# Comparison of calls for 149snps between 2010 pcr and sequenom data

## Yu Huang

## January 6, 2008

#### Abstract

# Contents

1	Introduction	9
<b>2</b>	Observations	9
	2.1 observation from summary comparison	. 9
	2.2 observation from strain-wise comparison	
	2.3 observation from snp-wise comparison	. 12
3	2010 PCR versus sequenom. summary	12
4	Real Mismatches between pcr and sequenom (deletion/NA excluded)	13
_	2010 PCR versus sequenom for each strain	1 5
5	5.1 strain RRS-10(accession id=2)	$\begin{array}{c} 15 \\ 15 \end{array}$
	5.1.1 corresponding ecotype RRS-10(stkparent=CS22565, ecotype id=8372, duplicate=1)	
	5.2 strain Kno-10(accession id=3)	
	5.2.1 corresponding ecotype Kno-10(stkparent=CS22566, ecotype id=8317, duplicate=1)	
	5.3 strain Kno-18(accession id=4)	
	5.3.1 corresponding ecotype Kho-To(stkparent=CS22507, ecotype id=8518, duplicate=1)	
	5.4.1 corresponding ecotype Rmx-A02(stkparent=CS22568, ecotype id=8370, duplicate=1)	
	5.5 strain Rmx-A180(accession id=6)	. 18
	5.5.1 corresponding ecotype Rmx-A180(stkparent=CS22569, ecotype id=8371, duplicate=1)	
	5.6 strain Pna-17(accession id=7)	
	5.7 strain Pna-10(accession id=8)	
	5.7.1 corresponding ecotype Pna-10(stkparent=CS22571, ecotype id=8358, duplicate=1)	
	5.8 strain Eden-1(accession id=9)	. 20
	5.8.1 corresponding ecotype Eden-1(stkparent=CS22572, ecotype id=6009, duplicate=4)	
	5.8.2 corresponding ecotype Eden-1(stkparent=CS22572, ecotype id=6009, duplicate=3)	
	5.8.3 corresponding ecotype Eden-1(stkparent=CS22572, ecotype id=6009, duplicate=2)	
	5.9 strain Eden-2(accession id=10)	
	5.9.1 corresponding ecotype Eden-2(stkparent=CS22573, ecotype id=8287, duplicate=1)	
	5.10 strain Lv-1(accession id=11)	
	5.10.1 corresponding ecotype Lv-1(stkparent=CS22574, ecotype id=6043, duplicate=2)	
	5.10.2 corresponding ecotype Lv-1(stkparent=CS22574, ecotype id=6043, duplicate=1)	
	5.11.1 corresponding ecotype Lv-5(stkparent=CS22575, ecotype id=6046, duplicate=2)	
	5.11.2 corresponding ecotype Lv-5(stkparent=CS22575, ecotype id=6046, duplicate=1)	. 27
	5.12 strain Fb-2(accession id=13)	
	5.12.1 corresponding ecotype Fb-2(stkparent=CS22576, ecotype id=8292, duplicate=1)	
	5.13 strain Fb-4(accession id=14)	
	5.13.1 corresponding ecotype Fb-4(stkparent=C522577, ecotype id=8295, duplicate=1)	
	5.14.1 corresponding ecotype Bil-5(stkparent=CS22578, ecotype id=8262, duplicate=1)	. 30
	5.15 strain Bil-7(accession id=16)	. 30
	5.15.1 corresponding ecotype Bil-7(stkparent=CS22579, ecotype id=8263, duplicate=1)	
	5.16 strain Vr2-1(accession id=17)	. 31
	5.10.1 corresponding ecotype V12-1(stkparent=C522360, ecotype id=6401, duplicate=1)	
	5.17.1 corresponding ecotype Vr2-6(stkparent=CS22581, ecotype id=8402, duplicate=1)	. 32
	5.18 strain Spr1-2(accession id=19)	. 33
	5.18.1 corresponding ecotype Spr1-2(stkparent=CS22582, ecotype id=8382, duplicate=1)	
	5.19 strain Spr1-6(accession id=20)	. 34
	5.19.1 corresponding ecotype Spr1-o(stkparent=C522585, ecotype id=6385, duplicate=1)	
	5.20.1 corresponding ecotype m2-1(stkparent=CS22584, ecotype id=8349, duplicate=1)	. 34
	5.21 strain m2-3(accession id=22)	. 35
	5.21.1 corresponding ecotype m2-3(stkparent=CS22585, ecotype id=8350, duplicate=1)	. 35
	5.22 strain Ull2-5(accession id=23)	
	5.22.1 corresponding ecotype Ull2-5(stkparent=CS22586, ecotype id=8397, duplicate=1)	
	5.23.1 corresponding ecotype Ull2-3(stkparent=CS22587, ecotype id=8396, duplicate=1)	
	5.24 strain Zdr-1(accession id=25)	
	5.24.1 corresponding acatype 7dr 1(ct/parent—CS22588 acatype id—8400 duplicate—1)	38

5.25		$ Zdr-6(accession \ id=26) \ \ldots \ $	
		corresponding ecotype Zdr-6(stkparent=CS22589, ecotype id=8410, duplicate=1)	
5.26		Bor-1(accession id=27)	
		corresponding ecotype Bor-1(stkparent=CS22590, ecotype id=5837, duplicate=2)	
		corresponding ecotype Bor-1(stkparent=CS22590, ecotype id=5837, duplicate=1)	
5.27		Bor-4(accession id=28)	
- 00		corresponding ecotype Bor-4(stkparent=CS22591, ecotype id=8268, duplicate=1)	
5.28		Pu2-7(accession id=29)	
- 00		corresponding ecotype Pu2-7(stkparent=CS22592, ecotype id=8362, duplicate=1)	
5.29		Pu2-23(accession id=30)	
E 20		corresponding ecotype Pu2-23(stkparent=CS22593, ecotype id=8361, duplicate=1)	
0.30	5 20 1	corresponding ecotype Lp2-2(stkparent=CS22594, ecotype id=8332, duplicate=1)	43
5 21	o.ou.1	Lp2-6(accession id=32)	40
0.01	5 21 1	corresponding ecotype Lp2-6(stkparent=CS22595, ecotype id=8333, duplicate=1)	11
5 39	o.oi.i	HR-5(accession id=33)	44
0.04		corresponding ecotype HR-5(stkparent=CS22596, ecotype id=8309, duplicate=1)	
5 22		HR-10(accession id=34)	
0.00		corresponding ecotype HR-10(stkparent=CS22597, ecotype id=8308, duplicate=1)	
E 94		NFA-8(accession id=35)	
5.54	5 2 4 1	corresponding ecotype NFA-8(stkparent=CS22598, ecotype id=8346, duplicate=1)	46
5 25	otroin	NFA-10(accession id=36)	40
0.50		corresponding ecotype NFA-10(stkparent=CS22599, ecotype id=8345, duplicate=1)	
5 26		Sq-1(accession id=37)	
5.50		corresponding ecotype Sq-1(stkparent=CS22600, ecotype id=8384, duplicate=1)	
5 97		Sq-8(accession id=38)	
5.57		corresponding ecotype Sq-8(stkparent=CS22601, ecotype id=8385, duplicate=1)	
E 20		CIBC-5(accession id=39)	
0.38		corresponding ecotype CIBC-5(stkparent=CS22602, ecotype id=8277, duplicate=1)	
5 20		CIBC-17(accession id=40)	
5.39		corresponding ecotype CIBC-17(stkparent=CS22603, ecotype id=8276, duplicate=1)	
E 40		Tamm-2(accession id=41)	
5.40			
E 41		corresponding ecotype Tamm-2(stkparent=CS22604, ecotype id=8390, duplicate=1)	
5.41			
F 40		corresponding ecotype Tamm-27(stkparent=CS22605, ecotype id=8391, duplicate=1)	
5.42			
E 49		corresponding ecotype Kz-1(stkparent=CS22606, ecotype id=8320, duplicate=1)	
5.43			54
F 44		corresponding ecotype Kz-9(stkparent=CS22607, ecotype id=8322, duplicate=1)	
5.44		Got-7(accession id=45)	
E 1E		corresponding ecotype Got-7(stkparent=CS22608, ecotype id=8299, duplicate=1)	
5.45		Got-22(accession id=46)	
- 10		corresponding ecotype Got-22(stkparent=CS22609, ecotype id=8298, duplicate=1)	
5.46		Ren-1(accession id=47)	
F 45		corresponding ecotype Ren-1(stkparent=CS22610, ecotype id=8367, duplicate=1)	
5.47		Ren-11(accession id=48)	
E 10		corresponding ecotype Ren-11(stkparent=CS22611, ecotype id=8368, duplicate=1)	
5.48		Uod-1(accession id=49)	
F 40		corresponding ecotype Uod-1(stkparent=CS22612, ecotype id=8398, duplicate=1)	
5.49		Uod-7(accession id=50)	
F F0		corresponding ecotype Uod-7(stkparent=CS22613, ecotype id=8399, duplicate=1)	
5.50	strain	Cvi-0(accession id=51)	60
1		corresponding ecotype Cvi-0(stkparent=CS22614, ecotype id=8281, duplicate=1)	
5.51		Lz-0(accession id=52)	
F F0		corresponding ecotype Lz-0(stkparent=CS22615, ecotype id=8336, duplicate=1)	
5.52		Ei-2(accession id=53)	
E E0		corresponding ecotype Ei-2(stkparent=CS22616, ecotype id=8289, duplicate=1)	
5.55		Gu-0(accession id=54)	
E E 4		corresponding ecotype Gu-0(stkparent=CS22617, ecotype id=8301, duplicate=1)	
5.54			
E EE		corresponding ecotype Ler-1(stkparent=CS22618, ecotype id=8324, duplicate=1)	
6.66		Nd-1(accession id=56)	
E E6		corresponding ecotype Nd-1(stkparent=CS22619, ecotype id=8344, duplicate=1)	
0.00		C24(accession id=57)	
E E7		corresponding ecotype C24(stkparent=CS22620, ecotype id=8273, duplicate=1)	
0.07		N13(accession id=58)	
E EO		corresponding ecotype N13(stkparent=CS22491, ecotype id=8429, duplicate=1)	
ə.ə8		Wei-0(accession id=59)	
E EO		corresponding ecotype Wei-0(stkparent=CS22622, ecotype id=8404, duplicate=1)	
ə.ə9		Ws-0(accession id=60)	
5 60		corresponding ecotype Ws-0(stkparent=CS22623, ecotype id=8405, duplicate=1)	
0 <b>0</b> .6		Yo-0(accession id=61)	
5 61		corresponding ecotype Yo-0(stkparent=CS22624, ecotype id=8408, duplicate=1)	
0.01		Col-0(accession id=62)	
5 60		Corresponding ecotype Col-0(stkparent=CS22625, ecotype id=8279, duplicate=1)	
0.02		An-1 (accession id=63)	
5 69		Van-0(accession id=64)	
0.00		van-0(accession id=64)	
5.64		Br-0(accession id=65)	
5.04	5 64 1	corresponding ecotype Br-0(stkparent=CS22628, ecotype id=8269, duplicate=1)	72
	5.51.1		

5.65		Est-1(accession id=66) $\dots$	
		corresponding ecotype Est-1(stkparent=CS22629, ecotype id=8291, duplicate=1)	
5.66	strain	Ag-0(accession id=67)	73
	5.66.1	corresponding ecotype Ag-0(stkparent=CS22630, ecotype id=8251, duplicate=1)	73
5.67		Gy-0(accession id=68)	
		corresponding ecotype Gy-0(stkparent=CS22631, ecotype id=8302, duplicate=1)	
5.68		Ra-0(accession id=69)	
0.00		corresponding ecotype Ra-0(stkparent=CS22632, ecotype id=8364, duplicate=1)	
5 60		Bay-0(accession id=70)	
0.09	5 60 1	corresponding ecotype Bay-0(stkparent=CS22633, ecotype id=8260, duplicate=1)	76
F 70			
5.70		Ga-0(accession id=71)	
		corresponding ecotype Ga-0(stkparent=CS22634, ecotype id=8295, duplicate=1)	
5.71		Mrk-0(accession id=72)	
		corresponding ecotype Mrk-0(stkparent=CS22635, ecotype id=8339, duplicate=1)	
5.72		Mz-0(accession id=73)	
		corresponding ecotype Mz-0(stkparent=CS22636, ecotype id=8342, duplicate=1)	
5.73		Wt-5(accession id=74)	
	5.73.1	corresponding ecotype Wt-5(stkparent=CS22637, ecotype id=8407, duplicate=1)	79
5.74	strain	Ct-1(accession id=76)	80
	5.74.1	corresponding ecotype Ct-1(stkparent=CS22639, ecotype id=8280, duplicate=1)	80
5.75		Mr-0(accession id=77)	
	5.75.1	corresponding ecotype Mr-0(stkparent=CS22640, ecotype id=8338, duplicate=1)	81
5.76		Tsu-1(accession id=78)	
0		corresponding ecotype Tsu-1(stkparent=CS22641, ecotype id=8394, duplicate=1)	
5 77		Mt-0(accession id=79)	
5.11		corresponding ecotype Mt-0(stkparent=CS22642, ecotype id=8341, duplicate=1)	
5 79		Nok-3(accession id=80)	
0.78			
E 70		corresponding ecotype Nok-3(stkparent=CS22643, ecotype id=8347, duplicate=1)	
5.79		Wa-1(accession id=81)	
		corresponding ecotype Wa-1(stkparent=CS22644, ecotype id=8403, duplicate=1)	
5.80		Fei-0(accession id=82)	
		corresponding ecotype Fei-0(stkparent=CS22645, ecotype id=8294, duplicate=1)	
5.81		Se-0(accession id=83)	
		corresponding ecotype Se-0(stkparent=CS22646, ecotype id=8379, duplicate=1)	
5.82		Ts-1(accession id=84)	
	5.82.1	corresponding ecotype Ts-1(stkparent=CS22647, ecotype id=8392, duplicate=1)	87
5.83	strain	Ts-5(accession id=85)	88
		corresponding ecotype Ts-5(stkparent=CS22648, ecotype id=8393, duplicate=1)	
5.84	strain	Pro-0(accession id=86)	89
		corresponding ecotype Pro-0(stkparent=CS22649, ecotype id=8360, duplicate=1)	
5.85		LL-0(accession id=87)	
0.00		corresponding ecotype LL-0(stkparent=CS22650, ecotype id=8328, duplicate=1)	
5.86		Kondara(accession id=88)	
0.00		corresponding ecotype Kondara(stkparent=CS22651, ecotype id=8319, duplicate=1)	
5 97		Shahdara(accession id=89)	
0.01		corresponding ecotype Shahdara(stkparent=CS22652, ecotype id=8248, duplicate=1)	
F 00			
5.88		Sorbo(accession id=90)	
		corresponding ecotype Sorbo(stkparent=CS22653, ecotype id=8381, duplicate=1)	
5.89		Kin-0(accession id=91)	
		corresponding ecotype Kin-0(stkparent=CS22654, ecotype id=8316, duplicate=1)	
5.90		Ms-0(accession id=92)	
		corresponding ecotype Ms-0(stkparent=CS22655, ecotype id=8340, duplicate=1)	
5.91	$\operatorname{strain}$	Bur-0(accession id=93)	95
	5.91.1	corresponding ecotype Bur-0(stkparent=CS22656, ecotype id=8272, duplicate=1)	95
5.92	strain	Edi-0(accession id=94)	96
		corresponding ecotype Edi-0(stkparent=CS22657, ecotype id=8288, duplicate=1)	
5.93		Oy-0(accession id=95)	
		corresponding ecotype Oy-0(stkparent=CS22658, ecotype id=8352, duplicate=1)	
5.94		Ws-2(accession id=96)	
		corresponding ecotype Ws-2(stkparent=CS22659, ecotype id=8406, duplicate=1)	
5 95		M3385S(accession id=98)	
0.50		corresponding ecotype M3385S(stkparent=CS6183, ecotype id=7453, duplicate=1)	
5.06		Kent(accession id=289)	
5.90		corresponding ecotype Kent(stkparent=, ecotype id=8238, duplicate=1)	
F 07			
5.97		Rsch-4(accession id=290)	
<b>.</b>		corresponding ecotype Rsch-4(stkparent=CS1494, ecotype id=8374, duplicate=1)	
5.98		Lund(accession id=292)	
		corresponding ecotype Lund(stkparent=, ecotype id=8335, duplicate=1)	
5.99		Kln(accession id=293)	
		corresponding ecotype Kln(stkparent=CS6003, ecotype id=8239, duplicate=1)	
5.10		NC-6(accession id=294)	
		$1 \ corresponding \ ecotype \ NC-6 (stkparent=, \ ecotype \ id=8246, \ duplicate=1) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	
5.10		Vimmerby(accession id=295)	
		1 corresponding ecotype Vimmerby(stkparent=, ecotype id=8249, duplicate=1)	
5.10	2strain	Pu2-8(accession id=296)	01
		1 corresponding ecotype Pu2-8(stkparent=CS22449, ecotype id=8363, duplicate=1)	
5.10		Dem-4(accession id=297)	
	5.103	1 corresponding ecotype Dem-4(stkparent=, ecotype id=8233, duplicate=1)	.01
5.10		Kz-13(accession id=298)	
	5.104	1 corresponding ecotype Kz-13(stkparent=CS22445, ecotype id=8321, duplicate=1)	01
5.10			02

5.106 detain St. $1/2$ according id= $200$	. 102
$5.106 strain Sf-1 (accession id=300) \\ 5.106.1 corresponding ecotype Sf-1 (stkparent=N6855, ecotype id=8380, duplicate=1) \\ \ldots \\ $	
5.107 strain En-1(accession id=301)	
5.107.1 corresponding ecotype En-1(stkparent=N1137, ecotype id=8290, duplicate=1)	
5.108strain Gr-1(accession id=302)	
5.108.1 corresponding ecotype Gr-1(stkparent=N1199, ecotype id=8300, duplicate=1)	
$5.109 strain \ Ang-0 (accession \ id=303) \ \dots $	. 103
5.110strain PHW-34(accession id=304)	
5.110.1 corresponding ecotype PHW-34(stkparent=N6034, ecotype id=8244, duplicate=1)	
5.111strain Bu-0(accession id=305)	
5.111.1 corresponding ecotype Bu-0(stkparent=N1007, ecotype id=8271, duplicate=1)	
$5.112 strain \ Gd-1 (accession \ id=306) \ldots \ldots$	
5.113strain Hi-0(accession id=307)	
5.113.1 corresponding ecotype Hi-0(stkparent=N1227, ecotype id=8304, duplicate=1)	. 105
5.114strain Hs-0(accession id=308)	
$5.114.1 \text{ corresponding ecotype Hs-0(stkparent=N1237, ecotype id=8310, duplicate=1)} \dots \dots$	
5.115.1 corresponding ecotype Is-0(stkparent=N1241, ecotype id=8312, duplicate=1) $\dots$	
5.116strain Jm-0(accession id=310)	
$5.116.1 corresponding ecotype Jm-0 (stkparent=N1259, ecotype id=8313, duplicate=1) \\ 00000000000000000000000000000000000$	
5.117strain Ka-0(accession id=311)	
$5.117.1  \text{corresponding ecotype Ka-0(stkparent=N1267, ecotype id=8314, duplicate=1)} \dots \dots$	
5.118.1  corresponding ecotype Rd-0(stkparent=N1483, ecotype id=8411, duplicate=1)	
$5.119 \mathrm{strain} \ \mathrm{PHW-2(accession} \ \mathrm{id}=313)$	. 107
$5.119.1 corresponding ecotype PHW-2 (stkparent=N6002, ecotype id=8243, duplicate=1) \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	
5.120 strain Seattle-0(accession id=314)	
5.120.1 corresponding ecotype Seattle-0(stkparent=N6187, ecotype id=8245, duplicate=1)	
$5.121.1  {\rm corresponding \ ecotype \ Alc-0(stkparent=N1656, \ ecotype \ id=8252, \ duplicate=1)}  \dots $	
$5.122 \mathrm{strain~Bla-1}(\mathrm{accession~id}=316)$	
5.122.1 corresponding ecotype Bla-1(stkparent=N971, ecotype id=8264, duplicate=1)	
5.123strain Blh-1(accession id=317)	
5.123.1 corresponding ecotype Bin-1(stkparent=N1031, ecotype id=8203, duplicate=1)	
5.124.1 corresponding ecotype Bs-1(stkparent=N997, ecotype id=8270, duplicate=1)	
5.125strain Can-0(accession id=319)	
5.125.1 corresponding ecotype Can-0(stkparent=N1065, ecotype id=8274, duplicate=1)	
5.126strain Cen-0(accession id=320)	
5.126 From Co(accession id=321)	
5.127.1 corresponding ecotype Co(stkparent=N3180, ecotype id=8278, duplicate=1)	
	. 110
$5.128 \mathrm{strain} \; \mathrm{Ge-0(accession} \; \mathrm{id} = 322) \ldots $	. 110 . 110
$5.128 strain \ Ge-0 (accession \ id=322) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	<ul><li>. 110</li><li>. 110</li><li>. 110</li></ul>
$5.128 strain Ge-0 (accession id=322) \\ 5.128.1 corresponding ecotype Ge-0 (stkparent=N1187, ecotype id=8297, duplicate=1) \\ 5.129 strain H55 (accession id=323) \\ \ldots \\ \ldots \\ \ldots \\ \ldots$	<ul><li>. 110</li><li>. 110</li><li>. 110</li><li>. 110</li></ul>
$5.128 strain \ Ge-0 (accession \ id=322) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	<ul><li>. 110</li><li>. 110</li><li>. 110</li><li>. 110</li><li>. 110</li></ul>
5.128strain Ge-0(accession id=322)	<ul><li>. 110</li><li>. 110</li><li>. 110</li><li>. 110</li><li>. 111</li><li>. 111</li></ul>
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1)  5.129strain H55(accession id=323)  5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1)  5.130strain In-0(accession id=324)  5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1)  5.131strain Lc-0(accession id=325)	<ul><li>. 110</li><li>. 110</li><li>. 110</li><li>. 110</li><li>. 111</li><li>. 111</li><li>. 111</li></ul>
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1)  5.129strain H55(accession id=323)  5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1)  5.130strain In-0(accession id=324)  5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1)  5.131strain Lc-0(accession id=325)  5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1)	. 110 . 110 . 110 . 110 . 110 . 111 . 111 . 111
5.128strain Ge-0(accession id=322)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129strain H55(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130strain In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131strain Lc-0(accession id=325) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lm-2(accession id=327)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 111
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1)  5.129strain H55(accession id=323)  5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1)  5.130strain In-0(accession id=324)  5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1)  5.131strain Lc-0(accession id=325)  5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1)  5.132strain Lip-0(accession id=326)  5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1)  5.133strain Lm-2(accession id=327)  5.133.1 corresponding ecotype Lm-2(stkparent=N1345, ecotype id=8329, duplicate=1)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1)  5.129strain H55(accession id=323)  5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1)  5.130strain In-0(accession id=324)  5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1)  5.131strain Lc-0(accession id=325)  5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1)  5.132strain Lip-0(accession id=326)  5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1)  5.133strain Lm-2(accession id=327)  5.133.1 corresponding ecotype Lm-2(stkparent=N1345, ecotype id=8329, duplicate=1)  5.134strain Lu-1(accession id=328)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112
5.128strain Ge-0(accession id=322)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1)  5.129strain H55(accession id=323)  5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1)  5.130strain In-0(accession id=324)  5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1)  5.131strain Lc-0(accession id=325)  5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1)  5.132strain Lip-0(accession id=326)  5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1)  5.133strain Lm-2(accession id=327)  5.133.1 corresponding ecotype Lm-2(stkparent=N1345, ecotype id=8329, duplicate=1)  5.134strain Lu-1(accession id=328)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129strain H55(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130strain In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131strain Lc-0(accession id=325) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lm-2(accession id=327) 5.133.1 corresponding ecotype Lm-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 112 . 112
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.1 corresponding ecotype H55(stkparent=N1239, ecotype id=8311, duplicate=1) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132.train Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lin-2(accession id=327) 5.133.1 corresponding ecotype Lip-0(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 113 . 113
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.strain In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.strain Lc-0(accession id=325) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lm-2(accession id=327) 5.133.1 corresponding ecotype Lip-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134.1 corresponding ecotype Lu-1(stkparent=N1345, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Lu-1(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Nw-0(accession id=331)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 113 . 113 . 113
5.128strain Ge-0(accession id=322)  5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.1 corresponding ecotype H55(stkparent=N1239, ecotype id=8311, duplicate=1) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132.train Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lin-2(accession id=327) 5.133.1 corresponding ecotype Lip-0(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 113 . 113 . 113
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.train In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.train Lc-0(accession id=325) 5.131.1 corresponding ecotype Le-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lm-2(accession id=327) 5.133.train Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8343, duplicate=1) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8348, duplicate=1) 5.137.1 corresponding ecotype Nw-0(stkparent=N1409, ecotype id=8348, duplicate=1)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 113 . 113 . 113 . 113
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.strain In-0(accession id=324) 5.130.strain In-0(accession id=324) 5.131.strain Lc-0(accession id=325) 5.131.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.132strain Lip-0(accession id=325) 5.132.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Ln-2(accession id=327) 5.133.1 corresponding ecotype Lm-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134.1 corresponding ecotype Lu-1(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Na-1(accession id=331) 5.136.1 corresponding ecotype Na-1(stkparent=N1499, ecotype id=8348, duplicate=1) 5.138strain Ost-0(accession id=331) 5.137.1 corresponding ecotype Nw-0(stkparent=N1409, ecotype id=8348, duplicate=1) 5.138strain Ost-0(accession id=333) 5.138.1 corresponding ecotype Ost-0(stkparent=N1409, ecotype id=8351, duplicate=1) 5.139strain Pa-1(accession id=333)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 113 . 113 . 113 . 114 . 114
5.128strain Ge-0(accession id=322) 5.128strain Ge-0(accession id=322) 5.129strain H55(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N187, ecotype id=8297, duplicate=1) 5.130.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lm-2(accession id=327) 5.133.1 corresponding ecotype Lip-0(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Nw-0(accession id=331) 5.137strain Nw-0(accession id=331) 5.138strain Ost-0(accession id=332) 5.138strain Ost-0(accession id=332) 5.138strain Ost-0(accession id=333) 5.139strain Pa-1(accession id=333)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 113 . 113 . 113 . 114 . 114 . 114
5.128.train Ge-0(accession id=322) 5.128.t corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.train H55(accession id=323) 5.129.t corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.t corresponding ecotype H50(stkparent=N1239, ecotype id=8311, duplicate=1) 5.130.t corresponding ecotype Ln-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.strain Lc-0(accession id=325) 5.131.t corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132.t corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133.train Ln-2(accession id=327) 5.133.t corresponding ecotype Ln-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.t corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.t corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.t corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137.t corresponding ecotype Na-1(stkparent=N1485, ecotype id=8348, duplicate=1) 5.138strain Nw-0(accession id=332) 5.137.t corresponding ecotype Na-0(stkparent=N1409, ecotype id=8348, duplicate=1) 5.138strain Ost-0(accession id=332) 5.138.t corresponding ecotype Ost-0(stkparent=N1431, ecotype id=8348, duplicate=1) 5.139strain Pa-1(accession id=333) 5.139.1 corresponding ecotype Ost-0(stkparent=N1431, ecotype id=8351, duplicate=1) 5.140strain Per-1(accession id=334)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114
5.128strain Ge-0(accession id=322) 5.128.tcorresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129strain Hr.5(accession id=323) 5.129.1corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130strain In-0(accession id=324) 5.130strain In-0(accession id=325) 5.131.tcorresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131strain Le-0(accession id=325) 5.131.tcorresponding ecotype Le-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.tcorresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Im-2(accession id=327) 5.133strain Im-2(accession id=328) 5.134.tcorresponding ecotype Lu-2(stkparent=N1355, ecotype id=8329, duplicate=1) 5.135strain Min-0(accession id=329) 5.134.tcorresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.136strain Nin-0(accession id=329) 5.135.tcorresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.tcorresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Nw-0(accession id=331) 5.138strain Ost-0(accession id=331) 5.138strain Ost-0(accession id=331) 5.138strain Pa-1(accession id=333) 5.139strain Pa-1(accession id=333) 5.140strain Pa-1(accession id=334) 5.140strain Pa-1(accession id=333) 5.140strain Pa-1(accession id=334) 5.140strain Pa-1(accession id=335)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 114 . 115
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129strain H55(accession id=3234) 5.139.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130strain In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131strain Lc-0(accession id=325) 5.131.1 corresponding ecotype Lc-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.133strain In-2(accession id=326) 5.133.1 corresponding ecotype Lip-0(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lin-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Na-0(accession id=3330) 5.136.1 corresponding ecotype Na-1(stkparent=N1481, ecotype id=8348, duplicate=1) 5.138strain Ost-0(accession id=3332) 5.138.1 corresponding ecotype Na-0(stkparent=N1449, ecotype id=8348, duplicate=1) 5.139strain Pa-1(accession id=3332) 5.139.1 corresponding ecotype Ost-0(stkparent=N1431, ecotype id=8351, duplicate=1) 5.149strain Pa-1(accession id=3333) 5.139.1 corresponding ecotype Pa-1(stkparent=N1439, ecotype id=8354, duplicate=1) 5.149strain Pa-1(accession id=3333) 5.140.1 corresponding ecotype Per-1(stkparent=N1445, ecotype id=8355, duplicate=1) 5.141strain Petergof(accession id=335) 5.141.1 corresponding ecotype Petergof(stkparent=N1445, ecotype id=8355, duplicate=1)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 114 . 115 . 115 . 115
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129strain His-5(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130strain In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131strain Le-0(accession id=325) 5.131.1 corresponding ecotype Le-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lup-(accession id=327) 5.133.1 corresponding ecotype Lip-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Nw-0(accession id=331) 5.137.1 corresponding ecotype Na-0(stkparent=N1490, ecotype id=8348, duplicate=1) 5.138strain Ost-0(accession id=333) 5.138.1 corresponding ecotype Pa-1(stkparent=N1441, ecotype id=8351, duplicate=1) 5.139strain Pa-1(accession id=333) 5.139.1 corresponding ecotype Pa-1(stkparent=N1431, ecotype id=8351, duplicate=1) 5.141strain Petergof(accession id=333) 5.141strain Petergof(accession id=333) 5.141.1 corresponding ecotype Petergof(stkparent=N1445, ecotype id=8355, duplicate=1) 5.144strain Petergof(accession id=335) 5.141.1 corresponding ecotype Petergof(stkparent=N1445, ecotype id=8355, duplicate=1) 5.144strain Petergof(accession id=335) 5.141.1 corresponding ecotype Petergof(stkparent=N1266, ecotype id=8355, duplicate=1) 5.144strain Petergof(accession id=336)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 115 . 115 . 115
5.128.train Ge-0(accession id=322) 5.128.t corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.train In-0(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.train In-0(accession id=324) 5.130.train In-0(accession id=325) 5.131.train Le-0(accession id=325) 5.131.train Le-0(accession id=325) 5.131.train Lip-0(accession id=326) 5.132.train Lip-0(accession id=326) 5.132.train Lip-0(accession id=326) 5.132.train Lip-0(accession id=327) 5.133.train Lip-0(accession id=328) 5.134.train Lu-1(accession id=328) 5.134.train Lu-1(accession id=328) 5.135.train Mir-0(accession id=329) 5.135.train Mir-0(accession id=329) 5.135.train Mir-0(accession id=330) 5.136.train Na-1(accession id=331) 5.137.train Na-0(accession id=331) 5.137.train Na-0(accession id=331) 5.137.train Na-0(accession id=331) 5.138.train Ost-0(accession id=331) 5.138.train Ost-0(accession id=333) 5.138.train Ost-0(accession id=333) 5.138.train Ost-0(accession id=333) 5.139.train Pa-1(accession id=333) 5.149.train Pa-1(accession id=335) 5.141.train Pa-1(accession id=335) 5.140.train Pa-1(accession id=335) 5.141.train Pa-1(accession id=336) 5.149.train Pa-0(accession id=335) 5.141.train Pa-0(accession id=336) 5.149.train Pa-0(accession id=336) 5.149.train Pa-0(accession id=336) 5.149.train Pa-0(accession id=335) 5.149.train Pa-0(accession id=335) 5.149.train Pa-0(accession id=336) 5.149.train Pa-0(accession id=336)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 115 . 115 . 115 . 115
5.128strain Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129strain His-5(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130strain In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131strain Le-0(accession id=325) 5.131.1 corresponding ecotype Le-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132strain Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1) 5.133strain Lup-(accession id=327) 5.133.1 corresponding ecotype Lip-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134strain Lu-1(accession id=328) 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135strain Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136strain Na-1(accession id=330) 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1) 5.137strain Nw-0(accession id=331) 5.137.1 corresponding ecotype Na-0(stkparent=N1490, ecotype id=8348, duplicate=1) 5.138strain Ost-0(accession id=333) 5.138.1 corresponding ecotype Pa-1(stkparent=N1441, ecotype id=8351, duplicate=1) 5.139strain Pa-1(accession id=333) 5.139.1 corresponding ecotype Pa-1(stkparent=N1431, ecotype id=8351, duplicate=1) 5.141strain Petergof(accession id=333) 5.141strain Petergof(accession id=333) 5.141.1 corresponding ecotype Petergof(stkparent=N1445, ecotype id=8355, duplicate=1) 5.144strain Petergof(accession id=335) 5.141.1 corresponding ecotype Petergof(stkparent=N1445, ecotype id=8355, duplicate=1) 5.144strain Petergof(accession id=335) 5.141.1 corresponding ecotype Petergof(stkparent=N1266, ecotype id=8355, duplicate=1) 5.144strain Petergof(accession id=336)	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 115 . 115 . 115 . 115
5.1281 corresponding ecotype Bi55(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.1 corresponding ecotype Bi55(stkparent=N923, ecotype id=8303, duplicate=1) 5.129.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131 strain Le 0(accession id=325) 5.131.1 corresponding ecotype Le-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132 train Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1307, ecotype id=8325, duplicate=1) 5.133.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8329, duplicate=1) 5.133.1 corresponding ecotype Lin-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134.1 corresponding ecotype Lin-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135.1 corresponding ecotype Lin-1(stkparent=N1353, ecotype id=8337, duplicate=1) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.135.1 corresponding ecotype Na-1(stkparent=N1355, ecotype id=8343, duplicate=1) 5.137 strain Na-1(accession id=330) 5.136.1 corresponding ecotype Na-1(stkparent=N1409, ecotype id=8348, duplicate=1) 5.138 strain Ost-0(accession id=3331) 5.139.1 corresponding ecotype Pa-1(stkparent=N1431, ecotype id=8351, duplicate=1) 5.139 strain Pa-1(accession id=333) 5.139.1 corresponding ecotype Pa-1(stkparent=N1439, ecotype id=8351, duplicate=1) 5.140.1 corresponding ecotype Pa-1(stkparent=N1445, ecotype id=8354, duplicate=1) 5.141 strain Petergof(accession id=336) 5.142 torresponding ecotype Petergof(stkparent=N1455, ecotype id=8356, duplicate=1) 5.143 train Pla-0(accession id=336) 5.143.1 corresponding ecotype Pla-0(stkparent=N1455, ecotype id=8356, duplicate=1) 5.143 train Pla-0(accession id=336) 5.143	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 115 . 115 . 115 . 115 . 115 . 116
5.128.train Ge-0(accession id=322) 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1) 5.129.train H55(accession id=323) 5.129.1 corresponding ecotype H55(stkparent=N923, ecotype id=8303, duplicate=1) 5.130.train In-0(accession id=324) 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1) 5.131.train Lc-0(accession id=326) 5.131.train Lc-0(accession id=326) 5.132.train Lip-0(accession id=326) 5.132.1 corresponding ecotype Lip-0(stkparent=N1307, ecotype id=8323, duplicate=1) 5.132.1 corresponding ecotype Lip-0(stkparent=N1347, ecotype id=8325, duplicate=1) 5.133.1 corresponding ecotype Lin-2(stkparent=N1345, ecotype id=8329, duplicate=1) 5.134.train Lin-(accession id=327) 5.133.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1) 5.135.train Mir-0(accession id=329) 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1) 5.136.1 corresponding ecotype Na-1(stkparent=N1379, ecotype id=8343, duplicate=1) 5.137.train Na-1(accession id=330) 5.137.train Na-1(accession id=331) 5.137.1 corresponding ecotype Na-1(stkparent=N1349, ecotype id=8348, duplicate=1) 5.1385.train Ost-0(accession id=331) 5.138.1 corresponding ecotype Na-0(stkparent=N1431, ecotype id=8351, duplicate=1) 5.139.train Pa-1(accession id=333) 5.139.train Pa-1(accession id=333) 5.139.train Pa-1(accession id=333) 5.139.train Pa-1(accession id=333) 5.149.train Pa-1(accession id=333) 5.149.train Pa-1(accession id=333) 5.149.train Pa-1(accession id=334) 5.149.train Pa-1(accession id=335) 5.149.train Pa-1(accession id=356) 5.149.train Pa-1(accession id=356) 5.149.train Pa-1(accession id=356) 5.149.train Pa-1(accession id=336) 5.149.train Pa-1(accession id=337) 5.149.train Pa-1(accession id=337) 5.149.train Pa-1(accession id=337) 5.149.train Pa-0(accession id=337) 5.149.train Pa-0(ac	. 110 . 110 . 110 . 110 . 111 . 111 . 111 . 111 . 111 . 112 . 112 . 112 . 112 . 112 . 114 . 114 . 114 . 114 . 114 . 115 . 115 . 115 . 115 . 116 . 116

5.146strain Santa Clara(accession id=340)	
5.146.1 corresponding ecotype Santa Clara(stkparent=N8069, ecotype id=8377, duplicate=1)	
5.147strain Sap-0(accession id=341)	. 117
5.147.1 corresponding ecotype Sap-0(stkparent=N1507, ecotype id=8378, duplicate=1)	. 117
5.148strain St-0(accession id=342)	. 118
5.148.1 corresponding ecotype St-0(stkparent=N1535, ecotype id=8387, duplicate=1)	. 118
5.149strain Stw-0(accession id=343)	
5.149.1 corresponding ecotype Stw-0(stkparent=N1539, ecotype id=8388, duplicate=1)	
5.150strain Ta-0(accession id=344)	
5.150.1 corresponding ecotype Ta-0(stkparent=N1549, ecotype id=8389, duplicate=1)	
5.151strain Tu-0(accession id=345)	
5.151.1 corresponding ecotype Tu-0(stkparent=N1567, ecotype id=8395, duplicate=1)	110
5.152strain Fly2-2(accession id=346)	
5.152.1 corresponding ecotype Fly2-2(stkparent=, ecotype id=6024, duplicate=1)	
5.153strain Rev-1(accession id=347)	
$5.153.1\mathrm{corresponding}\mathrm{ecotype}\mathrm{Rev-1}(\mathrm{stkparent}=,\mathrm{ecotype}\mathrm{id}=8369,\mathrm{duplicate}=1)$	
5.154strain Hov4-1(accession id=348)	
5.154.1 corresponding ecotype Hov 4-1 (stkparent=, ecotype id=8306, duplicate=1) . . . . . . . . .	
5.155strain San-2(accession id=349)	
5.155.1 corresponding ecotype San-2(stkparent=, ecotype id=8247, duplicate=1)	. 120
5.156strain Lom1-1(accession id=351)	
5.156.1 corresponding ecotype Lom1-1(stkparent=, ecotype id=6042, duplicate=2)	. 120
5.156.2 corresponding ecotype Lom1-1(stkparent=, ecotype id=6042, duplicate=1)	
5.157strain Lill-1(accession id=353)	
5.157.1 corresponding ecotype Lill-1(stkparent=, ecotype id=8242, duplicate=1)	
5.158strain Br1-6(accession id=354)	
5.158.1 corresponding ecotype Br1-6(stkparent=, ecotype id=8231, duplicate=1)	
5.158.1 corresponding ecotype Bri-0(stkparent=, ecotype id=8251, duplicate=1)	
5.159strain Guii-2(accession id=550)	
5.159.1 corresponding ecotype Guir-2(stkparent=, ecotype id=8254, duplicate=1)	
5.160.1 corresponding ecotype B1-2(stkparent=, ecotype id=8256, duplicate=1)	
5.161strain B3-3(accession id=358)	
5.161.1 corresponding ecotype B3-3(stkparent=, ecotype id=8257, duplicate=1)	
5.162strain B4-1(accession id=359)	
$5.162.1 \text{ corresponding ecotype B4-1} (\text{stkparent}=, \text{ ecotype id}=8258, \text{ duplicate}=1) \dots \dots$	
5.163strain B5-1(accession id=360)	
5.163.1 corresponding ecotype B5-1(stkparent=, ecotype id=8259, duplicate=1)	. 124
5.164strain Dra3-1(accession id=361)	
5.164.1 corresponding ecotype Dra3-1(stkparent=, ecotype id=8283, duplicate=1)	. 124
5.165strain Kni-1(accession id=362)	. 124
5.165.1 corresponding ecotype Kni-1(stkparent=, ecotype id=6040, duplicate=2)	. 124
5.165.2 corresponding ecotype Kni-1(stkparent=, ecotype id=6040, duplicate=1)	. 125
5.166strain Stu1-1(accession id=363)	. 125
5.166.1 corresponding ecotype Stu1-1(stkparent=, ecotype id=6088, duplicate=1)	
5.167strain r-1(accession id=364)	
5.167.1 corresponding ecotype r-1(stkparent=, ecotype id=6074, duplicate=2)	
5.167.2 corresponding ecotype r-1(stkparent=, ecotype id=6074, duplicate=1)	
5.168strain Lis-1(accession id=365)	
5.168.1 corresponding ecotype Lis-1(stkparent=, ecotype id=8326, duplicate=1)	
5.169strain Lis-2(accession id=366)	
5.169.1 corresponding ecotype Lis-2(stkparent=, ecotype id=8222, duplicate=2)	
5.169.2 corresponding ecotype Lis-2(stkparent=, ecotype id=8222, duplicate=1)	
5.170strain Hovdala-2(accession id=368)	
5.170.1 corresponding ecotype Hovdala-2(stkparent=, ecotype id=6039, duplicate=1)	
5.170.2 corresponding ecotype Hovdala-2(stkparent=, ecotype id=6039, duplicate=2)	
5.171strain Tottarp-2(accession id=370)	
5.171.1 corresponding ecotype Tottarp-2(stkparent=, ecotype id=6243, duplicate=2)	
5.171.2 corresponding ecotype Tottarp-2(stkparent=, ecotype id=6243, duplicate=1)	
5.172strain Liarum(accession id=371)	
5.172.1 corresponding ecotype Liarum(stkparent=, ecotype id=8241, duplicate=1)	
5.173etrain Kulturon-1(accession id=372)	
5.173strain Kulturen-1(accession id=372)	
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1)	
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1)	. 129
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1)	100
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373)	
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1)	
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373)	. 130
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375)	<ul><li>. 130</li><li>. 130</li><li>. 130</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1)	<ul><li>. 130</li><li>. 130</li><li>. 130</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2)	<ul><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1)	<ul><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177strain Sanna-2(accession id=376)	<ul><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li><li>. 131</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1)	<ul><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li><li>. 131</li><li>. 131</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177strain Sanna-2(accession id=376) 5.178strain Sr:5(accession id=377)	<ul><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li><li>. 131</li><li>. 131</li><li>. 131</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1) 5.178strain Sr:5(accession id=377) 5.178strain Sr:5(accession id=377) 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1)	<ul><li>. 130</li><li>. 130</li><li>. 130</li><li>. 130</li><li>. 131</li><li>. 131</li><li>. 131</li><li>. 131</li></ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1) 5.178strain Sr:5(accession id=377) 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1) 5.179strain Duk(accession id=378)	<ul> <li>130</li> <li>130</li> <li>130</li> <li>130</li> <li>131</li> <li>131</li> <li>131</li> <li>131</li> <li>131</li> </ul>
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1) 5.178strain Sr:5(accession id=377) 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1) 5.179strain Duk(accession id=378) 5.179.1 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=1)	. 130 . 130 . 130 . 130 . 131 . 131 . 131 . 132 . 132
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1) 5.178strain Sr:5(accession id=377) 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1) 5.179strain Duk(accession id=378) 5.179.1 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=1) 5.179.2 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=2)	. 130 . 130 . 130 . 130 . 131 . 131 . 131 . 132 . 132
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1) 5.178strain Sr:5(accession id=377) 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1) 5.179strain Duk(accession id=378) 5.179.1 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=1) 5.179.2 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=2) 5.180strain Hod(accession id=379)	. 130 . 130 . 130 . 130 . 131 . 131 . 131 . 132 . 132 . 132
5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1) 5.174strain Kvlinge-1(accession id=373) 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1) 5.175strain Eds-1(accession id=374) 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2) 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1) 5.176strain Nyl-2(accession id=375) 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2) 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1) 5.177strain Sanna-2(accession id=376) 5.177.1 corresponding ecotype Sanna-2(stkparent=, ecotype id=8376, duplicate=1) 5.178strain Sr:5(accession id=377) 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1) 5.179strain Duk(accession id=378) 5.179.1 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=1) 5.179.2 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=2)	. 130 . 130 . 130 . 130 . 131 . 131 . 131 . 132 . 132 . 132 . 132

5.182strain DraII-1(accession id=381)	
5.182.1 corresponding ecotype DraII-1(stkparent=, ecotype id=8284, duplicate=1)	
5.183strain DraIII-1(accession id=382)	194
5.184strain Aa-0(accession id=385)	
5.184.1 corresponding ecotype Aa-0(stkparent=CS6600, ecotype id=7000, duplicate=1)	
5.185strain Abd-0(accession id=386)	
5.185.1 corresponding ecotype Abd-0(stkparent=CS932, ecotype id=6986, duplicate=1)	
5.186strain Ak-1(accession id=387)	134
5.186.1 corresponding ecotype Ak-1(stkparent=CS6602, ecotype id=6987, duplicate=1)	
5.187strain Ba-1(accession id=388)	135
5.187.1 corresponding ecotype Ba-1(stkparent=CS6607, ecotype id=7014, duplicate=1)	
5.188strain Bl-1(accession id=389)	
5.188.1 corresponding ecotype Bl-1(stkparent=CS6615, ecotype id=7025, duplicate=1)	
5.189.1 corresponding ecotype Bla-10(stkparent=CS6622, ecotype id=7016, duplicate=1)	
5.190strain Ca-0(accession id=391)	
5.190.1 corresponding ecotype Ca-0(stkparent=CS6658, ecotype id=7062, duplicate=1)	
5.191strain Cal-0(accession id=392)	
5.191.1 corresponding ecotype Cal-0(stkparent=CS6659, ecotype id=7061, duplicate=1)	
5.192strain Chi-0(accession id=393)	
5.192.1 corresponding ecotype Chi-0(stkparent=CS6664, ecotype id=7072, duplicate=1)	
5.193strain Cnt-1(accession id=394)	
5.193.1 corresponding ecotype Cnt-1(stkparent=CS6921, ecotype id=7064, duplicate=1)	
5.194strain Seattle-0(accession id=395)	
5.194.1 corresponding ecotype Seattle-O(stkparent=C50188, ecotype Id=7552, duplicate=1)	
5.195.1 corresponding ecotype Da-0(stkparent=CS6676, ecotype id=7094, duplicate=1)	
5.196strain Da(1)-12(accession id=397)	
5.196.1 corresponding ecotype Da(1)-12(stkparent=CS917, ecotype id=7460, duplicate=1)	
5.197strain Db-1(accession id=398)	138
$5.197.1 \text{ corresponding ecotype Db-1} \text{ (stkparent=CS6678, ecotype id=7419, duplicate=1)} \dots \dots$	
5.198strain Di-G(accession id=399)	
5.198.1 corresponding ecotype Di-G(stkparent=CS910, ecotype id=7096, duplicate=1)	
5.199strain Dra-0(accession id=400)	
5.200strain Ema-1(accession id=401)	
5.200.1 corresponding ecotype Ema-1(stkparent=CS6923, ecotype id=7109, duplicate=1)	
5.201strain Ep-0(accession id=403)	
$5.201.1 \text{ corresponding ecotype Ep-0(stkparent=CS6697, ecotype id=7123, duplicate=1)} \dots \dots$	
5.202strain Er-0(accession id=404)	
5.202.1 corresponding ecotype Er-0(stkparent=CS6698, ecotype id=7125, duplicate=1)	
5.203strain Est(accession id=405)	
5.203.1 corresponding ecotype Est(stkparent=C50173, ecotype id=7127, duplicate=1)  5.204strain Et-0(accession id=406)	
5.204.1 corresponding ecotype Et-0(stkparent=CS6702, ecotype id=7130, duplicate=1)	
5.205strain Fr-2(accession id=407)	
5.205.1 corresponding ecotype Fr-2(stkparent=CS6708, ecotype id=7133, duplicate=1)	
5.206strain Gie-0(accession id=408)	
5.206.1 corresponding ecotype Gie-0(stkparent=CS6720, ecotype id=7147, duplicate=1)	
5.207strain Gre-0(accession id=409)	
5.207.1 corresponding ecotype Gre-0(stkparent=CS6729, ecotype id=7160, duplicate=1)	
9.2008114111114-0(400008101110-410)	
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1)	141
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1)	141
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1)  5.209strain Hau-0(accession id=411)  5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1)  5.210strain Hl-3(accession id=412)  5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1)	141 142 142
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413)	141 142 142 142
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1)	141 142 142 142
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414)	141 142 142 142 142
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1)	141 142 142 142 142 142
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213strain Kb-0(accession id=415)	141 142 142 142 142 142 143 143
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414) 5.212strain Jl-3(accession id=414) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213strain Kb-0(accession id=415) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1)	141 142 142 142 142 142 143 143
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414) 5.212strain Jl-3(accession id=414) 5.213strain Kb-0(accession id=415) 5.213strain Kb-0(accession id=415) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214strain Kil-0(accession id=417) 5.214strain Kil-0(accession id=417) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1)	. 141 . 142 . 142 . 142 . 142 . 142 . 143 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.strain Jl-3(accession id=414) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213strain Kb-0(accession id=415) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214strain Kil-0(accession id=417) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215strain Li-7(accession id=418)	. 141 . 142 . 142 . 142 . 142 . 143 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.strain Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.strain Jl-3(accession id=414) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.strain Kb-0(accession id=415) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.strain Kil-0(accession id=417) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.strain Li-7(accession id=418) 5.215.1 corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.1 train Je-0(accession id=413) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.strain Jl-3(accession id=414) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.train Li-7(accession id=418) 5.215.1 corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216strain Ll-1(accession id=419)	. 141 . 142 . 142 . 142 . 142 . 143 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.t corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.t corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.train Je-0(accession id=413) 5.211.t corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414) 5.212.t corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213strain Kb-0(accession id=415) 5.213.t corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214strain Kil-0(accession id=417) 5.214.t corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215strain Li-7(accession id=418) 5.215.t corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216strain Li-1(accession id=419) 5.216.t corresponding ecotype Ll-1(stkparent=CS6782, ecotype id=7238, duplicate=1)	. 141 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209strain Hau-0(accession id=411) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=413) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7181, duplicate=1) 5.213strain Kb-0(accession id=414) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.214.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Kil-0(stkparent=CS6778, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216strain Li-1(accession id=419) 5.216.1 corresponding ecotype Ll-1(stkparent=CS6782, ecotype id=7238, duplicate=1) 5.217strain Ma-0(accession id=420) 5.217strain Ma-0(accession id=420)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.t corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210strain Hl-3(accession id=412) 5.210.t corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.train Je-0(accession id=413) 5.211.t corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212strain Jl-3(accession id=414) 5.212.t corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213strain Kb-0(accession id=415) 5.213.t corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214strain Kil-0(accession id=417) 5.214.t corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215strain Li-7(accession id=418) 5.215.t corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216strain Li-1(accession id=419) 5.216.t corresponding ecotype Ll-1(stkparent=CS6782, ecotype id=7238, duplicate=1)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7181, duplicate=1) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216.1 corresponding ecotype Li-1(stkparent=CS6782, ecotype id=7238, duplicate=1) 5.217.1 corresponding ecotype Ma-0(stkparent=CS6789, ecotype id=7245, duplicate=1)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.strain Hl-3(accession id=412) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.1 corresponding ecotype Jl-3(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.strain Jl-3(accession id=413) 5.212.strain Jl-3(accession id=414) 5.212.strain Jl-3(accession id=414) 5.212.strain Jl-3(accession id=415) 5.213.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.strain Kil-0(accession id=417) 5.214.strain Kil-0(accession id=417) 5.215.strain Li-7(accession id=418) 5.215.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7291, duplicate=1) 5.215.strain Li-1(accession id=418) 5.215.strain Ll-1(accession id=419) 5.216.1 corresponding ecotype Ll-1(stkparent=CS6782, ecotype id=7238, duplicate=1) 5.217.strain Ma-0(accession id=420) 5.217.strain Ma-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.219.strain Nh-0(accession id=422)	. 141 . 142 . 142 . 143 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6744, ecotype id=7164, duplicate=1) 5.210.strain Hl-3(accession id=412) 5.210.strain Hl-3(accession id=412) 5.211.strain Je-0(accession id=413) 5.211.t corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.strain Jl-3(accession id=413) 5.211.strain Jl-3(accession id=414) 5.212.strain Jl-3(accession id=414) 5.212.strain Jl-3(accession id=414) 5.213.strain Kb-0(accession id=415) 5.213.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.214.strain Kil-0(accession id=417) 5.214.strain Kil-0(accession id=417) 5.214.strain Kil-0(accession id=417) 5.215.strain Li-7(accession id=418) 5.215.i corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.216.strain Ll-1(accession id=418) 5.215.strain Ll-1(accession id=419) 5.216.strain Ll-1(accession id=420) 5.217.strain Ma-0(accession id=420) 5.217.strain Ma-0(accession id=420) 5.218.strain Mh-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.218.strain Mh-0(accession id=422) 5.219.strain Nd-0(accession id=422) 5.219.strain Nd-0(accession id=422) 5.219.strain Nd-0(accession id=620)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209 strain Hau-0(accession id=411) 5.210.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216.1 corresponding ecotype Li-1(stkparent=CS6782, ecotype id=7238, duplicate=1) 5.217.1 corresponding ecotype Ma-0(stkparent=CS6789, ecotype id=7245, duplicate=1) 5.218.1 corresponding ecotype Ma-0(stkparent=CS6789, ecotype id=7245, duplicate=1) 5.218.1 corresponding ecotype Mh-0(stkparent=CS6792, ecotype id=7255, duplicate=1) 5.219.1 corresponding ecotype Mh-0(stkparent=CS6792, ecotype id=7255, duplicate=1) 5.219.1 corresponding ecotype Nd-0(stkparent=CS6792, ecotype id=7265, duplicate=1) 5.219.1 corresponding ecotype Nd-0(stkparent=CS6792, ecotype id=7265, duplicate=1)	. 141 . 142 . 142 . 143 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.strain Hl-3(accession id=412) 5.210.strain Hl-3(accession id=412) 5.211.strain Je-0(accession id=413) 5.211.1 corresponding ecotype Hl-3(stkparent=CS6794, ecotype id=7172, duplicate=1) 5.212.strain Jl-3(accession id=413) 5.212.strain Jl-3(accession id=414) 5.212.strain Jl-3(accession id=414) 5.212.strain Jl-3(accession id=415) 5.213.strain Kb-0(accession id=415) 5.213.strain Kb-0(accession id=417) 5.214.strain Kil-0(accession id=417) 5.214.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.215.strain Li-7(accession id=418) 5.215.strain Li-7(accession id=418) 5.215.tcorresponding ecotype Li-7(stkparent=CS6754, ecotype id=7231, duplicate=1) 5.216.strain Li-1(accession id=419) 5.216.strain Li-1(accession id=420) 5.217.strain Ma-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.218.strain Mh-0(accession id=421) 5.218.strain Ma-0(accession id=421) 5.219.strain Ma-0(accession id=422) 5.219.strain Ma-0(accession id=423) 5.220.strain No-0(accession id=423)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144
5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1) 5.209 strain Hau-0(accession id=411) 5.210.1 corresponding ecotype Hau-0(stkparent=CS6734, ecotype id=7164, duplicate=1) 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1) 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1) 5.212.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Jl-3(stkparent=CS6745, ecotype id=7424, duplicate=1) 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1) 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1) 5.215.1 corresponding ecotype Li-7(stkparent=CS6778, ecotype id=7231, duplicate=1) 5.216.1 corresponding ecotype Li-1(stkparent=CS6782, ecotype id=7238, duplicate=1) 5.217.1 corresponding ecotype Ma-0(stkparent=CS6789, ecotype id=7245, duplicate=1) 5.218.1 corresponding ecotype Ma-0(stkparent=CS6789, ecotype id=7245, duplicate=1) 5.218.1 corresponding ecotype Mh-0(stkparent=CS6792, ecotype id=7255, duplicate=1) 5.219.1 corresponding ecotype Mh-0(stkparent=CS6792, ecotype id=7255, duplicate=1) 5.219.1 corresponding ecotype Nd-0(stkparent=CS6792, ecotype id=7265, duplicate=1) 5.219.1 corresponding ecotype Nd-0(stkparent=CS6792, ecotype id=7265, duplicate=1)	. 141 . 142 . 142 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144 . 144

	$5.222.1 \text{ corresponding ecotype Ob-0(stkparent=CS6816, ecotype id=7276, duplicate=1)} \dots \dots$		
	$5.223 strain\ Or-0 (accession\ id=426)\ \dots \dots$	. 14	16
	5.223.1 corresponding ecotype Or-0(stkparent=CS6822, ecotype id=7282, duplicate=1)		
	5.224strain Pog-0(accession id=427)		
	5.224.1 corresponding ecotype Pog-0(stkparent=CS6842, ecotype id=7306, duplicate=1)	. 14	16
	5.225strain RLD-1(accession id=428)	. 14	6
	5.225.1 corresponding ecotype RLD-1(stkparent=CS913, ecotype id=7471, duplicate=1)	. 14	16
	5.226strain Sf-2(accession id=429)		
	$5.226.1 \text{ corresponding ecotype Sf-} 2(\text{stkparent=CS}6857, \text{ ecotype id=}7328, \text{ duplicate=}1) \dots \dots$		
	5.227strain Ste-0(accession id=430)		
	5.227.1 corresponding ecotype Ste-0(stkparent=CS6864, ecotype id=7346, duplicate=1)		
	5.228strain Te-0(accession id=431)		
	$5.228.1 corresponding ecotype Te-0 (stkparent=CS6918, ecotype id=7352, duplicate=1) \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $		
	$5.229 strain \ Tol-0 (accession \ id=432) \ldots \ldots$		
	5.229.1 corresponding ecotype Tol-0(stkparent=CS8020, ecotype id=7356, duplicate=1)	. 14	١7
	5.230strain Tu-1(accession id=433)	. 14	18
	5.230.1 corresponding ecotype Tu-1(stkparent=CS6876, ecotype id=7376, duplicate=1)	. 14	18
	5.231strain Uk-4(accession id=434)		
	5.231.1 corresponding ecotype Uk-4(stkparent=CS6882, ecotype id=7381, duplicate=1)		
	5.232strain WAR(accession id= $435$ )		
	5.232.1 corresponding ecotype WAR(stkparent=CS8143, ecotype id=7477, duplicate=1)		
	5.233strain Wt-1(accession id=436)		
	5.233.1 corresponding ecotype Wt-1(stkparent=CS6892, ecotype id=7406, duplicate=1)		
	5.234strain Zu-1(accession id=437)		
	$5.234.1 \text{ corresponding ecotype Zu-1} (\text{stkparent=CS6903}, \text{ ecotype id=7418}, \text{ duplicate=1}) \dots \dots$	. 14	.9
c	2010 DCD for and CND		
O	2010 PCR versus sequenom for each SNP	14	
	6.1 SNP AtMSQTsnp 2(chrom=1, pos=112907, alignment id=847, alignment start=112445)		
	6.2 SNP AtMSQTsnp 4(chrom=1, pos=340810, alignment id=1095, alignment start=340398)		
	6.3 SNP AtMSQTsnp 8(chrom=1, pos=993374, alignment id=1042, alignment start=992824)		
	$6.4  SNP \ AtMSQTsnp \ 9 (chrom=1, \ pos=1042427, \ alignment \ id=1109, \ alignment \ start=1042028) \ \dots $		
	6.5 SNP AtMSQTsnp 10(chrom=1, pos=1149280, alignment id=1467, alignment start=1149096)		
	6.6 SNP AtMSQTsnp 11(chrom=1, pos=1602136, alignment id=848, alignment start=1601885)	. 15	i1
	6.7 SNP AtMSQTsnp 12(chrom=1, pos=2211033, alignment id=964, alignment start=2210982)	. 15	$\mathbf{i}^2$
	6.8 SNP AtMSQTsnp 14(chrom=1, pos=2775956, alignment id=1649, alignment start=2775589)		
	6.9 SNP AtMSQTsnp 15(chrom=1, pos=2844525, alignment id=1139, alignment start=2844111)		
	6.10 SNP AtMSQTsnp 18(chrom=1, pos=3872591, alignment id=2224, alignment start=3872234)		
	6.11 SNP AtMSQTsnp 21(chrom=1, pos=4142539, alignment id=2625, alignment start=4142402)		
	6.12 SNP AtMSQTsnp 22(chrom=1, pos=4396087, alignment id=46, alignment start=4395913)	. 15	: 1
	6.13 SNP AtMSQTsnp 27(chrom=1, pos=4590087, alignment id=40, alignment start=5206479)		
	6.14 SNP AtMSQTsnp 29(chrom=1, pos=5482008, alignment id=263, alignment start=5481722)		
	6.15 SNP AtMSQTsnp 30(chrom=1, pos=5629159, alignment id=2156, alignment start=5628596)		
	6.16 SNP AtMSQTsnp 31(chrom=1, pos=5923041, alignment id=265, alignment start=5922974)		
	6.17 SNP AtMSQTsnp 33(chrom=1, pos=6375605, alignment id=967, alignment start=6375563)		
	6.18 SNP AtMSQTsnp 38(chrom=1, pos=7449598, alignment id=2136, alignment start=7449482)		
	6.19 SNP AtMSQTsnp 40(chrom=1, pos=7842523, alignment id=928, alignment start=7842440)	. 16	0
	6.20 SNP AtMSQTsnp 41(chrom=1, pos=8015448, alignment id=855, alignment start=8014943)	. 16	i1
	6.21 SNP AtMSQTsnp 47(chrom=1, pos=9343401, alignment id=929, alignment start=9343234)	. 16	i2
	6.22 SNP AtMSQTsnp 48(chrom=1, pos=9497118, alignment id=930, alignment start=9496666)	. 16	53
	6.23 SNP AtMSQTsnp 49(chrom=1, pos=9781347, alignment id=1018, alignment start=9781260)		
	6.24 SNP AtMSQTsnp 53(chrom=1, pos=10423708, alignment id=948, alignment start=10423483)		
	6.25 SNP AtMSQTsnp 54(chrom=1, pos=10720273, alignment id=860, alignment start=10719833)		
	6.26 SNP AtMSQTsnp 57(chrom=1, pos=11655519, alignment id=273, alignment start=11655171)		
	6.27 SNP AtMSQTsnp 58(chrom=1, pos=12093546, alignment id=279, alignment start=12093079)		
	6.28 SNP AtMSQTsnp 60(chrom=1, pos=12357583, alignment id=1973, alignment start=12357044)		
	6.29 SNP AtMSQ1snp 60(chrom=1, pos=12357583, alignment id=1973, alignment start=12357044)		
	• • • • • • • • • • • • • • • • • • • •		
	6.30 SNP AtMSQTsnp 62(chrom=1, pos=13541648, alignment id=808, alignment start=13541490)		
	6.31 SNP AtMSQTsnp 63(chrom=1, pos=13712241, alignment id=345, alignment start=13711856)		
	6.32 SNP AtMSQTsnp 65(chrom=1, pos=16874727, alignment id=290, alignment start=16874305)		
	6.33 SNP AtMSQTsnp 67(chrom=1, pos=17355738, alignment id=660, alignment start=17355484)		
	6.34 SNP AtMSQTsnp 69(chrom=1, pos=18340160, alignment id=1407, alignment start=18340113)		
	$6.35~SNP~AtMSQTsnp~73 (chrom=1,~pos=20175347,~alignment~id=1477,~alignment~start=20174753)~\dots \dots $		
	$6.36~SNP~AtMSQTsnp~76 (chrom=1,~pos=21908667,~alignment~id=2670,~alignment~start=21908157)~\dots \dots $		
	6.37 SNP AtMSQTsnp 85(chrom=1, pos=23155780, alignment id=668, alignment start=23155464)	. 17	4
	6.38 SNP AtMSQTsnp 87(chrom=1, pos=23381760, alignment id=312, alignment start=23381443)	. 17	<b>'</b> 4
	6.39 SNP AtMSQTsnp 88(chrom=1, pos=23395010, alignment id=1071, alignment start=23394478)		
	6.40 SNP AtMSQTsnp 90(chrom=1, pos=23893336, alignment id=69, alignment start=23893276)		
	6.41 SNP AtMSQTsnp 91(chrom=1, pos=24071689, alignment id=1427, alignment start=24071203)		
	6.42 SNP AtMSQTsnp 92(chrom=1, pos=24292774, alignment id=672, alignment start=24292482)		
	6.43 SNP AtMSQTsnp 97(chrom=1, pos=24893649, alignment id=1428, alignment start=24893448)		
	6.44 SNP AtMSQTsnp 100(chrom=1, pos=25717887, alignment id=1758, alignment start=25717715)		
	6.45 SNP AtMSQ1snp 100(chrom=1, pos=26278413, alignment id=1738, alignment start=26177713)		
	6.45 SNP AtMSQ1snp 101(chrom=1, pos=26278413, alignment id=330, alignment start=26278221)		
	6.47 SNP AtMSQTsnp 108(chrom=1, pos=28666837, alignment id=343, alignment start=28666569)		
	6.48 SNP AtMSQTsnp 114(chrom=1, pos=30214313, alignment id=1800, alignment start=30213917)		
	6.49 SNP AtMSQTsnp 118(chrom=2, pos=322335, alignment id=2465, alignment start=322253)		
	6.50 SNP AtMSQTsnp 123(chrom=2, pos=1798445, alignment id=2109, alignment start=1798324)		
	$6.51~SNP~AtMSQTsnp~126 (chrom=2,~pos=2477756,~alignment~id=2192,~alignment~start=2477306) \\  (chrom=2,~pos=2477756,~alignment~start=2477306) \\  (chrom=2,~pos=2477756$		
	$6.52~\mathrm{SNP}~\mathrm{AtMSQTsnp}~128 (\mathrm{chrom} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ ~\mathrm{AtMSQTsnp}}}} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ ~\mathrm{AtMSQTsnp}}} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ ~\mathrm{AtMSQTsnp}}} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ ~\mathrm{AtMSQTsnp}}} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ }} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ }} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ }} = 2,~\mathrm{pos} = 5021020,~\mathrm{alignment}~\mathrm{id} = 1514,~\mathrm{alignment}~\mathrm{start} = 5020871) \\ }} = 2,~\mathrm{pos} = 5021020,~\mathrm{pos} = 2021020,~\mathrm{pos} =$		
	6.53 SNP AtMSQTsnp 129(chrom=2, pos=5804076, alignment id=407, alignment start=5803805)	. 18	3
	6.54 SNP AtMSQTsnp 130(chrom=2, pos=6499679, alignment id=2098, alignment start=6499196)	. 18	55

```
6.125SNP AtMSQTsnp 358(chrom=5, pos=7279057, alignment id=550, alignment start=7278798) . . . . . . . . . . . .
6.126 SNP\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ id=1363,\ alignment\ start=7442039) \\ \phantom{6.126 SNP}\ AtMSQTsnp\ 359 (chrom=5,\ pos=7442381,\ alignment\ start=7442039) \\ \phantom{6.126
```

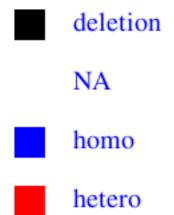


Figure 1: matrix legend

6.136SNP AtMSQTsnp 390(chrom=5, pos=20215473, alignment id=970, alignment start=20214933)	240
6.137SNP AtMSQTsnp 392(chrom=5, pos=20409250, alignment id=994, alignment start=20408706)	241
6.138SNP AtMSQTsnp 394(chrom=5, pos=20518330, alignment id=2759, alignment start=20518241)	242
6.139SNP AtMSQTsnp 395(chrom=5, pos=20915321, alignment id=981, alignment start=20915132)	242
6.140SNP AtMSQTsnp 397(chrom=5, pos=22040877, alignment id=992, alignment start=22040690)	243
6.141SNP AtMSQTsnp 398(chrom=5, pos=22116788, alignment id=642, alignment start=22116605)	243
6.142SNP AtMSQTsnp 399(chrom=5, pos=22414941, alignment id=146, alignment start=22414510)	244
6.143SNP AtMSQTsnp 404(chrom=5, pos=23270994, alignment id=1391, alignment start=23270845)	244
6.144SNP AtMSQTsnp 406(chrom=5, pos=23815848, alignment id=978, alignment start=23815354)	244
6.145SNP AtMSQTsnp 408(chrom=5, pos=25301234, alignment id=2690, alignment start=25300706)	246
6.146SNP AtMSQTsnp 409(chrom=5, pos=26029439, alignment id=2404, alignment start=26029366)	246
6.147SNP AtMSQTsnp 410(chrom=5, pos=26120955, alignment id=596, alignment start=26120843)	247
6.148SNP AtMSQTsnp 412(chrom=5, pos=26379972, alignment id=2302, alignment start=26379717)	247
6.149SNP AtMSQTsnp 415(chrom=5, pos=26708459, alignment id=2711, alignment start=26707937)	248

#### 1 Introduction

In an earlier 2010SequenceReport, 244 out of old 2010's 248 strains were found matches in the new sequenom-genotyped ecotype table (one-to-one mapping). Now not only that, other copies of that 244 strains in ecotype table were also found out based on nativename (two pairs deleted after manual checkup. see ticket no.3 on the trac website). Different genotype runs for a single ecotype are also treated separately.

The question is to do a detailed comparison between two different studies.

The input are two matricies. Matrix 1 (2010 pcr data, Figure 2) is 236 2010 strains X 149 SNPs. (it's 236, not 244 because a few strains are not genotyped in sequenom-data. Matrix 2 (Figure 3 is 454 sequenom strains X 149 SNPs. All these 454 sequenom strains could be mapped to 236 2010 pcr strains.

The method is to look at contingency-like tables. It's a table to show where the 2010 pcr calls are mapped in sequenom calls. There're 12 different types of calls. The row is 2010 pcr call. The column is sequenom call.

'-' is deletion. 'NA' means not available (it could mean not genotyped or genotyped but can't be told which is which.) The rest is self-explanatory.

#### 2 Observations

#### 2.1 observation from summary comparison

Results are in section 3. Whether there's a strain recorded is one thing, whether that strain was tried using pcr or sequenom is another thing. Based on whether that strain was **tried** by pcr in 2010 or sequenom, there're 4 combinations between 2010 and sequenom. 4 tables (Table 1-5) correspond to these 4 different combinations. The data of the strains not tried by sequenom are not included. This is why table 2 and table 5 are empty.

Attention should be focused on Table 1.

- There's a dominance of mismatches happening within two purine (A and G) or two pyrimidine bases (C and T). this is probably related to the mass spectrometry technology used by sequenom.
- Only 3 heterozygous calls match between 2010 pcr and sequenom data. If the heterozygous call is mismatched, it's mismatched to one of the two alleles (which is nothing new).
- Check 2nd column, Lots of calls (about 12% for each base) made in 2010 per were called 'NA' (undecided) in sequenom data.

All these call for the improvement in the genotype calling algorithm.

#### 2.2 observation from strain-wise comparison

Results are in section 5.

Strains are ordered by 2010 accession id. For each 2010 strain, different sequenom runs are listed as subsections.

- 4 copies of Mr-0 in sequenom. 3 of them show consistent homozygous states. the 3rd one, which is a technical duplicate of the 2rd one, might be contamination (lots of heterozygous calls).
- 3 copies of Van-0 in sequenom all show consistent homozygous calls in sequenom. but Van-0 shows quite heterozygous in 2010 pcr. So 2010 pcr's Van-0 is contaminated?
- $\bullet\,$  Cvi-0 looks pretty consistent between two types of data.

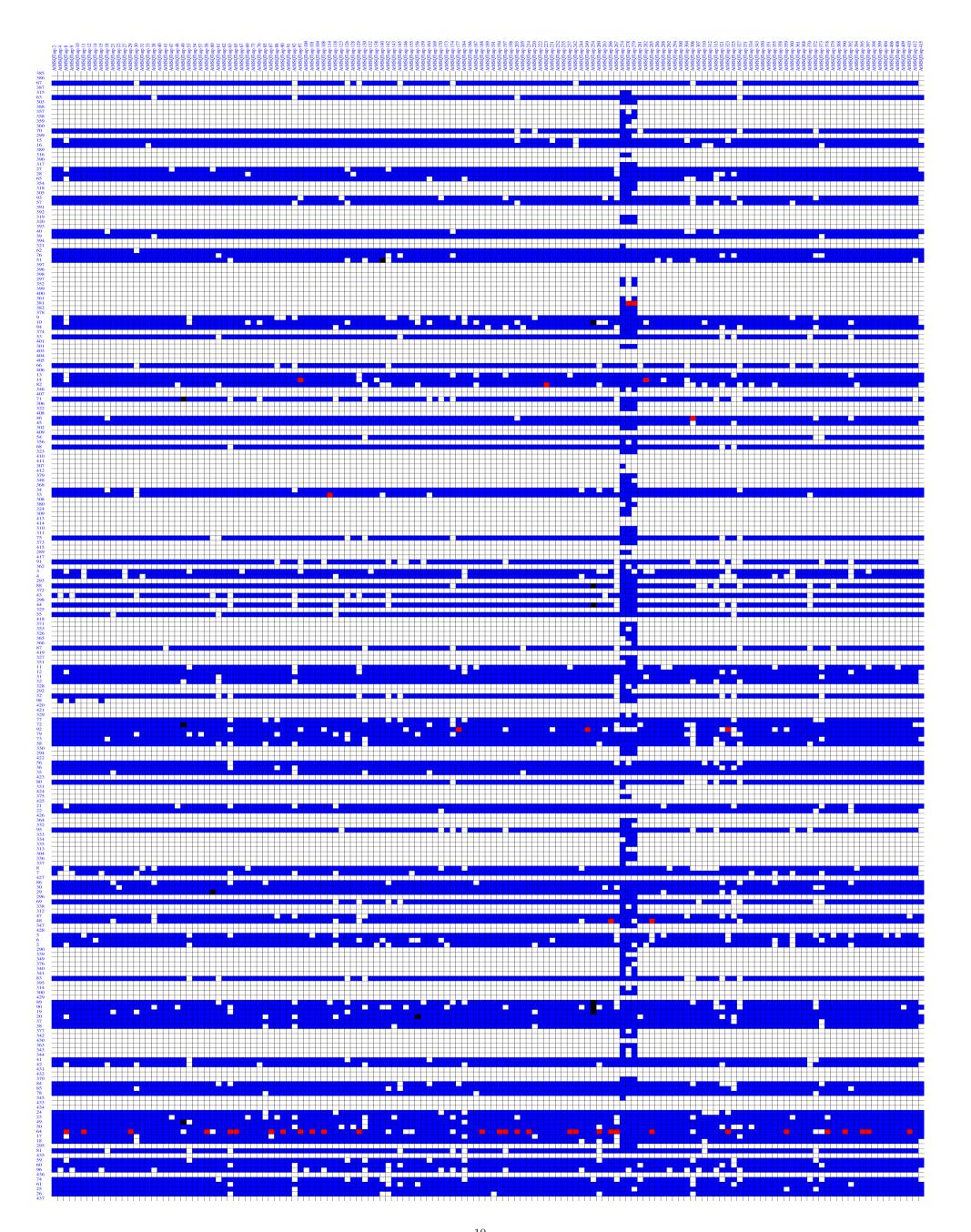


Figure 2: 2010 pcr strain X snp matrix. rows are labeled by 2010 accession ids. columns are labeled by SNP ids. check Figure 1 for legend.

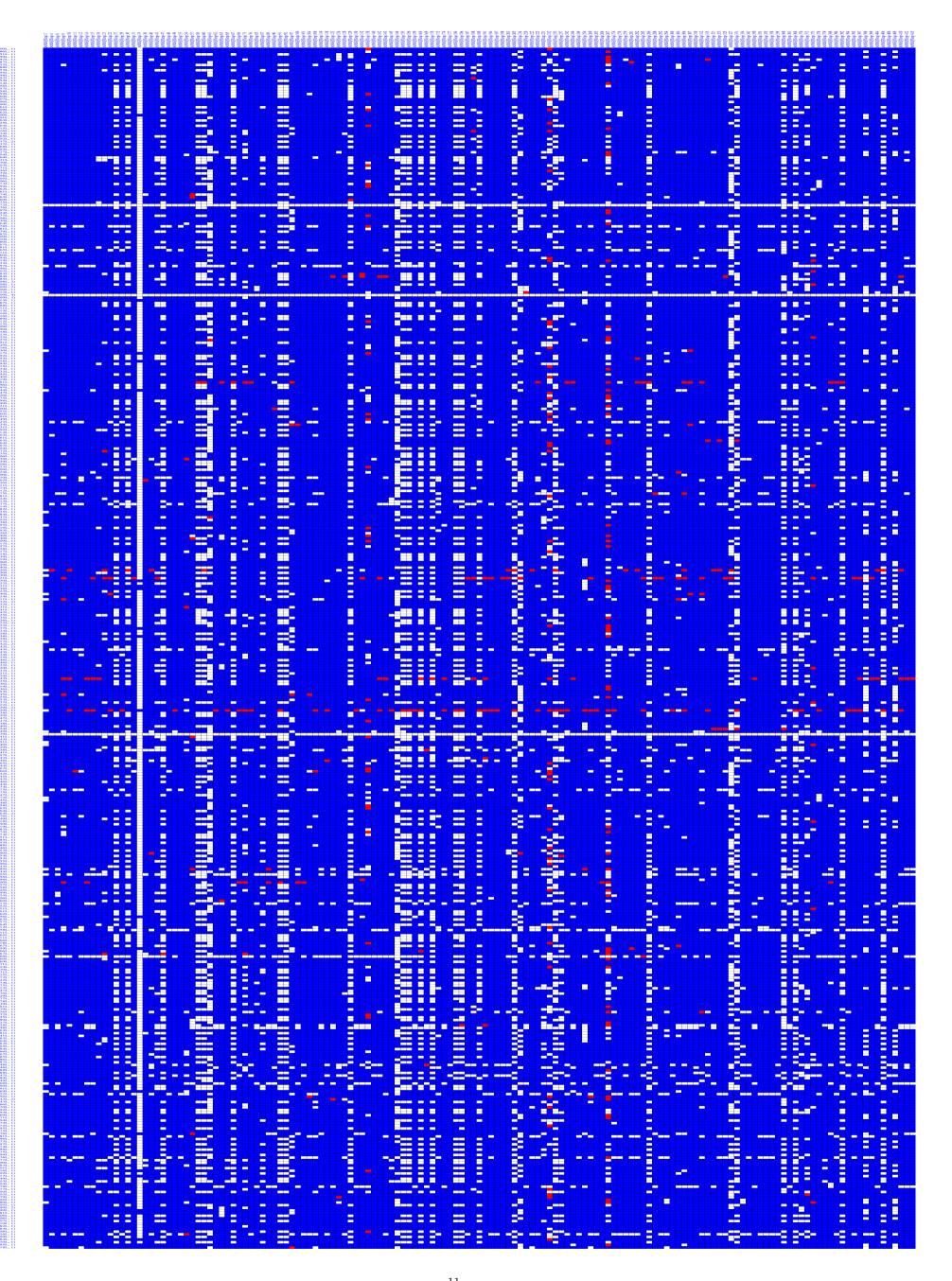


Figure 3: sequenom strain X snp matrix. rows are labeled by sequenom ecotype, duplicate pairs. columns are labeled by SNP ids. check Figure 1 for legend.

#### 2.3 observation from snp-wise comparison

Results are in section 6.

- AtMSQTsnp146 has 3 major alleles in 2010 pcr data. In sequenom, the 3rd allele('C') is all called 'NA' except one case.
- there're 4 bad snps (AtMSQTsnp 138, 232, 263 and 267) showing excessive heterozygosity that were tossed out based on a statistic model. one of them (AtMSQTsnp 264) doesn't show excessive heterozygosity in these strains. AtMSQTsnp 138 has lots of 'C' alleles of 2010 pcr called 'NA' and 'CT' in sequenom data (AtMSQTsnp 232, 267 has similar situation).
- $\bullet$  (loss) snp AtMSQTsnp 30, 33, 47, 58, 60, 61, 67, 87, 91, 92, 129, 155, 156, 164, 170, 184, 186, 189, 205, 214, 231, 235, 237, 286, 331, 360, 368, 372, 398, 406, 409 show calls in 2010 pcr called 'NA' in sequenom data.
- (recovery) snp AtMSQTsnp 118, 126, 130, 142, 145, 174, 184, 278, 279, 304, 306, 315, 321, 325, 373, 415 show lots of 'NA' in 2010 pcr recovered by sequenom.
- $\bullet\,$  snp AtMSQTsnp 327, 370, 392 show both loss and recovery.

#### 3 2010 PCR versus sequenom. summary

Table 1: PCR-tried vs sequenom-tried

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	8	1	0	0	3	0	0	0	0	0	0
NA	0	177	150	142	150	122	1	0	0	0	2	0
A	0	873	2954	3	23	3	0	0	0	0	0	0
$\mathbf{C}$	0	666	8	2402	2	13	0	0	0	0	5	0
G	0	866	23	5	2997	5	0	0	0	0	0	0
${\rm T}$	0	540	3	18	6	2792	0	0	0	0	0	0
AC	0	0	2	0	0	0	0	0	0	0	0	0
AG	0	1	10	0	5	0	0	0	0	0	0	0
AT	0	0	2	0	0	1	0	0	1	0	0	0
CG	0	1	0	3	1	0	0	0	0	0	0	0
$\operatorname{CT}$	0	1	0	5	0	4	0	0	0	0	1	0
$\operatorname{GT}$	0	1	0	0	1	2	0	0	0	0	0	0

Table 2: PCR-tried vs sequenom-untried

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 3: PCR-untried vs sequenom-tried

	Г											
	-	NA	A	С	G	T	AC	$\mid AG \mid$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3081	5098	4220	5114	4463	22	20	7	5	60	6
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 4: PCR-untried vs sequenom-untried

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

# 4 Real Mismatches between pcr and sequenom (deletion/NA excluded)

Table 5: mismatches between pcr and sequenom data (deletion/NA excluded, sorted by accession id)  $\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	SNP	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	AtMSQTsnp 140	2	8750047	1072	8749828	С	A
Kno-10	CS22566	8317	1	3	AtMSQTsnp 378	5	17171676	1489	17171242	G	$\mathbf{C}$
Lv-1	CS22574	6043	1	11	AtMSQTsnp 370	5	15065196	756	15065018	A	G
Lv-5	CS22575	6046	1	12	AtMSQTsnp 370	5	15065196	756	15065018	A	G
Fb-4	CS22577	8293	1	14	AtMSQTsnp 307	4	17038400	2205	17038096	${ m T}$	A
Fb-4	CS22577	8293	1	14	AtMSQTsnp 97	1	24893649	1428	24893448	CG	$\mathbf{C}$
Bil-7	CS22579	8263	1	16	AtMSQTsnp 370	5	15065196	756	15065018	A	G
m2-3	CS22585	8350	1	22	AtMSQTsnp 373	5	15767945	1190	15767914	A	G
Zdr-1	CS22588	8409	1	25	AtMSQTsnp 260	4	5775707	933	5775541	C	Ā
Bor-1	CS22590	5837	1	27	AtMSQTsnp 2	1	112907	847	112445	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 12	1	2211033	964	2210982	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 88	1	23395010	1071	23394478	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 100	1	25717887	1758	25717715	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 177	2	17859964	118	17859576	A	G
Bor-1	CS22590	5837	1	$\frac{27}{27}$	AtMSQTsnp 177 AtMSQTsnp 249	4	1055234	482	1055093	A	G
Bor-1	CS22590 $CS22590$	5837	1	$\frac{27}{27}$	AtMSQTsnp 300	4	15765120	1685	15764920	A	G
				27							G
Bor-1	CS22590	5837	1		AtMSQTsnp 323	5	872350	532	872097	A	
Bor-1	CS22590	5837	1	27	AtMSQTsnp 358	5	7279057	550	7278798	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 368	5	14216131	1035	14215995	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 410	5	26120955	596	26120843	A	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 187	3	580470	55	580026	A	T
Bor-1	CS22590	5837	1	27	AtMSQTsnp 194	3	3679541	1632	3679103	A	T
Bor-1	CS22590	5837	1	27	AtMSQTsnp 191	3	2236458	2592	2236406	$\mathbf{C}$	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 254	4	2441217	233	2440917	$\mathbf{C}$	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 310	4	17608924	1999	17608717	C	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 321	5	625679	2386	625179	С	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 388	5	19316200	761	19315950	$\mathbf{C}$	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 398	5	22116788	642	22116605	$\mathbf{C}$	G
Bor-1	CS22590	5837	1	27	AtMSQTsnp 21	1	4142539	2625	4142402	$\mathbf{C}$	${ m T}$
Bor-1	CS22590	5837	1	27	AtMSQTsnp 30	1	5629159	2156	5628596	$\mathbf{C}$	${ m T}$
Bor-1	CS22590	5837	1	27	AtMSQTsnp 343	5	3606967	538	3606683	$\mathbf{C}$	${ m T}$
Bor-1	CS22590	5837	1	27	AtMSQTsnp 22	1	4396087	46	4395913	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 67	1	17355738	660	17355484	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 91	1	24071689	1427	24071203	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 92	1	24292774	672	24292482	$\overset{\smile}{\mathrm{G}}$	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 123	2	1798445	2109	1798324	$\overset{\smile}{\mathrm{G}}$	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 129	2	5804076	407	5803805	Ğ	A
Bor-1	CS22590 $CS22590$	5837	1	$\frac{27}{27}$	AtMSQTsnp 220	3	11398207	1053	11398071	G	A
Bor-1	CS22590 $CS22590$	5837	1	$\frac{27}{27}$	AtMSQTsnp 223	3	16489589	2208	16489217	G	A
Bor-1	CS22590 $CS22590$	5837		27	AtMSQTsnp 278	4	9377790	2783	9377549	G	A
Bor-1	CS22590 $CS22590$	5837	1	27	AtMSQTsnp 288		11984772	1376	11984495	G	A
	CS22590 $CS22590$	5837	1	27	AtMSQTsnp 370	4	15065196	756	15065018	G	
Bor-1			1			5					A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 373	5	15767945	1190	15767914	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 379	5	17629384	2039	17629093	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 394	5	20518330	2759	20518241	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 406	5	23815848	978	23815354	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 408	5	25301234	2690	25300706	G	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 40	1	7842523	928	7842440	G	С
Bor-1	CS22590	5837	1	27	AtMSQTsnp 58	1	12093546	279	12093079	G	C
Bor-1	CS22590	5837	1	27	AtMSQTsnp 97	1	24893649	1428	24893448	G	С
Bor-1	CS22590	5837	1	27	AtMSQTsnp 31	1	5923041	265	5922974	G	${ m T}$
Bor-1	CS22590	5837	1	27	AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	A
Bor-1	CS22590	5837	1	27	AtMSQTsnp 48	1	9497118	930	9496666	${ m T}$	$\mathbf{C}$
Bor-1	CS22590	5837	1	27	AtMSQTsnp 49	1	9781347	1018	9781260	${ m T}$	$\mathbf{C}$
	CS22590	5837	1	27	AtMSQTsnp 57	1	11655519	273	11655171	T	$\mathbf{C}$
Bor-1	0.0 == 0.0						i e			Τ	$\mathbf{C}$

									i	1	
Bor-1	CS22590	5837	1	27	AtMSQTsnp 130	2	6499679	2098	6499196	T	(
Bor-1	CS22590	5837	1	27	AtMSQTsnp 145	2	10566917	381	10566416	T	(
Bor-1	CS22590	5837	1	27	AtMSQTsnp 159	2	13265124	2127	13265029	T	(
Bor-1	CS22590	5837	1	27	AtMSQTsnp 188	3	2072780	649	2072648	T	(
Bor-1	CS22590	5837	1	27	AtMSQTsnp 263	4	7077926	495	7077771	Т	(
Bor-1	CS22590	5837	1	27	AtMSQTsnp 325	5	1214057	2388	1213621	$^{-}$	
Bor-1	CS22590	5837	1	$\begin{vmatrix} 27\\27 \end{vmatrix}$	AtMSQTsnp 390	5	20215473	970	20214933	$\begin{array}{ c c }\hline T\end{array}$	
											- 1
Bor-1	CS22590	5837	1	27	AtMSQTsnp 294	4	13576588	960	13576336	T	(
Bor-1	CS22590	5837	1	27	AtMSQTsnp 355	5	6708014	547	6707732	T	(
IR-5	CS22596	8309	1	33	AtMSQTsnp 114	1	30214313	1800	30213917	$\overline{AG}$	I A
FA-10	CS22599	8345	1	36	AtMSQTsnp 159	2	13265124	2127	13265029	C	]
IBC-5	CS22602	8277	1	39	AtMSQTsnp 321	5	625679	2386	625179	A	(
IBC-5	CS22602	8277	1	39	AtMSQTsnp 223	3	16489589	2208	16489217	A	(
IBC-5	CS22602	8277	1	39	AtMSQTsnp 244	3	23053878	1662	23053771	A	
IBC-5	CS22602	8277		39	AtMSQTsnp 304		16272521	2262	16272270	$\frac{\Lambda}{C}$	
			1			4					
IBC-5	CS22602	8277	1	39	AtMSQTsnp 334	5	2244739	1995	2244524	C	
CIBC-5	CS22602	8277	1	39	AtMSQTsnp 138	2	8371133	373	8370574	С	(
SIBC-5	CS22602	8277	1	39	AtMSQTsnp 306	4	16742071	2714	16741855	G	
$^{\circ}$ IBC-5	CS22602	8277	1	39	AtMSQTsnp 307	4	17038400	2205	17038096	T	I
CIBC-17	CS22603	8276	1	40	AtMSQTsnp 415	5	26708459	2711	26707937	A	(
CIBC-17	CS22603	8276	1	40	AtMSQTsnp 307	4	17038400	2205	17038096	A	
IBC-17	CS22603	8276		40	AtMSQTsnp 321	5	625679	2386	625179	$^{\rm C}$	Ā
			1								
IBC-17	CS22603	8276	1	40	AtMSQTsnp 159	2	13265124	2127	13265029	C	
IBC-17	CS22603	8276	1	40	AtMSQTsnp 114	1	30214313	1800	30213917	G	I
CIBC-17	CS22603	8276	1	40	AtMSQTsnp 223	3	16489589	2208	16489217	G	1
CIBC-17	CS22603	8276	1	40	AtMSQTsnp 244	3	23053878	1662	23053771	G	1
IBC-17	CS22603	8276	1	40	AtMSQTsnp 327	5	1497133	2105	1496987	G	7
IBC-17	CS22603	8276	1	40	AtMSQTsnp 334	5	2244739	1995	2244524	$\stackrel{\circ}{\mathrm{T}}$	(
Z-1	CS22606	8320	1	$\begin{array}{ c c }\hline 40\\ 43 \end{array}$	AtMSQTsnp 15	1	2844525	1139	2844111	$\begin{array}{c} 1 \\ T \end{array}$	
										$^{1}_{\mathrm{CG}}$	
Got-22	CS22609	8298	1	46	AtMSQTsnp 306	4	16742071	2714	16741855		
Ren-1	CS22610	8367	1	47	AtMSQTsnp 388	5	19316200	761	19315950	A	(
z-0	CS22615	8336	1	52	AtMSQTsnp 159	2	13265124	2127	13265029	T	(
m er-1	CS22618	8324	1	55	AtMSQTsnp 159	2	13265124	2127	13265029	${ m T}$	(
C24	CS22620	8273	1	57	AtMSQTsnp 138	2	8371133	373	8370574	C	(
7o-0	CS22624	8408	1	61	AtMSQTsnp 138	2	8371133	373	8370574	$\mathbf{C}$	(
$\tan \theta$	CS22627	8400	1	64	AtMSQTsnp 281	4	10482088	956	10482038	$\stackrel{\circ}{\mathrm{C}}$	
					AtMSQTsnp 12		2211033				
an-0	CS22627	8400	1	64	1	1		964	2210982	G	I
an-0	CS22627	8400	1	64	AtMSQTsnp 220	3	11398207	1053	11398071	G	I
7an-0	CS22627	8400	1	64	AtMSQTsnp 63	1	13712241	345	13711856	AC	I
7an- $0$	CS22627	8400	1	64	AtMSQTsnp 260	4	5775707	933	5775541	AC	I
$V_{ m an-0}$	CS22627	8400	1	64	AtMSQTsnp 65	1	16874727	290	16874305	$\overline{AG}$	1
an-0	CS22627	8400	1	64	AtMSQTsnp 101	1	26278413	330	26278221	$\overline{AG}$	I
/an-0	CS22627	8400	1	64	AtMSQTsnp 197	3	4818602	435	4818362	AG	A
7 an - 0	CS22627	8400	1	64	AtMSQTsnp 214	3	9747261	641	9747158	AG	Ā
/an-0	CS22627	8400	1	64	AtMSQTsnp 323	5	872350	532	872097	AG	A
7an-0	CS22627	8400	1	64	AtMSQTsnp 395	5	20915321	981	20915132	$\overline{AG}$	A
7an- $0$	CS22627	8400	1	64	AtMSQTsnp 8	1	993374	1042	992824	$\overline{AG}$	(
7an- $0$	CS22627	8400	1	64	AtMSQTsnp 108	1	28666837	343	28666569	$\overline{AG}$	(
$V_{an-0}$	CS22627	8400	1	64	AtMSQTsnp 410	5	26120955	596	26120843	$\overline{AG}$	(
$V_{ m an-0}$	CS22627	8400	1	64	AtMSQTsnp 29	1	5482008	263	5481722	$\operatorname{AT}$	A
$V_{\rm an-0}$	CS22627	8400	1	64	AtMSQTsnp 203	3	6890665	73	6890596	AT	A
$V_{\rm an-0}$	CS22627	8400	1	64	AtMSQTsnp 194	3	3679541	1632	3679103	AT	
an-0	CS22627	8400	1	64	AtMSQTsnp 97	1	24893649	1428	24893448	$\overline{CG}$	(
an-0	CS22627	8400	1	64	AtMSQTsnp 378	5	17171676	1489	17171242	$\overline{CG}$	(
an-0	CS22627	8400	1	64	AtMSQTsnp 87	1	23381760	312	23381443	CT	(
an-0	CS22627	8400	1	64	AtMSQTsnp 90	1	23893336	69	23893276	$\operatorname{CT}$	(
an-0	CS22627	8400	1	64	AtMSQTsnp 188	3	2072780	649	2072648	$\operatorname{CT}$	(
an-0	CS22627	8400	1	64	AtMSQTsnp 242	3	21632608	138	21632379	$\overline{\mathrm{CT}}$	(
an-0	CS22627	8400	1	64	AtMSQTsnp 267	4	8297960	499	8297594	CT	
an-0	CS22627 CS22627	8400		64			1602136	848	1601885	CT	,
			1		AtMSQTsnp 11	1					
an-0	CS22627	8400	1	64	AtMSQTsnp 285	4	11326190	507	11325921	CT	
an-0	CS22627	8400	1	64	AtMSQTsnp 390	5	20215473	970	20214933	CT	,
an-0	CS22627	8400	1	64	AtMSQTsnp 359	5	7442381	1363	7442039	GT	
an-0	CS22627	8400	1	64	AtMSQTsnp 266	4	8078648	238	8078388	GT	r
an-0	CS22627	8400	1	64	AtMSQTsnp 397	5	22040877	992	22040690	GT	r
a-0	CS22632	8364	1	69	AtMSQTsnp 321	5	625679	2386	625179	A	(
a-0 a-0	CS22632	8364	1	69	AtMSQTsnp 334	5	2244739	1995	2244524	$\frac{\Lambda}{C}$	,
a-0	CS22632	8364	1	69	AtMSQTsnp 223	3	16489589	2208	16489217	G	1
rk-0	CS22635	8339	1	72	AtMSQTsnp 325	5	1214057	2388	1213621	C	-
't-5	CS22637	8407	1	74	AtMSQTsnp 334	5	2244739	1995	2244524	T	(
t-1	CS22639	8280	1	76	AtMSQTsnp 292	4	12404111	2534	12403706	${ m T}$	- (
su-1	CS22641	8394	1	78	AtMSQTsnp 138	2	8371133	373	8370574	C	7
'su-1	CS22641	8394	1	78	AtMSQTsnp 334	5	2244739	1995	2244524	$\stackrel{\circ}{ m T}$	(
It-0	CS22641 CS22642	8341	l	79	AtMSQTsnp 138	2	8371133	373	8370574	$\frac{1}{C}$	
			1								
lok-3	CS22643	8347	1	80	AtMSQTsnp 334	5	2244739	1995	2244524	C	1
'ei-0	CS22645	8294	1	82	AtMSQTsnp 223	3	16489589	2208	16489217	$\overline{AG}$	(
Kondara	CS22651	8319	1	88	AtMSQTsnp 114	1	30214313	1800	30213917	A	(
Cin-O	CS22654	8316	1	91	AtMSQTsnp 138	2	8371133	373	8370574	С	(
	CS22655	8340	1	92	AtMSQTsnp 173	2	16908190	728	16908054	A	(
$I_{S-0}$	0022000		l			2	17859964	118		AG	A
	CS22655	8340		1 49	ATIVISCITIONS						1 .
Ms-0 Ms-0 Ms-0	CS22655 CS22655	8340 8340	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	$\begin{array}{c} 92 \\ 92 \end{array}$	AtMSQTsnp 177 AtMSQTsnp 249	4	1055234	482	17859576 $1055093$	AG	

Ms-0	CS22655	8340	1	92	AtMSQTsnp 323	5	872350	532	872097	AG	G
NC-6		8246	1	294	AtMSQTsnp 278	4	9377790	2783	9377549	G	A
NC-6		8246	1	294	AtMSQTsnp 274	4	9213312	2778	9213072	T	G
Sf-1	N6855	8380	1	300	AtMSQTsnp 278	4	9377790	2783	9377549	A	G
Sf-1	N6855	8380	1	300	AtMSQTsnp 274	4	9213312	2778	9213072	G	T
PHW-34	N6034	8244	1	304	AtMSQTsnp 274	4	9213312	2778	9213072	T	G
Pi-0	N1455	8356	1	336	AtMSQTsnp 279	4	9580049	2788	9579976	C	T
Pi-0	N1455	8356	1	336	AtMSQTsnp 274	4	9213312	2778	9213072	T	G
Lom1-1		6042	2	351	AtMSQTsnp 278	4	9377790	2783	9377549	A	G
Gul1-2		8234	1	356	AtMSQTsnp 274	4	9213312	2778	9213072	G	T
Stu1-1		6088	1	363	AtMSQTsnp 274	4	9213312	2778	9213072	G	T
Duk		6008	2	378	AtMSQTsnp 278	4	9377790	2783	9377549	A	G
DraII-1		8284	1	381	AtMSQTsnp 274	4	9213312	2778	9213072	$\mathbf{T}$	G
DraII-1		8284	1	381	AtMSQTsnp 278	4	9377790	2783	9377549	AG	A
DraII-1		8284	1	381	AtMSQTsnp 279	4	9580049	2788	9579976	CT	T

# 5 2010 PCR versus sequenom for each strain

## 5.1 strain RRS-10(accession id=2)

#### 5.1.1 corresponding ecotype RRS-10(stkparent=CS22565, ecotype id=8372, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	0	3	3	0	0	0	0	0	0
A	0	10	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	1	22	0	0	0	0	0	0	0	0
G	0	7	0	0	28	0	0	0	0	0	0	0
${\rm T}$	0	4	0	0	0	29	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 7: detailed difference for accession id=2 vs ecotype id=8372, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_cal
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	$^{\rm C}$	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 140	2	8750047	1072	8749828	С	A
AtMSQTsnp 142	2	9256095	223	9256049	NA	$\mid$ T
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 173	2	16908190	728	16908054	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 220	3	11398207	1053	11398071	NA	A
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 278	4	9377790	2783	9377549	A	NA
AtMSQTsnp 279	4	9580049	2788	9579976	NA	$\mid$ T
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA

AtMSQTsnp 392	5	20409250	994	20408706	NA	G	
AtMSQTsnp 406	5	23815848	978	23815354	A	NA	

## 5.2 strain Kno-10(accession id=3)

#### 5.2.1 corresponding ecotype Kno-10(stkparent=CS22566, ecotype id=8317, duplicate=1)

Table 8: accession id=3 vs ecotype id=8317, duplicate=1(nativename=Kno-10, stockparent=CS22566)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	2	0	1	4	0	0	0	0	0	0
A	0	8	34	0	0	0	0	0	0	0	0	0
C	0	4	0	18	0	0	0	0	0	0	0	0
G	0	6	0	1	29	0	0	0	0	0	0	0
T	0	4	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 9: detailed difference for accession id=3 vs ecotype id=8317, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	$^{\rm C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 132	2	7072955	367	7072571	NA	T
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	С	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 260	4	5775707	933	5775541	NA	A
AtMSQTsnp 263	4	7077926	495	7077771	NA	T
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T
AtMSQTsnp 282	4	10659455	505	10659034	NA	T
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 378	5	17171676	1489	17171242	G	C
AtMSQTsnp 397	5	22040877	992	22040690	NA	G
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.3 strain Kno-18(accession id=4)

## $5.3.1 \quad {\rm corresponding\ ecotype\ Kno-18} \\ ({\rm stkparent=CS22567},\ {\rm ecotype\ id=8318},\ {\rm duplicate=1}) \\$

Table 10: accession id=4 vs ecotype id=8318, duplicate=1(nativename=Kno-18, stockparent=CS22567)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	2	1	1	2	0	0	0	0	0	0
A	0	7	31	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	3	0	23	0	0	0	0	0	0	0	0
G	0	11	0	0	26	0	0	0	0	0	0	0

T	0	5	0	0	0	29	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 11: detailed difference for accession id=4 vs ecotype id=8318, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 11	1	1602136	848	1601885	NA	С
AtMSQTsnp 30	1	5629159	2156	5628596	$^{\rm C}$	NA
AtMSQTsnp 31	1	5923041	265	5922974	NA	G
AtMSQTsnp 33	1	6375605	967	6375563	T	NA
AtMSQTsnp 47	1	9343401	929	9343234	$^{\rm C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$^{\rm C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 359	5	7442381	1363	7442039	NA	T
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.4 strain Rmx-A02(accession id=5)

#### 5.4.1 corresponding ecotype Rmx-A02(stkparent=CS22568, ecotype id=8370, duplicate=1)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	5	0	2	2	0	0	0	0	0	0
A	0	8	33	0	0	0	0	0	0	0	0	0
С	0	5	0	21	0	0	0	0	0	0	0	0
G	0	7	0	0	28	0	0	0	0	0	0	0
T	0	6	0	0	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 13: detailed difference for accession id=5 vs ecotype id=8370, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\mid$ T	NA

AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	T	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 101	1	26278413	330	26278221	NA	A
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 288	4	11984772	1376	11984495	NA	G
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 379	5	17629384	2039	17629093	NA	A
AtMSQTsnp 404	5	23270994	1391	23270845	NA	T
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 408	5	25301234	2690	25300706	NA	A
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

## 5.5 strain Rmx-A180(accession id=6)

### 5.5.1 corresponding ecotype Rmx-A180(stkparent=CS22569, ecotype id=8371, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	1	1	2	0	0	0	0	0	0	0
A	0	6	28	0	0	0	0	0	0	0	0	0
C	0	5	0	26	0	0	0	0	0	0	0	0
G	0	6	0	0	32	0	0	0	0	0	0	0
T	0	6	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 15: detailed difference for accession id=6 vs ecotype id=8371, duplicate=1  $\,$ 

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 14	1	2775956	1649	2775589	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 140	2	8750047	1072	8749828	NA	C
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\mid \mathrm{T} \mid$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	NA	G

AtMSQTsnp 235	3	19930624	833	19930188	G	NA	
AtMSQTsnp 237	3	20483289	1645	20482976	Τ	NA	
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA	
AtMSQTsnp 327	5	1497133	2105	1496987	Τ	NA	
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA	
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA	
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G	
AtMSQTsnp 392	5	20409250	994	20408706	G	NA	
AtMSQTsnp 406	5	23815848	978	23815354	A	NA	

## 5.6 strain Pna-17(accession id=7)

### 5.6.1 corresponding ecotype Pna-17(stkparent=CS22570, ecotype id=8359, duplicate=1)

Table 16: accession id=7 vs ecotype id=8359 duplicate=1(nativename=Pna-17, stockparent=CS22570)

	-	NA	A	С	G	$\mathbf{T}$	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	1	1	2	0	0	0	0	0	0	0
A	0	8	36	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	7	0	17	0	0	0	0	0	0	0	0
G	0	7	0	0	33	0	0	0	0	0	0	0
T	0	6	0	0	0	21	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 17: detailed difference for accession id=7 vs ecotype id=8359, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 21	1	4142539	2625	4142402	Т	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$^{\rm C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$^{\rm C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\rm C}$	NA
AtMSQTsnp 334	5	2244739	1995	2244524	NA	C
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.7 strain Pna-10(accession id=8)

 $5.7.1 \quad {\rm corresponding\ ecotype\ Pna-10} \\ ({\rm stkparent=CS22571,\ ecotype\ id=8358,\ duplicate=1})$ 

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	3	3	4	0	0	0	0	0	0
A	0	10	31	0	0	0	0	0	0	0	0	0
C	0	3	0	20	0	0	0	0	0	0	0	0
G	0	5	0	0	31	0	0	0	0	0	0	0
T	0	4	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 19: detailed difference for accession id=8 vs ecotype id=8358, duplicate=1  $\,$ 

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mathbf{C}$	NA
AtMSQTsnp 31	1	5923041	265	5922974	NA	G
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 38	1	7449598	2136	7449482	NA	A
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 69	1	18340160	1407	18340113	NA	T
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	NA	T
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 244	3	23053878	1662	23053771	NA	G
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 292	4	12404111	2534	12403706	NA	C
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 310	4	17608924	1999	17608717	NA	C
AtMSQTsnp 312	4	17803781	1985	17803605	NA	T
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 394	5	20518330	2759	20518241	NA	G
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

## 5.8 strain Eden-1(accession id=9)

#### 5.8.1 corresponding ecotype Eden-1(stkparent=CS22572, ecotype id=6009, duplicate=4)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	13	0	0	0	0	0	0	0	0	0	0
A	0	38	0	0	0	0	0	0	0	0	0	0
C	0	29	0	0	0	0	0	0	0	0	0	0
G	0	31	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	36	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0

	CG	0	0	0	0	0	0	0	0	0	0	0	0
İ	CT	0	0	0	0	0	0	0	0	0	0	0	0
	$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 21: detailed difference for accession id=9 vs ecotype id=6009, duplicate=4

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 2	1	112907	847	112445	A	NA
AtMSQTsnp 4	1	340810	1095	340398	A	NA
AtMSQTsnp 9	1	1042427	1109	1042028	G	NA
AtMSQTsnp 10	1	1149280	1467	1149096	A	NA
AtMSQTsnp 11	1	1602136	848	1601885	T	NA
AtMSQTsnp 12	1	2211033	964	2210982	G	NA
AtMSQTsnp 14	1	2775956	1649	2775589	T	NA
AtMSQTsnp 15	1	2844525	1139	2844111	C	NA
AtMSQTsnp 18	1	3872591	2224	3872234	G	NA
AtMSQTsnp 21	1	4142539	2625	4142402	T	NA
AtMSQTsnp 22	1	4396087	46	4395913	G	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 29	1	5482008	263	5481722	${ m T}$	NA
AtMSQTsnp 30	1	5629159	$\frac{2156}{2156}$	5628596	C	NA
AtMSQTsnp 31	1	5923041	265	5922974	$\begin{array}{c} T \end{array}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 38	1	7449598	2136	7449482	C	NA NA
• •			928		G	NA NA
AtMSQTsnp 40	1	7842523		7842440		
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 48	1	9497118	930	9496666	C	NA
AtMSQTsnp 49	1	9781347	1018	9781260	$\mid T \mid$	NA
AtMSQTsnp 54	1	10720273	860	10719833	G	NA
AtMSQTsnp 57	1	11655519	273	11655171	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 62	1	13541648	808	13541490	A	NA
AtMSQTsnp 63	1	13712241	345	13711856	C	NA
AtMSQTsnp 65	1	16874727	290	16874305	G	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 69	1	18340160	1407	18340113	G	NA NA
• •					T	
AtMSQTsnp 73	1	20175347	1477	20174753		NA
AtMSQTsnp 76	1	21908667	2670	21908157	T	NA
AtMSQTsnp 85	1	23155780	668	23155464	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 97	1	24893649	1428	24893448	C	NA
AtMSQTsnp 100	1	25717887	1758	25717715	G	NA
AtMSQTsnp 101	1	26278413	330	26278221	G	NA
AtMSQTsnp 104	1	26794838	665	26794732	T	NA
AtMSQTsnp 108	1	28666837	343	28666569	G	NA
AtMSQTsnp 114	1	30214313	1800	30213917	G	NA
AtMSQTsnp 118	2	322335	2465	322253	A	NA
AtMSQTsnp 123	$\stackrel{-}{2}$	1798445	2109	1798324	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	G	NA
AtMSQTsnp 128	$\frac{2}{2}$	5021020	1514	5020871	$\begin{array}{c} G \\ T \end{array}$	NA NA
AtMSQTsnp 129	$\frac{2}{2}$	5804076	407	5803805	A	NA NA
AtMSQTsnp 129 AtMSQTsnp 130		6499679	$\begin{vmatrix} 407 \\ 2098 \end{vmatrix}$		$\begin{array}{c} A \\ T \end{array}$	NA NA
	2			6499196		
AtMSQTsnp 132	2	7072955	367	7072571	C	NA NA
AtMSQTsnp 138	2	8371133	373	8370574	C	NA
AtMSQTsnp 140	2	8750047	1072	8749828	A	NA
AtMSQTsnp 145	2	10566917	381	10566416	T	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 159	2	13265124	2127	13265029	T	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 169	2	15801542	396	15801112	$\Gamma$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	С	NA
AtMSQTsnp 173	2	16908190	728	16908054	G	NA
AtMSQTsnp 177	$\frac{2}{2}$	17859964	118	17859576	Ä	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 187	3	580470	55	580026	A	NA
AtmSQTsnp 187 AtmSQTsnp 188	3	2072780	649	2072648	$\stackrel{\mathbf{A}}{\mathbf{C}}$	NA NA
		2072780	779	2231413	G	NA NA
AtMSQTsnp 189	3					
AtMSQTsnp 191	3	2236458	2592	2236406	A	NA
AtMSQTsnp 194	3	3679541	1632	3679103	T	NA
AtMSQTsnp 197	3	4818602	435	4818362	G	NA
AtMSQTsnp 198	3	5235571	1612	5235221	T	NA
AtMSQTsnp 203	3	6890665	73	6890596	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
				9747158	G	NA

AtMSQTsnp 222	3	15880426	823	15879997	T	NA
AtMSQTsnp 223	3	16489589	2208	16489217	Ā	NA
AtMSQTsnp 231					G	NA NA
	3	18590671	883	18590590		
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 242	3	21632608	138	21632379	$\mathbf{C}$	NA
AtMSQTsnp 244	$\frac{3}{3}$	23053878	1662	23053771	Ä	NA
AtMSQTsnp 249	4	1055234	482	1055093	G	NA
AtMSQTsnp 254	4	2441217	233	2440917	A	NA
AtMSQTsnp 260	4	5775707	933	5775541	A	NA
AtMSQTsnp 263	4	7077926	495	7077771	${ m T}$	NA
AtMSQTsnp 266	4	8078648	238	8078388	${ m T}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\overline{\mathrm{T}}$	NA
			2778		${ m T}$	NA NA
AtMSQTsnp 274	4	9213312		9213072		
AtMSQTsnp 278	4	9377790	2783	9377549	G	NA
AtMSQTsnp 279	4	9580049	2788	9579976	$\mathbf{C}$	NA
AtMSQTsnp 281	4	10482088	956	10482038	$^{\mathrm{C}}$	NA
AtMSQTsnp 282	4	10659455	505	10659034	A	NA
AtMSQTsnp 285	4	11326190	507	11325921	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 288	4	11984772	1376	11984495	A	NA
AtMSQTsnp 292	4	12404111	2534	12403706	${ m T}$	NA
AtMSQTsnp 294	4	13576588	960	13576336	${ m T}$	NA
AtMSQTsnp 300	4	15765120	1685	15764920	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	$\dot{\mathrm{T}}$	NA
					G	
AtMSQTsnp 306	4	16742071	2714	16741855		NA
AtMSQTsnp 307	4	17038400	2205	17038096	T	NA
AtMSQTsnp 310	4	17608924	1999	17608717	A	NA
AtMSQTsnp 312	4	17803781	1985	17803605	${ m T}$	NA
AtMSQTsnp 315	4	18560343	2289	18560103	${ m T}$	NA
AtMSQTsnp 321	5	625679	2386	625179	C	NA
AtMSQTsnp 323	5					NA NA
• •		872350	532	872097	A	
AtMSQTsnp 325	5	1214057	2388	1213621	С	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{G}$	NA
AtMSQTsnp 334	5	2244739	1995	2244524	${ m T}$	NA
AtMSQTsnp 343	5	3606967	538	3606683	$\overline{\mathrm{T}}$	NA
AtMSQTsnp 350			1459	5005363	G	NA
	5	5005750				
AtMSQTsnp 351	5	5319138	126	5318924	G	NA
AtMSQTsnp 355	5	6708014	547	6707732	T	NA
AtMSQTsnp 358	5	7279057	550	7278798	$\mathbf{A}$	NA
AtMSQTsnp 359	5	7442381	1363	7442039	${ m T}$	NA
AtMSQTsnp 361	5	7881430	1986	7881187	Ā	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA NA
AtMSQTsnp 370	5	15065196	756	15065018	A	NA
AtMSQTsnp 373	5	15767945	1190	15767914	A	NA
AtMSQTsnp 378	5	17171676	1489	17171242	$\mathbf{C}$	NA
AtMSQTsnp 379	5	17629384	2039	17629093	A	NA
AtMSQTsnp 388	5	19316200	761	19315950	$\mathbf{C}$	NA
AtMSQTsnp 390	5	20215473	970	20214933	$\overset{\circ}{\mathrm{C}}$	NA
						NA NA
AtMSQTsnp 392	5	20409250	994	20408706	A	
AtMSQTsnp 394	5	20518330	2759	20518241	A	NA
AtMSQTsnp 395	5	20915321	981	20915132	G	NA
AtMSQTsnp 397	5	22040877	992	22040690	G	NA
AtMSQTsnp 398	5	22116788	642	22116605	$\mathbf{C}$	NA
AtMSQTsnp 399	5	22414941	146	22414510	Ā	NA
AtMSQTsnp 404	5	23270994	1391	23270845	$\stackrel{\Lambda}{\mathrm{C}}$	NA NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 408	5	25301234	2690	25300706	G	NA
AtMSQTsnp 409	5	26029439	2404	26029366	${ m T}$	NA
AtMSQTsnp 410	5	26120955	596	26120843	A	NA
AtMSQTsnp 412	5	26379972	2302	26379717	${ m T}$	NA
					_	

## 5.8.2 corresponding ecotype Eden-1(stkparent=CS22572, ecotype id=6009, duplicate=3)

Table 22: accession id=9 vs ecotype id=6009, duplicate=3(nativename=Eden-1, stockparent=CS22572)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	1	6	3	0	0	0	0	0	0
A	0	1	37	0	0	0	0	0	0	0	0	0
С	0	1	0	28	0	0	0	0	0	0	0	0
G	0	1	0	0	30	0	0	0	0	0	0	0
Τ	0	1	0	0	0	35	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0

AT	0	0	0	0	0	0	0	0	0	0	0	0	
CG	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

Table 23: detailed difference for accession id=9 vs ecotype id=6009, duplicate=3  $\,$ 

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 73	1	20175347	1477	20174753	T	NA
AtMSQTsnp 90	1	23893336	69	23893276	NA	T
AtMSQTsnp 92	1	24292774	672	24292482	NA	G
AtMSQTsnp 138	2	8371133	373	8370574	$^{\mathrm{C}}$	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 143	2	9428987	376	9428891	NA	A
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	NA	A
AtMSQTsnp 156	2	12658862	2572	12658576	NA	C
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	NA	T
AtMSQTsnp 220	3	11398207	1053	11398071	NA	G
AtMSQTsnp 360	5	7842993	174	7842900	NA	G
AtMSQTsnp 372	5	15569205	926	15568698	NA	G
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

#### 5.8.3 corresponding ecotype Eden-1(stkparent=CS22572, ecotype id=6009, duplicate=2)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	3	1	3	3	0	0	0	0	0	0
A	0	2	36	0	0	0	0	0	0	0	0	0
С	0	1	0	28	0	0	0	0	0	0	0	0
G	0	2	0	0	29	0	0	0	0	0	0	0
T	0	2	0	0	0	34	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 25: detailed difference for accession id=9 vs ecotype id=6009, duplicate=2

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 73	1	20175347	1477	20174753	${ m T}$	NA
AtMSQTsnp 85	1	23155780	668	23155464	A	NA
AtMSQTsnp 90	1	23893336	69	23893276	NA	$\Gamma$
AtMSQTsnp 92	1	24292774	672	24292482	NA	G
AtMSQTsnp 142	2	9256095	223	9256049	NA	$\Gamma$
AtMSQTsnp 143	2	9428987	376	9428891	NA	A
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	NA	A
AtMSQTsnp 156	2	12658862	2572	12658576	NA	C
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	NA	$\Gamma$
AtMSQTsnp 214	3	9747261	641	9747158	G	NA
AtMSQTsnp 398	5	22116788	642	22116605	$^{\rm C}$	NA
AtMSQTsnp 409	5	26029439	2404	26029366	Τ	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## $5.8.4 \quad {\it corresponding \ ecotype \ Eden-1(stkparent=CS22572, \ ecotype \ id=6009, \ duplicate=1)}$

	-	NA	A	$\mathbf{C}$	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	3	1	3	3	0	0	0	0	0	0
A	0	2	36	0	0	0	0	0	0	0	0	0
$\mid C \mid$	0	1	0	28	0	0	0	0	0	0	0	0
G	0	2	0	0	29	0	0	0	0	0	0	0
T	0	2	0	0	0	34	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 27: detailed difference for accession id=9 vs ecotype id=6009, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 85	1	23155780	668	23155464	A	NA
AtMSQTsnp 90	1	23893336	69	23893276	NA	T
AtMSQTsnp 92	1	24292774	672	24292482	NA	G
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 143	2	9428987	376	9428891	NA	A
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	NA	A
AtMSQTsnp 156	2	12658862	2572	12658576	NA	C
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	NA	T
AtMSQTsnp 214	3	9747261	641	9747158	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	T	NA
AtMSQTsnp 398	5	22116788	642	22116605	C	NA
AtMSQTsnp 409	5	26029439	2404	26029366	T	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.9 strain Eden-2(accession id=10)

#### 5.9.1 corresponding ecotype Eden-2(stkparent=CS22573, ecotype id=8287, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	4	2	1	4	3	0	0	0	0	0	0
$\mathbf{A}$	0	10	25	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	8	0	19	0	0	0	0	0	0	0	0
G	0	8	0	0	24	0	0	0	0	0	0	0
${ m T}$	0	3	0	0	0	35	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 29: detailed difference for accession id=10 vs ecotype id=8287, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 8	1	993374	1042	992824	NA	G
AtMSQTsnp 21	1	4142539	2625	4142402	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$^{\rm C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	С	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	Т

AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 69	1	18340160	1407	18340113	NA	G
AtMSQTsnp 76	1	21908667	2670	21908157	NA	T
AtMSQTsnp 87	1	23381760	312	23381443	С	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 187	3	580470	55	580026	NA	A
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 203	3	6890665	73	6890596	NA	T
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 254	4	2441217	233	2440917	-	NA
AtMSQTsnp 260	4	5775707	933	5775541	NA	C
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	A
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	$\mathbf{G}$	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.10 strain Lv-1(accession id=11)

# $5.10.1 \quad {\rm corresponding\ ecotype\ Lv-1} ({\rm stkparent=CS22574,\ ecotype\ id=6043,\ duplicate=2})$

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	5	1	0	4	0	0	0	0	0	0	0
A	0	20	16	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	12	0	14	0	0	0	0	0	0	0	0
G	0	19	0	0	21	0	0	0	0	0	0	0
${ m T}$	0	9	0	0	0	24	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 31: detailed difference for accession id=11 vs ecotype id=6043, duplicate=2  $\,$ 

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 4	1	340810	1095	340398	A	NA
AtMSQTsnp 9	1	1042427	1109	1042028	G	NA
AtMSQTsnp 11	1	1602136	848	1601885	${ m T}$	NA
AtMSQTsnp 12	1	2211033	964	2210982	A	NA
AtMSQTsnp 22	1	4396087	46	4395913	G	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 29	1	5482008	263	5481722	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	С	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 48	1	9497118	930	9496666	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\Gamma$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$^{\rm C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA

LAUMCOTT 07	l a	0.40096.40	1400	04009440	C	NT A
AtMSQTsnp 97	1	24893649	1428	24893448	G	NA
AtMSQTsnp 104	1	26794838	665	26794732	T	NA
AtMSQTsnp 108	1	28666837	343	28666569	G	NA
AtMSQTsnp 143	2	9428987	376	9428891	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	С	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 173	2	16908190	728	16908054	G	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 194	3	3679541	1632	3679103	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 214	3	9747261	641	9747158	G	NA
AtMSQTsnp 222	3	15880426	823	15879997	Τ	NA
AtMSQTsnp 223	3	16489589	2208	16489217	A	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 249	4	1055234	482	1055093	G	NA
AtMSQTsnp 260	4	5775707	933	5775541	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	T	NA
AtMSQTsnp 274	4	9213312	2778	9213072	T	NA
AtMSQTsnp 278	4	9377790	2783	9377549	G	NA
AtMSQTsnp 282	4	10659455	505	10659034	$\overset{\circlearrowleft}{\mathrm{T}}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 288	4	11984772	1376	11984495	NA	G
AtMSQTsnp 294	4	13576588	960	13576336	G	NA
AtMSQTsnp 312	4	17803781	1985	17803605	$\stackrel{ ext{G}}{ ext{T}}$	NA
AtMSQTsnp 323	5	872350	532	872097	A	NA
AtMSQTsnp 325	5	1214057	2388	1213621	$^{\Lambda}$ C	NA
AtMSQTsnp 325 AtMSQTsnp 331	5	1931167	1633	1931083	G	NA NA
AtMSQTsnp 351 AtMSQTsnp 351	5	5319138	126	5318924	G	NA NA
AtMSQTsnp 358	5	7279057	550	7278798	G	NA NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA NA
	5				G	NA NA
AtMSQTsnp 368 AtMSQTsnp 370		$\frac{14216131}{15065196}$	1035	14215995		
	5		756	15065018	A N. A	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 390	5	20215473	970	20214933	С	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 395	5	20915321	981	20915132	G	NA
AtMSQTsnp 397	5	22040877	992	22040690	NA	G
AtMSQTsnp 398	5	22116788	642	22116605	C	NA
AtMSQTsnp 399	5	22414941	146	22414510	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 408	5	25301234	2690	25300706	NA	A

## $5.10.2 \quad {\rm corresponding\ ecotype\ Lv-1} (stkparent=CS22574,\ ecotype\ id=6043,\ duplicate=1)$

	-	NA	Α	С	G	$\mathbf{T}$	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	1	4	3	0	0	0	0	0	0
A	0	0	35	0	1	0	0	0	0	0	0	0
С	0	0	0	26	0	0	0	0	0	0	0	0
G	0	2	0	0	38	0	0	0	0	0	0	0
Τ	0	0	0	0	0	33	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 33: detailed difference for accession id=11 vs ecotype id=6043, duplicate=1  $\,$ 

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	NA	A
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	NA	T

AtMSQTsnp 237	3	20483289	1645	20482976	NA	C	
AtMSQTsnp 281	4	10482088	956	10482038	NA	T	
AtMSQTsnp 288	4	11984772	1376	11984495	NA	G	
AtMSQTsnp 292	4	12404111	2534	12403706	NA	T	
AtMSQTsnp 360	5	7842993	174	7842900	G	NA	
AtMSQTsnp 370	5	15065196	756	15065018	A	G	
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G	
AtMSQTsnp 397	5	22040877	992	22040690	NA	G	
AtMSQTsnp 408	5	25301234	2690	25300706	NA	A	

## 5.11 strain Lv-5(accession id=12)

#### 5.11.1 corresponding ecotype Lv-5(stkparent=CS22575, ecotype id=6046, duplicate=2)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	1	2	1	0	0	0	0	0	0	0
A	0	11	26	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	7	0	18	0	0	0	0	0	0	0	0
G	0	7	0	0	35	0	0	0	0	0	0	0
T	0	2	0	0	0	35	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 35: detailed difference for accession id=12 vs ecotype id=6046, duplicate=2

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.11.2 corresponding ecotype Lv-5(stkparent=CS22575, ecotype id=6046, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	2	2	1	0	0	0	0	0	0
A	0	0	36	0	1	0	0	0	0	0	0	0
С	0	1	0	24	0	0	0	0	0	0	0	0
G	0	1	0	0	41	0	0	0	0	0	0	0
Τ	0	0	0	0	0	37	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 37: detailed difference for accession id=12 vs ecotype id=6046, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	NA	A
AtMSQTsnp 138	2	8371133	373	8370574	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	NA	T
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 370	5	15065196	756	15065018	A	G
AtMSQTsnp 392	5	20409250	994	20408706	NA	G
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.12 strain Fb-2(accession id=13)

#### 5.12.1 corresponding ecotype Fb-2(stkparent=CS22576, ecotype id=8292, duplicate=1)

Table 38: accession id=13 vs ecotype id=8292, duplicate=1(nativename=Fb-2, stockparent=CS22576)

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	3	2	1	0	0	0	0	0	0	0
A	0	7	31	0	0	0	0	0	0	0	0	0
C	0	6	0	26	0	0	0	0	0	0	0	0
G	0	8	0	0	26	0	0	0	0	0	0	0
$\Gamma$	0	7	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 39: detailed difference for accession id=13 vs ecotype id=8292, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$^{\mathrm{C}}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	С	NA

AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	Τ	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 187	3	580470	55	580026	NA	A
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 197	3	4818602	435	4818362	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	NA	C
AtMSQTsnp 267	4	8297960	499	8297594	Т	NA
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.13 strain Fb-4(accession id=14)

### 5.13.1 corresponding ecotype Fb-4(stkparent=CS22577, ecotype id=8293, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	2	1	0	0	0	0	0	0	0
A	0	9	35	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	25	0	0	0	0	0	0	0	0
G	0	7	0	0	29	0	0	0	0	0	0	0
${ m T}$	0	5	1	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	1	0	0	0
CG	0	0	0	1	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 41: detailed difference for accession id=14 vs ecotype id=8293, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	alignment_start	pcr_call	$sequenom\_call$
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 97	1	24893649	1428	24893448	CG	C
AtMSQTsnp 138	2	8371133	373	8370574	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mid T \mid$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mid T \mid$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\mid T \mid$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 288	4	11984772	1376	11984495	NA	G
AtMSQTsnp 304	4	16272521	2262	16272270	NA	C
AtMSQTsnp 307	4	17038400	2205	17038096	$\mid \mathrm{T} \mid$	A
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

#### 5.14 strain Bil-5(accession id=15)

#### 5.14.1 corresponding ecotype Bil-5(stkparent=CS22578, ecotype id=8262, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	1	2	0	0	0	0	0	0	0
A	0	7	32	0	0	0	0	0	0	0	0	0
C	0	5	0	20	0	0	0	0	0	0	0	0
G	0	12	0	0	30	0	0	0	0	0	0	0
T	0	4	0	0	0	32	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 43: detailed difference for accession id=15 vs ecotype id=8262, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	С	NA
AtMSQTsnp 164	2	14003409	2631	14003272	С	NA
AtMSQTsnp 170	2	15986354	2292	15986145	С	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 203	3	6890665	73	6890596	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 231	3	18590671	883	18590590	NA	G
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 242	3	21632608	138	21632379	NA	C
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 278	4	9377790	2783	9377549	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 323	5	872350	532	872097	NA	A
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.15 strain Bil-7(accession id=16)

#### $5.15.1 \quad {\rm corresponding\ ecotype\ Bil-7} (stkparent=CS22579,\ ecotype\ id=8263,\ duplicate=1)$

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	1	1	1	0	0	0	0	0	0
A	0	5	35	0	1	0	0	0	0	0	0	0
С	0	5	0	20	0	0	0	0	0	0	0	0

G	0	11	0	0	31	0	0	0	0	0	0	0
T	0	4	0	0	0	32	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 45: detailed difference for accession id=16 vs ecotype id=8263, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 242	3	21632608	138	21632379	NA	C
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	A
AtMSQTsnp 312	4	17803781	1985	17803605	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	A	G
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.16 strain Vr2-1(accession id=17)

## 5.16.1 corresponding ecotype Vr2-1(stkparent=CS22580, ecotype id=8401, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	4	2	0	0	0	0	0	0	0	0	0
A	0	8	28	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	10	0	27	0	0	0	0	0	0	0	0
G	0	11	0	0	32	0	0	0	0	0	0	0
${\rm T}$	0	4	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 47: detailed difference for accession id=17 vs ecotype id=8401, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 18	1	3872591	2224	3872234	G	NA
AtMSQTsnp 21	1	4142539	2625	4142402	T	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA

AtMSQTsnp 41         1         8015448         855         8014943         C         NA           AtMSQTsnp 58         1         12093546         279         12093079         C         NA           AtMSQTsnp 60         1         12357583         1973         12357044         A         NA           AtMSQTsnp 61         1         13395892         1673         13395451         C         NA           AtMSQTsnp 65         1         16874727         290         16874305         G         NA           AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 92         1         24292774         672         24292482         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 156         2         12657149         38         12656716         G         NA           AtMSQTsnp 164         2	LAJMOOTT 99	1	COTTOOT	0.07	0077700		l nta l
AtMSQTsnp 47         1         9343401         929         9343234         C         NA           AtMSQTsnp 58         1         12093546         279         12093079         C         NA           AtMSQTsnp 60         1         12357583         1973         12357044         A         NA           AtMSQTsnp 61         1         13395892         1673         13395451         C         NA           AtMSQTsnp 65         1         16874727         290         16874305         G         NA           AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 92         1         24071689         1427         24071203         A         NA           AtMSQTsnp 192         2         5804076         407         5803805         G         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 155         2         12657149         38         1265716         G         NA           AtMSQTsnp 164         2	AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 58         1         12093546         279         12093079         C         NA           AtMSQTsnp 60         1         12357583         1973         12357044         A         NA           AtMSQTsnp 61         1         13395892         1673         13395451         C         NA           AtMSQTsnp 65         1         16874727         290         16874305         G         NA           AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2							
AtMSQTsnp 60         1         12357583         1973         12357044         A         NA           AtMSQTsnp 61         1         13395892         1673         13395451         C         NA           AtMSQTsnp 65         1         16874727         290         16874305         G         NA           AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 192         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 189         3<					00-0-0-		
AtMSQTsnp 61         1         13395892         1673         13395451         C         NA           AtMSQTsnp 65         1         16874727         290         16874305         G         NA           AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 92         1         24292774         672         24292482         G         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 205         3							
AtMSQTsnp 65         1         16874727         290         16874305         G         NA           AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 129         1         24292774         672         24292482         G         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3 <td>· ·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	· ·						
AtMSQTsnp 67         1         17355738         660         17355484         A         NA           AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 92         1         24292774         672         24292482         G         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 289         3         2231938         779         2231413         A         NA           AtMSQTsnp 220         3			l				
AtMSQTsnp 73         1         20175347         1477         20174753         T         NA           AtMSQTsnp 91         1         24071689         1427         24071203         A         NA           AtMSQTsnp 92         1         24292774         672         24292482         G         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         1598634         2292         15986145         C         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 235         3	• •		l				
AtMSQTsnp 91       1       24071689       1427       24071203       A       NA         AtMSQTsnp 92       1       24292774       672       24292482       G       NA         AtMSQTsnp 129       2       5804076       407       5803805       G       NA         AtMSQTsnp 145       2       10566917       381       10566416       C       NA         AtMSQTsnp 155       2       12657149       38       12656716       G       NA         AtMSQTsnp 156       2       1265862       2572       12658576       T       NA         AtMSQTsnp 164       2       14003409       2631       14003272       C       NA         AtMSQTsnp 170       2       15986354       2292       15986145       C       NA         AtMSQTsnp 186       3       298210       777       297801       A       NA         AtMSQTsnp 205       3       7392098       91       7391896       C       NA         AtMSQTsnp 235       3       11398207       1053       11398071       NA       A         AtMSQTsnp 237       3       20483289       1645       20482976       T       NA         AtMSQTsnp 331	• •	1	l				
AtMSQTsnp 92         1         24292774         672         24292482         G         NA           AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 156         2         1265862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3	AtMSQTsnp 73	1	20175347	1477	20174753	T	NA
AtMSQTsnp 129         2         5804076         407         5803805         G         NA           AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 189         3         298210         777         297801         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 205         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 360         5	AtMSQTsnp 91	1	24071689	1427	24071203		NA
AtMSQTsnp 145         2         10566917         381         10566416         C         NA           AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 360         5	AtMSQTsnp 92		24292774	672	24292482		NA
AtMSQTsnp 155         2         12657149         38         12656716         G         NA           AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 366         5	AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 156         2         12658862         2572         12658576         T         NA           AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 372         5	AtMSQTsnp 145	2	10566917	381	10566416		NA
AtMSQTsnp 164         2         14003409         2631         14003272         C         NA           AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 368         5         14216131         1035         14215995         G         NA           AtMSQTsnp 379         5	AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 170         2         15986354         2292         15986145         C         NA           AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 368         5         14216131         1035         14215995         G         NA           AtMSQTsnp 379         5         15569205         926         15568698         G         NA           AtMSQTsnp 392         5	AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 186         3         298210         777         297801         A         NA           AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 372         5         15569205         926         15568698         G         NA           AtMSQTsnp 379         5         17629384         2039         17629093         G         NA           AtMSQTsnp 392         5	AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 189         3         2231938         779         2231413         A         NA           AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 368         5         14216131         1035         14215995         G         NA           AtMSQTsnp 372         5         15569205         926         15568698         G         NA           AtMSQTsnp 392         5         20409250         994         20408706         A         NA	AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 205         3         7392098         91         7391896         C         NA           AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 368         5         14216131         1035         14215995         G         NA           AtMSQTsnp 372         5         15569205         926         15568698         G         NA           AtMSQTsnp 379         5         17629384         2039         17629093         G         NA           AtMSQTsnp 392         5         20409250         994         20408706         A         NA	AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 220         3         11398207         1053         11398071         NA         A           AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 368         5         14216131         1035         14215995         G         NA           AtMSQTsnp 372         5         15569205         926         15568698         G         NA           AtMSQTsnp 379         5         17629384         2039         17629093         G         NA           AtMSQTsnp 392         5         20409250         994         20408706         A         NA	AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 235         3         19930624         833         19930188         A         NA           AtMSQTsnp 237         3         20483289         1645         20482976         T         NA           AtMSQTsnp 286         4         11580143         1019         11579700         C         NA           AtMSQTsnp 331         5         1931167         1633         1931083         C         NA           AtMSQTsnp 360         5         7842993         174         7842900         G         NA           AtMSQTsnp 368         5         14216131         1035         14215995         G         NA           AtMSQTsnp 372         5         15569205         926         15568698         G         NA           AtMSQTsnp 379         5         17629384         2039         17629093         G         NA           AtMSQTsnp 392         5         20409250         994         20408706         A         NA	AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 237       3       20483289       1645       20482976       T       NA         AtMSQTsnp 286       4       11580143       1019       11579700       C       NA         AtMSQTsnp 331       5       1931167       1633       1931083       C       NA         AtMSQTsnp 360       5       7842993       174       7842900       G       NA         AtMSQTsnp 368       5       14216131       1035       14215995       G       NA         AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA	AtMSQTsnp 220	3	11398207	1053	11398071	NA	A
AtMSQTsnp 286       4       11580143       1019       11579700       C       NA         AtMSQTsnp 331       5       1931167       1633       1931083       C       NA         AtMSQTsnp 360       5       7842993       174       7842900       G       NA         AtMSQTsnp 368       5       14216131       1035       14215995       G       NA         AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA	AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 331       5       1931167       1633       1931083       C       NA         AtMSQTsnp 360       5       7842993       174       7842900       G       NA         AtMSQTsnp 368       5       14216131       1035       14215995       G       NA         AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA	AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 360       5       7842993       174       7842900       G       NA         AtMSQTsnp 368       5       14216131       1035       14215995       G       NA         AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA	AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 360       5       7842993       174       7842900       G       NA         AtMSQTsnp 368       5       14216131       1035       14215995       G       NA         AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA	AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 368       5       14216131       1035       14215995       G       NA         AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA	1	5	7842993	174	7842900	G	NA
AtMSQTsnp 372       5       15569205       926       15568698       G       NA         AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA		5	14216131	1035	14215995	G	NA
AtMSQTsnp 379       5       17629384       2039       17629093       G       NA         AtMSQTsnp 392       5       20409250       994       20408706       A       NA		5	15569205				NA
AtMSQTsnp 392   5   20409250   994   20408706   A   NA				2039			
		5					
	AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.17 strain Vr2-6(accession id=18)

#### 5.17.1 corresponding ecotype Vr2-6(stkparent=CS22581, ecotype id=8402, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	2	1	0	0	0	0	0	0	0
A	0	6	28	0	0	0	0	0	0	0	0	0
C	0	7	0	26	0	0	0	0	0	0	0	0
G	0	12	0	0	36	0	0	0	0	0	0	0
$\Gamma$	0	4	0	0	0	24	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 49: detailed difference for accession id=18 vs ecotype id=8402, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	$pcr_call$	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$^{\rm C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	С	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	Τ	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\sim$	NA

AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	Т	NA
AtMSQTsnp 244	3	23053878	1662	23053771	NA	A
AtMSQTsnp 260	4	5775707	933	5775541	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	$^{\rm C}$	NA
AtMSQTsnp 304	4	16272521	2262	16272270	Τ	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.18 strain Spr1-2(accession id=19)

## 5.18.1 corresponding ecotype Spr1-2(stkparent=CS22582, ecotype id=8382, duplicate=1)

	-	NA	Α	С	G	$\mathbf{T}$	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	2	1	0	2	0	0	0	0	0	0	0
A	0	8	27	0	0	0	0	0	0	0	0	0
C	0	5	0	28	0	0	0	0	0	0	0	0
G	0	8	0	0	33	0	0	0	0	0	0	0
$\Gamma$	0	4	0	0	0	29	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 51: detailed difference for accession id=19 vs ecotype id=8382, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	С	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 220	3	11398207	1053	11398071	NA	G
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 254	4	2441217	233	2440917	-	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

#### 5.19 strain Spr1-6(accession id=20)

#### 5.19.1 corresponding ecotype Spr1-6(stkparent=CS22583, ecotype id=8383, duplicate=1)

Table 52: accession id=20 vs ecotype id=8383, duplicate=1(nativename=Spr1-6, stockparent=CS22583)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	2	0	1	0	0	0	0	0	0
A	0	5	29	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	8	0	26	0	0	0	0	0	0	0	0
G	0	11	0	0	33	0	0	0	0	0	0	0
T	0	7	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 53: detailed difference for accession id=20 vs ecotype id=8383, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 18	1	3872591	2224	3872234	G	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\Gamma$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 85	1	23155780	668	23155464	NA	A
AtMSQTsnp 87	1	23381760	312	23381443	T	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	_	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\Gamma$	NA
AtMSQTsnp 281	4	10482088	956	10482038	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.20 strain m2-1(accession id=21)

#### 5.20.1 corresponding ecotype m2-1(stkparent=CS22584, ecotype id=8349, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	1	1	1	0	0	0	0	0	0

A	0	7	25	0	0	0	0	0	0	0	0	0
С	0	9	0	18	0	0	0	0	0	0	0	0
G	0	9	0	0	34	0	0	0	0	0	0	0
$\mid T \mid$	0	5	0	0	0	33	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 55: detailed difference for accession id=21 vs ecotype id=8349, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 21	1	4142539	2625	4142402	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$^{\rm C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 48	1	9497118	930	9496666	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$^{\rm C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	С	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	С	NA
AtMSQTsnp 267	4	8297960	499	8297594	$^{\rm C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 288	4	11984772	1376	11984495	NA	A
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.21 strain m2-3(accession id=22)

## 5.21.1 corresponding ecotype m2-3(stkparent=CS22585, ecotype id=8350, duplicate=1)

Table 56: accession id=22 vs ecotype id=8350, duplicate=1(nativename=m2-3, stockparent=CS22585)

	-	NA	A	С	G	${\rm T}$	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	0	1	0	0	0	0	0	0	0
A	0	9	23	0	1	0	0	0	0	0	0	0
С	0	8	0	27	0	0	0	0	0	0	0	0
G	0	5	0	0	37	0	0	0	0	0	0	0
${ m T}$	0	4	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 57: detailed difference for accession id=22 vs ecotype id=8350, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\mid T \mid$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\mid T \mid$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 373	5	15767945	1190	15767914	A	G
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

#### 5.22 strain Ull2-5(accession id=23)

#### 5.22.1 corresponding ecotype Ull2-5(stkparent=CS22586, ecotype id=8397, duplicate=1)

	-	NA	A	С	G	$\mathbf{T}$	AC	$\overline{AG}$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	1	0	3	4	0	0	0	0	0	0
A	0	8	30	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	21	0	0	0	0	0	0	0	0
G	0	7	0	0	31	0	0	0	0	0	0	0
${ m T}$	0	6	0	0	0	29	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 59: detailed difference for accession id=23 vs ecotype id=8397, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid \mathrm{T} \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\mid T \mid$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 69	1	18340160	1407	18340113	NA	T
AtMSQTsnp 85	1	23155780	668	23155464	NA	T
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	$\mid T \mid$
AtMSQTsnp 143	2	9428987	376	9428891	NA	A
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA

AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	Τ	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 203	3	6890665	73	6890596	NA	T
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 378	5	17171676	1489	17171242	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.23 strain Ull2-3(accession id=24)

## 5.23.1 corresponding ecotype Ull2-3(stkparent=CS22587, ecotype id=8396, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	3	1	1	0	0	0	0	0	0	0
A	0	8	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	25	0	0	0	0	0	0	0	0
G	0	7	0	0	32	0	0	0	0	0	0	0
Τ	0	4	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 61: detailed difference for accession id=24 vs ecotype id=8396, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 85	1	23155780	668	23155464	NA	A
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	A
AtMSQTsnp 312	4	17803781	1985	17803605	NA	C
AtMSQTsnp 315	4	18560343	2289	18560103	NA	A
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\rm C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

#### 5.24 strain Zdr-1(accession id=25)

#### 5.24.1 corresponding ecotype Zdr-1(stkparent=CS22588, ecotype id=8409, duplicate=1)

Table 62: accession id=25 vs ecotype id=8409, duplicate=1(nativename=Zdr-1, stockparent=CS22588)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	1	0	0	0	0	0	0	0	0
A	0	6	28	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	1	29	0	0	0	0	0	0	0	0
G	0	10	0	0	27	0	0	0	0	0	0	0
$\Gamma$	0	4	0	0	0	34	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 63: detailed difference for accession id=25 vs ecotype id=8409, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 260	4	5775707	933	5775541	C	A
AtMSQTsnp 279	4	9580049	2788	9579976	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	$\Gamma$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\Gamma$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.25 strain Zdr-6(accession id=26)

### $5.25.1 \quad {\rm corresponding\ ecotype\ Zdr-6(stkparent=CS22589,\ ecotype\ id=8410,\ duplicate=1)}$

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	3	0	0	0	0	0	0	0	0
A	0	6	28	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	11	0	25	0	0	0	0	0	0	0	0
G	0	9	0	0	29	0	0	0	0	0	0	0
${ m T}$	0	4	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 65: detailed difference for accession id=26 vs ecotype id=8410, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 140	2	8750047	1072	8749828	NA	A
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 191	3	2236458	2592	2236406	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

### 5.26 strain Bor-1(accession id=27)

### 5.26.1 corresponding ecotype Bor-1(stkparent=CS22590, ecotype id=5837, duplicate=2)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	0	2	1	0	0	0	0	0	0
A	0	5	28	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	27	0	0	0	0	0	0	0	0
G	0	12	0	0	27	0	0	0	0	0	0	0
${ m T}$	0	3	0	0	0	36	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 67: detailed difference for accession id=27 vs ecotype id=5837, duplicate=2  $\,$ 

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA

AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	Τ	NA
AtMSQTsnp 186	3	298210	777	297801	Τ	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.26.2 corresponding ecotype Bor-1(stkparent=CS22590, ecotype id=5837, duplicate=1)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	1	1	1	0	0	0	0	0	0
A	0	1	19	0	11	2	0	0	0	0	0	0
C	0	0	5	21	2	3	0	0	0	0	0	0
G	0	2	16	3	17	1	0	0	0	0	0	0
T	0	1	1	11	2	24	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 69: detailed difference for accession id=27 vs ecotype id=5837, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 2	1	112907	847	112445	A	G
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 12	1	2211033	964	2210982	A	G
AtMSQTsnp 21	1	4142539	2625	4142402	C	${ m T}$
AtMSQTsnp 22	1	4396087	46	4395913	G	A
AtMSQTsnp 30	1	5629159	2156	5628596	С	${ m T}$
AtMSQTsnp 31	1	5923041	265	5922974	G	${ m T}$
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 40	1	7842523	928	7842440	G	C
AtMSQTsnp 48	1	9497118	930	9496666	${ m T}$	C
AtMSQTsnp 49	1	9781347	1018	9781260	${ m T}$	C
AtMSQTsnp 57	1	11655519	273	11655171	${ m T}$	C
AtMSQTsnp 58	1	12093546	279	12093079	G	C
AtMSQTsnp 60	1	12357583	1973	12357044	NA	${ m T}$
AtMSQTsnp 67	1	17355738	660	17355484	G	A
AtMSQTsnp 73	1	20175347	1477	20174753	${ m T}$	NA
AtMSQTsnp 76	1	21908667	2670	21908157	${ m T}$	C
AtMSQTsnp 88	1	23395010	1071	23394478	A	G
AtMSQTsnp 91	1	24071689	1427	24071203	G	A
AtMSQTsnp 92	1	24292774	672	24292482	G	A
AtMSQTsnp 97	1	24893649	1428	24893448	G	C
AtMSQTsnp 100	1	25717887	1758	25717715	A	G
AtMSQTsnp 123	2	1798445	2109	1798324	G	A
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	A
AtMSQTsnp 130	2	6499679	2098	6499196	Τ	C
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 145	2	10566917	381	10566416	Τ	C
AtMSQTsnp 159	2	13265124	2127	13265029	Τ	C
AtMSQTsnp 177	2	17859964	118	17859576	A	G
AtMSQTsnp 184	2	18752840	1423	18752604	T	A

AtMSQTsnp 187	3	580470	55	580026	Α	Τ
AtMSQTsnp 188	3	2072780	649	2072648	T	C
AtMSQTsnp 191	3	2236458	2592	2236406	С	A
AtMSQTsnp 194	3	3679541	1632	3679103	A	${ m T}$
AtMSQTsnp 220	3	11398207	1053	11398071	G	A
AtMSQTsnp 223	3	16489589	2208	16489217	G	A
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 249	4	1055234	482	1055093	A	G
AtMSQTsnp 254	4	2441217	233	2440917	С	A
AtMSQTsnp 263	4	7077926	495	7077771	Τ	C
AtMSQTsnp 278	4	9377790	2783	9377549	G	A
AtMSQTsnp 286	4	11580143	1019	11579700	С	G
AtMSQTsnp 288	4	11984772	1376	11984495	G	A
AtMSQTsnp 294	4	13576588	960	13576336	Τ	G
AtMSQTsnp 300	4	15765120	1685	15764920	A	G
AtMSQTsnp 310	4	17608924	1999	17608717	С	A
AtMSQTsnp 321	5	625679	2386	625179	С	A
AtMSQTsnp 323	5	872350	532	872097	A	G
AtMSQTsnp 325	5	1214057	2388	1213621	Τ	C
AtMSQTsnp 343	5	3606967	538	3606683	С	T
AtMSQTsnp 355	5	6708014	547	6707732	T	G
AtMSQTsnp 358	5	7279057	550	7278798	A	G
AtMSQTsnp 368	5	14216131	1035	14215995	A	G
AtMSQTsnp 370	5	15065196	756	15065018	G	A
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 373	5	15767945	1190	15767914	G	A
AtMSQTsnp 379	5	17629384	2039	17629093	G	A
AtMSQTsnp 388	5	19316200	761	19315950	С	A
AtMSQTsnp 390	5	20215473	970	20214933	Τ	C
AtMSQTsnp 394	5	20518330	2759	20518241	G	A
AtMSQTsnp 398	5	22116788	642	22116605	С	G
AtMSQTsnp 406	5	23815848	978	23815354	G	A
AtMSQTsnp 408	5	25301234	2690	25300706	G	A
AtMSQTsnp 410	5	26120955	596	26120843	A	G
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

### 5.27 strain Bor-4(accession id=28)

### 5.27.1 corresponding ecotype Bor-4(stkparent=CS22591, ecotype id=8268, duplicate=1)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	2	1	2	0	0	0	0	0	0
A	0	8	33	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	21	0	0	0	0	0	0	0	0
G	0	10	0	0	30	0	0	0	0	0	0	0
T	0	3	0	0	0	33	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 71: detailed difference for accession id=28 vs ecotype id=8268, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mid T \mid$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 69	1	18340160	1407	18340113	NA	T
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 128	2	5021020	1514	5020871	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA

AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.28 strain Pu2-7(accession id=29)

## 5.28.1 corresponding ecotype Pu2-7(stkparent=CS22592, ecotype id=8362, duplicate=1)

Table 72: accession id=29 vs ecotype id=8362, duplicate=1(nativename=Pu2-7, stockparent=CS22592)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	2	0	0	0	0	0	0	0	0
A	0	5	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	3	0	22	0	0	0	0	0	0	0	0
G	0	13	0	0	28	0	0	0	0	0	0	0
${ m T}$	0	5	0	0	0	37	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 73: detailed difference for accession id=29 vs ecotype id=8362, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	_	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$^{\rm C}$	NA
AtMSQTsnp 288	4	11984772	1376	11984495	NA	A
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

#### 5.29 strain Pu2-23(accession id=30)

#### 5.29.1 corresponding ecotype Pu2-23(stkparent=CS22593, ecotype id=8361, duplicate=1)

Table 74: accession id=30 vs ecotype id=8361, duplicate=1(nativename=Pu2-23, stockparent=CS22593)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	1	0	0	0	0	0	0	0	0
A	0	8	27	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	9	0	24	0	0	0	0	0	0	0	0
G	0	8	0	0	28	0	0	0	0	0	0	0
$\Gamma$	0	6	0	0	0	34	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 75: detailed difference for accession id=30 vs ecotype id=8361, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943	$^{\rm C}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$^{\rm C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	C	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\mathrm{C}}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 263	4	7077926	495	7077771	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	$^{\mathrm{C}}$	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

### 5.30 strain Lp2-2(accession id=31)

## 5.30.1 corresponding ecotype Lp2-2(stkparent=CS22594, ecotype id=8332, duplicate=1)

Table 76: accession id=31 vs ecotype id=8332, duplicate=1(nativename=Lp2-2, stockparent=CS22594)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	2	1	0	0	0	0	0	0
A	0	7	27	0	0	0	0	0	0	0	0	0
C	0	10	0	27	0	0	0	0	0	0	0	0
G	0	12	0	0	28	0	0	0	0	0	0	0
$\Gamma$	0	3	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0	1
AT	0	0	0	0	0	0	0	0	0	0	0	0	
CG	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

Table 77: detailed difference for accession id=31 vs ecotype id=8332, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 63	1	13712241	345	13711856	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\mid T \mid$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 282	4	10659455	505	10659034	NA	T
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.31 strain Lp2-6(accession id=32)

## 5.31.1 corresponding ecotype Lp2-6(stkparent=CS22595, ecotype id=8333, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	CG	CT	$\operatorname{GT}$
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	1	1	2	0	0	0	0	0	0
A	0	7	33	0	0	0	0	0	0	0	0	0
С	0	6	0	29	0	0	0	0	0	0	0	0
G	0	8	0	0	25	0	0	0	0	0	0	0
$\Gamma$	0	5	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 79: detailed difference for accession id=32 vs ecotype id=8333, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA

AtMSQTsnp 33	1	6375605	967	6375563	T	NA
AtMSQTsnp 41	1	8015448	855	8014943	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 49	1	9781347	1018	9781260	NA	$\mid$ T
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	Т	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.32 strain HR-5(accession id=33)

# 5.32.1 corresponding ecotype HR-5(stkparent=CS22596, ecotype id=8309, duplicate=1)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	1	0	0	0	0	0	0	0	0
A	0	10	31	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	35	0	0	0	0	0	0	0	0
G	0	8	0	0	24	0	0	0	0	0	0	0
T	0	5	0	0	0	26	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 81: detailed difference for accession id=33 vs ecotype id=8309, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	$pcr_call$	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 114	1	30214313	1800	30213917	$\overline{AG}$	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 140	2	8750047	1072	8749828	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	С	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	T	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\mathrm{C}}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\mid T \mid$	NA

AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\mid \mathrm{T} \mid$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.33 strain HR-10(accession id=34)

### 5.33.1 corresponding ecotype HR-10(stkparent=CS22597, ecotype id=8308, duplicate=1)

	-	NA	Α	С	G	T	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	1	1	0	0	0	0	0	0	0
A	0	7	30	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	7	0	27	0	0	0	0	0	0	0	0
G	0	11	0	0	31	0	0	0	0	0	0	0
$\Gamma$	0	7	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 83: detailed difference for accession id=34 vs ecotype id=8308, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 9	1	1042427	1109	1042028	T	NA
AtMSQTsnp 18	1	3872591	2224	3872234	NA	C
AtMSQTsnp 21	1	4142539	2625	4142402	C	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\mid T \mid$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mid \mathrm{T}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 244	3	23053878	1662	23053771	NA	G
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\mid \mathrm{T} \mid$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.34 strain NFA-8(accession id=35)

5.34.1 corresponding ecotype NFA-8(stkparent=CS22598, ecotype id=8346, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	0	0	1	0	0	0	0	0	0
A	0	7	28	0	0	0	0	0	0	0	0	0
C	0	4	0	32	0	0	0	0	0	0	0	0
G	0	6	0	0	33	0	0	0	0	0	0	0
T	0	7	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm CG}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 85: detailed difference for accession id=35 vs ecotype id=8346, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$^{\rm C}$	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.35 strain NFA-10(accession id=36)

## 5.35.1 corresponding ecotype NFA-10(stkparent=CS22599, ecotype id=8345, duplicate=1)

Table 86: accession id=36 vs ecotype id=8345, duplicate=1(nativename=NFA-10, stockparent=CS22599)

		3.7.4	Ι 4			TD.	1.0	1.0	ACD	aa	CIT	- CIT
	-	NA	A	C	G	T.	AC	$^{\mathrm{AG}}$	AT	-CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	3	1	0	0	0	0	0	0	0
A	0	10	26	0	0	0	0	0	0	0	0	0
С	0	7	0	23	0	1	0	0	0	0	0	0
$\mathbf{G}$	0	9	0	0	30	0	0	0	0	0	0	0
$\Gamma$	0	5	0	0	0	33	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 87: detailed difference for accession id=36 vs ecotype id=8345, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call

AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$^{\rm C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	Τ	NA
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	Т	NA
AtMSQTsnp 88	1	23395010	1071	23394478	NA	G
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 159	2	13265124	2127	13265029	С	T
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	T	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

### 5.36 strain Sq-1(accession id=37)

### 5.36.1 corresponding ecotype Sq-1(stkparent=CS22600, ecotype id=8384, duplicate=1)

Table 88: accession id=37 vs ecotype id=8384, duplicate=1(nativename=Sq-1, stockparent=CS22600)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	9	31	0	0	0	0	0	0	0	0	0
С	0	9	0	26	0	0	0	0	0	0	0	0
G	0	9	0	0	31	0	0	0	0	0	0	0
${ m T}$	0	4	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 89: detailed difference for accession id=37 vs ecotype id=8384, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid T \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA

AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mathbf{C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mathbf{C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.37 strain Sq-8(accession id=38)

## 5.37.1 corresponding ecotype Sq-8(stkparent=CS22601, ecotype id=8385, duplicate=1)

Table 90: accession id=38 vs ecotype id=8385, duplicate=1(nativename=Sq-8, stockparent=CS22601)

	-	NA	Α	С	G	$\mathbf{T}$	AC	$\overline{AG}$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	1	0	0	0	0	0	0	0
A	0	9	34	0	0	0	0	0	0	0	0	0
C	0	9	0	28	0	0	0	0	0	0	0	0
G	0	5	0	0	24	0	0	0	0	0	0	0
T	0	5	0	0	0	29	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 91: detailed difference for accession id=38 vs ecotype id=8385, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 143	2	9428987	376	9428891	NA	A
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	С	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$^{\rm C}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.38 strain CIBC-5(accession id=39)

### 5.38.1 corresponding ecotype CIBC-5(stkparent=CS22602, ecotype id=8277, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	1	1	0	0	0	0	0	0	0
A	0	9	25	1	2	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	25	0	2	0	0	0	0	1	0
G	0	9	0	1	34	0	0	0	0	0	0	0
$\mathbf{T}$	0	7	1	0	0	23	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 93: detailed difference for accession id=39 vs ecotype id=8277, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 38	1	7449598	2136	7449482	NA	C
AtMSQTsnp 41	1	8015448	855	8014943	T	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 138	2	8371133	373	8370574	C	CT
AtMSQTsnp 146	2	10703371	380	10702850	C	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 223	3	16489589	2208	16489217	A	G
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 244	3	23053878	1662	23053771	A	G
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 304	4	16272521	2262	16272270	C	T
AtMSQTsnp 306	4	16742071	2714	16741855	G	C
AtMSQTsnp 307	4	17038400	2205	17038096	$\Gamma$	A
AtMSQTsnp 321	5	625679	2386	625179	A	C
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 334	5	2244739	1995	2244524	C	$\mid$ T
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

## 5.39 strain CIBC-17(accession id=40)

5.39.1 corresponding ecotype CIBC-17(stkparent=CS22603, ecotype id=8276, duplicate=1)

	-	NA	A	$\mathbf{C}$	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	2	2	0	0	0	0	0	0	0
A	0	9	33	0	1	1	0	0	0	0	0	0
C	0	6	1	23	0	1	0	0	0	0	0	0
G	0	7	3	0	28	1	0	0	0	0	0	0
T	0	3	0	1	0	26	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 95: detailed difference for accession id=40 vs ecotype id=8276, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 18	1	3872591	2224	3872234	NA	С
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	T	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 114	1	30214313	1800	30213917	G	A
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 159	2	13265124	2127	13265029	C	${ m T}$
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 223	3	16489589	2208	16489217	G	A
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 244	3	23053878	1662	23053771	G	A
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	C
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 307	4	17038400	2205	17038096	A	T
AtMSQTsnp 321	5	625679	2386	625179	C	A
AtMSQTsnp 327	5	1497133	2105	1496987	G	T
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 334	5	2244739	1995	2244524	$\Gamma$	C
AtMSQTsnp 360	5	7842993	174	7842900	$\Gamma$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	A	G

#### 5.40 strain Tamm-2(accession id=41)

### 5.40.1 corresponding ecotype Tamm-2(stkparent=CS22604, ecotype id=8390, duplicate=1)

Table 96: accession id=41 vs ecotype id=8390, duplicate=1(nativename=Tamm-2, stockparent=CS22604)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	2	0	0	0	0	0	0	0	0	0
A	0	9	29	0	0	0	0	0	0	0	0	0
С	0	6	0	21	0	0	0	0	0	0	0	0
G	0	9	0	0	34	0	0	0	0	0	0	0
Τ	0	6	0	0	0	30	0	0	0	0	0	0

AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 97: detailed difference for accession id=41 vs ecotype id=8390, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	T	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	T	NA
AtMSQTsnp 267	4	8297960	499	8297594	T	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.41 strain Tamm-27(accession id=42)

## 5.41.1 corresponding ecotype Tamm-27(stkparent=CS22605, ecotype id=8391, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	3	0	2	2	0	0	0	0	0	0
A	0	10	27	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	21	0	0	0	0	0	0	0	0
G	0	9	0	0	32	0	0	0	0	0	0	0
$\mathbf{T}$	0	5	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 99: detailed difference for accession id=42 vs ecotype id=8391, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	A
AtMSQTsnp 18	1	3872591	2224	3872234	NA	G
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA

AtMSQTsnp 41	1	8015448	855	8014943	$\mathbf{C}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 76	1	21908667	2670	21908157	NA	T
AtMSQTsnp 87	1	23381760	312	23381443	$\mathbf{C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mathbf{C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 260	4	5775707	933	5775541	NA	A
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.42 strain Kz-1(accession id=43)

### 5.42.1 corresponding ecotype Kz-1(stkparent=CS22606, ecotype id=8320, duplicate=1)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	5	1	3	1	1	0	0	0	0	0	0
A	0	8	31	0	0	0	0	0	0	0	0	0
C	0	9	0	22	0	0	0	0	0	0	0	0
G	0	4	0	0	30	0	0	0	0	0	0	0
$\Gamma$	0	8	0	1	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 101: detailed difference for accession id=43 vs ecotype id=8320, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 4	1	340810	1095	340398	NA	A
AtMSQTsnp 9	1	1042427	1109	1042028	NA	T
AtMSQTsnp 15	1	2844525	1139	2844111	$\mid T \mid$	C
AtMSQTsnp 18	1	3872591	2224	3872234	C	NA
AtMSQTsnp 21	1	4142539	2625	4142402	$\mid T \mid$	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\mid T \mid$	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\mid T \mid$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 142	2	9256095	223	9256049	NA	C

AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	Τ	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	T	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mathbf{C}$	NA
AtMSQTsnp 263	4	7077926	495	7077771	NA	C
AtMSQTsnp 267	4	8297960	499	8297594	$\mathbf{C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.43 strain Kz-9(accession id=44)

## 5.43.1 corresponding ecotype Kz-9(stkparent=CS22607, ecotype id=8322, duplicate=1)

Table 102: accession id=44 vs ecotype id=8322, duplicate=1(nativename=Kz-9, stockparent=CS22607)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	0	0	2	0	0	0	0	0	0
A	0	6	29	0	0	0	0	0	0	0	0	0
C	0	8	0	29	0	0	0	0	0	0	0	0
G	0	8	0	0	29	0	0	0	0	0	0	0
${ m T}$	0	6	0	0	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 103: detailed difference for accession id=44 vs ecotype id=8322, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\mid T \mid$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 254	4	2441217	233	2440917	_	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA

AtMSQTsnp 392	5	20409250	994	20408706	A	NA	
AtMSQTsnp 406	5	23815848	978	23815354	G	NA	l

### 5.44 strain Got-7(accession id=45)

#### 5.44.1 corresponding ecotype Got-7(stkparent=CS22608, ecotype id=8299, duplicate=1)

Table 104: accession id=45 vs ecotype id=8299, duplicate=1(nativename=Got-7, stockparent=CS22608)

	_	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	1	0	0	0	0	0	0
A	0	10	36	0	0	0	0	0	0	0	0	0
С	0	4	0	23	0	0	0	0	0	0	0	0
G	0	9	0	0	28	0	0	0	0	0	0	0
Τ	0	6	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 105: detailed difference for accession id=45 vs ecotype id=8299, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.45 strain Got-22(accession id=46)

#### 5.45.1 corresponding ecotype Got-22(stkparent=CS22609, ecotype id=8298, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	1	0	0	0	0	0	0	0	0
A	0	9	35	0	0	0	0	0	0	0	0	0
С	0	6	0	20	0	0	0	0	0	0	0	0

G	0	8	0	0	29	0	0	0	0	0	0	0
T	0	6	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	1	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 107: detailed difference for accession id=46 vs ecotype id=8298, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	NA	С
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	T	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\Gamma$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 138	2	8371133	373	8370574	C	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 203	3	6890665	73	6890596	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	CG	G
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\Gamma$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.46 strain Ren-1(accession id=47)

### 5.46.1 corresponding ecotype Ren-1(stkparent=CS22610, ecotype id=8367, duplicate=1)

Table 108: accession id=47 vs ecotype id=8367, duplicate=1(nativename=Ren-1, stockparent=CS22610)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	2	1	1	0	0	0	0	1	0
A	0	6	27	1	0	0	0	0	0	0	0	0
C	0	12	0	28	0	0	0	0	0	0	0	0
G	0	6	0	0	29	0	0	0	0	0	0	0
${ m T}$	0	6	0	0	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 109: detailed difference for accession id=47 vs ecotype id=8367, duplicate=1

snp ch	hromosome position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
--------	--------------------	--------------	--------------------	----------	---------------

AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 38	1	7449598	2136	7449482	NA	A
AtMSQTsnp 41	1	8015448	855	8014943	$^{\mathrm{T}}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	$^{\circ}$ C	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	Т	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	С	NA
AtMSQTsnp 88	1	23395010	1071	23394478	NA	G
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 146	2	10703371	380	10702850	$^{\mathrm{C}}$	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\mathrm{C}}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 222	3	15880426	823	15879997	G	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 292	4	12404111	2534	12403706	$^{\mathrm{C}}$	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	CT
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	T	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 388	5	19316200	761	19315950	A	C
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

### 5.47 strain Ren-11(accession id=48)

### 5.47.1 corresponding ecotype Ren-11(stkparent=CS22611, ecotype id=8368, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	5	0	0	1	0	0	0	0	0	0	0
A	0	22	16	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	24	0	11	0	0	0	0	0	0	0	0
G	0	17	0	0	17	0	0	0	0	0	0	0
$\mathbf{T}$	0	18	0	0	0	15	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	1	0
GT	0	1	0	0	0	0	0	0	0	0	0	0

Table 111: detailed difference for accession id=48 vs ecotype id=8368, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 2	1	112907	847	112445	G	NA
AtMSQTsnp 8	1	993374	1042	992824	A	NA
AtMSQTsnp 9	1	1042427	1109	1042028	$\Gamma$	NA
AtMSQTsnp 10	1	1149280	1467	1149096	G	NA
AtMSQTsnp 12	1	2211033	964	2210982	G	NA
AtMSQTsnp 14	1	2775956	1649	2775589	$\Gamma$	NA
AtMSQTsnp 15	1	2844525	1139	2844111	$\Gamma$	NA
AtMSQTsnp 18	1	3872591	2224	3872234	C	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 29	1	5482008	263	5481722	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\mid$ T	NA

AtMSQTsnp 40	1	7842523	928	7842440	$\mathbf{C}$	NA
		!			$^{\circ}_{ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943		
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 49	1	9781347	1018	9781260	${ m T}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 62	1	13541648	808	13541490	A	NA
AtMSQTsnp 63	1	13712241	345	13711856	$\mathbf{C}$	NA
AtMSQTsnp 65	1	16874727	290	16874305	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 73	1	20175347	1477	20174753	C	NA
AtMSQTsnp 76	1	21908667	2670	21908157	С	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mathbf{C}$	NA
AtMSQTsnp 90	1	23893336	69	23893276	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
		l			G	
AtMSQTsnp 92	1	24292774	672	24292482		NA
AtMSQTsnp 101	1	26278413	330	26278221	A	NA
AtMSQTsnp 108	1	28666837	343	28666569	$\mathbf{G}$	NA
AtMSQTsnp 114	1	30214313	1800	30213917	G	NA
AtMSQTsnp 123	$\frac{1}{2}$	1798445	2109	1798324	Ā	NA
					G	
AtMSQTsnp 126	2	2477756	2192	2477306		NA
AtMSQTsnp 130	2	6499679	2098	6499196	T	NA
AtMSQTsnp 132	2	7072955	367	7072571	${ m T}$	NA
AtMSQTsnp 138	2	8371133	373	8370574	С	NA
AtMSQTsnp 140	$\frac{1}{2}$	8750047	1072	8749828	$\overset{\circ}{\mathrm{C}}$	NA
	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$		223			
AtMSQTsnp 142		9256095		9256049	T	NA
AtMSQTsnp 143	2	9428987	376	9428891	A	NA
AtMSQTsnp 145	2	10566917	381	10566416	$\mathbf{C}$	NA
AtMSQTsnp 146	2	10703371	380	10702850	C	NA
AtMSQTsnp 155	$\frac{1}{2}$	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 159	2	13265124	2127	13265029	T	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 203	3	6890665	73	6890596	$\mathbf{A}$	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 222	3	15880426	823	15879997	G	NA
AtMSQTsnp 231	3	18590671	883	18590590	G	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	$\mathbf{G}$	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mathbf{C}$	NA
AtMSQTsnp 242	3	21632608	138	21632379	Č	NA
• •						
AtMSQTsnp 244	3	23053878	1662	23053771	NA	G
AtMSQTsnp 254	4	2441217	233	2440917	$\mathbf{C}$	NA
AtMSQTsnp 266	4	8078648	238	8078388	$\operatorname{GT}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\mathbf{C}$	NA
AtMSQTsnp 274	4	9213312	2778	9213072	G	NA
AtMSQTsnp 282	4	10659455	505	10659034	T	NA NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 292	4	12404111	2534	12403706	${ m T}$	NA
AtMSQTsnp 306	4	16742071	2714	16741855	$\mathbf{C}$	NA
AtMSQTsnp 310	4	17608924	1999	17608717	C	NA
AtMSQTsnp 315	4	18560343	2289	18560103	$\stackrel{\circ}{ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	Τ	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	A	NA
AtMSQTsnp 378		17171676	1489	17171242	$\stackrel{\Lambda}{\mathrm{C}}$	NA NA
	5					
AtMSQTsnp 379	5	17629384	2039	17629093	G	NA
AtMSQTsnp 388	5	19316200	761	19315950	A	NA
AtMSQTsnp 390	5	20215473	970	20214933	С	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 395	5	20915321	981	20915132	A	NA
• •		l				
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 412	5	26379972	2302	26379717	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	A	NA
-	•	•				

## 5.48 strain Uod-1(accession id=49)

## 5.48.1 corresponding ecotype Uod-1(stkparent=CS22612, ecotype id=8398, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	1	0	0	0	0	0	0
NA	0	1	0	1	0	0	0	0	0	0	0	0
A	0	6	31	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	33	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	11	0	0	31	0	0	0	0	0	0	0
Τ	0	4	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 113: detailed difference for accession id=49 vs ecotype id=8398, duplicate=1  $\,$ 

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 49	1	9781347	1018	9781260	-	T
AtMSQTsnp 58	1	12093546	279	12093079	$^{\mathrm{C}}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\rm C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.49 strain Uod-7(accession id=50)

## 5.49.1 corresponding ecotype Uod-7(stkparent=CS22613, ecotype id=8399, duplicate=1)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	1	2	2	1	0	0	0	0	0	0
A	0	5	31	0	0	0	0	0	0	0	0	0
C	0	5	0	25	0	0	0	0	0	0	0	0
G	0	11	0	0	30	0	0	0	0	0	0	0
$\mid T \mid$	0	7	0	0	0	26	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 115: detailed difference for accession id=50 vs ecotype id=8399, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	T	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 123	2	1798445	2109	1798324	NA	G
AtMSQTsnp 128	2	5021020	1514	5020871	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 334	5	2244739	1995	2244524	NA	C
AtMSQTsnp 360	5	7842993	174	7842900	T	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.50 strain Cvi-0(accession id=51)

## 5.50.1 corresponding ecotype Cvi-0(stkparent=CS22614, ecotype id=8281, duplicate=1)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	1	0	0	0	0	0	0	0	0	0
NA	0	1	1	3	2	1	0	0	0	0	0	0
$\mathbf{A}$	0	11	23	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	7	0	28	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	7	0	0	36	0	0	0	0	0	0	0
$\mathbf{T}$	0	6	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 117: detailed difference for accession id=51 vs ecotype id=8281, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid$ T	NA

LAUMICOTT OF	4	0.4071.000	1.407	0.4071.000		TA I
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 140	2	8750047	1072	8749828	-	A
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mathbf{C}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\mathbf{C}$	NA
AtMSQTsnp 292	4	12404111	2534	12403706	NA	C
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 412	5	26379972	2302	26379717	NA	A

### 5.51 strain Lz-0(accession id=52)

## 5.51.1 corresponding ecotype Lz-0(stkparent=CS22615, ecotype id=8336, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	3	1	1	0	0	0	0	0	0
A	0	10	39	0	0	0	0	0	0	0	0	0
C	0	6	0	27	0	0	0	0	0	0	0	0
G	0	8	0	0	23	0	0	0	0	0	0	0
T	0	2	0	1	0	24	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 119: detailed difference for accession id=52 vs ecotype id=8336, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 159	2	13265124	2127	13265029	$\mid \mathrm{T}$	C
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\mid \mathrm{T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mid$ C	NA

AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	T	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.52 strain Ei-2(accession id=53)

### 5.52.1 corresponding ecotype Ei-2(stkparent=CS22616, ecotype id=8289, duplicate=1)

Table 120: accession id=53 vs ecotype id=8289, duplicate=1(nativename=Ei-2, stockparent=CS22616)

	-	NA	A	С	G	T	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	4	1	0	0	0	0	0	0	0
A	0	7	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	29	0	0	0	0	0	0	0	0
G	0	8	0	0	32	0	0	0	0	0	0	0
${ m T}$	0	7	0	0	0	21	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 121: detailed difference for accession id=53 vs ecotype id=8289, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	T	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	С
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	$\mid T \mid$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\mid T \mid$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.53 strain Gu-0(accession id=54)

5.53.1 corresponding ecotype Gu-0(stkparent=CS22617, ecotype id=8301, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	1	1	0	0	0	0	0	0	0
A	0	7	27	0	0	0	0	0	0	0	0	0
C	0	9	0	30	0	0	0	0	0	0	0	0
G	0	7	0	0	36	0	0	0	0	0	0	0
T	0	5	0	0	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 123: detailed difference for accession id=54 vs ecotype id=8301, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mathbf{C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\mathbf{G}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	$\mathbf{C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	$\mathbf{C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	$\mathbf{G}$	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	$\mathbf{G}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	$\mathbf{G}$	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

### 5.54 strain Ler-1(accession id=55)

## 5.54.1 corresponding ecotype Ler-1(stkparent=CS22618, ecotype id=8324, duplicate=1)

Table 124: accession id=55 vs ecotype id=8324, duplicate=1(nativename=Ler-1, stockparent=CS22618)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	1	1	1	0	0	0	0	0	0
A	0	10	33	0	0	0	0	0	0	0	0	0
C	0	7	0	19	0	0	0	0	0	0	0	0
G	0	9	0	0	33	0	0	0	0	0	0	0
$\mathbf{T}$	0	5	0	1	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 125: detailed difference for accession id=55 vs ecotype id=8324, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	NA	Т
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid T \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 159	2	13265124	2127	13265029	$\Gamma$	C
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\Gamma$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

### 5.55 strain Nd-1(accession id=56)

### 5.55.1 corresponding ecotype Nd-1(stkparent=CS22619, ecotype id=8344, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	1	1	1	0	0	0	0	0	0
A	0	8	40	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	30	0	0	0	0	0	0	0	0
G	0	9	0	0	24	0	0	0	0	0	0	0
${ m T}$	0	3	0	0	0	24	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 127: detailed difference for accession id=56 vs ecotype id=8344, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid$ T	NA

AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	Т	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	C
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

## 5.56 strain C24(accession id=57)

## 5.56.1 corresponding ecotype C24(stkparent=CS22620, ecotype id=8273, duplicate=1)

Table 128: accession id=57 vs ecotype id=8273, duplicate=1(nativename=C24, stockparent=CS22620)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	1	1	1	0	0	0	0	0	0
A	0	7	34	0	0	0	0	0	0	0	0	0
C	0	8	0	25	0	0	0	0	0	0	1	0
G	0	10	0	0	23	0	0	0	0	0	0	0
T	0	4	0	0	0	29	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 129: detailed difference for accession id=57 vs ecotype id=8273, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 138	2	8371133	373	8370574	$^{\rm C}$	CT
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\mathrm{C}}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 278	4	9377790	2783	9377549	G	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 315	4	18560343	2289	18560103	NA	$\mid \mathrm{T}$
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\rm C}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA

AtMSQTsnp 378	5	17171676	1489	17171242	$\mid T \mid$	NA	
AtMSQTsnp 392	5	20409250	994	20408706	G	NA	
AtMSQTsnp 406	5	23815848	978	23815354	G	NA	
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A	

## 5.57 strain N13(accession id=58)

#### 5.57.1 corresponding ecotype N13(stkparent=CS22491, ecotype id=8429, duplicate=1)

Table 130: accession id=58 vs ecotype id=8429, duplicate=1(nativename=N13, stockparent=CS22491)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	1	1	2	0	0	0	0	0	0
A	0	7	23	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	22	0	0	0	0	0	0	0	0
G	0	7	0	0	35	0	0	0	0	0	0	0
$\Gamma$	0	11	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 131: detailed difference for accession id=58 vs ecotype id=8429, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	T	NA
AtMSQTsnp 33	1	6375605	967	6375563	T	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\Gamma$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\mid T \mid$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 315	4	18560343	2289	18560103	NA	$\Gamma$
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.58 strain Wei-0(accession id=59)

### $5.58.1 \quad {\rm corresponding\ ecotype\ Wei-0} \\ ({\rm stkparent=CS22622,\ ecotype\ id=8404,\ duplicate=1})$

Table 132: accession id=59 vs ecotype id=8404, duplicate=1(nativename=Wei-0, stockparent=CS22622)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	2	2	3	0	0	0	0	0	0
A	0	13	26	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	8	0	26	0	0	0	0	0	0	0	0
G	0	9	0	0	30	0	0	0	0	0	0	0
Τ	0	5	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 133: detailed difference for accession id=59 vs ecotype id=8404, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	NA	G
AtMSQTsnp 18	1	3872591	2224	3872234	$^{\rm C}$	NA
AtMSQTsnp 22	1	4396087	46	4395913	A	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	$^{\rm C}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 108	1	28666837	343	28666569	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 138	2	8371133	373	8370574	С	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$^{\mathrm{C}}$	NA
AtMSQTsnp 260	4	5775707	933	5775541	NA	C
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\rm C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.59 strain Ws-0(accession id=60)

# $5.59.1 \quad corresponding \ ecotype \ Ws-0 (stkparent=CS22623, \ ecotype \ id=8405, \ duplicate=1)$

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	4	0	1	0	0	0	0	0	0
A	0	7	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	20	0	0	0	0	0	0	0	0
G	0	10	0	0	33	0	0	0	0	0	0	0

T	0	8	0	0	0	26	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm CG}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 135: detailed difference for accession id=60 vs ecotype id=8405, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid \mathrm{T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\mid T \mid$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	T	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	T	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 281	4	10482088	956	10482038	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	$\Gamma$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.60 strain Yo-0(accession id=61)

### 5.60.1 corresponding ecotype Yo-0(stkparent=CS22624, ecotype id=8408, duplicate=1)

Table 136: accession id=61 vs ecotype id=8408, duplicate=1(nativename=Yo-0, stockparent=CS22624)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	2	0	2	0	0	0	0	0	0
A	0	10	33	0	0	0	0	0	0	0	0	0
C	0	6	0	19	0	0	0	0	0	0	1	0
G	0	8	0	0	34	0	0	0	0	0	0	0
$\Gamma$	0	5	0	0	0	26	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 137: detailed difference for accession id=61 vs ecotype id=8408, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 138	2	8371133	373	8370574	C	CT
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 145	2	10566917	381	10566416	NA	$\mid$ T
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	$\mid$ T
AtMSQTsnp 327	5	1497133	2105	1496987	$\Gamma$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.61 strain Col-0(accession id=62)

### 5.61.1 corresponding ecotype Col-0(stkparent=CS22625, ecotype id=8279, duplicate=1)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	11	35	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	27	0	0	0	0	0	0	0	0
G	0	9	0	0	26	0	0	0	0	0	0	0
T	0	7	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{AG}}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 139: detailed difference for accession id=62 vs ecotype id=8279, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943	С	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA

AtMSQTsnp 156	2	12658862	2572	12658576	$\mid \mathrm{T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	С	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	Τ	NA
AtMSQTsnp 186	3	298210	777	297801	Τ	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$^{\rm C}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$^{\rm C}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 278	4	9377790	2783	9377549	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	Τ	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.62 strain An-1(accession id=63)

## 5.62.1 corresponding ecotype An-1(stkparent=CS22626, ecotype id=8253, duplicate=1)

	-	NA	Α	С	G	T	AC	$\overline{AG}$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	0	0	0	0	0	0	0	0	0
A	0	11	36	0	0	0	0	0	0	0	0	0
С	0	10	0	23	0	0	0	0	0	0	0	0
G	0	6	0	0	22	0	0	0	0	0	0	0
Τ	0	6	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 141: detailed difference for accession id=63 vs ecotype id=8253, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	T	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 38	1	7449598	2136	7449482	NA	A
AtMSQTsnp 41	1	8015448	855	8014943	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	C	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 203	3	6890665	73	6890596	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	С	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA

AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.63 strain Van-0(accession id=64)

#### 5.63.1 corresponding ecotype Van-0(stkparent=CS22627, ecotype id=8400, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	2	1	2	2	0	0	0	0	0	0
A	0	5	23	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	5	0	16	0	1	0	0	0	0	0	0
G	0	7	2	0	24	0	0	0	0	0	0	0
$\Gamma$	0	4	0	0	0	23	0	0	0	0	0	0
AC	0	0	2	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	1	6	0	3	0	0	0	0	0	0	0
AT	0	0	2	0	0	1	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	1	0	2	0	0	0	0	0	0	0	0
CT	0	1	0	5	0	3	0	0	0	0	0	0
GT	0	0	0	0	1	2	0	0	0	0	0	0

Table 143: detailed difference for accession id=64 vs ecotype id=8400, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 8	1	993374	1042	992824	AG	G
AtMSQTsnp 11	1	1602136	848	1601885	CT	T
AtMSQTsnp 12	1	2211033	964	2210982	G	A
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 29	1	5482008	263	5481722	AT	A
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 49	1	9781347	1018	9781260	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	CG	NA
AtMSQTsnp 63	1	13712241	345	13711856	AC	A
AtMSQTsnp 65	1	16874727	290	16874305	AG	A
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	CT	C
AtMSQTsnp 90	1	23893336	69	23893276	CT	C
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 97	1	24893649	1428	24893448	CG	C
AtMSQTsnp 101	1	26278413	330	26278221	AG	A
AtMSQTsnp 108	1	28666837	343	28666569	AG	G
AtMSQTsnp 129	2	5804076	407	5803805	AG	NA
AtMSQTsnp 142	$\frac{1}{2}$	9256095	223	9256049	NA	T
AtMSQTsnp 146	$\frac{1}{2}$	10703371	380	10702850	NA	G
AtMSQTsnp 156	$\frac{1}{2}$	12658862	2572	12658576	T	NA
AtMSQTsnp 164	$\frac{1}{2}$	14003409	2631	14003272	C	NA
AtMSQTsnp 170	$\frac{1}{2}$	15986354	2292	15986145	Ā	NA
AtMSQTsnp 174	$\frac{1}{2}$	17121378	2453	17121159	NA	A
AtMSQTsnp 184	$\frac{1}{2}$	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 188	3	2072780	649	2072648	$\overline{\mathrm{CT}}$	C
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 194	3	3679541	1632	3679103	AT	T
AtMSQTsnp 197	3	4818602	435	4818362	AG	A
AtMSQTsnp 203	$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	6890665	73	6890596	AT	A
AtMSQTsnp 205	$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	7392098	91	7391896	C	NA
AtMSQTsnp 214	3	9747261	641	9747158	AG	A
AtMSQTsnp 220	$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	11398207	1053	11398071	G	A
AtMSQTsnp 235	$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$_{ m CT}$	NA NA
AtMSQTsnp 237 AtMSQTsnp 242	3	21632608	138	21632379	CT	$\begin{array}{ c c }\hline & NA \\ C & \end{array}$
AtMSQTsnp 242 AtMSQTsnp 260		5775707	933	5775541	AC	A
AtMSQTsnp 266	4	8078648	238	8078388	GT GT	$\begin{array}{ c c }\hline A \\ T \end{array}$
AtMSQTsnp 267	4	8297960	238   499	8297594	CT	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
AtMSQTsnp 267 AtMSQTsnp 281	4		956	10482038	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	T
	4	10482088		11325921	$_{\mathrm{CT}}^{\mathrm{C}}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
AtMSQTsnp 285 AtMSQTsnp 286	4	11326190	507		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
AtMSQ1snp 286	4	11580143	1019	11579700		NA

AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 323	5	872350	532	872097	AG	A
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\rm C}$	NA
AtMSQTsnp 359	5	7442381	1363	7442039	GT	G
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 378	5	17171676	1489	17171242	CG	C
AtMSQTsnp 390	5	20215473	970	20214933	CT	T
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 395	5	20915321	981	20915132	AG	A
AtMSQTsnp 397	5	22040877	992	22040690	GT	T
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 410	5	26120955	596	26120843	$\overline{AG}$	G

## 5.64 strain Br-0(accession id=65)

## $5.64.1 \quad {\rm corresponding\ ecotype\ Br-0} (stkparent=CS22628,\ ecotype\ id=8269,\ duplicate=1)$

Table 144: accession id=65 vs ecotype id=8269, duplicate=1(nativename=Br-0, stockparent=CS22628)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	1	1	1	0	0	0	0	0	0
A	0	11	31	0	0	0	0	0	0	0	0	0
C	0	14	0	22	0	0	0	0	0	0	0	0
G	0	11	0	0	26	0	0	0	0	0	0	0
T	0	3	0	0	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 145: detailed difference for accession id=65 vs ecotype id=8269, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	alignment_start	pcr_call	$sequenom\_call$
AtMSQTsnp 8	1	993374	1042	992824	NA	G
AtMSQTsnp 18	1	3872591	2224	3872234	C	NA
AtMSQTsnp 21	1	4142539	2625	4142402	C	NA
AtMSQTsnp 22	1	4396087	46	4395913	A	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 65	1	16874727	290	16874305	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 73	1	20175347	1477	20174753	C	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 108	1	28666837	343	28666569	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 145	2	10566917	381	10566416	$\mid T \mid$	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	С	NA
AtMSQTsnp 267	4	8297960	499	8297594	С	NA
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	$\mid$ T
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C

AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 379	5	17629384	2039	17629093	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

# 5.65 strain Est-1(accession id=66)

### 5.65.1 corresponding ecotype Est-1(stkparent=CS22629, ecotype id=8291, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	2	2	2	1	0	0	0	0	0	0
A	0	9	29	0	0	0	0	0	0	0	0	0
С	0	4	0	28	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	7	0	0	25	0	0	0	0	0	0	0
$\mathbf{T}$	0	8	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 147: detailed difference for accession id=66 vs ecotype id=8291, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	Т	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 88	1	23395010	1071	23394478	NA	G
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 260	4	5775707	933	5775541	NA	A
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 281	4	10482088	956	10482038	NA	T
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

# 5.66 strain Ag-0(accession id=67)

 $5.66.1 \quad {\rm corresponding\ ecotype\ Ag-0(stkparent=CS22630,\ ecotype\ id=8251,\ duplicate=1)}$ 

	-	NA	A	$\mathbf{C}$	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	4	2	3	0	0	0	0	0	0	0	0
A	0	6	30	0	0	0	0	0	0	0	0	0
C	0	6	0	27	0	0	0	0	0	0	0	0
G	0	12	0	0	28	0	0	0	0	0	0	0
$\Gamma$	0	3	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 149: detailed difference for accession id=67 vs ecotype id=8251, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	$^{\rm C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 242	3	21632608	138	21632379	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	$^{\mathrm{C}}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

# 5.67 strain Gy-0(accession id=68)

# $5.67.1 \quad {\rm corresponding\ ecotype\ Gy-0(stkparent=CS22631,\ ecotype\ id=8302,\ duplicate=1)}$

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	1	0	0	0	0	0	0
A	0	11	34	0	0	0	0	0	0	0	0	0
C	0	10	0	20	0	0	0	0	0	0	0	0
G	0	10	0	0	28	0	0	0	0	0	0	0
T	0	6	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 151: detailed difference for accession id=68 vs ecotype id=8302, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 21	1	4142539	2625	4142402	C	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	T	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\mid T \mid$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	$\Gamma$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	C	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 379	5	17629384	2039	17629093	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.68 strain Ra-0(accession id=69)

### 5.68.1 corresponding ecotype Ra-0(stkparent=CS22632, ecotype id=8364, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	2	1	1	0	0	0	0	0	0
A	0	11	27	1	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	9	0	28	0	1	0	0	0	0	0	0
G	0	7	1	0	35	0	0	0	0	0	0	0
T	0	4	0	0	0	16	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 153: detailed difference for accession id=69 vs ecotype id=8364, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA

AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	T	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	A
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 223	3	16489589	2208	16489217	G	A
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 321	5	625679	2386	625179	A	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 334	5	2244739	1995	2244524	$\mathbf{C}$	T
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	$\mathbf{G}$	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

# 5.69 strain Bay-0(accession id=70)

## 5.69.1 corresponding ecotype Bay-0(stkparent=CS22633, ecotype id=8260, duplicate=1)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	0	0	1	0	0	0	0	0	0
A	0	11	35	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	8	0	26	0	0	0	0	0	0	0	0
G	0	10	0	0	24	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 155: detailed difference for accession id=70 vs ecotype id=8260, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	ightharpoons C	NA

AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 203	3	6890665	73	6890596	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 281	4	10482088	956	10482038	NA	T
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 388	5	19316200	761	19315950	$\mathbf{C}$	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

# 5.70 strain Ga-0(accession id=71)

# 5.70.1 corresponding ecotype Ga-0(stkparent=CS22634, ecotype id=8295, duplicate=1)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	1	0	0	0	0	0	0
NA	0	3	0	3	2	2	0	0	0	0	0	0
A	0	8	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	19	0	0	0	0	0	0	0	0
G	0	6	0	0	28	0	0	0	0	0	0	0
$\Gamma$	0	7	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 157: detailed difference for accession id=71 vs ecotype id=8295, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 49	1	9781347	1018	9781260	-	T
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 76	1	21908667	2670	21908157	NA	C
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mid \mathrm{T}$	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	$\mid T \mid$	NA
AtMSQTsnp 186	3	298210	777	297801	$\mid T \mid$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C

AtMSQTsnp 331	5	1931167	1633	1931083	$\mid C \mid$	NA	
AtMSQTsnp 360	5	7842993	174	7842900	Т	NA	
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA	
AtMSQTsnp 392	5	20409250	994	20408706	G	NA	
AtMSQTsnp 406	5	23815848	978	23815354	A	NA	

# 5.71 strain Mrk-0(accession id=72)

## $5.71.1 \quad {\rm corresponding\ ecotype\ Mrk-0} \\ ({\rm stkparent=CS22635},\ {\rm ecotype\ id=8339},\ {\rm duplicate=1})$

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	1	0	0	0	0	0	0
NA	0	1	2	3	1	0	0	0	0	0	0	0
A	0	12	29	0	0	0	0	0	0	0	0	0
C	0	6	0	20	0	1	0	0	0	0	0	0
G	0	7	0	0	31	0	0	0	0	0	0	0
$\Gamma$	0	6	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 159: detailed difference for accession id=72 vs ecotype id=8339, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	$sequenom\_call$
AtMSQTsnp 21	1	4142539	2625	4142402	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 49	1	9781347	1018	9781260	-	T
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 281	4	10482088	956	10482038	NA	C
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	C
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	$^{\mathrm{C}}$	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 412	5	26379972	2302	26379717	NA	A
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

### 5.72 strain Mz-0(accession id=73)

### 5.72.1 corresponding ecotype Mz-0(stkparent=CS22636, ecotype id=8342, duplicate=1)

Table 160: accession id=73 vs ecotype id=8342, duplicate=1(nativename=Mz-0, stockparent=CS22636)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	1	3	1	0	0	0	0	0	0
A	0	8	31	0	0	0	0	0	0	0	0	0
C	0	6	0	26	0	0	0	0	0	0	0	0
G	0	9	0	0	34	0	0	0	0	0	0	0
T	0	6	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 161: detailed difference for accession id=73 vs ecotype id=8342, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	NA	C
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mathbf{C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	$\mathbf{C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 315	4	18560343	2289	18560103	NA	A
AtMSQTsnp 327	5	1497133	2105	1496987	${ m T}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

# 5.73 strain Wt-5(accession id=74)

## $\textbf{5.73.1} \quad \textbf{corresponding ecotype Wt-5} (\textbf{stkparent=CS22637}, \, \textbf{ecotype id=8407}, \, \textbf{duplicate=1})$

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	4	2	3	1	3	0	0	0	0	0	0
A	0	10	27	0	0	0	0	0	0	0	0	0
С	0	9	0	25	0	0	0	0	0	0	0	0
G	0	8	0	0	28	0	0	0	0	0	0	0

T	0	2	0	1	0	23	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 163: detailed difference for accession id=74 vs ecotype id=8407, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\Gamma$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	С	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	$\mid$ T
AtMSQTsnp 142	2	9256095	223	9256049	NA	$\mid$ T
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	С	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 254	4	2441217	233	2440917	NA	C
AtMSQTsnp 281	4	10482088	956	10482038	NA	T
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 334	5	2244739	1995	2244524	$\Gamma$	C
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

# 5.74 strain Ct-1(accession id=76)

# 5.74.1 corresponding ecotype Ct-1(stkparent=CS22639, ecotype id=8280, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	4	1	0	0	0	0	0	0	0
A	0	9	29	0	0	0	0	0	0	0	0	0
C	0	7	0	25	0	0	0	0	0	0	0	0
G	0	7	0	0	34	0	0	0	0	0	0	0
T	0	6	0	1	0	23	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 165: detailed difference for accession id=76 vs ecotype id=8280, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	$sequenom\_call$
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$^{\rm C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	Т	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	Τ	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	T	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	T	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$^{\rm C}$	NA
AtMSQTsnp 292	4	12404111	2534	12403706	T	C
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

# 5.75 strain Mr-0(accession id=77)

# 5.75.1 corresponding ecotype Mr-0(stkparent=CS22640, ecotype id=8338, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	2	3	2	2	0	0	0	0	0	0
A	0	10	22	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	31	0	0	0	0	0	0	0	0
G	0	10	0	0	39	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	21	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 167: detailed difference for accession id=77 vs ecotype id=8338, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA

AtMSQTsnp 85	1	23155780	668	23155464	NA	A
AtMSQTsnp 88	1	23395010	1071	23394478	NA	G
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	C
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 145	2	10566917	381	10566416	NA	T
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mathbf{C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA

# 5.76 strain Tsu-1(accession id=78)

# 5.76.1 corresponding ecotype Tsu-1(stkparent=CS22641, ecotype id=8394, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	0	0	0	0	0	0	0	0	0
A	0	11	24	0	0	0	0	0	0	0	0	0
C	0	7	0	30	0	1	0	0	0	0	0	0
G	0	8	0	0	33	0	0	0	0	0	0	0
${ m T}$	0	6	0	1	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 169: detailed difference for accession id=78 vs ecotype id=8394, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 85	1	23155780	668	23155464	NA	A
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 138	2	8371133	373	8370574	C	T
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mid \mathrm{T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 187	3	580470	55	580026	NA	A
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA

AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	T	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 334	5	2244739	1995	2244524	T	C
AtMSQTsnp 360	5	7842993	174	7842900	T	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

# 5.77 strain Mt-0(accession id=79)

## 5.77.1 corresponding ecotype Mt-0(stkparent=CS22642, ecotype id=8341, duplicate=1)

	-	NA	Α	С	G	T	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	1	1	3	2	0	0	0	0	1	0
A	0	9	33	0	0	0	0	0	0	0	0	0
C	0	8	0	22	0	0	0	0	0	0	1	0
G	0	7	0	0	30	0	0	0	0	0	0	0
T	0	6	0	0	0	21	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 171: detailed difference for accession id=79 vs ecotype id=8341, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	Т	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	C
AtMSQTsnp 57	1	11655519	273	11655171	NA	CT
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\Gamma$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	G
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 138	2	8371133	373	8370574	C	CT
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 184	2	18752840	1423	18752604	$\mid T \mid$	NA
AtMSQTsnp 186	3	298210	777	297801	$\mid T \mid$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mid T \mid$	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	T
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA

| AtMSQTsnp 406 | 5 | 23815848 | 978 | 23815354 | A | NA

## 5.78 strain Nok-3(accession id=80)

## 5.78.1 corresponding ecotype Nok-3(stkparent=CS22643, ecotype id=8347, duplicate=1)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	1	1	0	2	0	0	0	0	0	0
A	0	7	37	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	22	0	1	0	0	0	0	0	0
G	0	10	0	0	29	0	0	0	0	0	0	0
Τ	0	6	0	0	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 173: detailed difference for accession id=80 vs ecotype id=8347, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	T	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	T	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 184	2	18752840	1423	18752604	T	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	T
AtMSQTsnp 310	4	17608924	1999	17608717	NA	C
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 334	5	2244739	1995	2244524	C	T
AtMSQTsnp 360	5	7842993	174	7842900	$\Gamma$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 378	5	17171676	1489	17171242	$\Gamma$	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.79 strain Wa-1(accession id=81)

### 5.79.1 corresponding ecotype Wa-1(stkparent=CS22644, ecotype id=8403, duplicate=1)

-	NA	Α	С	G	T	AC	AG	AT	$\overline{\text{CG}}$	CT	GT
0	0	0	0	0	0	0	0	0	0	0	0
0	3	4	0	1	1	0	0	0	0	0	0
0	9	19	0	0	0	0	0	0	0	0	0
0	9	0	19	0	0	0	0	0	0	0	0
	- 0 0 0 0	- NA 0 0 0 3 0 9 0 9	- NA A 0 0 0 0 3 4 0 9 19 0 9 0	- NA A C 0 0 0 0 0 3 4 0 0 9 19 0 0 9 0 19	- NA A C G 0 0 0 0 0 0 0 3 4 0 1 0 9 19 0 0 0 9 0 19 0	- NA A C G T 0 0 0 0 0 0 0 0 3 4 0 1 1 0 9 19 0 0 0 0 9 0 19 0 0	- NA A C G T AC 0 0 0 0 0 0 0 0 0 3 4 0 1 1 0 0 9 19 0 0 0 0 0 9 0 19 0 0	- NA A C G T AC AG 0 0 0 0 0 0 0 0 0 0 0 3 4 0 1 1 0 0 0 9 19 0 0 0 0 0 0 0 9 0 19 0 0 0 0	-         NA         A         C         G         T         AC         AG         AT           0         0         0         0         0         0         0         0         0           0         3         4         0         1         1         0         0         0           0         9         19         0         0         0         0         0         0           0         9         0         19         0         0         0         0         0	- NA A C G T AC AG AT CG 0 0 0 0 0 0 0 0 0 0 0 0 0 3 4 0 1 1 0 0 0 0 0 0 9 19 0 0 0 0 0 0 0 0 0 9 0 19 0 0 0 0 0 0	-         NA         A         C         G         T         AC         AG         AT         CG         CT           0 </th

G	0	11	0	0	30	0	0	0	0	0	0	0
T	0	8	0	0	0	33	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 175: detailed difference for accession id=81 vs ecotype id=8403, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 10	1	1149280	1467	1149096	G	NA
AtMSQTsnp 21	1	4142539	2625	4142402	$^{\rm C}$	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 38	1	7449598	2136	7449482	A	NA
AtMSQTsnp 41	1	8015448	855	8014943	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 65	1	16874727	290	16874305	G	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 73	1	20175347	1477	20174753	${ m T}$	NA
AtMSQTsnp 87	1	23381760	312	23381443	${ m T}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	$^{\rm C}$	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 197	3	4818602	435	4818362	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$^{\rm C}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$^{\rm C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	A
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\tilde{\mathrm{C}}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\stackrel{\circ}{ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 379	5	17629384	2039	17629093	A	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

## 5.80 strain Fei-0(accession id=82)

# 5.80.1 corresponding ecotype Fei-0(stkparent=CS22645, ecotype id=8294, duplicate=1)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	5	4	0	3	0	0	0	0	0	0
A	0	11	29	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	8	0	23	0	0	0	0	0	0	0	0
G	0	8	0	0	27	0	0	0	0	0	0	0
$\Gamma$	0	3	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	1	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	$\begin{array}{c} 0 \\ 0 \end{array}$

Table 177: detailed difference for accession id=82 vs ecotype id=8294, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 48	1	9497118	930	9496666	NA	C
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 140	2	8750047	1072	8749828	NA	A
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	C	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 187	3	580470	55	580026	NA	A
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 223	3	16489589	2208	16489217	AG	G
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	$\mid$ T
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 310	4	17608924	1999	17608717	NA	A
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 334	5	2244739	1995	2244524	NA	$\mid$ T
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 394	5	20518330	2759	20518241	NA	A
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

## 5.81 strain Se-0(accession id=83)

# 5.81.1 corresponding ecotype Se-0(stkparent=CS22646, ecotype id=8379, duplicate=1)

Table 178: accession id=83 vs ecotype id=8379, duplicate=1(nativename=Se-0, stockparent=CS22646)

	-	NA	A	С	G	T	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	3	1	2	0	0	0	0	0	0
A	0	9	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	3	0	18	0	0	0	0	0	0	0	0
G	0	13	0	0	31	0	0	0	0	0	0	0
Τ	0	4	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 179: detailed difference for accession id=83 vs ecotype id=8379, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 53	1	10423708	948	10423483	NA	T
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	NA	T
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.82 strain Ts-1(accession id=84)

## 5.82.1 corresponding ecotype Ts-1(stkparent=CS22647, ecotype id=8392, duplicate=1)

Table 180: accession id=84 vs ecotype id=8392, duplicate=1(nativename=Ts-1, stockparent=CS22647)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	1	4	2	1	0	0	0	0	0	0
A	0	10	26	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	3	0	19	0	0	0	0	0	0	0	0
G	0	12	0	0	29	0	0	0	0	0	0	0
$\mathbf{T}$	0	4	0	0	0	36	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 181: detailed difference for accession id=84 vs ecotype id=8392, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid T \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	C
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA

AtMSQTsnp 145	2	10566917	381	10566416	NA	T
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 177	2	17859964	118	17859576	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	${ m T}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\mathbf{C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 323	5	872350	532	872097	NA	A
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	$\mathbf{C}$	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	$\mathbf{G}$	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

# 5.83 strain Ts-5(accession id=85)

# 5.83.1 corresponding ecotype Ts-5(stkparent=CS22648, ecotype id=8393, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	2	0	1	0	0	0	0	0	0
A	0	12	29	0	0	0	0	0	0	0	0	0
C	0	5	0	22	0	0	0	0	0	0	0	0
G	0	9	0	0	32	0	0	0	0	0	0	0
Т	0	5	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 183: detailed difference for accession id=85 vs ecotype id=8393, duplicate=1  $\,$ 

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	${ m T}$	NA
AtMSQTsnp 61	1	13395892	1673	13395451	С	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	T
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mathbf{C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$^{\rm C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mid T \mid$	NA

AtMSQTsnp 267	4	8297960	499	8297594	С	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.84 strain Pro-0(accession id=86)

## 5.84.1 corresponding ecotype Pro-0(stkparent=CS22649, ecotype id=8360, duplicate=1)

Table 184: accession id=86 vs ecotype id=8360, duplicate=1(nativename=Pro-0, stockparent=CS22649)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	2	2	0	0	1	0	0	0	0	0
A	0	6	35	0	0	0	0	0	0	0	0	0
С	0	3	0	23	0	0	0	0	0	0	0	0
G	0	14	0	0	30	0	0	0	0	0	0	0
Τ	0	7	0	0	0	21	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 185: detailed difference for accession id=86 vs ecotype id=8360, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 38	1	7449598	2136	7449482	NA	A
AtMSQTsnp 41	1	8015448	855	8014943	T	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 63	1	13712241	345	13711856	NA	AC
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 85	1	23155780	668	23155464	NA	A
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mid T \mid$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\Gamma$	NA
AtMSQTsnp 267	4	8297960	499	8297594	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

### 5.85 strain LL-0(accession id=87)

### 5.85.1 corresponding ecotype LL-0(stkparent=CS22650, ecotype id=8328, duplicate=1)

Table 186: accession id=87 vs ecotype id=8328, duplicate=1(nativename=LL-0, stockparent=CS22650)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	4	1	1	1	0	0	0	0	0	0	0
A	0	11	23	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	7	0	26	0	0	0	0	0	0	0	0
G	0	11	0	0	29	0	0	0	0	0	0	0
$\Gamma$	0	3	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 187: detailed difference for accession id=87 vs ecotype id=8328, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 9	1	1042427	1109	1042028	G	NA
AtMSQTsnp 21	1	4142539	2625	4142402	$\mathbf{C}$	NA
AtMSQTsnp 27	1	5206767	1014	5206479	$\mathbf{G}$	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	$\mathbf{C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mathbf{C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	C
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mathbf{C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 379	5	17629384	2039	17629093	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

# 5.86 strain Kondara(accession id=88)

# $5.86.1 \quad {\tt corresponding\ ecotype\ Kondara(stkparent=CS22651,\ ecotype\ id=8319,\ duplicate=1)}$

Table 188: accession id=88 vs ecotype id=8319, duplicate=1(nativename=Kondara, stockparent=CS22651)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	0	2	1	0	0	0	0	0	0
A	0	11	30	0	1	0	0	0	0	0	0	0
С	0	5	0	30	0	0	0	0	0	0	0	0
G	0	4	0	0	26	0	0	0	0	0	0	0

T	0	5	0	0	0	28	0	0	0	0	0	0	
AC	0	0	0	0	0	0	0	0	0	0	0	0	
AG	0	0	0	0	0	0	0	0	0	0	0	0	
AT	0	0	0	0	0	0	0	0	0	0	0	0	
CG	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

Table 189: detailed difference for accession id=88 vs ecotype id=8319, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid T \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 114	1	30214313	1800	30213917	A	G
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	C	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 254	4	2441217	233	2440917	-	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 310	4	17608924	1999	17608717	NA	A
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	NA	G
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	NA	G
AtMSQTsnp 379	5	17629384	2039	17629093	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

# 5.87 strain Shahdara(accession id=89)

# $5.87.1 \quad corresponding \ ecotype \ Shahdara(stkparent=CS22652, \ ecotype \ id=8248, \ duplicate=1)$

Table 190: accession id=89 vs ecotype id=8248, duplicate=1 (nativename=Shahdara, stockparent=CS22652)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	8	2	0	0	1	0	0	0	0	0	0
A	0	18	20	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	15	0	21	0	0	0	0	0	0	0	0
G	0	14	0	0	18	0	0	0	0	0	0	0
${ m T}$	0	10	0	0	0	19	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 191: detailed difference for accession id=89 vs ecotype id=8248, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 2	1	112907	847	112445	G	NA
AtMSQTsnp 8	1	993374	1042	992824	A	NA

1				1		
AtMSQTsnp 14	1	2775956	1649	2775589	T	NA
AtMSQTsnp 15	1	2844525	1139	2844111	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	С	NA
AtMSQTsnp 33	1	6375605	967	6375563	Τ	NA
AtMSQTsnp 41	1	8015448	855	8014943	С	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 57	1	11655519	273	11655171	$\mathbf{C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	Ä	NA
AtMSQTsnp 62	1	13541648	808	13541490	A	NA
AtMSQTsnp 63	1	13712241	345	13711856	$\stackrel{\Lambda}{\mathrm{C}}$	NA NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA NA
AtMSQTsnp 85	1	23155780	668	23155464	A	NA NA
	l .		312		$\stackrel{\mathbf{A}}{\mathbf{C}}$	NA NA
AtMSQTsnp 87	1	23381760		23381443		
AtMSQTsnp 88	1	23395010	1071	23394478	A	NA
AtMSQTsnp 90	1	23893336	69	23893276	T	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 100	1	25717887	1758	25717715	A	NA
AtMSQTsnp 123	2	1798445	2109	1798324	G	NA
AtMSQTsnp 126	2	2477756	2192	2477306	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 130	2	6499679	2098	6499196	T	NA
AtMSQTsnp 132	2	7072955	367	7072571	Τ	NA
AtMSQTsnp 138	2	8371133	373	8370574	Τ	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$^{\rm C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 169	$\frac{1}{2}$	15801542	396	15801112	G	NA
AtMSQTsnp 170	$\frac{1}{2}$	15986354	2292	15986145	A	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 220	$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	11398207	1053	11398071	G	NA
AtMSQTsnp 231	$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	18590671	883	18590590	G	NA NA
AtMSQTsnp 232	3	18980664	829	18980171	C	NA NA
	3		833		G	NA NA
AtMSQTsnp 235		19930624		19930188		
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 244	3	23053878	1662	23053771	A	NA
AtMSQTsnp 254	4	2441217	233	2440917	-	NA
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 288	4	11984772	1376	11984495	G	NA
AtMSQTsnp 304	4	16272521	2262	16272270	С	NA
AtMSQTsnp 307	4	17038400	2205	17038096	T	NA
AtMSQTsnp 310	4	17608924	1999	17608717	A	NA
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 321	5	625679	2386	625179	A	NA
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 350	5	5005750	1459	5005363	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 361	5	7881430	1986	7881187	A	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 388	5	19316200	761	19315950	C	NA
AtMSQTsnp 392	5	20409250	994	20408706	Ä	NA
AtMSQTsnp 404	5	23270994	1391	23270845	$\stackrel{\scriptstyle 11}{ m T}$	NA
AtMSQTsnp 404	5	23815848	978	23815354	A	NA
AtMSQTsnp 410	5	26120955	596	26120843	G	NA NA
AtMSQTsnp 410 AtMSQTsnp 412	5	26379972	2302	26379717	A	NA NA
7101110 & 1511p 412		20010012	2002	20013111	4.1	1111

# 5.88 strain Sorbo(accession id=90)

## 5.88.1 corresponding ecotype Sorbo(stkparent=CS22653, ecotype id=8381, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	3	5	1	1	4	0	0	0	0	0	0
A	0	11	28	0	0	0	0	0	0	0	0	0
С	0	10	0	26	0	0	0	0	0	0	0	0
G	0	4	0	0	27	0	0	0	0	0	0	0
Τ	0	4	0	0	0	21	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

CT	0	0	0	0	0	0	0	0	0	0	0	0	
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	

Table 193: detailed difference for accession id=90 vs ecotype id=8381, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 41	1	8015448	855	8014943	C	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 48	1	9497118	930	9496666	NA	$\mid \mathrm{T}$
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	$\mid$ T
AtMSQTsnp 140	2	8750047	1072	8749828	NA	A
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 173	2	16908190	728	16908054	NA	G
AtMSQTsnp 184	2	18752840	1423	18752604	$\Gamma$	NA
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 197	3	4818602	435	4818362	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	C	NA
AtMSQTsnp 244	3	23053878	1662	23053771	NA	A
AtMSQTsnp 254	4	2441217	233	2440917	_	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 315	4	18560343	2289	18560103	NA	$\mid$ T
AtMSQTsnp 321	5	625679	2386	625179	NA	Ā
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\Gamma$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 409	5	26029439	2404	26029366	NA	T

# 5.89 strain Kin-0(accession id=91)

# 5.89.1 corresponding ecotype Kin-0(stkparent=CS22654, ecotype id=8316, duplicate=1)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	2	5	2	1	0	0	0	0	0	0
A	0	12	24	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	23	0	0	0	0	0	0	1	0
G	0	8	0	0	32	0	0	0	0	0	0	0
$\Gamma$	0	6	0	0	0	23	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{AG}}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm CG}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 195: detailed difference for accession id=91 vs ecotype id=8316, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 18	1	3872591	2224	3872234	C	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid T \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\mid T \mid$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	C	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mid T \mid$	NA
AtMSQTsnp 88	1	23395010	1071	23394478	NA	G
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 108	1	28666837	343	28666569	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 138	2	8371133	373	8370574	C	CT
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 145	2	10566917	381	10566416	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\Gamma$	NA
AtMSQTsnp 159	2	13265124	2127	13265029	NA	C
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\Gamma$	NA
AtMSQTsnp 231	3	18590671	883	18590590	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\Gamma$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	C	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	C
AtMSQTsnp 321	5	625679	2386	625179	NA	C
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 373	5	15767945	1190	15767914	NA	G
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	A

## 5.90 strain Ms-0(accession id=92)

## 5.90.1 corresponding ecotype Ms-0(stkparent=CS22655, ecotype id=8340, duplicate=1)

Table 196: accession id=92 vs ecotype id=8340, duplicate=1(nativename=Ms-0, stockparent=CS22655)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	3	1	0	0	0	0	0	0
A	0	8	25	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	26	0	0	0	0	0	0	0	0
G	0	10	0	0	23	0	0	0	0	0	0	0
T	0	7	0	0	0	24	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	2	0	1	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 197: detailed difference for accession id=92 vs ecotype id=8340, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	G	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mid T \mid$	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 41	1	8015448	855	8014943	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	A	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA

AtMSQTsnp 61	1	13395892	1673	13395451	Τ	NA
AtMSQTsnp 67	1	17355738	660	17355484	G	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mathbf{C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	A	NA
AtMSQTsnp 108	1	28666837	343	28666569	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	$\mathbf{C}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 173	2	16908190	728	16908054	A	G
AtMSQTsnp 177	2	17859964	118	17859576	$\overline{AG}$	A
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	${ m T}$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	$\mathbf{C}$	NA
AtMSQTsnp 231	3	18590671	883	18590590	NA	G
AtMSQTsnp 235	3	19930624	833	19930188	G	NA
AtMSQTsnp 249	4	1055234	482	1055093	$\overline{AG}$	A
AtMSQTsnp 254	4	2441217	233	2440917	A	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 323	5	872350	532	872097	$\overline{AG}$	G
AtMSQTsnp 325	5	1214057	2388	1213621	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	G	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 359	5	7442381	1363	7442039	NA	G
AtMSQTsnp 360	5	7842993	174	7842900	${ m T}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	A	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA

## 5.91 strain Bur-0(accession id=93)

## 5.91.1 corresponding ecotype Bur-0(stkparent=CS22656, ecotype id=8272, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	1	3	0	0	0	0	0	0	0
A	0	7	35	0	0	0	0	0	0	0	0	0
C	0	7	0	22	0	0	0	0	0	0	0	0
G	0	8	0	0	26	0	0	0	0	0	0	0
T	0	8	0	0	0	26	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 199: detailed difference for accession id=93 vs ecotype id=8272, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	$\mathbf{C}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943	С	NA
AtMSQTsnp 47	1	9343401	929	9343234	$^{\rm C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	$^{\rm C}$	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	${ m T}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	С	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 123	2	1798445	2109	1798324	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA

AtMSQTsnp 156	2	12658862	2572	12658576	Τ	NA
AtMSQTsnp 164	2	14003409	2631	14003272	$\mathbf{C}$	NA
AtMSQTsnp 184	2	18752840	1423	18752604	A	NA
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	T	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	$\mathbf{C}$	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 325	5	1214057	2388	1213621	NA	C
AtMSQTsnp 327	5	1497133	2105	1496987	T	NA
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	T	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	G	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

# 5.92 strain Edi-0(accession id=94)

## 5.92.1 corresponding ecotype Edi-0(stkparent=CS22657, ecotype id=8288, duplicate=1)

	_	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	3	0	0	0	0	0	0	0	0	0
A	0	10	31	0	0	0	0	0	0	0	0	0
С	0	4	0	22	0	0	0	0	0	0	0	0
G	0	10	0	0	28	0	0	0	0	0	0	0
Τ	0	6	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 201: detailed difference for accession id=94 vs ecotype id=8288, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 21	1	4142539	2625	4142402	Т	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	${ m T}$	NA
AtMSQTsnp 33	1	6375605	967	6375563	${ m T}$	NA
AtMSQTsnp 41	1	8015448	855	8014943	${ m T}$	NA
AtMSQTsnp 47	1	9343401	929	9343234	$\mathbf{C}$	NA
AtMSQTsnp 58	1	12093546	279	12093079	G	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	$\mathbf{C}$	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	$\mathbf{C}$	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 118	2	322335	2465	322253	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	A	NA
AtMSQTsnp 146	2	10703371	380	10702850	$\mathbf{G}$	NA
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 170	2	15986354	2292	15986145	A	NA
AtMSQTsnp 184	2	18752840	1423	18752604	${ m T}$	NA
AtMSQTsnp 186	3	298210	777	297801	A	NA
AtMSQTsnp 232	3	18980664	829	18980171	A	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	$\mathbf{C}$	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 321	5	625679	2386	625179	NA	A
AtMSQTsnp 331	5	1931167	1633	1931083	G	NA
AtMSQTsnp 360	5	7842993	174	7842900	$\mathbf{G}$	NA
AtMSQTsnp 368	5	14216131	1035	14215995	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	NA	A
AtMSQTsnp 392	5	20409250	994	20408706	G	NA

| AtMSQTsnp 406 | 5 | 23815848 | 978 | 23815354 | G | NA

## 5.93 strain Oy-0(accession id=95)

## 5.93.1 corresponding ecotype Oy-0(stkparent=CS22658, ecotype id=8352, duplicate=1)

	-	NA	A	С	G	T	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	0	4	1	0	0	0	0	0	0
A	0	7	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	9	0	31	0	0	0	0	0	0	0	0
G	0	7	0	0	27	0	0	0	0	0	0	0
T	0	4	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 203: detailed difference for accession id=95 vs ecotype id=8352, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	C	NA
AtMSQTsnp 33	1	6375605	967	6375563	$\Gamma$	NA
AtMSQTsnp 47	1	9343401	929	9343234	C	NA
AtMSQTsnp 58	1	12093546	279	12093079	C	NA
AtMSQTsnp 60	1	12357583	1973	12357044	A	NA
AtMSQTsnp 61	1	13395892	1673	13395451	T	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	C	NA
AtMSQTsnp 91	1	24071689	1427	24071203	G	NA
AtMSQTsnp 92	1	24292774	672	24292482	G	NA
AtMSQTsnp 123	2	1798445	2109	1798324	NA	G
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 146	2	10703371	380	10702850	A	NA
AtMSQTsnp 155	2	12657149	38	12656716	A	NA
AtMSQTsnp 156	2	12658862	2572	12658576	C	NA
AtMSQTsnp 164	2	14003409	2631	14003272	C	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	G
AtMSQTsnp 186	3	298210	777	297801	$\Gamma$	NA
AtMSQTsnp 189	3	2231938	779	2231413	G	NA
AtMSQTsnp 205	3	7392098	91	7391896	C	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 267	4	8297960	499	8297594	C	NA
AtMSQTsnp 286	4	11580143	1019	11579700	G	NA
AtMSQTsnp 306	4	16742071	2714	16741855	NA	G
AtMSQTsnp 315	4	18560343	2289	18560103	NA	$\Gamma$
AtMSQTsnp 327	5	1497133	2105	1496987	$\Gamma$	NA
AtMSQTsnp 331	5	1931167	1633	1931083	C	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

# 5.94 strain Ws-2(accession id=96)

### 5.94.1 corresponding ecotype Ws-2(stkparent=CS22659, ecotype id=8406, duplicate=1)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	4	2	2	4	0	0	0	0	0	0
A	0	9	19	0	0	0	0	0	0	0	0	0
C	0	7	0	17	0	0	0	0	0	0	0	0

G	0	7	0	0	34	0	0	0	0	0	0	0
T	0	8	0	0	0	27	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 205: detailed difference for accession id=96 vs ecotype id=8406, duplicate=1

snp	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 21	1	4142539	2625	4142402	С	NA
AtMSQTsnp 27	1	5206767	1014	5206479	A	NA
AtMSQTsnp 30	1	5629159	2156	5628596	Т	NA
AtMSQTsnp 33	1	6375605	967	6375563	G	NA
AtMSQTsnp 38	1	7449598	2136	7449482	NA	A
AtMSQTsnp 41	1	8015448	855	8014943	С	NA
AtMSQTsnp 47	1	9343401	929	9343234	С	NA
AtMSQTsnp 58	1	12093546	279	12093079	С	NA
AtMSQTsnp 60	1	12357583	1973	12357044	T	NA
AtMSQTsnp 61	1	13395892	1673	13395451	T	NA
AtMSQTsnp 63	1	13712241	345	13711856	A	NA
AtMSQTsnp 67	1	17355738	660	17355484	A	NA
AtMSQTsnp 87	1	23381760	312	23381443	T	NA
AtMSQTsnp 91	1	24071689	1427	24071203	A	NA
AtMSQTsnp 100	1	25717887	1758	25717715	NA	A
AtMSQTsnp 129	2	5804076	407	5803805	G	NA
AtMSQTsnp 130	2	6499679	2098	6499196	NA	T
AtMSQTsnp 142	2	9256095	223	9256049	NA	C
AtMSQTsnp 155	2	12657149	38	12656716	G	NA
AtMSQTsnp 156	2	12658862	2572	12658576	${ m T}$	NA
AtMSQTsnp 164	2	14003409	2631	14003272	A	NA
AtMSQTsnp 174	2	17121378	2453	17121159	NA	A
AtMSQTsnp 186	3	298210	777	297801	T	NA
AtMSQTsnp 189	3	2231938	779	2231413	A	NA
AtMSQTsnp 197	3	4818602	435	4818362	NA	A
AtMSQTsnp 205	3	7392098	91	7391896	С	NA
AtMSQTsnp 235	3	19930624	833	19930188	A	NA
AtMSQTsnp 237	3	20483289	1645	20482976	${ m T}$	NA
AtMSQTsnp 267	4	8297960	499	8297594	${ m T}$	NA
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 286	4	11580143	1019	11579700	С	NA
AtMSQTsnp 292	4	12404111	2534	12403706	NA	T
AtMSQTsnp 304	4	16272521	2262	16272270	NA	C
AtMSQTsnp 315	4	18560343	2289	18560103	NA	T
AtMSQTsnp 327	5	1497133	2105	1496987	NA	T
AtMSQTsnp 331	5	1931167	1633	1931083	С	NA
AtMSQTsnp 360	5	7842993	174	7842900	G	NA
AtMSQTsnp 368	5	14216131	1035	14215995	G	NA
AtMSQTsnp 370	5	15065196	756	15065018	A	NA
AtMSQTsnp 372	5	15569205	926	15568698	G	NA
AtMSQTsnp 392	5	20409250	994	20408706	G	NA
AtMSQTsnp 406	5	23815848	978	23815354	A	NA
AtMSQTsnp 415	5	26708459	2711	26707937	NA	G

# 5.95 strain M3385S(accession id=98)

# 5.95.1 corresponding ecotype M3385S(stkparent=CS6183, ecotype id=7453, duplicate=1)

Table 206: accession id=98 vs ecotype id=7453, duplicate=1(nativename=M3385S, stockparent=CS6183)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
C	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	3	0	0	0	0	0	0	0
$\mid T \mid$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

CT	0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.96 strain Kent(accession id=289)

### 5.96.1 corresponding ecotype Kent(stkparent=, ecotype id=8238, duplicate=1)

Table 207: accession id=289 vs ecotype id=8238, duplicate=1(nativename=Kent, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 208: detailed difference for accession id=289 vs ecotype id=8238, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

## 5.97 strain Rsch-4(accession id=290)

#### 5.97.1 corresponding ecotype Rsch-4(stkparent=CS1494, ecotype id=8374, duplicate=1)

Table 209: accession id=290 vs ecotype id=8374 duplicate=1(nativename=Rsch-4, stockparent=CS1494)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.98 strain Lund(accession id=292)

### 5.98.1 corresponding ecotype Lund(stkparent=, ecotype id=8335, duplicate=1)

Table 210: accession id=292 vs ecotype id=8335, duplicate=1(nativename=Lund, stockparent=)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

CT	0	0	0	0	0	0	0	0	0	0	0	0
GT GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 211: detailed difference for accession id=292 vs ecotype id=8335, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

## 5.99 strain Kln(accession id=293)

### 5.99.1 corresponding ecotype Kln(stkparent=CS6003, ecotype id=8239, duplicate=1)

Table 212: accession id=293 vs ecotype id=8239, duplicate=1(nativename=Kln, stockparent=CS6003)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.100 strain NC-6(accession id=294)

#### 5.100.1 corresponding ecotype NC-6(stkparent=, ecotype id=8246, duplicate=1)

Table 213: accession id=294 vs ecotype id=8246, duplicate=1(nativename=NC-6, stockparent=)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	1	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	1	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 214: detailed difference for accession id=294 vs ecotype id=8246, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 274	4	9213312	2778	9213072	T	G
AtMSQTsnp 278	4	9377790	2783	9377549	G	A

## 5.101 strain Vimmerby(accession id=295)

## 5.101.1 corresponding ecotype Vimmerby(stkparent=, ecotype id=8249, duplicate=1)

Table 215: accession id=295 vs ecotype id=8249, duplicate=1(nativename=Vimmerby, stockparent=)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.102 strain Pu2-8(accession id=296)

#### 5.102.1 corresponding ecotype Pu2-8(stkparent=CS22449, ecotype id=8363, duplicate=1)

Table 216: accession id=296 vs ecotype id=8363, duplicate=1(nativename=Pu2-8, stockparent=CS22449)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.103 strain Dem-4(accession id=297)

### 5.103.1 corresponding ecotype Dem-4(stkparent=, ecotype id=8233, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 218: detailed difference for accession id=297 vs ecotype id=8233, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

### 5.104 strain Kz-13(accession id=298)

### 5.104.1 corresponding ecotype Kz-13(stkparent=CS22445, ecotype id=8321, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
Α	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

# 5.105 strain Bg-2(accession id=299)

### 5.105.1 corresponding ecotype Bg-2(stkparent=CS22342, ecotype id=8261, duplicate=1)

Table 220: accession id=299 vs ecotype id=8261, duplicate=1(nativename=Bg-2, stockparent=CS22342)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 221: detailed difference for accession id=299 vs ecotype id=8261, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

## 5.106 strain Sf-1(accession id=300)

## 5.106.1 corresponding ecotype Sf-1(stkparent=N6855, ecotype id=8380, duplicate=1)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	1	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	1	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 223: detailed difference for accession id=300 vs ecotype id=8380, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	G	Τ
AtMSQTsnp 278	4	9377790	2783	9377549	A	G

### 5.107 strain En-1(accession id=301)

## 5.107.1 corresponding ecotype En-1(stkparent=N1137, ecotype id=8290, duplicate=1)

Table 224: accession id=301 vs ecotype id=8290, duplicate=1(nativename=En-1, stockparent=N1137)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.108 strain Gr-1(accession id=302)

### 5.108.1 corresponding ecotype Gr-1(stkparent=N1199, ecotype id=8300, duplicate=1)

Table 225: accession id=302 vs ecotype id=8300, duplicate=1(nativename=Gr-1, stockparent=N1199)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	0	0	0	0	0	0	0	0	0	0
C	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 226: detailed difference for accession id=302 vs ecotype id=8300, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	A	NA

## 5.109 strain Ang-0(accession id=303)

### 5.109.1 corresponding ecotype Ang-0(stkparent=N949, ecotype id=8254, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

## 5.110 strain PHW-34(accession id=304)

## 5.110.1 corresponding ecotype PHW-34(stkparent=N6034, ecotype id=8244, duplicate=1)

										·		
	-	NA	A	С	G	$\Gamma$	AC	$^{\rm AG}$	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	1	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 229: detailed difference for accession id=304 vs ecotype id=8244, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	T	G

### 5.111 strain Bu-0(accession id=305)

### 5.111.1 corresponding ecotype Bu-0(stkparent=N1007, ecotype id=8271, duplicate=1)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 231: detailed difference for accession id=305 vs ecotype id=8271, duplicate=1

snp	chromosome	position	alignment_id	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

# 5.112 strain Gd-1(accession id=306)

# $5.112.1 \quad {\rm corresponding\ ecotype\ Gd-1} \\ ({\rm stkparent=N1185},\ {\rm ecotype\ id=8296},\ {\rm duplicate=1})$

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0

G	0	0	0	0	1	0	0	0	0	0	0	0	
T	0	0	0	0	0	1	0	0	0	0	0	0	
AC	0	0	0	0	0	0	0	0	0	0	0	0	
AG	0	0	0	0	0	0	0	0	0	0	0	0	
AT	0	0	0	0	0	0	0	0	0	0	0	0	
CG	0	0	0	0	0	0	0	0	0	0	0	0	
СТ	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	İ

## 5.113 strain Hi-0(accession id=307)

## 5.113.1 corresponding ecotype Hi-0(stkparent=N1227, ecotype id=8304, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 234: detailed difference for accession id=307 vs ecotype id=8304, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A
AtMSQTsnp 279	4	9580049	2788	9579976	NA	${ m T}$

## 5.114 strain Hs-0(accession id=308)

## 5.114.1 corresponding ecotype Hs-0(stkparent=N1237, ecotype id=8310, duplicate=1)

Table 235: accession id=308 vs ecotype id=8310, duplicate=1(nativename=Hs-0, stockparent=N1237)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 236: detailed difference for accession id=308 vs ecotype id=8310, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	G	NA
AtMSQTsnp 278	4	9377790	2783	9377549	G	NA
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

### 5.115 strain Is-0(accession id=309)

### $5.115.1 \quad {\rm corresponding\ ecotype\ Is-0} \\ ({\rm stkparent=N1241,\ ecotype\ id=8312,\ duplicate=1})$

Table 237: accession id=309 vs ecotype id=8312, duplicate=1(nativename=Is-0, stockparent=N1241)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 238: detailed difference for accession id=309 vs ecotype id=8312, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	С

### 5.116 strain Jm-0(accession id=310)

### $5.116.1 \quad {\rm corresponding \ ecotype \ Jm-0} \\ ({\rm stkparent=N1259, \ ecotype \ id=8313, \ duplicate=1})$

Table 239: accession id=310 vs ecotype id=8313, duplicate=1(nativename=Jm-0, stockparent=N1259)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.117 strain Ka-0(accession id=311)

### 5.117.1 corresponding ecotype Ka-0(stkparent=N1267, ecotype id=8314, duplicate=1)

Table 240: accession id=311 vs ecotype id=8314, duplicate=1(nativename=Ka-0, stockparent=N1267)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.118 strain Rd-0(accession id=312)

## $5.118.1 \quad {\rm corresponding \ ecotype \ Rd-0} \\ (stkparent=N1483, \ ecotype \ id=8411, \ duplicate=1)$

Table 241: accession id=312 vs ecotype id=8411, duplicate=1(nativename=Rd-0, stockparent=N1483)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.119 strain PHW-2(accession id=313)

## 5.119.1 corresponding ecotype PHW-2(stkparent=N6002, ecotype id=8243, duplicate=1)

Table 242: accession id=313 vs ecotype id=8243, duplicate=1(nativename=PHW-2, stockparent=N6002)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 243: detailed difference for accession id=313 vs ecotype id=8243, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A
AtMSQTsnp 279	4	9580049	2788	9579976	NA	C

# 5.120 strain Seattle-0(accession id=314)

# 5.120.1 corresponding ecotype Seattle-0(stkparent=N6187, ecotype id=8245, duplicate=1)

Table 244: accession id=314 vs ecotype id=8245, duplicate=1(nativename=Seattle-0, stockparent=N6187)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

### 5.121 strain Alc-0(accession id=315)

#### 5.121.1 corresponding ecotype Alc-0(stkparent=N1656, ecotype id=8252, duplicate=1)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 247: detailed difference for accession id=315 vs ecotype id=8252, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

### 5.122 strain Bla-1(accession id=316)

## 5.122.1 corresponding ecotype Bla-1(stkparent=N971, ecotype id=8264, duplicate=1)

Table 248: accession id=316 vs ecotype id=8264, duplicate=1(nativename=Bla-1, stockparent=N971)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 249: detailed difference for accession id=316 vs ecotype id=8264, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

# 5.123 strain Blh-1(accession id=317)

## $5.123.1 \quad {\tt corresponding\ ecotype\ Blh-1} (stkparent=N1031,\ ecotype\ id=8265,\ duplicate=1)$

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.124 strain Bs-1(accession id=318)

### 5.124.1 corresponding ecotype Bs-1(stkparent=N997, ecotype id=8270, duplicate=1)

Table 251: accession id=318 vs ecotype id=8270, duplicate=1(nativename=Bs-1, stockparent=N997)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.125 strain Can-0(accession id=319)

### 5.125.1 corresponding ecotype Can-0(stkparent=N1065, ecotype id=8274, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.126 strain Cen-0(accession id=320)

#### 5.126.1 corresponding ecotype Cen-0(stkparent=N1067, ecotype id=8275, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	1	0	0	0	0	0	0

AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.127 strain Co(accession id=321)

#### 5.127.1 corresponding ecotype Co(stkparent=N3180, ecotype id=8278, duplicate=1)

Table 254: accession id=321 vs ecotype id=8278, duplicate=1(nativename=Co, stockparent=N3180)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	1	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 255: detailed difference for accession id=321 vs ecotype id=8278, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 274	4	9213312	2778	9213072	Τ	NA
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

#### 5.128 strain Ge-0(accession id=322)

#### 5.128.1 corresponding ecotype Ge-0(stkparent=N1187, ecotype id=8297, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

# 5.129 strain H55(accession id=323)

#### $5.129.1 \quad {\rm corresponding\ ecotype\ H55} ({\rm stkparent=N923,\ ecotype\ id=8303,\ duplicate=1})$

Table 257: accession id=323 vs ecotype id=8303, duplicate=1(nativename=H55, stockparent=N923)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	1	0	0	1	0	0	0	0	0	0	0

$\mid T \mid$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 258: detailed difference for accession id=323 vs ecotype id=8303, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	G	NA

### 5.130 strain In-0(accession id=324)

#### 5.130.1 corresponding ecotype In-0(stkparent=N1239, ecotype id=8311, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	$\operatorname{CT}$	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 260: detailed difference for accession id=324 vs ecotype id=8311, duplicate=1

$\operatorname{snp}$	chromosome	position	${\it alignment\_id}$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

## 5.131 strain Lc-0(accession id=325)

### $5.131.1 \quad {\rm corresponding\ ecotype\ Lc-0} ({\rm stkparent=N1307,\ ecotype\ id=8323,\ duplicate=1})$

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.132 strain Lip-0(accession id=326)

5.132.1 corresponding ecotype Lip-0(stkparent=N1337, ecotype id=8325, duplicate=1)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.133 strain Lm-2(accession id=327)

#### $5.133.1 \quad {\rm corresponding \ ecotype \ Lm-2} \\ ({\rm stkparent=N1345, \ ecotype \ id=8329, \ duplicate=1})$

Table 263: accession id=327 vs ecotype id=8329 duplicate=1(nativename=Lm-2, stockparent=N1345)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.134 strain Lu-1(accession id=328)

#### 5.134.1 corresponding ecotype Lu-1(stkparent=N1353, ecotype id=8334, duplicate=1)

Table 264: accession id=328 vs ecotype id=8334, duplicate=1(nativename=Lu-1, stockparent=N1353)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
Α	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 265: detailed difference for accession id=328 vs ecotype id=8334, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

# 5.135 strain Mir-0(accession id=329)

# 5.135.1 corresponding ecotype Mir-0(stkparent=N1379, ecotype id=8337, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 267: detailed difference for accession id=329 vs ecotype id=8337, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

### 5.136 strain Na-1(accession id=330)

#### 5.136.1 corresponding ecotype Na-1(stkparent=N1385, ecotype id=8343, duplicate=1)

Table 268: accession id=330 vs ecotype id=8343, duplicate=1(nativename=Na-1, stockparent=N1385)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.137 strain Nw-0(accession id=331)

# 5.137.1 corresponding ecotype Nw-0(stkparent=N1409, ecotype id=8348, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 270: detailed difference for accession id=331 vs ecotype id=8348, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

#### 5.138 strain Ost-0(accession id=332)

#### 5.138.1 corresponding ecotype Ost-0(stkparent=N1431, ecotype id=8351, duplicate=1)

Table 271: accession id=332 vs ecotype id=8351, duplicate=1(nativename=Ost-0, stockparent=N1431)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 272: detailed difference for accession id=332 vs ecotype id=8351, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	С

### 5.139 strain Pa-1(accession id=333)

### 5.139.1 corresponding ecotype Pa-1(stkparent=N1439, ecotype id=8353, duplicate=1)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.140 strain Per-1(accession id=334)

#### $5.140.1 \quad {\tt corresponding\ ecotype\ Per-1} \\ ({\tt stkparent=N1445},\ {\tt ecotype\ id=8354},\ {\tt duplicate=1})$

Table 274: accession id=334 vs ecotype id=8354, duplicate=1(nativename=Per-1, stockparent=N1445)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0

AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 275: detailed difference for accession id=334 vs ecotype id=8354, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	NA	G

#### 5.141 strain Petergof(accession id=335)

#### $5.141.1 \quad {\tt corresponding\ ecotype\ Petergof(stkparent=N926,\ ecotype\ id=8355,\ duplicate=1)}$

	-	NA	Α	$\mathbf{C}$	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.142 strain Pi-0(accession id=336)

#### 5.142.1 corresponding ecotype Pi-0(stkparent=N1455, ecotype id=8356, duplicate=1)

Table 277: accession id=336 vs ecotype id=8356, duplicate=1(nativename=Pi-0, stockparent=N1455)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	1	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	1	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 278: detailed difference for accession id=336 vs ecotype id=8356, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	T	G
AtMSQTsnp 279	4	9580049	2788	9579976	С	T

#### 5.143 strain Pla-0(accession id=337)

### 5.143.1 corresponding ecotype Pla-0(stkparent=N1459, ecotype id=8357, duplicate=1)

Table 279: accession id=337 vs ecotype id=8357 duplicate=1(nativename=Pla-0, stockparent=N1459)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 280: detailed difference for accession id=337 vs ecotype id=8357, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 279	4	9580049	2788	9579976	NA	C

### 5.144 strain Rak-2(accession id=338)

### 5.144.1 corresponding ecotype Rak-2(stkparent=N1485, ecotype id=8365, duplicate=1)

Table 281: accession id=338 vs ecotype id=8365 duplicate=1(nativename=Rak-2, stockparent=N1485)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 282: detailed difference for accession id=338 vs ecotype id=8365, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

#### 5.145 strain Rubezhnoe-1(accession id=339)

### 5.145.1 corresponding ecotype Rubezhnoe-1(stkparent=N927, ecotype id=8375, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0

GT	0	0	0	0	0	0	0	0	0	0	0	0
----	---	---	---	---	---	---	---	---	---	---	---	---

Table 284: detailed difference for accession id=339 vs ecotype id=8375, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

### 5.146 strain Santa Clara(accession id=340)

#### 5.146.1 corresponding ecotype Santa Clara(stkparent=N8069, ecotype id=8377, duplicate=1)

	_	NA	Α	$\mathbf{C}$	G	Т	AC	AG	AT	CG	СТ	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 286: detailed difference for accession id=340 vs ecotype id=8377, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

# 5.147 strain Sap-0(accession id=341)

### 5.147.1 corresponding ecotype Sap-0(stkparent=N1507, ecotype id=8378, duplicate=1)

Table 287: accession id=341 vs ecotype id=8378, duplicate=1(nativename=Sap-0, stockparent=N1507)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 288: detailed difference for accession id=341 vs ecotype id=8378, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

#### 5.148 strain St-0(accession id=342)

#### 5.148.1 corresponding ecotype St-0(stkparent=N1535, ecotype id=8387, duplicate=1)

Table 289: accession id=342 vs ecotype id=8387, duplicate=1(nativename=St-0, stockparent=N1535)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
Τ	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.149 strain Stw-0(accession id=343)

### 5.149.1 corresponding ecotype Stw-0(stkparent=N1539, ecotype id=8388, duplicate=1)

Table 290: accession id=343 vs ecotype id=8388, duplicate=1(nativename=Stw-0, stockparent=N1539)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 291: detailed difference for accession id=343 vs ecotype id=8388, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

#### 5.150 strain Ta-0(accession id=344)

#### 5.150.1 corresponding ecotype Ta-0(stkparent=N1549, ecotype id=8389, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

snp	chromosome	position	$alignment\_id$	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

#### 5.151 strain Tu-0(accession id=345)

### $5.151.1 \quad {\tt corresponding\ ecotype\ Tu-0(stkparent=N1567,\ ecotype\ id=8395,\ duplicate=1)}$

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 295: detailed difference for accession id=345 vs ecotype id=8395, duplicate=1

$\operatorname{snp}$	chromosome	position	$\operatorname{alignment\_id}$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 279	4	9580049	2788	9579976	NA	C

### 5.152 strain Fly2-2(accession id=346)

## 5.152.1 corresponding ecotype Fly2-2(stkparent=, ecotype id=6024, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 297: detailed difference for accession id=346 vs ecotype id=6024, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

### 5.153 strain Rev-1(accession id=347)

### 5.153.1 corresponding ecotype Rev-1(stkparent=, ecotype id=8369, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.154 strain Hov4-1(accession id=348)

#### 5.154.1 corresponding ecotype Hov4-1(stkparent=, ecotype id=8306, duplicate=1)

Table 299: accession id=348 vs ecotype id=8306, duplicate=1(nativename=Hov4-1, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	2	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 300: detailed difference for accession id=348 vs ecotype id=8306, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	С

# 5.155 strain San-2(accession id=349)

# 5.155.1 corresponding ecotype San-2(stkparent=, ecotype id=8247, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

# 5.156 strain Lom1-1(accession id=351)

5.156.1 corresponding ecotype Lom1-1(stkparent=, ecotype id=6042, duplicate=2)

Table 302: accession id=351 vs ecotype id=6042, duplicate=2(nativename=Lom1-1, stockparent=)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	1	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mid T \mid$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 303: detailed difference for accession id=351 vs ecotype id=6042, duplicate=2

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	NA	T
AtMSQTsnp 278	4	9377790	2783	9377549	A	G

#### 5.156.2 corresponding ecotype Lom1-1(stkparent=, ecotype id=6042, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	1	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 305: detailed difference for accession id=351 vs ecotype id=6042, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	$pcr_call$	$sequenom\_call$
AtMSQTsnp 274	4	9213312	2778	9213072	NA	G
AtMSQTsnp 278	4	9377790	2783	9377549	A	NA

### 5.157 strain Lill-1(accession id=353)

#### 5.157.1 corresponding ecotype Lill-1(stkparent=, ecotype id=8242, duplicate=1)

Table 306: accession id=353 vs ecotype id=8242, duplicate=1(nativename=Lill-1, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

CT	0	0	0	0	0	0	0	0	0	0	0	0
GT GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 307: detailed difference for accession id=353 vs ecotype id=8242, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

### 5.158 strain Br1-6(accession id=354)

#### 5.158.1 corresponding ecotype Br1-6(stkparent=, ecotype id=8231, duplicate=1)

Table 308: accession id=354 vs ecotype id=8231, duplicate=1(nativename=Br1-6, stockparent=)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.159 strain Gul1-2(accession id=356)

#### 5.159.1 corresponding ecotype Gul1-2(stkparent=, ecotype id=8234, duplicate=1)

Table 309: accession id=356 vs ecotype id=8234, duplicate=1(nativename=Gul1-2, stockparent=)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	1	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 310: detailed difference for accession id=356 vs ecotype id=8234, duplicate=1

$\operatorname{snp}$	chromosome	position	alignment_id	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	G	T
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

#### 5.160 strain B1-2(accession id=357)

### 5.160.1 corresponding ecotype B1-2(stkparent=, ecotype id=8256, duplicate=1)

Table 311: accession id=357 vs ecotype id=8256, duplicate=1(nativename=B1-2, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 312: detailed difference for accession id=357 vs ecotype id=8256, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

## 5.161 strain B3-3(accession id=358)

#### 5.161.1 corresponding ecotype B3-3(stkparent=, ecotype id=8257, duplicate=1)

Table 313: accession id=358 vs ecotype id=8257, duplicate=1(nativename=B3-3, stockparent=)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.162 strain B4-1(accession id=359)

### 5.162.1 corresponding ecotype B4-1(stkparent=, ecotype id=8258, duplicate=1)

Table 314: accession id=359 vs ecotype id=8258, duplicate=1(nativename=B4-1, stockparent=)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 315: detailed difference for accession id=359 vs ecotype id=8258, duplicate=1

snp	chromosome	position	$alignment\_id$	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	С

#### 5.163 strain B5-1(accession id=360)

#### 5.163.1 corresponding ecotype B5-1(stkparent=, ecotype id=8259, duplicate=1)

Table 316: accession id=360 vs ecotype id=8259, duplicate=1(nativename=B5-1, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	1	0	0	0	0	0	0	0
Α	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 317: detailed difference for accession id=360 vs ecotype id=8259, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G
AtMSQTsnp 279	4	9580049	2788	9579976	NA	C

#### 5.164 strain Dra3-1(accession id=361)

#### 5.164.1 corresponding ecotype Dra3-1(stkparent=, ecotype id=8283, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 319: detailed difference for accession id=361 vs ecotype id=8283, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	$pcr_call$	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

## 5.165 strain Kni-1(accession id=362)

#### 5.165.1 corresponding ecotype Kni-1(stkparent=, ecotype id=6040, duplicate=2)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0 0	0	0	0	0
A	0	0	0	0				0	0	0	0	0

C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
T	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 321: detailed difference for accession id=362 vs ecotype id=6040, duplicate=2

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

#### 5.165.2 corresponding ecotype Kni-1(stkparent=, ecotype id=6040, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 323: detailed difference for accession id=362 vs ecotype id=6040, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	A

# 5.166 strain Stu1-1(accession id=363)

## 5.166.1 corresponding ecotype Stu1-1(stkparent=, ecotype id=6088, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	1	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 325: detailed difference for accession id=363 vs ecotype id=6088, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	alignment_start	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	G	T

### 5.167 strain r-1(accession id=364)

### 5.167.1 corresponding ecotype r-1(stkparent=, ecotype id=6074, duplicate=2)

Table 326: accession id=364 vs ecotype id=6074, duplicate=2(nativename=r-1, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.167.2 corresponding ecotype r-1(stkparent=, ecotype id=6074, duplicate=1)

Table 327: accession id=364 vs ecotype id=6074, duplicate=1(nativename=r-1, stockparent=)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.168 strain Lis-1(accession id=365)

#### 5.168.1 corresponding ecotype Lis-1(stkparent=, ecotype id=8326, duplicate=1)

Table 328: accession id=365 vs ecotype id=8326, duplicate=1(nativename=Lis-1, stockparent=)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	1	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 329: detailed difference for accession id=365 vs ecotype id=8326, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	NA	G

#### 5.169 strain Lis-2(accession id=366)

#### 5.169.1 corresponding ecotype Lis-2(stkparent=, ecotype id=8222, duplicate=2)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	2	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 331: detailed difference for accession id=366 vs ecotype id=8222, duplicate=2

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	NA	G
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

#### 5.169.2 corresponding ecotype Lis-2(stkparent=, ecotype id=8222, duplicate=1)

Table 332: accession id=366 vs ecotype id=8222, duplicate=1(nativename=Lis-2, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	2	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 333: detailed difference for accession id=366 vs ecotype id=8222, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 274	4	9213312	2778	9213072	NA	G
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

### 5.170 strain Hovdala-2(accession id=368)

### 5.170.1 corresponding ecotype Hovdala-2(stkparent=, ecotype id=6039, duplicate=1)

Table 334: accession id=368 vs ecotype id=6039, duplicate=1(nativename=Hovdala-2, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0

AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.170.2 corresponding ecotype Hovdala-2(stkparent=, ecotype id=6039, duplicate=2)

Table 335: accession id=368 vs ecotype id=6039, duplicate=2(nativename=Hovdala-2, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.171 strain Tottarp-2(accession id=370)

#### 5.171.1 corresponding ecotype Tottarp-2(stkparent=, ecotype id=6243, duplicate=2)

Table 336: accession id=370 vs ecotype id=6243, duplicate=2(nativename=Tottarp-2, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	$\overline{\text{CG}}$	CT	$\operatorname{GT}$
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.171.2 corresponding ecotype Tottarp-2(stkparent=, ecotype id=6243, duplicate=1)

Table 337: accession id=370 vs ecotype id=6243, duplicate=1(nativename=Tottarp-2, stockparent=)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.172 strain Liarum(accession id=371)

#### 5.172.1 corresponding ecotype Liarum(stkparent=, ecotype id=8241, duplicate=1)

Table 338: accession id=371 vs ecotype id=8241, duplicate=1(nativename=Liarum, stockparent=)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.173 strain Kulturen-1(accession id=372)

### 5.173.1 corresponding ecotype Kulturen-1(stkparent=, ecotype id=8240, duplicate=1)

Table 339: accession id=372 vs ecotype id=8240, duplicate=1(nativename=Kulturen-1, stockparent=)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
Α	0	1	0	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 340: detailed difference for accession id=372 vs ecotype id=8240, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	A	NA

#### 5.174 strain Kvlinge-1(accession id=373)

#### 5.174.1 corresponding ecotype Kvlinge-1(stkparent=, ecotype id=8237, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
С	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.175 strain Eds-1(accession id=374)

#### 5.175.1 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=2)

 $\begin{tabular}{lll} Table & 342: & accession & id=374 & vs & ecotype & id=6016, \\ duplicate=2(nativename=Eds-1, stockparent=) & \\ \end{tabular}$ 

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
T	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.175.2 corresponding ecotype Eds-1(stkparent=, ecotype id=6016, duplicate=1)

Table 343: accession id=374 vs ecotype id=6016, duplicate=1(nativename=Eds-1, stockparent=)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.176 strain Nyl-2(accession id=375)

#### 5.176.1 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=2)

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 345: detailed difference for accession id=375 vs ecotype id=6064, duplicate=2

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	Τ

# 5.176.2 corresponding ecotype Nyl-2(stkparent=, ecotype id=6064, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	2	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 347: detailed difference for accession id=375 vs ecotype id=6064, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 279	4	9580049	2788	9579976	NA	T

## 5.177 strain Sanna-2(accession id=376)

### $5.177.1 \quad {\rm corresponding \ ecotype \ Sanna-2 (stkparent=, \ ecotype \ id=8376, \ duplicate=1)}$

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 349: detailed difference for accession id=376 vs ecotype id=8376, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 279	4	9580049	2788	9579976	NA	С

### 5.178 strain Sr:5(accession id=377)

### 5.178.1 corresponding ecotype Sr:5(stkparent=, ecotype id=8386, duplicate=1)

Table 350: accession id=377 vs ecotype id=8386, duplicate=1(nativename=Sr:5, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
Α	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

CT	0	0	0	0	0	0	0	0	0	0	0	0
GT GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 351: detailed difference for accession id=377 vs ecotype id=8386, duplicate=1

snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	$sequenom\_call$
AtMSQTsnp 278	4	9377790	2783	9377549	NA	G

## 5.179 strain Duk(accession id=378)

#### 5.179.1 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=1)

Table 352: accession id=378 vs ecotype id=6008, duplicate=1(nativename=Duk, stockparent=)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.179.2 corresponding ecotype Duk(stkparent=, ecotype id=6008, duplicate=2)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 354: detailed difference for accession id=378 vs ecotype id=6008, duplicate=2

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 278	4	9377790	2783	9377549	A	G

### 5.180 strain Hod(accession id=379)

### 5.180.1 corresponding ecotype Hod(stkparent=, ecotype id=8235, duplicate=1)

Table 355: accession id=379 vs ecotype id=8235, duplicate=1(nativename=Hod, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0

Α	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	1	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
${f T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.181 strain HSm(accession id=380)

### 5.181.1 corresponding ecotype HSm(stkparent=, ecotype id=8236, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	0	0	0	0	0	0	0
Τ	0	0	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 357: detailed difference for accession id=380 vs ecotype id=8236, duplicate=1

$\operatorname{snp}$	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
AtMSQTsnp 274	4	9213312	2778	9213072	NA	G

### 5.182 strain DraII-1(accession id=381)

### 5.182.1 corresponding ecotype DraII-1(stkparent=, ecotype id=8284, duplicate=1)

 $\begin{tabular}{lll} Table & 358: & accession & id=381 & vs & ecotype & id=8284, \\ duplicate=1 (nativename=DraII-1, stockparent=) & \\ \end{tabular}$ 

	-	NA	A	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	1	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	1	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 359: detailed difference for accession id=381 vs ecotype id=8284, duplicate=1

	snp	chromosome	position	$alignment\_id$	$alignment\_start$	pcr_call	sequenom_call
Γ	AtMSQTsnp 274	4	9213312	2778	9213072	Т	G
	AtMSQTsnp 278	4	9377790	2783	9377549	AG	A
	AtMSQTsnp 279	4	9580049	2788	9579976	CT	$\Gamma$

#### 5.183 strain DraIII-1(accession id=382)

#### 5.183.1 corresponding ecotype DraIII-1(stkparent=, ecotype id=8285, duplicate=1)

Table 360: accession id=382 vs ecotype id=8285, duplicate=1(nativename=DraIII-1, stockparent=)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	2	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.184 strain Aa-0(accession id=385)

### 5.184.1 corresponding ecotype Aa-0(stkparent=CS6600, ecotype id=7000, duplicate=1)

Table 361: accession id=385 vs ecotype id=7000, duplicate=1(nativename=Aa-0, stockparent=CS6600)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.185 strain Abd-0(accession id=386)

## 5.185.1 corresponding ecotype Abd-0(stkparent=CS932, ecotype id=6986, duplicate=1)

Table 362: accession id=386 vs ecotype id=6986, duplicate=1(nativename=Abd-0, stockparent=CS932)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.186 strain Ak-1(accession id=387)

5.186.1 corresponding ecotype Ak-1(stkparent=CS6602, ecotype id=6987, duplicate=1)

-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0       0     0	0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0	0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0	0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0       0     0     0     0     0     0	0         0	0         0	0         0	0         0	0         0

#### 5.187 strain Ba-1(accession id=388)

#### 5.187.1 corresponding ecotype Ba-1(stkparent=CS6607, ecotype id=7014, duplicate=1)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.188 strain Bl-1(accession id=389)

#### 5.188.1 corresponding ecotype Bl-1(stkparent=CS6615, ecotype id=7025, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

## 5.189 strain Bla-10(accession id=390)

## 5.189.1 corresponding ecotype Bla-10(stkparent=CS6622, ecotype id=7016, duplicate=1)

Table 366: accession id=390 vs ecotype id=7016, duplicate=1(nativename=Bla-10, stockparent=CS6622)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0
AT			0						0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.190 strain Ca-0(accession id=391)

#### 5.190.1 corresponding ecotype Ca-0(stkparent=CS6658, ecotype id=7062, duplicate=1)

Table 367: accession id=391 vs ecotype id=7062, duplicate=1(nativename=Ca-0, stockparent=CS6658)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.191 strain Cal-0(accession id=392)

### 5.191.1 corresponding ecotype Cal-0(stkparent=CS6659, ecotype id=7061, duplicate=1)

Table 368: accession id=392 vs ecotype id=7061, duplicate=1(nativename=Cal-0, stockparent=CS6659)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.192 strain Chi-0(accession id=393)

#### 5.192.1 corresponding ecotype Chi-0(stkparent=CS6664, ecotype id=7072, duplicate=1)

Table 369: accession id=393 vs ecotype id=7072, duplicate=1(nativename=Chi-0, stockparent=CS6664)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.193 strain Cnt-1(accession id=394)

#### 5.193.1 corresponding ecotype Cnt-1(stkparent=CS6921, ecotype id=7064, duplicate=1)

Table 370: accession id=394 vs ecotype id=7064, duplicate=1(nativename=Cnt-1, stockparent=CS6921)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.194 strain Seattle-0(accession id=395)

#### 5.194.1 corresponding ecotype Seattle-0(stkparent=CS6188, ecotype id=7332, duplicate=1)

Table 371: accession id=395 vs ecotype id=7332, duplicate=1(nativename=Seattle-0, stockparent=CS6188)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

## 5.195 strain Da-0(accession id=396)

## 5.195.1 corresponding ecotype Da-0(stkparent=CS6676, ecotype id=7094, duplicate=1)

Table 372: accession id=396 vs ecotype id=7094, duplicate=1(nativename=Da-0, stockparent=CS6676)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.196 strain Da(1)-12(accession id=397)

5.196.1 corresponding ecotype Da(1)-12(stkparent=CS917, ecotype id=7460, duplicate=1)

Table 373: accession id=397 vs ecotype id=7460, duplicate=1(nativename=Da(1)-12, stockparent=CS917)

	-	NA	A	С	G	Т	AC	AG	AT	$\overline{\text{CG}}$	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.197 strain Db-1(accession id=398)

#### 5.197.1 corresponding ecotype Db-1(stkparent=CS6678, ecotype id=7419, duplicate=1)

Table 374: accession id=398 vs ecotype id=7419, duplicate=1(nativename=Db-1, stockparent=CS6678)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.198 strain Di-G(accession id=399)

#### 5.198.1 corresponding ecotype Di-G(stkparent=CS910, ecotype id=7096, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.199 strain Dra-0(accession id=400)

# $5.199.1 \quad corresponding \ ecotype \ Dra-0 (stkparent=CS6685, \ ecotype \ id=7103, \ duplicate=1)$

Table 376: accession id=400 vs ecotype id=7103, duplicate=1(nativename=Dra-0, stockparent=CS6685)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0	
AT	0	0	0	0	0	0	0	0	0	0	0	0	
CG	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0		0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

#### 5.200 strain Ema-1(accession id=401)

#### 5.200.1 corresponding ecotype Ema-1(stkparent=CS6923, ecotype id=7109, duplicate=1)

Table 377: accession id=401 vs ecotype id=7109, duplicate=1(nativename=Ema-1, stockparent=CS6923)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.201 strain Ep-0(accession id=403)

### 5.201.1 corresponding ecotype Ep-0(stkparent=CS6697, ecotype id=7123, duplicate=1)

Table 378: accession id=403 vs ecotype id=7123, duplicate=1(nativename=Ep-0, stockparent=CS6697)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{C}}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.202 strain Er-0(accession id=404)

### $5.202.1 \quad {\rm corresponding\ ecotype\ Er-0} (stkparent=CS6698,\ ecotype\ id=7125,\ duplicate=1)$

Table 379: accession id=404 vs ecotype id=7125, duplicate=1(nativename=Er-0, stockparent=CS6698)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.203 strain Est(accession id=405)

### 5.203.1 corresponding ecotype Est(stkparent=CS6173, ecotype id=7127, duplicate=1)

Table 380: accession id=405 vs ecotype id=7127, duplicate=1(nativename=Est, stockparent=CS6173)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.204 strain Et-0(accession id=406)

#### 5.204.1 corresponding ecotype Et-0(stkparent=CS6702, ecotype id=7130, duplicate=1)

Table 381: accession id=406 vs ecotype id=7130, duplicate=1(nativename=Et-0, stockparent=CS6702)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{AT}$	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.205 strain Fr-2(accession id=407)

## 5.205.1 corresponding ecotype Fr-2(stkparent=CS6708, ecotype id=7133, duplicate=1)

Table 382: accession id=407 vs ecotype id=7133, duplicate=1(nativename=Fr-2, stockparent=CS6708)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.206 strain Gie-0(accession id=408)

5.206.1 corresponding ecotype Gie-0(stkparent=CS6720, ecotype id=7147, duplicate=1)

Table 383: accession id=408 vs ecotype id=7147, duplicate=1(nativename=Gie-0, stockparent=CS6720)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.207 strain Gre-0(accession id=409)

#### 5.207.1 corresponding ecotype Gre-0(stkparent=CS6729, ecotype id=7160, duplicate=1)

Table 384: accession id=409 vs ecotype id=7160, duplicate=1(nativename=Gre-0, stockparent=CS6729)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.208 strain Ha-0(accession id=410)

#### 5.208.1 corresponding ecotype Ha-0(stkparent=CS6733, ecotype id=7163, duplicate=1)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

## 5.209 strain Hau-0(accession id=411)

## $5.209.1 \quad corresponding \ ecotype \ Hau-0 (stkparent=CS6734, \ ecotype \ id=7164, \ duplicate=1)$

Table 386: accession id=411 vs ecotype id=7164, duplicate=1(nativename=Hau-0, stockparent=CS6734)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0	
AT	0	0	0	0	0	0	0	0	0	0	0	0	
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

#### 5.210 strain Hl-3(accession id=412)

#### 5.210.1 corresponding ecotype Hl-3(stkparent=CS6904, ecotype id=7172, duplicate=1)

Table 387: accession id=412 vs ecotype id=7172, duplicate=1(nativename=Hl-3, stockparent=CS6904)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.211 strain Je-0(accession id=413)

### 5.211.1 corresponding ecotype Je-0(stkparent=CS6742, ecotype id=7181, duplicate=1)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{C}}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.212 strain Jl-3(accession id=414)

### $5.212.1 \quad {\rm corresponding\ ecotype\ Jl-3(stkparent=CS6745,\ ecotype\ id=7424,\ duplicate=1)}$

Table 389: accession id=414 vs ecotype id=7424, duplicate=1(nativename=Jl-3, stockparent=CS6745)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.213 strain Kb-0(accession id=415)

#### 5.213.1 corresponding ecotype Kb-0(stkparent=CS6753, ecotype id=7202, duplicate=1)

Table 390: accession id=415 vs ecotype id=7202, duplicate=1(nativename=Kb-0, stockparent=CS6753)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.214 strain Kil-0(accession id=417)

#### 5.214.1 corresponding ecotype Kil-0(stkparent=CS6754, ecotype id=7192, duplicate=1)

Table 391: accession id=417 vs ecotype id=7192, duplicate=1(nativename=Kil-0, stockparent=CS6754)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

## 5.215 strain Li-7(accession id=418)

## $5.215.1 \quad {\tt corresponding\ ecotype\ Li-7(stkparent=CS6778,\ ecotype\ id=7231,\ duplicate=1)}$

Table 392: accession id=418 vs ecotype id=7231, duplicate=1(nativename=Li-7, stockparent=CS6778)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.216 strain Ll-1(accession id=419)

5.216.1 corresponding ecotype Ll-1(stkparent=CS6782, ecotype id=7238, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

# 5.217 strain Ma-0(accession id=420)

#### 5.217.1 corresponding ecotype Ma-0(stkparent=CS6789, ecotype id=7245, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.218 strain Mh-0(accession id=421)

### 5.218.1 corresponding ecotype Mh-0(stkparent=CS6792, ecotype id=7255, duplicate=1)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

## 5.219 strain Nd-0(accession id=422)

# $5.219.1 \quad {\rm corresponding\ ecotype\ Nd-0} (stkparent=CS6803,\ ecotype\ id=7265,\ duplicate=1)$

Table 396: accession id=422 vs ecotype id=7265, duplicate=1(nativename=Nd-0, stockparent=CS6803)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.220 strain No-0(accession id=423)

#### 5.220.1 corresponding ecotype No-0(stkparent=CS3081, ecotype id=7275, duplicate=1)

Table 397: accession id=423 vs ecotype id=7275, duplicate=1(nativename=No-0, stockparent=CS3081)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

### 5.221 strain Nw-4(accession id=424)

### 5.221.1 corresponding ecotype Nw-4(stkparent=CS6815, ecotype id=7262, duplicate=1)

Table 398: accession id=424 vs ecotype id=7262, duplicate=1(nativename=Nw-4, stockparent=CS6815)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{C}}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.222 strain Ob-0(accession id=425)

#### 5.222.1 corresponding ecotype Ob-0(stkparent=CS6816, ecotype id=7276, duplicate=1)

Table 399: accession id=425 vs ecotype id=7276, duplicate=1(nativename=Ob-0, stockparent=CS6816)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.223 strain Or-0(accession id=426)

### 5.223.1 corresponding ecotype Or-0(stkparent=CS6822, ecotype id=7282, duplicate=1)

Table 400: accession id=426 vs ecotype id=7282, duplicate=1(nativename=Or-0, stockparent=CS6822)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.224 strain Pog-0(accession id=427)

#### 5.224.1 corresponding ecotype Pog-0(stkparent=CS6842, ecotype id=7306, duplicate=1)

Table 401: accession id=427 vs ecotype id=7306, duplicate=1(nativename=Pog-0, stockparent=CS6842)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.225 strain RLD-1(accession id=428)

### 5.225.1 corresponding ecotype RLD-1(stkparent=CS913, ecotype id=7471, duplicate=1)

Table 402: accession id=428 vs ecotype id=7471, duplicate=1(nativename=RLD-1, stockparent=CS913)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.226 strain Sf-2(accession id=429)

5.226.1 corresponding ecotype Sf-2(stkparent=CS6857, ecotype id=7328, duplicate=1)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.227 strain Ste-0(accession id=430)

#### 5.227.1 corresponding ecotype Ste-0(stkparent=CS6864, ecotype id=7346, duplicate=1)

Table 404: accession id=430 vs ecotype id=7346, duplicate=1(nativename=Ste-0, stockparent=CS6864)

	-	NA	Α	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.228 strain Te-0(accession id=431)

#### 5.228.1 corresponding ecotype Te-0(stkparent=CS6918, ecotype id=7352, duplicate=1)

Table 405: accession id=431 vs ecotype id=7352, duplicate=1(nativename=Te-0, stockparent=CS6918)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.229 strain Tol-0(accession id=432)

### 5.229.1 corresponding ecotype Tol-0(stkparent=CS8020, ecotype id=7356, duplicate=1)

Table 406: accession id=432 vs ecotype id=7356, duplicate=1(nativename=Tol-0, stockparent=CS8020)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0	
AT	0	0	0	0	0	0	0	0	0	0	0	0	١
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

#### 5.230 strain Tu-1(accession id=433)

#### 5.230.1 corresponding ecotype Tu-1(stkparent=CS6876, ecotype id=7376, duplicate=1)

Table 407: accession id=433 vs ecotype id=7376, duplicate=1(nativename=Tu-1, stockparent=CS6876)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

### 5.231 strain Uk-4(accession id=434)

### 5.231.1 corresponding ecotype Uk-4(stkparent=CS6882, ecotype id=7381, duplicate=1)

Table 408: accession id=434 vs ecotype id=7381, duplicate=1(nativename=Uk-4, stockparent=CS6882)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.232 strain WAR(accession id=435)

#### 5.232.1 corresponding ecotype WAR(stkparent=CS8143, ecotype id=7477, duplicate=1)

Table 409: accession id=435 vs ecotype id=7477, duplicate=1(nativename=WAR, stockparent=CS8143)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.233.1 corresponding ecotype Wt-1(stkparent=CS6892, ecotype id=7406, duplicate=1)

Table 410: accession id=436 vs ecotype id=7406, duplicate=1(nativename=Wt-1, stockparent=CS6892)

	-	NA	A	С	G	Τ	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

#### 5.234 strain Zu-1(accession id=437)

### 5.234.1 corresponding ecotype Zu-1(stkparent=CS6903, ecotype id=7418, duplicate=1)

Table 411: accession id=437 vs ecotype id=7418, duplicate=1(nativename=Zu-1, stockparent=CS6903)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

# 6 2010 PCR versus sequenom for each SNP

# 6.1 SNP AtMSQTsnp 2(chrom=1, pos=112907, alignment id=847, alignment start=112445)

Table 412: SNP AtMSQTsnp 2(chromosome=1, position=112907, alignment id=847, alignment start=112445)

	-	NA	A	С	G	Τ	AC	$^{\mathrm{AG}}$	AT	$^{\mathrm{CG}}$	CT	$\operatorname{GT}$
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	51	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	45	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 413: detailed difference for SNP AtMSQTsnp 2  $\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Bor-1	CS22590	5837	1	27	A	G
Ren-11	CS22611	8368	1	48	G	NA
Shahdara	CS22652	8248	1	89	G	NA

### 6.2 SNP AtMSQTsnp 4(chrom=1, pos=340810, alignment id=1095, alignment start=340398)

Table 414: SNP AtMSQTsnp 4(chromosome=1, position=340810, alignment id=1095, alignment start=340398)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	2	39	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	57	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 415: detailed difference for SNP AtMSQTsnp 4

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Kz-1	CS22606	8320	1	43	NA	A

# 6.3 SNP AtMSQTsnp 8(chrom=1, pos=993374, alignment id=1042, alignment start=992824)

Table 416: SNP AtMSQTsnp 8(chromosome=1, position=993374, alignment id=1042, alignment start=992824)

	-	NA	Α	С	G	Τ	AC	$^{\mathrm{AG}}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	17	0	3	0	0	0	0	0	0	0
A	0	2	54	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	21	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	1	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 417: detailed difference for SNP AtMSQTsnp 8

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	NA	A
Kno-10	CS22566	8317	1	3	NA	A
Pna-10	CS22571	8358	1	8	NA	A
Eden-1	CS22572	6009	1	9	NA	A
Eden-1	CS22572	6009	2	9	NA	A
Eden-1	CS22572	6009	3	9	NA	A
Eden-2	CS22573	8287	1	10	NA	G
Lv-5	CS22575	6046	1	12	NA	A
Lv-5	CS22575	6046	2	12	NA	A
Fb-2	CS22576	8292	1	13	NA	A
Fb-4	CS22577	8293	1	14	NA	A
Bil-5	CS22578	8262	1	15	NA	A
Vr2-1	CS22580	8401	1	17	NA	A
Spr1-6	CS22583	8383	1	20	NA	A
m2-1	CS22584	8349	1	21	NA	A
Bor-1	CS22590	5837	1	27	NA	A
Bor-1	CS22590	5837	2	27	NA	A
Tamm-27	CS22605	8391	1	42	NA	A
Ren-11	CS22611	8368	1	48	A	NA
Wei-0	CS22622	8404	1	59	NA	G
Van-0	CS22627	8400	1	64	AG	G

Br-0	CS22628	8269	1	65	NA	G	
Shahdara	CS22652	8248	1	89	A	NA	

#### 6.4 SNP AtMSQTsnp 9(chrom=1, pos=1042427, alignment id=1109, alignment start=1042028)

 $\begin{tabular}{llll} Table & 418: & SNP & AtMSQTsnp & 9(chromosome=1, & position=1042427, & alignment & id=1109, & alignment & start=1042028) \\ \end{tabular}$ 

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	3	0	0	49	0	0	0	0	0	0	0
$\Gamma$	0	2	0	0	0	44	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 419: detailed difference for SNP AtMSQTsnp 9  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
HR-10	CS22597	8308	1	34	T	NA
Kz-1	CS22606	8320	1	43	NA	T
Ren-11	CS22611	8368	1	48	T	NA
LL-0	CS22650	8328	1	87	G	NA

### 6.5 SNP AtMSQTsnp 10(chrom=1, pos=1149280, alignment id=1467, alignment start=1149096)

 $\begin{tabular}{llll} Table & 420: & SNP & AtMSQTsnp & 10(chromosome=1, & position=1149280, alignment id=1467, alignment start=1149096) \\ \end{tabular}$ 

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	39	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	58	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 421: detailed difference for SNP AtMSQTsnp 10

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Ren-11	CS22611	8368	1	48	G	NA
Wa-1	CS22644	8403	1	81	G	NA

#### 6.6 SNP AtMSQTsnp 11(chrom=1, pos=1602136, alignment id=848, alignment start=1601885)

 $\begin{array}{llll} {\rm Table} & 422: & {\rm SNP} & {\rm AtMSQTsnp} & 11 ({\rm chromosome=1,} & {\rm position=1602136, \ alignment \ id=848, \ alignment \ start=1601885)} \end{array}$ 

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	32	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
T	0	2	0	0	0	62	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	1	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 423: detailed difference for SNP AtMSQTsnp 11

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Kno-18	CS22567	8318	1	4	NA	С
Eden-1	CS22572	6009	4	9	T	NA
Lv-1	CS22574	6043	2	11	T	NA
Van-0	CS22627	8400	1	64	CT	$\mid$ T

# 6.7 SNP AtMSQTsnp 12(chrom=1, pos=2211033, alignment id=964, alignment start=2210982)

Table 424: SNP AtMSQTsnp 12(chromosome=1, position=2211033, alignment id=964, alignment start=2210982)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	56	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	1	0	39	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 425: detailed difference for SNP AtMSQTsnp 12

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	A	NA
Bor-1	CS22590	5837	1	27	A	G
Ren-11	CS22611	8368	1	48	G	NA
Van-0	CS22627	8400	1	64	G	A

# 6.8 SNP AtMSQTsnp 14(chrom=1, pos=2775956, alignment id=1649, alignment start=2775589)

 $\begin{array}{lll} {\rm Table} & 426: & {\rm SNP} & {\rm AtMSQTsnp} & 14 ({\rm chromosome=1, position=2775956, alignment id=1649, alignment start=2775589}) \end{array}$ 

	-	NA	A	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	0	31	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	3	0	0	0	65	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 427: detailed difference for SNP AtMSQTsnp 14

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Rmx-A180	CS22569	8371	1	6	NA	A
Eden-1	CS22572	6009	4	9	Τ	NA
Ren-11	CS22611	8368	1	48	Τ	NA
Shahdara	CS22652	8248	1	89	$\Gamma$	NA

### 6.9 SNP AtMSQTsnp 15(chrom=1, pos=2844525, alignment id=1139, alignment start=2844111)

 $\begin{tabular}{lll} Table & 428: & SNP & AtMSQTsnp & 15 (chromosome=1, & position=2844525, alignment id=1139, alignment start=2844111) \\ \end{tabular}$ 

	-	NA	A	С	G	T	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	67	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	1	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 429: detailed difference for SNP AtMSQTsnp 15

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	C	NA
Kz-1	CS22606	8320	1	43	$\Gamma$	C
Ren-11	CS22611	8368	1	48	$\Gamma$	NA
Shahdara	CS22652	8248	1	89	C	NA

# 6.10 SNP AtMSQTsnp 18(chrom=1, pos=3872591, alignment id=2224, alignment start=3872234)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	4	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	12	0	51	0	0	0	0	0	0	0	0
G	0	3	0	0	28	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 431: detailed difference for SNP AtMSQTsnp 18

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Spr1-6	CS22583	8383	1	20	G	NA
Zdr-6	CS22589	8410	1	26	$^{\mathrm{C}}$	NA
Lp2-2	CS22594	8332	1	31	$^{\mathrm{C}}$	NA
HR-10	CS22597	8308	1	34	NA	C
Sq-8	CS22601	8385	1	38	$^{\mathrm{C}}$	NA
CIBC-17	CS22603	8276	1	40	NA	C
Tamm-27	CS22605	8391	1	42	NA	G

Kz-1	CS22606	8320	1	43	$\mathbf{C}$	NA	
Got-22	CS22609	8298	1	46	NA	C	
Ren-11	CS22611	8368	1	48	$\mathbf{C}$	NA	
Cvi-0	CS22614	8281	1	51	С	NA	
Wei-0	CS22622	8404	1	59	$\mathbf{C}$	NA	
Br-0	CS22628	8269	1	65	$\mathbf{C}$	NA	
Gy-0	CS22631	8302	1	68	С	NA	
Ra-0	CS22632	8364	1	69	С	NA	
Mz-0	CS22636	8342	1	73	NA	C	
Fei-0	CS22645	8294	1	82	С	NA	
Kin-0	CS22654	8316	1	91	С	NA	

# 6.11 SNP AtMSQTsnp 21(chrom=1, pos=4142539, alignment id=2625, alignment start=4142402)

Table 432: SNP AtMSQTsnp 21(chromosome=1, position=4142539, alignment id=2625, alignment start=4142402)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	4	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	11	0	44	0	1	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	8	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 433: detailed difference for SNP AtMSQTsnp 21

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-17	CS22570	8359	1	7	Т	NA
Eden-1	CS22572	6009	4	9	T	NA
Eden-2	CS22573	8287	1	10	C	NA
Vr2-1	CS22580	8401	1	17	T	NA
m2-1	CS22584	8349	1	21	C	NA
Bor-1	CS22590	5837	1	27	C	T
HR-10	CS22597	8308	1	34	C	NA
Kz-1	CS22606	8320	1	43	T	NA
Ler-1	CS22618	8324	1	55	NA	T
N13	CS22491	8429	1	58	C	NA
An-1	CS22626	8253	1	63	T	NA
Br-0	CS22628	8269	1	65	C	NA
Est-1	CS22629	8291	1	66	T	NA
Ag-0	CS22630	8251	1	67	C	NA
Gy-0	CS22631	8302	1	68	C	NA
Mrk-0	CS22635	8339	1	72	C	NA
Mt-0	CS22642	8341	1	79	T	NA
Wa-1	CS22644	8403	1	81	C	NA
LL-0	CS22650	8328	1	87	C	NA
Edi-0	CS22657	8288	1	94	$\Gamma$	NA
Ws-2	CS22659	8406	1	96	С	NA

# 6.12 SNP AtMSQTsnp 22(chrom=1, pos=4396087, alignment id=46, alignment start=4395913)

Table 434: SNP AtMSQTsnp 22(chromosome=1, position=4396087, alignment id=46, alignment start=4395913)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	2	32	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	1	0	62	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0

CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 435: detailed difference for SNP AtMSQTsnp  $22\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Bor-1	CS22590	5837	1	27	G	A
Wei-0	CS22622	8404	1	59	A	NA
Br-0	CS22628	8269	1	65	A	NA

# 6.13 SNP AtMSQTsnp 27(chrom=1, pos=5206767, alignment id=1014, alignment start=5206479)

	-	NA	A	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	54	2	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	38	0	0	4	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 437: detailed difference for SNP AtMSQTsnp 27

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	A	NA
Rmx-A02	CS22568	8370	1	5	A	NA
Rmx-A180	CS22569	8371	1	6	A	NA
Pna-17	CS22570	8359	1	7	A	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	9	G	NA
Eden-2	CS22573	8287	1	10	G	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Fb-2	CS22576	8292	1	13	A	NA
Fb-4	CS22577	8293	1	14	A	NA
Bil-5	CS22578	8262	1	15	A	NA
Bil-7	CS22579	8263	1	16	A	NA
Vr2-1	CS22580	8401	1	17	A	NA
Vr2-6	CS22581	8402	1	18	A	NA
Spr1-2	CS22582	8382	1	19	A	NA
Spr1-6	CS22583	8383	1	20	G	NA
m2-1	CS22584	8349	1	21	A	NA
m2-3	CS22585	8350	1	22	G	NA
Ull2-5	CS22586	8397	1	23	G	NA
Ull2-3	CS22587	8396	1	24	A	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	G	NA
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	A	NA
NFA-8	CS22598	8346	1	35	A	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	A	NA
CIBC-17	CS22603	8276	1	40	G	NA
Tamm-2	CS22604	8390	1	41	A	NA

	1					
Tamm-27	CS22605	8391	1	42	A	NA
Kz-1	CS22606	8320	1	43	G	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	A	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	A	NA
Ren-11	CS22611	8368	1	48	A	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	G	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	A	NA
Gu-0	CS22617	8301	1	54	A	NA
Ler-1	CS22618	8324	1	55	G	NA
Nd-1	CS22619	8344	1	56	A	NA
C24	CS22620	8273	1	57	G	NA
N13	CS22491	8429	1	58	G	NA
Wei-0	CS22622	8404	1	59	G	NA
Ws-0	CS22623	8405	1	60	G	NA
Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	A	NA
Van-0	CS22627	8400	1	64	A	NA
Br-0	CS22628	8269	1	65	G	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22629 $CS22630$	8251	1	67	G	NA NA
Gy-0	CS22631	8302	1	68	A	NA NA
Ra-0	CS22631 $CS22632$	8364	1	69	A	NA NA
Bay-0	CS22632 $CS22633$	8260	1	70	G	NA NA
Ga-0	CS22634	8295	1	$\begin{array}{c c} 70 \\ 71 \end{array}$	G	NA NA
Mrk-0	CS22634 $CS22635$	8339	1	$\begin{array}{c c} 71 \\ 72 \end{array}$	A	NA NA
Mz-0	CS22636	8342	1	73	A	NA NA
			1	73   74	A	NA NA
Wt-5	CS22637	8407				
Ct-1	CS22639	8280	1	76 77	G	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	A	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	A	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	G	NA
Shahdara	CS22652	8248	1	89	G	NA
Sorbo	CS22653	8381	1	90	G	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	G	NA
Bur-0	CS22656	8272	1	93	A	NA
Edi-0	CS22657	8288	1	94	A	NA
Oy-0	CS22658	8352	1	95	A	NA
Ws-2	CS22659	8406	1	96	A	NA
Oy-0	CS22658	8352	1	95	A	NA

# 6.14 SNP AtMSQTsnp 29(chrom=1, pos=5482008, alignment id=263, alignment start=5481722)

Table 438: SNP AtMSQTsnp 29(chromosome=1, position=5482008, alignment id=263, alignment start=5481722)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	2	31	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	65	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	1	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 439: detailed difference for SNP AtMSQTsnp 29

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Τ	NA
Lv-1	CS22574	6043	2	11	A	NA
Ren-11	CS22611	8368	1	48	A	NA
Van-0	CS22627	8400	1	64	AT	A

# 6.15 SNP AtMSQTsnp 30(chrom=1, pos=5629159, alignment id=2156, alignment start=5628596)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	13	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	52	0	5	0	1	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	29	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 441: detailed difference for SNP AtMSQTsnp 30

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	С	NA
Kno-10	CS22566	8317	1	3	С	NA
Kno-18	CS22567	8318	1	4	C	NA
Rmx-A02	CS22568	8370	1	5	С	NA
Rmx-A180	CS22569	8371	1	6	C	NA
Pna-10	CS22571	8358	1	8	С	NA
Eden-1	CS22572	6009	4	9	С	NA
Eden-2	CS22573	8287	1	10	С	NA
Lv-1	CS22574	6043	2	11	С	NA
Lv-5	CS22575	6046	2	12	С	NA
Fb-2	CS22576	8292	1	13	С	NA
Fb-4	CS22577	8293	1	14	С	NA
Bil-5	CS22578	8262	1	15	C	NA
Bil-7	CS22579	8263	1	16	C	NA
Spr1-6	CS22583	8383	1	20	C	NA
m2-1	CS22584	8349	1	$\begin{bmatrix} 20 \\ 21 \end{bmatrix}$	$\stackrel{\circ}{\mathrm{C}}$	NA
m2-3	CS22585	8350	1	$\begin{vmatrix} 21\\22\end{vmatrix}$	$\tilde{C}$	NA
Ull2-5	CS22586	8397	1	$\begin{bmatrix} 22 \\ 23 \end{bmatrix}$	$\Gamma$	NA
Ull2-3	CS22587	8396	1	$\begin{bmatrix} 26 \\ 24 \end{bmatrix}$	C	NA
Zdr-1	CS22588	8409	1	$\begin{vmatrix} 24\\25 \end{vmatrix}$	C	NA
Zdr-6	CS22589	8410	1	$\begin{bmatrix} 25 \\ 26 \end{bmatrix}$	$\stackrel{\circ}{\text{C}}$	NA NA
Bor-1	CS22590	5837	1	$\begin{vmatrix} 20\\27 \end{vmatrix}$	$\frac{c}{c}$	$\begin{array}{c} T \end{array}$
Bor-1	CS22590 CS22590	5837	$\frac{1}{2}$	$\begin{bmatrix} 27 \\ 27 \end{bmatrix}$	$\frac{C}{C}$	NA
Bor-4	CS22590 $CS22591$	8268	$\begin{bmatrix} 2 \\ 1 \end{bmatrix}$	$\begin{vmatrix} 21\\28\end{vmatrix}$	$\frac{C}{C}$	NA NA
Pu2-7	CS22591 $CS22592$	8362	1	$\begin{bmatrix} 26 \\ 29 \end{bmatrix}$	$\begin{array}{c} C \\ T \end{array}$	NA NA
Pu2-7 Pu2-23	CS22592 $CS22593$		1	$\begin{vmatrix} 29\\30 \end{vmatrix}$	$\begin{array}{c c} \mathbf{I} \\ \mathbf{T} \end{array}$	NA NA
		8361			$\begin{array}{c c} \mathbf{I} \\ \mathbf{T} \end{array}$	
Lp2-2	CS22594	8332	1	31		NA
Lp2-6	CS22595	8333	1	32	C C	NA
NFA-8	CS22598	8346	1	35		NA
NFA-10	CS22599	8345	1	36	С	NA
Sq-1	CS22600	8384	1	37	T	NA
Sq-8	CS22601	8385	1	38	С	NA
CIBC-5	CS22602	8277	1	39	T	NA
CIBC-17	CS22603	8276	1	40	C	NA
Tamm-2	CS22604	8390	1	41	С	NA
Kz-9	CS22607	8322	1	44	T	NA
Got-7	CS22608	8299	1	45	T	NA
Got-22	CS22609	8298	1	46	T	NA
Ren-1	CS22610	8367	1	47	T	NA
Ren-11	CS22611	8368	1	48	С	NA
Uod-1	CS22612	8398	1	49	С	NA
Uod-7	CS22613	8399	1	50	С	NA
Cvi-0	CS22614	8281	1	51	T	NA
Lz-0	CS22615	8336	1	52	С	NA
Ei-2	CS22616	8289	1	53	$\Gamma$	NA

l	GC00617	0201	1	l ea	La	NT A
Gu-0	CS22617	8301	1   1	54 55	С Т	NA NA
Ler-1	CS22618	8324				
Nd-1	CS22619	8344	1	56	C C	NA
C24	CS22620	8273	1	57		NA
N13	CS22491	8429	1	58	T	NA
Wei-0	CS22622	8404	1	59	T	NA
Ws-0	CS22623	8405	1	60	T	NA
Yo-0	CS22624	8408	1	61	C	NA
An-1	CS22626	8253	1	63	C	NA
Van-0	CS22627	8400	1	64	С	NA
Br-0	CS22628	8269	1	65	С	NA
Gy-0	CS22631	8302	1	68	Т	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	С	NA
Ga-0	CS22634	8295	1	71	${ m T}$	NA
Mrk-0	CS22635	8339	1	72	${ m T}$	NA
Mz-0	CS22636	8342	1	73	$\mathbf{C}$	NA
Wt-5	CS22637	8407	1	74	${ m T}$	NA
Ct-1	CS22639	8280	1	76	$\mathbf{C}$	NA
Mr-0	CS22640	8338	1	77	$^{\mathrm{C}}$	NA
Tsu-1	CS22641	8394	1	78	$\mathbf{C}$	NA
Nok-3	CS22643	8347	1	80	${ m T}$	NA
Wa-1	CS22644	8403	1	81	${ m T}$	NA
Fei-0	CS22645	8294	1	82	$^{\mathrm{C}}$	NA
Se-0	CS22646	8379	1	83	$^{\mathrm{C}}$	NA
Ts-1	CS22647	8392	1	84	${ m T}$	NA
Pro-0	CS22649	8360	1	86	$^{\mathrm{C}}$	NA
LL-0	CS22650	8328	1	87	${ m T}$	NA
Kondara	CS22651	8319	1	88	${ m T}$	NA
Shahdara	CS22652	8248	1	89	С	NA
Sorbo	CS22653	8381	1	90	С	NA
Kin-0	CS22654	8316	1	91	${ m T}$	NA
Ms-0	CS22655	8340	1	92	${ m T}$	NA
Bur-0	CS22656	8272	1	93	С	NA
Edi-0	CS22657	8288	1	94	${ m T}$	NA
Oy-0	CS22658	8352	1	95	$^{\mathrm{C}}$	NA
Ws-2	CS22659	8406	1	96	${ m T}$	NA
1152		3100	-	1 00		-112

### 6.16 SNP AtMSQTsnp 31(chrom=1, pos=5923041, alignment id=265, alignment start=5922974)

Table 442: SNP AtMSQTsnp 31(chromosome=1, position=5923041, alignment id=265, alignment start=5922974)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	2	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	58	1	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	38	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 443: detailed difference for SNP AtMSQTsnp 31

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Kno-18	CS22567	8318	1	4	NA	G
Pna-10	CS22571	8358	1	8	NA	G
Eden-1	CS22572	6009	4	9	T	NA
Bor-1	CS22590	5837	1	27	G	Т

# 6.17 SNP AtMSQTsnp 33(chrom=1, pos=6375605, alignment id=967, alignment start=6375563)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	58	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	41	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 445: detailed difference for SNP AtMSQTsnp 33

				T SINF AUMSQ	-	
nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	Т	NA
Kno-10	CS22566	8317	1	3	T	NA
Kno-18	CS22567	8318	1	4	T	NA
Rmx-A02	CS22568	8370	1	5	T	NA
Rmx-A180	CS22569	8371	1	6	T	NA
Pna-17	CS22570	8359	1	7	T	NA
Pna-10	CS22571	8358	1	8	T	NA
Eden-1	CS22572	6009	1	9	G	NA
Eden-1	CS22572	6009	2	9	G	NA
Eden-1	CS22572	6009	3	9	G	NA
Eden-1	CS22572	6009	4	9	G	NA
Eden-2	CS22573	8287	1	10	G	NA
Lv-1	CS22574	6043	1	11	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Lv-5	CS22575	6046	1	12	G	NA
Lv-5	CS22575	6046	2	12	G	NA
Fb-2	CS22576	8292	1	13	G	NA
Fb-4	CS22577	8293	1	14	G	NA
Bil-5	CS22578	8262	1	15	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	G	NA
Spr1-6	CS22583	8383	1	20	T	NA
m2-1	CS22584	8349	1	21	T	NA
m2-3	CS22585	8350	1	22	T	NA
Ull2-5	CS22586	8397	1	23	T	NA
Ull2-3	CS22587	8396	1	24	T	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	G	NA
Bor-1	CS22590	5837	1	27	G	NA
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	T	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	T	NA
HR-5	CS22596	8309	1	33	G	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	T	NA
NFA-10	CS22599	8345	1	36	T	NA
Sq-1	CS22600	8384	1	37	G	NA
Sq-8	CS22601	8385	1	38	T	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	T	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-1	CS22606	8320	1	43	T	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	G	NA
Got-22	CS22609	8298	1	46	G	NA
Ren-1	CS22610	8367	1	47	G	NA
Ren-11	CS22611	8368	1	48	T	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	T	NA
Cvi-0	CS22614	8281	1	51	G	NA
$\Gamma = 0$	CS22615	8336	1	52	G	NA
Lz-0	(1/1000110	8289	1	53	G	NA
Ei-2	CS22616		_			
Ei-2 Gu-0	CS22617	8301	1	54	G	NA
Ei-2 Gu-0 Ler-1	CS22617 CS22618	8301 8324	1	55	G	NA
Ei-2 Gu-0 Ler-1 Nd-1	CS22617 CS22618 CS22619	8301 8324 8344	1 1	55 56	G G	NA NA
Ei-2 Gu-0 Ler-1	CS22617 CS22618	8301 8324	1	55	G	NA

Wei-0	CS22622	8404	1	59	G	NA
Ws-0	CS22623	8405	1	60	$\Gamma$	NA
Yo-0	CS22624	8408	1	61	${f T}$	NA
Col-0	CS22625	8279	1	62	${f T}$	NA
An-1	CS22626	8253	1	63	$\Gamma$	NA
Van-0	CS22627	8400	1	64	$\Gamma$	NA
Br-0	CS22628	8269	1	65	G	NA
Est-1	CS22629	8291	1	66	$\Gamma$	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	G	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	$\Gamma$	NA
Mrk-0	CS22635	8339	1	72	T	NA
Mz-0	CS22636	8342	1	73	T	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	T	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	T	NA
Mt-0	CS22642	8341	1	79	G	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	$\Gamma$	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	T	NA
Shahdara	CS22652	8248	1	89	T	NA
Sorbo	CS22653	8381	1	90	T	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	T	NA
Bur-0	CS22656	8272	1	93	T	NA
Edi-0	CS22657	8288	1	94	T	NA
Oy-0	CS22658	8352	1	95	T	NA
Ws-2	CS22659	8406	1	96	G	NA

# 6.18 SNP AtMSQTsnp 38(chrom=1, pos=7449598, alignment id=2136, alignment start=7449482)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	5	1	0	0	0	0	0	0	0	0
A	0	1	60	0	0	0	0	0	0	0	0	0
C	0	1	0	30	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 447: detailed difference for SNP AtMSQTsnp 38

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	A
Eden-1	CS22572	6009	4	9	C	NA
CIBC-5	CS22602	8277	1	39	NA	C
Ren-1	CS22610	8367	1	47	NA	A
An-1	CS22626	8253	1	63	NA	A
Wa-1	CS22644	8403	1	81	A	NA
Pro-0	CS22649	8360	1	86	NA	A
Ws-2	CS22659	8406	1	96	NA	A

# 6.19 SNP AtMSQTsnp 40(chrom=1, pos=7842523, alignment id=928, alignment start=7842440)

	-	NA	A	С	G	T	AC	$\overline{AG}$	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	1	0	51	0	0	0	0	0	0	0	0
G	0	1	0	1	46	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
СТ	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 449: detailed difference for SNP AtMSQTsnp  $40\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Bor-1	CS22590	5837	1	27	G	C
Ren-11	CS22611	8368	1	48	C	NA

# 6.20 SNP AtMSQTsnp 41(chrom=1, pos=8015448, alignment id=855, alignment start=8014943)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	24	0	34	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	19	0	0	0	22	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 451: detailed difference for SNP AtMSQTsnp 41  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Pna-17	CS22570	8359	1	7	Т	NA
Eden-1	CS22572	6009	4	9	C	NA
Eden-2	CS22573	8287	1	10	C	NA
Lv-1	CS22574	6043	2	11	C	NA
Fb-2	CS22576	8292	1	13	T	NA
Fb-4	CS22577	8293	1	14	${ m T}$	NA
Vr2-1	CS22580	8401	1	17	C	NA
Spr1-6	CS22583	8383	1	20	C	NA
Zdr-6	CS22589	8410	1	26	C	NA
Pu2-23	CS22593	8361	1	30	C	NA
Lp2-2	CS22594	8332	1	31	C	NA
Lp2-6	CS22595	8333	1	32	$\Gamma$	NA
HR-10	CS22597	8308	1	34	C	NA
Sq-1	CS22600	8384	1	37	C	NA
Sq-8	CS22601	8385	1	38	$\Gamma$	NA
CIBC-5	CS22602	8277	1	39	$\Gamma$	NA
Tamm-2	CS22604	8390	1	41	С	NA
Tamm-27	CS22605	8391	1	42	C	NA
Kz-1	CS22606	8320	1	43	T	NA
Kz-9	CS22607	8322	1	44	T	NA
Got-22	CS22609	8298	1	46	$\Gamma$	NA
Ren-1	CS22610	8367	1	47	T	NA
Ren-11	CS22611	8368	1	48	$\Gamma$	NA
Cvi-0	CS22614	8281	1	51	C	NA
Ler-1	CS22618	8324	1	55	C	NA
C24	CS22620	8273	1	57	C	NA

N13	CS22491	8429	1	58	T	NA
Wei-0	CS22622	8404	1	59	С	NA
Col-0	CS22625	8279	1	62	С	NA
An-1	CS22626	8253	1	63	T	NA
Br-0	CS22628	8269	1	65	С	NA
Gy-0	CS22631	8302	1	68	T	NA
Wt-5	CS22637	8407	1	74	С	NA
Mt-0	CS22642	8341	1	79	С	NA
Wa-1	CS22644	8403	1	81	T	NA
Pro-0	CS22649	8360	1	86	T	NA
Shahdara	CS22652	8248	1	89	С	NA
Sorbo	CS22653	8381	1	90	С	NA
Kin-0	CS22654	8316	1	91	T	NA
Ms-0	CS22655	8340	1	92	T	NA
Bur-0	CS22656	8272	1	93	С	NA
Edi-0	CS22657	8288	1	94	T	NA
Ws-2	CS22659	8406	1	96	C	NA

# 6.21 SNP AtMSQTsnp 47(chrom=1, pos=9343401, alignment id=929, alignment start=9343234)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
Α	0	58	5	0	0	0	0	0	0	0	0	0
С	0	34	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 453: detailed difference for SNP AtMSQTsnp 47

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	С	NA
Kno-10	CS22566	8317	1	3	C	NA
Kno-18	CS22567	8318	1	4	C	NA
Rmx-A02	CS22568	8370	1	5	C	NA
Rmx-A180	CS22569	8371	1	6	C	NA
Pna-17	CS22570	8359	1	7	C	NA
Pna-10	CS22571	8358	1	8	C	NA
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Fb-2	CS22576	8292	1	13	A	NA
Fb-4	CS22577	8293	1	14	A	NA
Bil-5	CS22578	8262	1	15	A	NA
Bil-7	CS22579	8263	1	16	A	NA
Vr2-1	CS22580	8401	1	17	C	NA
Vr2-6	CS22581	8402	1	18	C	NA
Spr1-2	CS22582	8382	1	19	C	NA
Spr1-6	CS22583	8383	1	20	A	NA
m2-1	CS22584	8349	1	21	A	NA
m2-3	CS22585	8350	1	22	A	NA
Ull2-3	CS22587	8396	1	24	A	NA
Zdr-1	CS22588	8409	1	25	A	NA
Zdr-6	CS22589	8410	1	26	A	NA
Bor-4	CS22591	8268	1	28	A	NA
Pu2-7	CS22592	8362	1	29	A	NA
Pu2-23	CS22593	8361	1	30	A	NA
Lp2-2	CS22594	8332	1	31	A	NA
Lp2-6	CS22595	8333	1	32	A	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	A	NA
NFA-8	CS22598	8346	1	35	A	NA
NFA-10	CS22599	8345	1	36	C	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	C	NA

L GID G F	Laggeress	1 00	l a		1 .	1 37 4
CIBC-5	CS22602	8277	1	39	A	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA
Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	A	NA
Got-7	CS22608	8299	1	45	C	NA
Got-22	CS22609	8298	1	46	C	NA
Ren-1	CS22610	8367	1	47	C	NA
Ren-11	CS22611	8368	1	48	C	NA
Uod-1	CS22612	8398	1	49	C	NA
Uod-7	CS22613	8399	1	50	A	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	С	NA
Gu-0	CS22617	8301	1	54	С	NA
Ler-1	CS22618	8324	1	55	С	NA
Nd-1	CS22619	8344	1	56	С	NA
C24	CS22620	8273	1	57	С	NA
N13	CS22491	8429	1	58	A	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	A	NA
Yo-0	CS22624	8408	1	61	С	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	С	NA
Van-0	CS22627	8400	1	64	A	NA
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22630	8251	1	67	С	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	C	NA
Ga-0	CS22634	8295	1	71	C	NA
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	С	NA
Wt-5	CS22637	8407	1	74	A	NA
Ct-1	CS22639	8280	1	76	A	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	C	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	A	NA
Wa-1	CS22644	8403	1	81	A	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	A	NA
Ts-1	CS22647	8392	1	84	A	NA
Ts-5	CS22648	8393	1	85	A	NA
Pro-0	CS22649	8360	1	86	A	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	A	NA NA
Shahdara	CS22652	8248	1	89	A	NA NA
Sorbo	CS22653	8381	1	90	A	NA NA
Kin-0	CS22654	8316	1	91	A	NA NA
Ms-0	CS22655	8340	1	92	A	NA NA
Bur-0	CS22656	8272	1	93	C	NA NA
Edi-0	CS22657	8288	1	94	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	NA NA
Oy-0	CS22658	8352	1	95	C	NA NA
Ws-2	CS22659	8406	1	96	C	NA NA
VV 5-4	0522099	3400	1	JU		INA

# 6.22 SNP AtMSQTsnp 48(chrom=1, pos=9497118, alignment id=930, alignment start=9496666)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	2	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	63	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	1	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 455: detailed difference for SNP AtMSQTsnp 48

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	С	NA
Lv-1	CS22574	6043	2	11	C	NA
m2-1	CS22584	8349	1	21	NA	$\Gamma$
Bor-1	CS22590	5837	1	27	Т	C
Fei-0	CS22645	8294	1	82	NA	C
Sorbo	CS22653	8381	1	90	NA	$\Gamma$

# 6.23 SNP AtMSQTsnp 49(chrom=1, pos=9781347, alignment id=1018, alignment start=9781260)

 $\begin{array}{lll} {\rm Table} & 456: & {\rm SNP} & {\rm AtMSQTsnp} & 49 ({\rm chromosome=1, position=9781347, alignment id=1018, alignment start=9781260}) \end{array}$ 

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	3	0	0	0	0	0	0
NA	0	0	0	0	0	2	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	33	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	2	0	1	0	59	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 457: detailed difference for SNP AtMSQTsnp 49

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	Т	NA
Bor-1	CS22590	5837	1	27	T	C
Lp2-6	CS22595	8333	1	32	NA	T
Ren-11	CS22611	8368	1	48	T	NA
Uod-1	CS22612	8398	1	49	-	T
Van-0	CS22627	8400	1	64	NA	T
Ga-0	CS22634	8295	1	71	-	T
Mrk-0	CS22635	8339	1	72	-	T

# 6.24 SNP AtMSQTsnp 53(chrom=1, pos=10423708, alignment id=948, alignment start=10423483)

	_	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	6	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	36	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	47	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 459: detailed difference for SNP AtMSQTsnp 53

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	NA	T
Rmx-A02	CS22568	8370	1	5	NA	T
Eden-2	CS22573	8287	1	10	NA	T

Wei-0	CS22622	8404	1	59	NA	T	
Mt-0	CS22642	8341	1	79	NA	C	
Wa-1	CS22644	8403	1	81	NA	T	
Se-0	CS22646	8379	1	83	NA	T	

#### 6.25 SNP AtMSQTsnp 54(chrom=1, pos=10720273, alignment id=860, alignment start=10719833)

Table 460: SNP AtMSQTsnp 54(chromosome=1, position=10720273, alignment id=860, alignment start=10719833)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	61	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	38	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 461: detailed difference for SNP AtMSQTsnp 54

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA

### 6.26 SNP AtMSQTsnp 57(chrom=1, pos=11655519, alignment id=273, alignment start=11655171)

 $\begin{tabular}{llll} Table & 462: & SNP & AtMSQTsnp & 57 (chromosome=1, & position=11655519, alignment id=273, alignment start=11655171) \\ \end{tabular}$ 

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	1	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	28	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	1	0	68	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 463: detailed difference for SNP AtMSQTsnp 57

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	С	NA
Bor-1	CS22590	5837	1	27	${ m T}$	C
Mt-0	CS22642	8341	1	79	NA	CT
Shahdara	CS22652	8248	1	89	С	NA

### 6.27 SNP AtMSQTsnp 58(chrom=1, pos=12093546, alignment id=279, alignment start=12093079)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0

A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	58	0	5	0	0	0	0	0	0	0	0
G	0	35	0	1	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	1	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 465: detailed difference for SNP AtMSQTsnp 58

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	G	NA NA
Kno-10	CS22566	8317	1	$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	G	NA NA
Kno-18	CS22567	8318	1	$\begin{bmatrix} 3 \\ 4 \end{bmatrix}$	G	NA NA
Rmx-A02	CS22568	8370	1	5	G	NA NA
Rmx-A180	CS22569	8371	1	6	G	NA
Pna-17	CS22570	8359	1	7	G	NA
Pna-10	CS22571	8358	1	8	G	NA
Eden-1	CS22572	6009	4	9	C	NA
Eden-2	CS22573	8287	1	10	G	NA
Lv-1	CS22574	6043	2	11	С	NA
Lv-5	CS22575	6046	2	12	С	NA
Fb-2	CS22576	8292	1	13	C	NA
Fb-4	CS22577	8293	1	14	G	NA
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	С	NA
Vr2-6	CS22581	8402	1	18	С	NA
Spr1-2	CS22582	8382	1	19	С	NA
Spr1-6	CS22583	8383	1	20	С	NA
m2-1	CS22584	8349	1	21	G	NA
m2-3	CS22585	8350	1	22	C	NA
Ull2-5	CS22586	8397	1	23	G	NA
Ull2-3	CS22587	8396	1	24	C	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	C	NA
Bor-1	CS22590	5837	1	27	G	C
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	C	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	С	NA
Lp2-2	CS22594	8332	1	31	С	NA
Lp2-6	CS22595	8333	1	32	С	NA
HR-5	CS22596	8309	1	33	С	NA
HR-10	CS22597	8308	1	34	C	NA
NFA-8	CS22598	8346	1	35	C	NA
NFA-10	CS22599	8345	1	36	C	NA
Sq-1	CS22600	8384	1	37	C	NA
Sq-8	CS22601	8385	1	38	C	NA
CIBC-5	CS22602	8277	1	39	C	NA
CIBC-17	CS22603	8276	1	40	C	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-1	CS22606	8320	1	43	C	NA NA
Kz-9	CS22607	8322	1	44	C	NA NA
Got-7	CS22608	8299	1	45	C	NA NA
Got-22 Ren-1	CS22609 CS22610	8298	1 1	$\begin{array}{ c c }\hline 46\\ 47\\ \end{array}$	C C	NA NA
Ren-1 Ren-11		8367	1 1	47 48	G	NA NA
Uod-1	CS22611 CS22612	8368 8398	1 1	48 49	C	NA NA
Uod-1 Uod-7	CS22612 CS22613	8398	1 1	50	G	NA NA
Cvi-0	CS22613 CS22614	8399	1	50	C	NA NA
Lz-0	CS22614 CS22615	8336	1	52	C	NA NA
Ei-2	CS22616	8289	1	53	C	NA NA
Gu-0	CS22616 CS22617	8301	1	54	C	NA NA
Ler-1	CS22617 CS22618	8324	1	55	G	NA NA
Nd-1	CS22619	8344	1	56	C	NA NA
C24	CS22620	8273	1	57	$\frac{C}{C}$	NA NA
N13	CS22491	8429	1	58	$\frac{C}{C}$	NA NA
Wei-0	CS22491 CS22622	8404	1	59	$\stackrel{\text{C}}{\text{C}}$	NA NA
Ws-0	CS22623	8405	1	$\begin{vmatrix} 60 \end{vmatrix}$	G	NA NA
Yo-0	CS22624	8408	1	$\begin{vmatrix} 60 \\ 61 \end{vmatrix}$	G	NA NA
Col-0	CS22625	8279	1	$\begin{vmatrix} 61 \\ 62 \end{vmatrix}$	C	NA NA
An-1	CS22626	8253	1	$\begin{vmatrix} 62 \\ 63 \end{vmatrix}$	$\stackrel{\circ}{\Gamma}$	NA NA
Van-0	CS22627	8400	1	$\begin{vmatrix} 66 \\ 64 \end{vmatrix}$	CG	NA NA
Br-0	CS22628	8269	1	65	C	NA NA
1		-	I	I	l .	ı l

Est-1	CS22629	8291	1	66	C	NA
Ag-0	CS22630	8251	1	67	С	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	G	NA
Bay-0	CS22633	8260	1	70	С	NA
Ga-0	CS22634	8295	1	71	С	NA
Mrk-0	CS22635	8339	1	72	C	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	C	NA
Ct-1	CS22639	8280	1	76	С	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	C	NA
Mt-0	CS22642	8341	1	79	C	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	C	NA
Fei-0	CS22645	8294	1	82	C	NA
Se-0	CS22646	8379	1	83	C	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	C	NA
Kondara	CS22651	8319	1	88	G	NA
Shahdara	CS22652	8248	1	89	G	NA
Sorbo	CS22653	8381	1	90	C	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	C	NA
Bur-0	CS22656	8272	1	93	C	NA
Edi-0	CS22657	8288	1	94	G	NA
Oy-0	CS22658	8352	1	95	C	NA
Ws-2	CS22659	8406	1	96	С	NA

# 6.28 SNP AtMSQTsnp 60(chrom=1, pos=12357583, alignment id=1973, alignment start=12357044)

	-	NA	A	С	G	Т	AC	AG	AT	$\overline{\text{CG}}$	CT	$\operatorname{GT}$
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	0	0	1	0	0	0	0	0	0
A	0	61	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	29	0	0	0	5	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 467: detailed difference for SNP AtMSQTsnp  $60\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	A	NA
Kno-10	CS22566	8317	1	3	A	NA
Kno-18	CS22567	8318	1	4	A	NA
Rmx-A02	CS22568	8370	1	5	A	NA
Rmx-A180	CS22569	8371	1	6	A	NA
Pna-17	CS22570	8359	1	7	A	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	9	$\Gamma$	NA
Eden-2	CS22573	8287	1	10	$\Gamma$	NA
Lv-1	CS22574	6043	2	11	$\Gamma$	NA
Lv-5	CS22575	6046	2	12	T	NA
Fb-2	CS22576	8292	1	13	$\Gamma$	NA
Fb-4	CS22577	8293	1	14	A	NA
Bil-5	CS22578	8262	1	15	$\Gamma$	NA
Bil-7	CS22579	8263	1	16	$\Gamma$	NA
Vr2-1	CS22580	8401	1	17	A	NA
Vr2-6	CS22581	8402	1	18	A	NA
Spr1-2	CS22582	8382	1	19	A	NA
Spr1-6	CS22583	8383	1	20	T	NA
m2-1	CS22584	8349	1	21	$\Gamma$	NA
m2-3	CS22585	8350	1	22	$\Gamma$	NA
Ull2-5	CS22586	8397	1	23	A	NA

UIII_2_3							
Zdi-6	Ull2-3	CS22587	8396	1	24	$\mid T \mid$	l NA
Bos-1						1	
Bor-1							
Bon-4							
Pn2-7	Bor-1	CS22590	5837	1		NA	T
Pn2-7	Bor-4	CS22591	8268	1	28	A	NA
Pu2-23							
Lp2-2						1	
Lip-2-6						1	
HR-5	Lp2-2	CS22594	8332	1		A	l NA
HR-5	Lp2-6	CS22595	8333	1	32	A	NA
HR-10	_			1			
NFA-10							
NFA-10						1	
Sq-1							
Sq-8	NFA-10	CS22599	8345	1	36	A	NA
Sq-8	Sa-1	CS22600	8384	1	37	A	NA
CiBC-17         CS22602         8277         1         39         T         NA           CiBC-17         CS22604         8276         1         40         A         NA           Tamm-2         CS22604         8390         1         41         T         NA           Ka-9         CS22607         8322         1         44         T         NA           Ka-9         CS22608         8299         1         45         A         NA           Got-7         CS22608         8299         1         46         A         NA           Got-2         CS22618         8367         1         47         T         NA           Ren-1         CS22611         8368         1         48         A         NA           Ren-1         CS22613         8399         1         50         A         NA           Uod-7         CS22618         8389         1         49         A         NA           Lz-0         CS22614         8281         1         51         A         NA           Ei-2         CS2616         8289         1         53         A         NA           Gu-0         <	_					1	
CIBC-17						1	
Tamm-2							
Tamm-27	CIBC-17	CS22603	8276	1	40	A	NA
Tamm-27	Tamm-2	CS22604	8390	1	41	Т	NA
K2-9						1	
Got-7	1					1	
Got-22							
Ren-1	Got-7						
Ren-1	Got-22	CS22609	8298	1	46	A	NA
Ren-11						1	
Uod-1							
Uod-7							
Cvi-0	Uod-1						
Cvi-0	Uod-7	CS22613	8399	1	50	A	NA
Lz-0	1						
Ei-2							
Gu-0						1	
Ler-1	Ei-2		8289	1	53	A	l NA
Ler-1	Gu-0	CS22617	8301	1	54	A	NA
Nd-1	Ler-1			1	55	Α	NA
C24         CS22620         8273         1         57         A         NA           N13         CS22491         8429         1         58         T         NA           Wei-0         CS22622         8404         1         59         A         NA           Ws-0         CS22623         8405         1         60         T         NA           Yo-0         CS22624         8408         1         61         A         NA           Yo-0         CS22628         8269         1         62         A         NA           An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22639         8291         1         66         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22633         8260         1         70         A         NA           Bay-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635							
N13						1	
Wei-0         CS22622         8404         1         59         A         NA           Ws-0         CS22623         8405         1         60         T         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         A         NA           An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22630         8251         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Ra-0         CS22633         8260         1         70         A         NA           Bay-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         T         NA           Mr-0         CS22636         8342         1         73         T         NA           Mr-1         CS22	C24		8273	1		1	NA NA
Wei-0         CS22622         8404         1         59         A         NA           Ws-0         CS22623         8405         1         60         T         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         A         NA           An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22630         8251         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Ra-0         CS22633         8260         1         70         A         NA           Bay-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         T         NA           Mr-0         CS22636         8342         1         73         T         NA           Mr-1         CS22	N13	CS22491	8429	1	58	$\Gamma$	NA
Ws-0	Wei-0			1	59	Α	NA
Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         A         NA           An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22630         8251         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Mr-0         CS22636         8342         1         71         A         NA           Mr-0         CS22636         8342         1         73         T         NA           Mr-0         CS22637         8407         1         74         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS226						1	
Col-0         CS22625         8279         1         62         A         NA           An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22634         8295         1         71         A         NA           Mr-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Tsu-1         CS22640         8338         1         77         A         NA           Mr-0         CS226						1	
An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22639         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22634         8295         1         70         A         NA           Ga-0         CS22635         8339         1         72         T         NA           Mr-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Nok-3         CS226				_		1	
Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22631         8302         1         67         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         A         NA           Mr-0         CS22636         8342         1         73         T         NA           Mz-0         CS22637         8407         1         74         A         NA           Mr-1         CS22638         8280         1         76         A         NA           Mr-0         CS22649         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Nk-0         CS2264	Col-0	CS22625	8279	1	62	A	NA
Br-0         CS22628         8269         1         65         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22631         8302         1         67         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         A         NA           Mr-0         CS22636         8342         1         73         T         NA           Mz-0         CS22637         8407         1         74         A         NA           Mr-1         CS22638         8280         1         76         A         NA           Mr-0         CS22649         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Nk-0         CS2264	An-1	CS22626	8253	1	63	A	NA
Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22635         8339         1         72         T         NA           Mrk-0         CS22636         8342         1         73         T         NA           Mz-0         CS22637         8407         1         74         A         NA           Wt-5         CS22637         8407         1         74         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22							
Ag-0         CS22630         8251         1         67         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22635         8339         1         72         T         NA           Mrk-0         CS22636         8342         1         73         T         NA           Mz-0         CS22637         8407         1         74         A         NA           Wt-5         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Mt-0         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS2264						1	
Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS2633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Mr-0         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Se-0         CS2264						1	
Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrh-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Mt-0         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Fei-0         CS22644         8403         1         81         A         NA           Se-0         CS226	Ag-0	CS22630	8251	1	67	$\Gamma$	NA
Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrh-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Mt-0         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Fei-0         CS22644         8403         1         81         A         NA           Se-0         CS226	Gv-0	CS22631	8302	1	68	T	NA
Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Mr-0         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Mt-0         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Ts-1         CS2264							
Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Mr-0         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Mt-0         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Ts-1         CS22648         8392         1         84         A         NA           Ts-5         CS22648						1	
Mrk-0         CS22635         8339         1         72         T         NA           Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Mr-0         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Mk-0         CS22643         8347         1         80         A         NA           Nok-3         CS22644         8403         1         81         A         NA           Va-1         CS22644         8403         1         81         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS2264						1	
Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           Kondara         CS							
Mz-0         CS22636         8342         1         73         T         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           Kondara         CS	Mrk-0	CS22635	8339	1	72	T	NA
Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Pro-0         CS22648         8393         1         85         T         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS						1	
Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Mr-0         CS22640         8338         1         77         A         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         C						1	
Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0						1	
Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0	Mr-0	CS22640	8338	1	77	A	NA
Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22654         8316         1         91         A         NA           Ms-0 <t< td=""><td>Tsu-1</td><td>CS22641</td><td></td><td></td><td>78</td><td>A</td><td>NA</td></t<>	Tsu-1	CS22641			78	A	NA
Nok-3         CS22643         8347         1         80         A         NA           Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0							
Wa-1         CS22644         8403         1         81         A         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Ms-0         CS22654         8316         1         91         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         <							
Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Ms-0         CS22654         8316         1         91         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22658         8352         1         94         A         NA           Oy-0         <						1	
Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22658         8352         1         94         A         NA           Oy-0         <							
Se-0         CS22646         8379         1         83         A         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22658         8352         1         94         A         NA           Oy-0         <	Fei-0	CS22645	8294	1	82	A	NA
Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Pro-0         CS22649         8360         1         86         A         NA           LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
LL-0         CS22650         8328         1         87         A         NA           Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA	Pro-0	CS22649	8360	1	86	A	NA
Kondara         CS22651         8319         1         88         T         NA           Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Shahdara         CS22652         8248         1         89         A         NA           Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Sorbo         CS22653         8381         1         90         A         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA						1	
Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA	Sorbo	CS22653	8381	1	90	A	NA
Ms-0         CS22655         8340         1         92         A         NA           Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Bur-0         CS22656         8272         1         93         A         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         A         NA							
Oy-0 CS22658 8352 1 95 A NA							
	Edi-0		8288	1	94	A	
	Oy-0	CS22658	8352	1	95	A	NA
10							
	110-4	0522000	0.100		1 00		1111

# $6.29 \quad SNP \ AtMSQTsnp \ 61 (chrom=1, pos=13395892, alignment \ id=1673, alignment \ start=13395451)$

Table 468: SNP AtMSQTsnp 61(chromosome=1, position=13395892, alignment id=1673, alignment start=13395451)

-	NA	A	С	G	T	AC	AG	AT	CG	СТ	GT

-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	11	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	43	0	19	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	16	0	0	0	10	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 469: detailed difference for SNP AtMSQTsnp 61

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
Kno-18	CS22567	8318	1	4	С	NA
Eden-1	CS22572	6009	4	9	$^{\mathrm{C}}$	NA
Eden-2	CS22573	8287	1	10	С	NA
Lv-1	CS22574	6043	2	11	T	NA
Fb-2	CS22576	8292	1	13	С	NA
Vr2-1	CS22580	8401	1	17	$^{\mathrm{C}}$	NA
Spr1-6	CS22583	8383	1	20	${ m T}$	NA
m2-1	CS22584	8349	1	21	$^{\mathrm{C}}$	NA
m2-3	CS22585	8350	1	22	С	NA
Zdr-6	CS22589	8410	1	26	С	NA
Bor-4	CS22591	8268	1	28	${ m T}$	NA
Pu2-23	CS22593	8361	1	30	${ m T}$	NA
HR-5	CS22596	8309	1	33	$^{\mathrm{C}}$	NA
HR-10	CS22597	8308	1	34	$\mathbf{C}$	NA
NFA-10	CS22599	8345	1	36	$\mathbf{C}$	NA
Sq-1	CS22600	8384	1	37	$\dot{\mathrm{C}}$	NA
Sq-8	CS22601	8385	1	38	$\overset{\circ}{\mathrm{C}}$	NA
Tamm-2	CS22604	8390	1	41	C	NA
Tamm-27	CS22604 $CS22605$	8391	1	41 $42$	C	NA NA
Kz-1	CS22606	8320	1	42	C	NA NA
Kz-1 Kz-9	CS22607	8322	1	44	C	NA NA
Got-7	CS22607 CS22608	8299	1	45	${ m T}$	NA NA
1			1	$\begin{array}{c} 45 \\ 46 \end{array}$	$\stackrel{1}{\mathrm{T}}$	NA NA
Got-22	CS22609	8298				
Ren-1	CS22610	8367	1	47	С	NA
Ren-11	CS22611	8368	1	48	С	NA
Uod-1	CS22612	8398	1	49	T	NA
Uod-7	CS22613	8399	1	50	T	NA
Cvi-0	CS22614	8281	1	51	С	NA
Ei-2	CS22616	8289	1	53	NA	$\Gamma$
Gu-0	CS22617	8301	1	54	$^{\mathrm{C}}$	NA
C24	CS22620	8273	1	57	${ m T}$	NA
Wei-0	CS22622	8404	1	59	${ m T}$	NA
Ws-0	CS22623	8405	1	60	$\mathbf{C}$	NA
Yo-0	CS22624	8408	1	61	$^{\mathrm{C}}$	NA
Col-0	CS22625	8279	1	62	$\mathbf{C}$	NA
An-1	CS22626	8253	1	63	$^{\mathrm{C}}$	NA
Br-0	CS22628	8269	1	65	С	NA
Est-1	CS22629	8291	1	66	${ m T}$	NA
Ag-0	CS22630	8251	1	67	${ m T}$	NA
Gy-0	CS22631	8302	1	68	С	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	С	NA
Ga-0	CS22634	8295	1	71	$\mathbf{C}$	NA
Mrk-0	CS22635	8339	1	72	$\overset{\circ}{\mathrm{C}}$	NA
Mz-0	CS22636	8342	1	73	$\overset{\circ}{\mathrm{C}}$	NA
Mr-0	CS22640	8338	1	77	$\overset{\circ}{\mathrm{C}}$	NA
Tsu-1	CS22641	8394	1	78	$^{\rm C}$	NA
Mt-0	CS22642	8341	1	79	C	NA
Nok-3	CS22643	8347	1	80	C	NA NA
Wa-1	CS22644	8403	1	81	C	NA NA
Ts-5	CS22648	8393	1	85	C	NA NA
Pro-0	CS22649	8360	1	86	C	NA NA
LL-0	CS22649 $CS22650$	8328	1	87	C	NA NA
Sorbo	CS22653	8381	1	90	C	NA NA
			1	90	C	NA NA
Kin-0	CS22654	8316			${f T}$	
Ms-0	CS22655	8340	1	92	$\begin{array}{c} T \\ T \end{array}$	NA NA
Bur-0	CS22656	8272	1	93		NA NA
Edi-0	CS22657	8288	1	94	C	NA
Oy-0	CS22658	8352	1	95	T	NA
Ws-2	CS22659	8406	1	96	Т	NA

### 6.30 SNP AtMSQTsnp 62(chrom=1, pos=13541648, alignment id=808, alignment start=13541490)

Table 470: SNP AtMSQTsnp 62(chromosome=1, position=13541648, alignment id=808, alignment start=13541490)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	3	63	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	34	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 471: detailed difference for SNP AtMSQTsnp 62

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Ren-11	CS22611	8368	1	48	A	NA
Shahdara	CS22652	8248	1	89	A	NA

### 6.31 SNP AtMSQTsnp 63(chrom=1, pos=13712241, alignment id=345, alignment start=13711856)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	8	0	0	1	0	0	0	0	0
A	0	2	32	0	0	0	0	0	0	0	0	0
C	0	3	0	40	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	1	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 473: detailed difference for SNP AtMSQTsnp 63

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	С	NA
Zdr-6	CS22589	8410	1	26	NA	C
Lp2-2	CS22594	8332	1	31	A	NA
NFA-10	CS22599	8345	1	36	NA	C
Kz-1	CS22606	8320	1	43	NA	C
Ren-11	CS22611	8368	1	48	C	NA
Cvi-0	CS22614	8281	1	51	NA	C
Ws-0	CS22623	8405	1	60	NA	C
Van-0	CS22627	8400	1	64	AC	A
Ga-0	CS22634	8295	1	71	NA	C
Mr-0	CS22640	8338	1	77	NA	C
Ts-1	CS22647	8392	1	84	NA	C
Pro-0	CS22649	8360	1	86	NA	AC
Shahdara	CS22652	8248	1	89	C	NA
Ws-2	CS22659	8406	1	96	A	NA

6.32 SNP AtMSQTsnp 65(chrom=1, pos=16874727, alignment id=290, alignment start=16874305)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	2	62	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	3	0	0	32	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 475: detailed difference for SNP AtMSQTsnp 65

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Ren-11	CS22611	8368	1	48	A	NA
Van-0	CS22627	8400	1	64	$\overline{AG}$	A
Br-0	CS22628	8269	1	65	A	NA
Wa-1	CS22644	8403	1	81	G	NA

# 6.33 SNP AtMSQTsnp 67(chrom=1, pos=17355738, alignment id=660, alignment start=17355484)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	42	5	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	50	1	0	1	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 477: detailed difference for SNP AtMSQTsnp  $67\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	G	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	G	NA
Rmx-A180	CS22569	8371	1	6	G	NA
Pna-17	CS22570	8359	1	7	A	NA
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Fb-2	CS22576	8292	1	13	A	NA
Fb-4	CS22577	8293	1	14	G	NA
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	A	NA
Vr2-6	CS22581	8402	1	18	A	NA
Spr1-2	CS22582	8382	1	19	A	NA
Spr1-6	CS22583	8383	1	20	G	NA
m2-1	CS22584	8349	1	21	G	NA
m2-3	CS22585	8350	1	22	A	NA
Ull2-5	CS22586	8397	1	23	A	NA
Ull2-3	CS22587	8396	1	24	G	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	G	NA

Bor-1	CS22590	5837	1	27	G	A
			2	27	G	
Bor-1	CS22590	5837				NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	A	NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	A	NA
NFA-10	CS22599	8345	1	36	G	NA
	CS22600	8384	1	37	G	NA
Sq-1						
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	G	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA
			1	43	G	NA
Kz-1	CS22606	8320				
Kz-9	CS22607	8322	1	44	A	NA
Got-7	CS22608	8299	1	45	G	NA
	CS22609			46	G	
Got-22		8298	1			NA
Ren-1	CS22610	8367	1	47	G	NA
Ren-11	CS22611	8368	1	48	A	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	G	NA
Cvi-0	CS22614	8281	1	51	A	NA
I						
Lz-0	CS22615	8336	1	52	G	NA
Ei-2	CS22616	8289	1	53	G	NA
Gu-0	CS22617	8301	1	54	A	NA
Ler-1	CS22618	8324	1	55	G	NA
Nd-1	CS22619	8344	1	56	A	NA
C24	CS22620	8273	1	57	G	NA
N13	CS22491	8429	1	58	G	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	G	NA
Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	62	G	NA
An-1	CS22626	8253	1	63	A	NA
Van-0	CS22627	8400	1	64	G	NA
Br-0	CS22628	8269	1	65	G	NA
Est-1				66	G	NA
I	CS22629	8291	1			
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	A	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	A	NA
Mrk-0	CS22635	8339	1	72	G	NA
Mz-0	CS22636	8342	1	73	A	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	G	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	A	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	A	NA
					1	
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	A	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	G	NA
Bur-0	CS22656	8272	1	93	A	NA
Edi-0	CS22657	8288	1	94	A	NA
Oy-0	CS22658	8352	1	95	A	NA
Ws-2	CS22659	8406	1	96	A	NA
		Ĭ.	·	<u> </u>		1

# 6.34 SNP AtMSQTsnp 69(chrom=1, pos=18340160, alignment id=1407, alignment start=18340113)

Table 478: SNP AtMSQTsnp 69(chromosome=1, position=18340160, alignment id=1407, alignment start=18340113)

-	NA	A	С	G	T	AC	AG	AT	CG	CT	GT

-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	3	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	63	0	0	0	0	0	0	0
$\mid T \mid$	0	0	0	0	0	32	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 479: detailed difference for SNP AtMSQTsnp 69

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	T
Eden-1	CS22572	6009	4	9	G	NA
Eden-2	CS22573	8287	1	10	NA	G
Ull2-5	CS22586	8397	1	23	NA	T
Bor-4	CS22591	8268	1	28	NA	$\Gamma$

# 6.35 SNP AtMSQTsnp 73(chrom=1, pos=20175347, alignment id=1477, alignment start=20174753)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	41	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	6	0	0	0	51	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 481: detailed difference for SNP AtMSQTsnp 73

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	2	9	T	NA
Eden-1	CS22572	6009	3	9	T	NA
Eden-1	CS22572	6009	4	9	T	NA
Vr2-1	CS22580	8401	1	17	T	NA
Bor-1	CS22590	5837	1	27	T	NA
Ren-11	CS22611	8368	1	48	C	NA
Br-0	CS22628	8269	1	65	C	NA
Wa-1	CS22644	8403	1	81	$\Gamma$	NA

# 6.36 SNP AtMSQTsnp 76(chrom=1, pos=21908667, alignment id=2670, alignment start=21908157)

	-	NA	A	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	2	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	29	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	1	0	1	0	65	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0

CG	0	0	0	0	0	0	0	0	0	0	0	0	ĺ
CG CT	0	0	0	0	0	0	0	0	0	0	0	0	
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0	l

Table 483: detailed difference for SNP AtMSQTsnp 76

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	T	NA
Eden-2	CS22573	8287	1	10	NA	T
Bor-1	CS22590	5837	1	27	$\Gamma$	C
Tamm-27	CS22605	8391	1	42	NA	T
Ren-11	CS22611	8368	1	48	C	NA
Ga-0	CS22634	8295	1	71	NA	C

# 6.37 SNP AtMSQTsnp 85(chrom=1, pos=23155780, alignment id=668, alignment start=23155464)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	5	0	0	1	0	0	0	0	0	0
A	0	4	57	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 485: detailed difference for SNP AtMSQTsnp 85

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	1	9	A	NA
Eden-1	CS22572	6009	2	9	A	NA
Eden-1	CS22572	6009	4	9	A	NA
Spr1-6	CS22583	8383	1	20	NA	A
Ull2-5	CS22586	8397	1	23	NA	T
Ull2-3	CS22587	8396	1	24	NA	A
Mr-0	CS22640	8338	1	77	NA	A
Tsu-1	CS22641	8394	1	78	NA	A
Pro-0	CS22649	8360	1	86	NA	A
Shahdara	CS22652	8248	1	89	A	NA

# 6.38 SNP AtMSQTsnp 87(chrom=1, pos=23381760, alignment id=312, alignment start=23381443)

Table 486: SNP AtMSQTsnp 87(chromosome=1, position=23381760, alignment id=312, alignment start=23381443)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	24	0	33	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	37	0	0	0	4	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	1	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 487: detailed difference for SNP AtMSQTsnp 87

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Kno-10	CS22566	8317	1	3	Т	NA
Kno-18	CS22567	8318	1	4	T	NA
Rmx-A02	CS22568	8370	1	5	T	NA
Rmx-A180	CS22569	8371	1	6	T	NA
Pna-17	CS22570	8359	1	7	С	NA
Pna-10	CS22571	8358	1	8	T	NA
Eden-1	CS22572	6009	4	9	С	NA
Eden-2	CS22573	8287	1	10	С	NA
Lv-1	CS22574	6043	2	11	С	NA
Fb-2	CS22576	8292	1	13	$\Gamma$	NA
Vr2-6	CS22581	8402	1	18	$\Gamma$	NA
Spr1-6	CS22583	8383	1	20	T	NA
m2-1	CS22584	8349	1	21	C	NA
m2-3	CS22585	8350	1	$\frac{1}{22}$	T	NA
Ull2-5	CS22586	8397	1	$\begin{vmatrix} 22\\23 \end{vmatrix}$	T	NA
Zdr-6	CS22589	8410	1	$\begin{vmatrix} 26 \\ 26 \end{vmatrix}$	T	NA
Pu2-7	CS22592	8362	1	$\begin{bmatrix} 20 \\ 29 \end{bmatrix}$	T	NA
Pu2-23	CS22592 $CS22593$	8361	1	$\begin{vmatrix} 29 \\ 30 \end{vmatrix}$	C	NA NA
	CS22593 $CS22594$	8332	1	31	C	NA NA
Lp2-2 Lp2-6			1 1	$\begin{vmatrix} 31 \\ 32 \end{vmatrix}$	$\begin{array}{c} C \\ T \end{array}$	NA NA
•	$\begin{array}{c} \text{CS22595} \\ \text{CS22597} \end{array}$	8333	1 1	32	T	NA NA
HR-10		8308				
NFA-10	CS22599	8345	1	36	T	NA
Sq-1	CS22600	8384	1	37	C	NA
CIBC-5	CS22602	8277	1	39	T	NA
Tamm-2	CS22604	8390	1	41	C	NA
Tamm-27	CS22605	8391	1	42	С	NA
Kz-1	CS22606	8320	1	43	T	NA
Kz-9	CS22607	8322	1	44	T	NA
Ren-1	CS22610	8367	1	47	С	NA
Ren-11	CS22611	8368	1	48	C	NA
Uod-7	CS22613	8399	1	50	T	NA
Cvi-0	CS22614	8281	1	51	T	NA
Ei-2	CS22616	8289	1	53	T	NA
Ler-1	CS22618	8324	1	55	T	NA
Nd-1	CS22619	8344	1	56	T	NA
C24	CS22620	8273	1	57	C	NA
N13	CS22491	8429	1	58	T	NA
Wei-0	CS22622	8404	1	59	T	NA
Ws-0	CS22623	8405	1	60	T	NA
Yo-0	CS22624	8408	1	61	T	NA
Col-0	CS22625	8279	1	62	T	NA
An-1	CS22626	8253	1	63	T	NA
Van-0	CS22627	8400	1	64	CT	С
Br-0	CS22628	8269	1	65	C	NA
Gy-0	CS22631	8302	1	68	C	NA
Ra-0	CS22632	8364	1	69	T	NA
Ga-0	CS22634	8295	1	71	T	NA
Mrk-0	CS22635	8339	1	$\frac{72}{72}$	T	NA
Wt-5	CS22637	8407	1	74	C	NA
Ct-1	CS22639	8280	1	76	$\begin{array}{c c} C \\ T \end{array}$	NA
Tsu-1	CS22641	8394	1	78	C	NA
Mt-0	CS22642	8341	1	79	$\begin{array}{ c c }\hline T\end{array}$	NA NA
Wa-1	CS22644	8403	1	81	$\frac{1}{T}$	NA NA
LL-0	CS22650	8328	1	87	C	NA NA
Shahdara	CS22652	8248	1	89	C	NA NA
Sorbo	CS22652 $CS22653$	8381	1	90	C	NA NA
Kin-0			1	90	$\begin{array}{c} C \\ T \end{array}$	NA NA
	CS22654	8316		91 92	$\frac{1}{C}$	NA NA
Ms-0	CS22655	8340	1		C	
Bur-0	CS22656	8272	1	93		NA NA
Edi-0	CS22657	8288	1	94	С	NA NA
Oy-0	CS22658	8352	1	95	C	NA NA
Ws-2	CS22659	8406	1	96	Т	NA

# 6.39 SNP AtMSQTsnp 88(chrom=1, pos=23395010, alignment id=1071, alignment start=23394478)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	5	0	0	0	0	0	0	0
A	0	1	23	0	1	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	64	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0

AC	0	0	0	0	0	0	0	0	0	0	0	0	
AG	0	0	0	0	0	0	0	0	0	0	0	0	
AT	0	0	0	0	0	0	0	0	0	0	0	0	
CG	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	0	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

Table 489: detailed difference for SNP AtMSQTsnp 88

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Bor-1	CS22590	5837	1	27	A	G
NFA-10	CS22599	8345	1	36	NA	G
Ren-1	CS22610	8367	1	47	NA	G
Est-1	CS22629	8291	1	66	NA	G
Mr-0	CS22640	8338	1	77	NA	G
Shahdara	CS22652	8248	1	89	A	NA
Kin-0	CS22654	8316	1	91	NA	G

# 6.40 SNP AtMSQTsnp 90(chrom=1, pos=23893336, alignment id=69, alignment start=23893276)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	3	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	35	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	0	0	58	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	1	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 491: detailed difference for SNP AtMSQTsnp  $90\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	1	9	NA	Т
Eden-1	CS22572	6009	2	9	NA	$\Gamma$
Eden-1	CS22572	6009	3	9	NA	T
Ren-11	CS22611	8368	1	48	T	NA
Van-0	CS22627	8400	1	64	CT	C
Shahdara	CS22652	8248	1	89	T	NA

# 6.41 SNP AtMSQTsnp 91(chrom=1, pos=24071689, alignment id=1427, alignment start=24071203)

Table 492: SNP AtMSQTsnp 91(chromosome=1, position=24071689, alignment id=1427, alignment start=24071203)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	47	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	47	1	0	5	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 493: detailed difference for SNP AtMSQTsnp 91  $\,$ 

RRS-10	nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Knu-10				_			
Rino-18				1			
Rums-A180				1			
Pns-17	Rmx-A02	CS22568	8370	1	5	A	NA
Pus-10	Rmx-A180	CS22569	8371	1	6	A	NA
Eden-1		CS22570	8359				
Eden-2							
Lv-1							
In-5							
Fb-2							
Bh-4				l			
Bil-5				l			
BiF7							
Vy2-1         CS22580         8401         1         17         A         NA           Spr1-2         CS22582         8382         1         19         A         NA           Spr1-6         CS22583         8383         1         20         A         NA           m2-1         CS22585         8380         1         21         A         NA           m2-3         CS22585         8350         1         22         A         NA           UII2-5         CS22586         8397         1         23         A         NA           UII2-3         CS22588         8409         1         24         A         NA           JUII-3         CS22590         8537         1         23         A         NA           JUI-1         CS22590         8587         1         26         A         NA           Bor-1         CS22591         8268         1         27         G         A           Bor-1         CS22591         8268         1         29         G         NA           Lp2-2         CS22593         8361         1         30         G         NA           Lp2-2							
Vr2-6         CS22581         8402         1         18         G         NA           Spr1-2         CS22582         3882         1         199         A         NA           m2-1         CS22584         8349         1         20         A         NA           m2-1         CS22585         8360         1         22         A         NA           UII2-3         CS22586         8397         1         23         A         NA           UII2-3         CS22586         8397         1         24         A         NA           Zdr-1         CS22589         8410         1         26         A         NA           Zdr-6         CS22590         5837         1         27         G         A           Bor-1         CS22590         5837         2         27         G         NA           Pu2-7         CS22592         8362         1         29         G         NA           Pu2-7         CS22592         8362         1         29         G         NA           Lp2-2         CS22594         8332         1         31         G         NA           Lp2-2							
Spr1-2         CS22582         8382         1         19         A         NA           Spr1-6         CS22583         8383         1         20         A         NA           m2-1         CS22585         8380         1         21         A         NA           m2-3         CS22585         8396         1         23         A         NA           UII2-3         CS22588         8396         1         24         A         NA           Zdn-1         CS22588         8410         1         25         G         NA           Zdn-6         CS22590         8387         1         27         G         A           Bor-1         CS22590         8837         1         27         G         A           Bor-4         CS22591         8268         1         29         G         NA           Pu2-23         CS22593         8361         1         30         G         NA           Lp2-6         CS22596         8333         1         32         A         NA           HR-10         CS22596         8303         1         34         A         NA           NFA-8							
Spr1-6							
m2-1	_						
m2-3	_						
UII2-3							
UIII-3							
Zdr-1							
Zdt-6							
Bor-1							
Bor-1							
Bor-4							
Pu2-7							
Pu2-23							
Lp2-6	Pu2-23	CS22593	8361	1	30		NA
HR-5	Lp2-2		8332	1	31	G	NA
HR-10	Lp2-6	CS22595	8333	1	32	A	NA
NFA-8	HR-5	CS22596	8309	1			
NFA-10		CS22597	8308	1			
Sq-1         CS22600         8384         1         37         G         NA           Sq-8         CS22601         8355         1         38         G         NA           CIBC-5         CS22602         8277         1         39         A         NA           CIBC-17         CS22604         8390         1         41         A         NA           Tamm-2         CS22604         8390         1         41         A         NA           Tamm-27         CS22606         8320         1         43         A         NA           Kz-9         CS22607         8322         1         44         A         NA           Got-7         CS22609         8298         1         46         G         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-1         CS22611         8368         1         48         A         NA           Uod-1         CS22613         8399         1         50         A         NA           Cvi-0         CS22614         8281         1         51         A         NA           Ei-2	NFA-8			1		l	
Sq-8         CS22601         8385         1         38         G         NA           CIBC-5         CS22602         8277         1         39         A         NA           CIBC-17         CS22604         8390         1         40         G         NA           Tamm-2         CS22605         8391         1         41         A         NA           Kz-1         CS22606         8320         1         43         A         NA           Kz-9         CS22607         8322         1         44         A         NA           Kz-9         CS22608         8299         1         45         G         NA           Got-7         CS22608         8299         1         46         G         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-1         CS22612         8368         1         48         A         NA           Uod-1         CS22613         8399         1         50         A         NA           Uod-7         CS22613         8336         1         50         A         NA           Lz-0         <	NFA-10			1			
CIBC-5         CS22602         8277         1         39         A         NA           CIBC-17         CS22603         8276         1         40         G         NA           Tamm-2         CS22604         8390         1         41         A         NA           Tamm-27         CS22606         8391         1         42         A         NA           Kz-1         CS22606         8320         1         43         A         NA           Kz-9         CS22608         8299         1         45         G         NA           Got-7         CS22609         8298         1         46         G         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-11         CS22611         8368         1         48         A         NA           Uod-1         CS22613         8398         1         49         A         NA           Uod-7         CS22613         8399         1         50         A         NA           Lz-0         CS22618         8281         1         51         A         NA           Ei-2	_			1			
CIBC-17							
Tamm-2         CS22604         8390         1         41         A         NA           Tamm-27         CS22605         8391         1         42         A         NA           Kz-1         CS22606         8320         1         43         A         NA           Kz-9         CS22607         8322         1         44         A         NA           Got-7         CS22608         8299         1         45         G         NA           Got-7         CS22609         8298         1         46         G         NA           Ren-1         CS22611         8368         1         48         A         NA           Ren-1         CS22611         8368         1         48         A         NA           Uod-1         CS22613         8398         1         49         A         NA           Uod-7         CS22613         8399         1         50         A         NA           Lz-0         CS22613         8396         1         50         A         NA           Lz-0         CS22618         8281         1         51         A         NA           Hz-2 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Tamm-27							
Kz-1							
Kz-9						1	
Got-7         CS22608         8299         1         45         G         NA           Got-22         CS22609         8298         1         46         G         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-11         CS22611         8368         1         48         A         NA           Uod-1         CS22612         8398         1         49         A         NA           Uod-7         CS22613         8399         1         50         A         NA           Cvi-0         CS22615         8336         1         52         G         NA           Ei-2         CS22616         8289         1         53         G         NA           Gu-0         CS22617         8301         1         54         A         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         G         NA           Wei-0         CS22620         8273         1         57         A         NA           Wei-0         <						1	
Got-22							
Ren-11							
Ren-11							
Uod-1						l	
Uod-7         CS22613         8399         1         50         A         NA           Cvi-0         CS22614         8281         1         51         A         NA           Lz-0         CS22615         8336         1         52         G         NA           Ei-2         CS22616         8289         1         53         G         NA           Gu-0         CS22617         8301         1         54         A         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         G         NA           N13         CS22620         8273         1         57         A         NA           Wi-0         CS22621         8404         1         59         G         NA           Ws-0         CS22623         8404         1         59         G         NA           Yo-0         CS226248         8408         1         61         A         NA           Van-0         CS22625         8279         1         62         G         NA           Ag-0         CS226						1	
Cvi-0         CS22614         8281         1         51         A         NA           Lz-0         CS22615         8336         1         52         G         NA           Ei-2         CS22616         8289         1         53         G         NA           Gu-0         CS22617         8301         1         54         A         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         G         NA           C24         CS22620         8273         1         57         A         NA           N13         CS22491         8429         1         58         G         NA           Wei-0         CS22622         8404         1         59         G         NA           Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Van-0         CS22625         8279         1         62         G         NA           Van-0         CS2262							
Lz-0							
Ei-2         CS22616         8289         1         53         G         NA           Gu-0         CS22617         8301         1         54         A         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         G         NA           C24         CS22620         8273         1         57         A         NA           N13         CS22491         8429         1         58         G         NA           Wei-0         CS22622         8404         1         59         G         NA           Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22639							
Gu-0         CS22617         8301         1         54         A         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         G         NA           C24         CS22620         8273         1         57         A         NA           N13         CS22491         8429         1         58         G         NA           Wei-0         CS22622         8404         1         59         G         NA           Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Yo-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22638         8269         1         65         G         NA           Ag-0         CS22630<							
Ler-1							
Nd-1         CS22619         8344         1         56         G         NA           C24         CS22620         8273         1         57         A         NA           N13         CS22491         8429         1         58         G         NA           Wei-0         CS22622         8404         1         59         G         NA           Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22633							
C24         CS22620         8273         1         57         A         NA           N13         CS22491         8429         1         58         G         NA           Wei-0         CS22622         8404         1         59         G         NA           Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22628         8269         1         66         G         NA           Ag-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS2263							
N13         CS22491         8429         1         58         G         NA           Wei-0         CS22622         8404         1         59         G         NA           Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Mz-0         CS226							
Ws-0         CS22623         8405         1         60         G         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Br-0         CS22629         8291         1         66         G         NA           Est-1         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22						G	
Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS226							
Col-0         CS22625         8279         1         62         G         NA           An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mz-0         CS22635         8339         1         72         A         NA           Wt-5         CS22637         8407         1         74         A         NA           Wt-5         CS226							
An-1         CS22626         8253         1         63         A         NA           Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS226							
Van-0         CS22627         8400         1         64         A         NA           Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Wt-5         CS22636         8342         1         73         G         NA           Wt-5         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22						1	
Br-0         CS22628         8269         1         65         G         NA           Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS226							
Est-1         CS22629         8291         1         66         G         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA							
Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA							
Gy-0         CS22631         8302         1         68         G         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA							
Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA	_						
Bay-0         CS22633         8260         1         70         G         NA           Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA							
Ga-0         CS22634         8295         1         71         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA							
Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA						1	
Mz-0         CS22636         8342         1         73         G         NA           Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA							
Wt-5         CS22637         8407         1         74         A         NA           Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA				l			
Ct-1         CS22639         8280         1         76         A         NA           Mr-0         CS22640         8338         1         77         G         NA           Tsu-1         CS22641         8394         1         78         G         NA						l	
Mr-0							
Tsu-1 CS22641 8394 1 78 G NA							
,	Mt-0	CS22642	8341	1	79	G	NA

Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	A	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	A	NA
Pro-0	CS22649	8360	1	86	A	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	G	NA
Sorbo	CS22653	8381	1	90	A	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	G	NA
Bur-0	CS22656	8272	1	93	G	NA
Edi-0	CS22657	8288	1	94	G	NA
Oy-0	CS22658	8352	1	95	G	NA
Ws-2	CS22659	8406	1	96	A	NA

# 6.42 SNP AtMSQTsnp 92(chrom=1, pos=24292774, alignment id=672, alignment start=24292482)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	6	0	0	3	0	0	0	0	0	0	0
A	0	17	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	50	1	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 495: detailed difference for SNP AtMSQTsnp 92  $\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	G	NA
Kno-10	CS22566	8317	1	3	G	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	G	NA
Rmx-A180	CS22569	8371	1	6	G	NA
Pna-10	CS22571	8358	1	8	G	NA
Eden-1	CS22572	6009	1	9	NA	G
Eden-1	CS22572	6009	2	9	NA	G
Eden-1	CS22572	6009	3	9	NA	G
Eden-2	CS22573	8287	1	10	G	NA
Fb-2	CS22576	8292	1	13	A	NA
Fb-4	CS22577	8293	1	14	G	NA
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	G	NA
m2-3	CS22585	8350	1	22	G	NA
Ull2-3	CS22587	8396	1	24	G	NA
Bor-1	CS22590	5837	1	27	G	A
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	A	NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	A	NA
HR-5	CS22596	8309	1	33	G	NA
Sq-1	CS22600	8384	1	37	G	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	G	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA
Got-7	CS22608	8299	1	45	G	NA
Got-22	CS22609	8298	1	46	G	NA
Ren-11	CS22611	8368	1	48	G	NA
Uod-1	CS22612	8398	1	49	G	NA

						1
Cvi-0	CS22614	8281	1	51	G	NA NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	G	NA
Gu-0	CS22617	8301	1	54	G	NA
Ler-1	CS22618	8324	1	55	A	NA
Nd-1	CS22619	8344	1	56	G	NA
Wei-0	CS22622	8404	1	59	G	NA
Yo-0	CS22624	8408	1	61	G	NA
Col-0	CS22625	8279	1	62	G	NA
Van-0	CS22627	8400	1	64	G	NA
Br-0	CS22628	8269	1	65	G	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	G	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	G	NA
Mrk-0	CS22635	8339	1	72	G	NA
Mz-0	CS22636	8342	1	73	G	NA
Ct-1	CS22639	8280	1	76	A	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	A	NA
Mt-0	CS22642	8341	1	79	G	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	A	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	A	NA
Ts-1	CS22647	8392	1	84	A	NA
Ts-5	CS22648	8393	1	85	A	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	A	NA
Sorbo	CS22653	8381	1	90	A	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	A	NA
Bur-0	CS22656	8272	1	93	G	NA
Edi-0	CS22657	8288	1	94	G	NA
Oy-0	CS22658	8352	1	95	G	NA

### 6.43 SNP AtMSQTsnp 97(chrom=1, pos=24893649, alignment id=1428, alignment start=24893448)

Table 496: SNP AtMSQTsnp 97(chromosome=1, position=24893649, alignment id=1428, alignment start=24893448)

	-	NA	A	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	58	0	0	0	0	0	0	0	0
G	0	1	0	1	33	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	2	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 497: detailed difference for SNP AtMSQTsnp 97  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$	
Eden-1	CS22572	6009	4	9	С	NA	
Lv-1	CS22574	6043	2	11	G	NA	
Fb-4	CS22577	8293	1	14	CG	C	
Bor-1	CS22590	5837	1	27	G	C	
Van-0	CS22627	8400	1	64	CG	C	

### 6.44 SNP AtMSQTsnp 100(chrom=1, pos=25717887, alignment id=1758, alignment start=25717715)

	-	NA	A	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	1	28	0	1	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	68	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 499: detailed difference for SNP AtMSQTsnp 100

	atlem a mont	acatuma id	dunlicata	a a a a a a a i a a a i a	m on oo 11	
nativename	stkparent	ecotype_id	duplicate	accession_id	$pcr_call$	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Bor-1	CS22590	5837	1	27	A	G
Shahdara	CS22652	8248	1	89	A	NA
Ws-2	CS22659	8406	1	96	NA	A

# 6.45 SNP AtMSQTsnp 101(chrom=1, pos=26278413, alignment id=330, alignment start=26278221)

Table 500: SNP AtMSQTsnp 101(chromosome=1, position=26278413, alignment id=330, alignment start=26278221)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	1	27	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	69	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 501: detailed difference for SNP AtMSQTsnp 101

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Rmx-A02	CS22568	8370	1	5	NA	A
Eden-1	CS22572	6009	4	9	G	NA
Ren-11	CS22611	8368	1	48	A	NA
Van-0	CS22627	8400	1	64	$\overline{AG}$	A

# 6.46 SNP AtMSQTsnp 104(chrom=1, pos=26794838, alignment id=665, alignment start=26794732)

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	38	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	0	0	60	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 503: detailed difference for SNP AtMSQTsnp 104

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Т	NA
Lv-1	CS22574	6043	2	11	$\Gamma$	NA

#### 6.47 SNP AtMSQTsnp 108(chrom=1, pos=28666837, alignment id=343, alignment start=28666569)

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	0	0	0	0	0	0	0	0
A	0	2	49	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	3	0	0	42	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	1	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 505: detailed difference for SNP AtMSQTsnp 108

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Ren-11	CS22611	8368	1	48	G	NA
Wei-0	CS22622	8404	1	59	A	NA
Van-0	CS22627	8400	1	64	$\overline{AG}$	G
Br-0	CS22628	8269	1	65	A	NA
Kin-0	CS22654	8316	1	91	NA	A
Ms-0	CS22655	8340	1	92	NA	A

### 6.48 SNP AtMSQTsnp 114(chrom=1, pos=30214313, alignment id=1800, alignment start=30213917)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	0	35	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	2	1	0	59	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 507: detailed difference for SNP AtMSQTsnp  $114\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
HR-5	CS22596	8309	1	33	$\overline{AG}$	A
CIBC-17	CS22603	8276	1	40	G	A
Ren-11	CS22611	8368	1	48	G	NA
Kondara	CS22651	8319	1	88	A	G

#### 6.49 SNP AtMSQTsnp 118(chrom=2, pos=322335, alignment id=2465, alignment start=322253)

Table 508: SNP AtMSQTsnp 118(chromosome=2, position=322335, alignment id=2465, alignment start=322253)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	5	0	8	0	0	0	0	0	0	0
A	0	1	46	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	39	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 509: detailed difference for SNP AtMSQTsnp 118

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	NA	G
Kno-18	CS22567	8318	1	4	NA	A
Rmx-A02	CS22568	8370	1	5	NA	G
Pna-17	CS22570	8359	1	7	NA	G
Eden-1	CS22572	6009	4	9	A	NA
Spr1-6	CS22583	8383	1	20	NA	A
m2-1	CS22584	8349	1	21	NA	G
Ull2-3	CS22587	8396	1	24	NA	G
Kz-9	CS22607	8322	1	44	NA	A
Ler-1	CS22618	8324	1	55	NA	G
Ra-0	CS22632	8364	1	69	NA	A
Ga-0	CS22634	8295	1	71	NA	G
Mt-0	CS22642	8341	1	79	NA	G
Edi-0	CS22657	8288	1	94	NA	A

#### 6.50 SNP AtMSQTsnp 123(chrom=2, pos=1798445, alignment id=2109, alignment start=1798324)

Table 510: SNP AtMSQTsnp 123(chromosome=2, position=1798445, alignment id=2109, alignment start=1798324)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	3	0	0	0	0	0	0	0
$\mathbf{A}$	0	2	56	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	1	0	37	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 511: detailed difference for SNP AtMSQTsnp 123

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	A	NA
Bor-1	CS22590	5837	1	27	G	A
Ren-11	CS22611	8368	1	48	A	NA
Uod-7	CS22613	8399	1	50	NA	G
Shahdara	CS22652	8248	1	89	G	NA
Bur-0	CS22656	8272	1	93	NA	G
Oy-0	CS22658	8352	1	95	NA	G

#### 6.51 SNP AtMSQTsnp 126(chrom=2, pos=2477756, alignment id=2192, alignment start=2477306)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	3	0	11	0	0	0	0	0	0	0
A	0	0	27	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	56	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 513: detailed difference for SNP AtMSQTsnp 126

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Eden-2	CS22573	8287	1	10	NA	G
Spr1-2	CS22582	8382	1	19	NA	A
Bor-1	CS22590	5837	1	27	NA	G
Bor-1	CS22590	5837	2	27	NA	G
Tamm-2	CS22604	8390	1	41	NA	A
Kz-1	CS22606	8320	1	43	NA	G
Ren-11	CS22611	8368	1	48	G	NA
Cvi-0	CS22614	8281	1	51	NA	G
C24	CS22620	8273	1	57	NA	G
Wei-0	CS22622	8404	1	59	NA	G
Mz-0	CS22636	8342	1	73	NA	G
Wt-5	CS22637	8407	1	74	NA	G
Mt-0	CS22642	8341	1	79	NA	G
Se-0	CS22646	8379	1	83	NA	G
Shahdara	CS22652	8248	1	89	NA	A

#### 6.52 SNP AtMSQTsnp 128(chrom=2, pos=5021020, alignment id=1514, alignment start=5020871)

	-	NA	Α	С	G	T	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	2	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	66	0	0	0	0	0	0	0
T	0	1	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 515: detailed difference for SNP AtMSQTsnp 128

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	Τ	NA
Bor-4	CS22591	8268	1	28	NA	G
Uod-7	CS22613	8399	1	50	NA	G

#### 6.53 SNP AtMSQTsnp 129(chrom=2, pos=5804076, alignment id=407, alignment start=5803805)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	6	2	0	0	0	0	0	0	0	0	0
A	0	27	3	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	55	1	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	1	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 517: detailed difference for SNP AtMSQTsnp 129  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_cal
RRS-10	CS22565	8372	1	2	G	NA
Kno-10	CS22566	8317	1	3	G	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	G	NA
Pna-17	CS22570	8359	1	7	G	NA
Pna-10	CS22571	8358	1	8	G	NA
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	1	11	NA	A
Lv-5	CS22575	6046	1	12	NA	A
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	A	NA NA
Spr1-6	CS22582 CS22583	8383	1	$\begin{vmatrix} 19 \\ 20 \end{vmatrix}$	A	NA NA
m2-1	CS22584	8349	1	$\begin{bmatrix} 20 \\ 21 \end{bmatrix}$	G	NA NA
				$\begin{bmatrix} 21\\22 \end{bmatrix}$		NA NA
m2-3	CS22585	8350	1		A	
Ull2-5	CS22586	8397	1	23	G	NA
Ull2-3	CS22587	8396	1	24	A	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	G	NA
Bor-1	CS22590	5837	1	27	G	A
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	G	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	G	NA
Sq-8	CS22601	8385	1	38	G	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	G	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-9	CS22607	8322	1	44	A	NA
Got-7	CS22608	8299	1	45	G	NA
Got-12	CS22609	8298	1	46	G	NA NA
Uod-1	CS22612	8398	1	49	G	NA NA
Uod-7	CS22612 CS22613		1	50	G	NA NA
		8399			G	
Cvi-0	CS22614	8281	1	51		NA NA
Ei-2	CS22616	8289	1	53	A	NA
Gu-0	CS22617	8301	1	54	A	NA
Ler-1	CS22618	8324	1	55	G	NA
Nd-1	CS22619	8344	1	56	A	NA
C24	CS22620	8273	1	57	G	NA
N13	CS22491	8429	1	58	G	NA
Wei-0	CS22622	8404	1	59	G	NA
Ws-0	CS22623	8405	1	60	A	NA
Yo-0	CS22624	8408	1	61	G	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	G	NA
Van-0	CS22627	8400	1	64	AG	NA
Br-0	CS22628	8269	1	65	G	NA

Est-1	CS22629	8291	1	66	G	NA
Gy-0	CS22631	8302	1	68	Ä	NA
Bay-0	CS22633	8260	1	70	A	NA
Ga-0	CS22634	8295	$\frac{1}{1}$	71	G	NA
Mrk-0	CS22635	8339	1	72	G	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	G	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	A	NA
Ts-1	CS22647	8392	1	84	A	NA
Ts-5	CS22648	8393	1	85	A	NA
Pro-0	CS22649	8360	1	86	A	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	G	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	G	NA
Bur-0	CS22656	8272	1	93	A	NA
Edi-0	CS22657	8288	1	94	A	NA
Oy-0	CS22658	8352	1	95	G	NA
Ws-2	CS22659	8406	1	96	G	NA

## 6.54 SNP AtMSQTsnp 130(chrom=2, pos=6499679, alignment id=2098, alignment start=6499196)

Table 518: SNP AtMSQTsnp 130(chromosome=2, position=6499679, alignment id=2098, alignment start=6499196)

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	6	0	13	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	24	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	3	0	1	0	53	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 519: detailed difference for SNP AtMSQTsnp 130

nativename	stkparent	$ecotype\_id$	duplicate	$accession\_id$	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Т	NA
Ull2-5	CS22586	8397	1	23	NA	T
Bor-1	CS22590	5837	1	27	${ m T}$	C
NFA-8	CS22598	8346	1	35	NA	T
Tamm-27	CS22605	8391	1	42	NA	T
Ren-1	CS22610	8367	1	47	NA	T
Ren-11	CS22611	8368	1	48	${ m T}$	NA
Uod-1	CS22612	8398	1	49	NA	C
Uod-7	CS22613	8399	1	50	NA	C
Cvi-0	CS22614	8281	1	51	NA	T
Gu-0	CS22617	8301	1	54	NA	C
N13	CS22491	8429	1	58	NA	T
Wei-0	CS22622	8404	1	59	NA	T
Ga-0	CS22634	8295	1	71	NA	T
Mz-0	CS22636	8342	1	73	NA	T
Wt-5	CS22637	8407	1	74	NA	T
Mr-0	CS22640	8338	1	77	NA	C
Fei-0	CS22645	8294	1	82	NA	T
Se-0	CS22646	8379	1	83	NA	C
LL-0	CS22650	8328	1	87	NA	C
Shahdara	CS22652	8248	1	89	${ m T}$	NA
Sorbo	CS22653	8381	1	90	NA	T
Ws-2	CS22659	8406	1	96	NA	T

#### 6.55 SNP AtMSQTsnp 132(chrom=2, pos=7072955, alignment id=367, alignment start=7072571)

Table 520: SNP AtMSQTsnp 132(chromosome=2, position=7072955, alignment id=367, alignment start=7072571)

	_	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	1	0	50	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	2	0	0	0	46	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 521: detailed difference for SNP AtMSQTsnp 132

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Kno-10	CS22566	8317	1	3	NA	Т
Eden-1	CS22572	6009	4	9	$^{\mathrm{C}}$	NA
Ren-11	CS22611	8368	1	48	${ m T}$	NA
Shahdara	CS22652	8248	1	89	${ m T}$	NA

### 6.56 SNP AtMSQTsnp 138(chrom=2, pos=8371133, alignment id=373, alignment start=8370574)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	6	0	33	0	1	0	0	0	0	5	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	52	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 523: detailed difference for SNP AtMSQTsnp 138  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	3	9	С	NA
Eden-1	CS22572	6009	4	9	$\mathbf{C}$	NA
Lv-5	CS22575	6046	1	12	$\mathbf{C}$	NA
Fb-4	CS22577	8293	1	14	NA	C
CIBC-5	CS22602	8277	1	39	С	CT
Got-22	CS22609	8298	1	46	$\mathbf{C}$	NA
Ren-11	CS22611	8368	1	48	$^{\mathrm{C}}$	NA
C24	CS22620	8273	1	57	$^{\mathrm{C}}$	CT
Wei-0	CS22622	8404	1	59	$^{\mathrm{C}}$	NA
Yo-0	CS22624	8408	1	61	$^{\mathrm{C}}$	CT
Tsu-1	CS22641	8394	1	78	$^{\mathrm{C}}$	T
Mt-0	CS22642	8341	1	79	С	CT
Shahdara	CS22652	8248	1	89	${ m T}$	NA
Kin-0	CS22654	8316	1	91	С	CT

6.57 SNP AtMSQTsnp 140(chrom=2, pos=8750047, alignment id=1072, alignment start=8749828)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	1	0	0	0	0	0	0	0	0	0
NA	0	0	3	2	0	0	0	0	0	0	0	0
A	0	1	58	0	0	0	0	0	0	0	0	0
C	0	1	1	32	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mid T \mid$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 525: detailed difference for SNP AtMSQTsnp 140

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	С	A
Rmx-A180	CS22569	8371	1	6	NA	C
Eden-1	CS22572	6009	4	9	A	NA
Zdr-6	CS22589	8410	1	26	NA	A
HR-5	CS22596	8309	1	33	NA	C
Ren-11	CS22611	8368	1	48	$^{\mathrm{C}}$	NA
Cvi-0	CS22614	8281	1	51	-	A
Fei-0	CS22645	8294	1	82	NA	A
Sorbo	CS22653	8381	1	90	NA	A

### 6.58 SNP AtMSQTsnp 142(chrom=2, pos=9256095, alignment id=223, alignment start=9256049)

Table 526: SNP AtMSQTsnp 142(chromosome=2, position=9256095, alignment id=223, alignment start=9256049)

	-	NA	A	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	14	0	11	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	40	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	33	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 527: detailed difference for SNP AtMSQTsnp 142

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	NA	Т
Eden-1	CS22572	6009	1	9	NA	T
Eden-1	CS22572	6009	2	9	NA	$\Gamma$
Eden-1	CS22572	6009	3	9	NA	$\Gamma$
Zdr-6	CS22589	8410	1	26	NA	C
Bor-1	CS22590	5837	1	27	NA	C
Bor-1	CS22590	5837	2	27	NA	T
Kz-1	CS22606	8320	1	43	NA	C
Kz-9	CS22607	8322	1	44	NA	T
Ren-11	CS22611	8368	1	48	${ m T}$	NA
Cvi-0	CS22614	8281	1	51	NA	C
Lz-0	CS22615	8336	1	52	NA	C
Ws-0	CS22623	8405	1	60	NA	T
Yo-0	CS22624	8408	1	61	NA	C
Van-0	CS22627	8400	1	64	NA	T
Est-1	CS22629	8291	1	66	NA	C
Ra-0	CS22632	8364	1	69	NA	C
Wt-5	CS22637	8407	1	74	NA	T
Ct-1	CS22639	8280	1	76	NA	C
Mr-0	CS22640	8338	1	77	NA	T

Fei-0	CS22645	8294	1	82	NA	C	
Ts-5	CS22648	8393	1	85	NA	T	
Pro-0	CS22649	8360	1	86	NA	C	
Sorbo	CS22653	8381	1	90	NA	C	
Kin-0	CS22654	8316	1	91	NA	C	
Ws-2	CS22659	8406	1	96	NA	C	

### 6.59 SNP AtMSQTsnp 143(chrom=2, pos=9428987, alignment id=376, alignment start=9428891)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	5	0	0	0	0	0	0	0	0	0
A	0	2	55	0	0	0	0	0	0	0	0	0
C	0	0	0	37	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 529: detailed difference for SNP AtMSQTsnp 143

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	1	9	NA	A
Eden-1	CS22572	6009	2	9	NA	A
Eden-1	CS22572	6009	3	9	NA	A
Lv-1	CS22574	6043	2	11	A	NA
Ull2-5	CS22586	8397	1	23	NA	A
Sq-8	CS22601	8385	1	38	NA	A
Ren-11	CS22611	8368	1	48	A	NA

### 6.60 SNP AtMSQTsnp 145(chrom=2, pos=10566917, alignment id=381, alignment start=10566416)

	-	NA	Α	С	G	T	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	8	0	3	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	37	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	2	0	1	0	46	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 531: detailed difference for SNP AtMSQTsnp 145

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	Т	NA
Vr2-1	CS22580	8401	1	17	C	NA
Bor-1	CS22590	5837	1	27	$\mid T \mid$	C
Ren-11	CS22611	8368	1	48	C	NA
Lz-0	CS22615	8336	1	52	NA	C
Ei-2	CS22616	8289	1	53	NA	C
Ws-0	CS22623	8405	1	60	NA	C
Yo-0	CS22624	8408	1	61	NA	$\Gamma$
Br-0	CS22628	8269	1	65	$\mid \mathrm{T} \mid$	NA

Ag-0	CS22630	8251	1	67	NA	C	
Ra-0	CS22632	8364	1	69	NA	C	
Ct-1	CS22639	8280	1	76	NA	C	
Mr-0	CS22640	8338	1	77	NA	T	
Ts-1	CS22647	8392	1	84	NA	T	
Ts-5	CS22648	8393	1	85	NA	C	
Kin-0	CS22654	8316	1	91	NA	C	

# $6.61 \quad SNP \ AtMSQTsnp \ 146 (chrom=2, \ pos=10703371, \ alignment \ id=380, \ alignment \ start=10702850)$

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	0	1	0	0	0	0	0	0	0
A	0	33	30	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	8	0	0	0	0	0	0	0	0	0	0
G	0	10	0	0	15	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 533: detailed difference for SNP AtMSQTsnp  $146\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	1	9	A	NA
Eden-1	CS22572	6009	2	9	A	NA
Eden-1	CS22572	6009	3	9	A	NA
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Vr2-6	CS22581	8402	1	18	A	NA
m2-1	CS22584	8349	1	21	A	NA
Zdr-6	CS22589	8410	1	26	A	NA
Pu2-23	CS22593	8361	1	30	С	NA
HR-5	CS22596	8309	1	33	С	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-10	CS22599	8345	1	36	G	NA
Sq-1	CS22600	8384	1	37	G	NA
CIBC-5	CS22602	8277	1	39	С	NA
Tamm-27	CS22605	8391	1	42	A	NA
Got-7	CS22608	8299	1	45	A	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	$^{\mathrm{C}}$	NA
Ren-11	CS22611	8368	1	48	$\mathbf{C}$	NA
Cvi-0	CS22614	8281	1	51	A	NA
Ler-1	CS22618	8324	1	55	A	NA
N13	CS22491	8429	1	58	A	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	A	NA
Yo-0	CS22624	8408	1	61	G	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	$^{\mathrm{C}}$	NA
Van-0	CS22627	8400	1	64	NA	G
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	$^{\mathrm{C}}$	NA
Ra-0	CS22632	8364	1	69	A	NA
Bay-0	CS22633	8260	1	70	A	NA
Ga-0	CS22634	8295	1	71	A	NA
Mrk-0	CS22635	8339	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A	NA
Wt-5	CS22637	8407	1	74	A	NA
Ct-1	CS22639	8280	1	76	A	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	A	NA
Mt-0	CS22642	8341	1	79	A	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	C	NA
Se-0	CS22646	8379	1	83	G	NA NA

Ts-1	CS22647	8392	1	84	G	NA	
Ts-5	CS22648	8393	1	85	A	NA	
Pro-0	CS22649	8360	1	86	G	NA	
LL-0	CS22650	8328	1	87	A	NA	
Bur-0	CS22656	8272	1	93	A	NA	
Edi-0	CS22657	8288	1	94	G	NA	
Oy-0	CS22658	8352	1	95	A	NA	

## 6.62 SNP AtMSQTsnp 155(chrom=2, pos=12657149, alignment id=38, alignment start=12656716)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	3	0	0	0	0	0	0	0	0	0
A	0	43	2	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	47	0	0	1	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 535: detailed difference for SNP AtMSQTsnp 155  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	G	NA
Kno-10	CS22566	8317	1	3	G	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	G	NA
Pna-10	CS22571	8358	1	8	G	NA
Eden-1	CS22572	6009	1	9	NA	A
Eden-1	CS22572	6009	2	9	NA	A
Eden-1	CS22572	6009	3	9	NA	A
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Fb-2	CS22576	8292	1	13	G	NA
Fb-4	CS22577	8293	1	14	G	NA
Bil-5	CS22578	8262	1	15	A	NA
Bil-7	CS22579	8263	1	16	A	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	A	NA
Spr1-2	CS22582	8382	1	19	G	NA
Spr1-6	CS22583	8383	1	20	G	NA
m2-1	CS22584	8349	1	21	G	NA
m2-3	CS22585	8350	1	22	A	NA
Ull2-5	CS22586	8397	1	23	A	NA
Ull2-3	CS22587	8396	1	24	G	NA
Zdr-1	CS22588	8409	1	25	A	NA
Zdr-6	CS22589	8410	1	26	A	NA
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	A	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	A	NA
Lp2-2	CS22594	8332	1	31	A	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	G	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	G	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	G	NA
CIBC-5	CS22602	8277	1	39	A	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA
Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	A	NA
Got-7	CS22608	8299	1	45	G	NA
Got-22	CS22609	8298	1	46	Ğ	NA

Ren-1	CS22610	8367	1	47	G	NA
Ren-11	CS22611	8368	1	48	Ğ	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	Ğ	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	G	NA
Gu-0	CS22617	8301	1	54	Ğ	NA
Ler-1	CS22618	8324	1	55	A	NA
Nd-1	CS22619	8344	1	56	G	NA
C24	CS22620	8273	1	57	Ğ	NA
N13	CS22491	8429	1	58	Ā	NA
Wei-0	CS22622	8404	1	59	G	NA
Ws-0	CS22623	8405	1	60	G	NA
Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	62	G	NA
An-1	CS22626	8253	1	63	A	NA
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	G	NA
Ag-0	CS22630	8251	1	67	A	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	G	NA
Bay-0	CS22633	8260	1	70	A	NA
Ga-0	CS22634	8295	1	71	G	NA
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	A	NA
Ct-1	CS22639	8280	1	76	A	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	A	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	A	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	A	NA
Bur-0	CS22656	8272	1	93	G	NA
Edi-0	CS22657	8288	1	94	G	NA
Oy-0	CS22658	8352	1	95	A	NA
Ws-2	CS22659	8406	1	96	G	NA

# 6.63 SNP AtMSQTsnp 156(chrom=2, pos=12658862, alignment id=2572, alignment start=12658576)

Table 536: SNP AtMSQTsnp 156(chromosome=2, position=12658862, alignment id=2572, alignment start=12658576)

	1	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	1	0	0	0	0	0	0	0	0	0	0
NA	0	6	0	3	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	36	0	2	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	51	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 537: detailed difference for SNP AtMSQTsnp 156  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	Т	NA
Kno-10	CS22566	8317	1	3	T	NA
Kno-18	CS22567	8318	1	4	T	NA
Rmx-A02	CS22568	8370	1	5	$\Gamma$	NA

Pna-17	CS22570	8359	1	7	T	NA
Pna-10	CS22571	8358	1	8	T	NA
Eden-1	CS22572	6009	1	9	NA	C
Eden-1	CS22572	6009	2	9	NA	C
Eden-1	CS22572	6009	3	9	NA	C
Lv-1	CS22574	6043	2	11	C	NA
Lv-5	CS22575	6046	$\frac{1}{2}$	12	$\stackrel{\circ}{\mathrm{C}}$	NA
Fb-2	CS22576	8292	1	13	$\begin{array}{c} C \\ T \end{array}$	NA
Fb-4	CS22577	8293	1	14	$\begin{array}{ c c }\hline T\end{array}$	NA NA
Bil-5	CS22577 CS22578	8262	1	15	$\frac{1}{C}$	NA NA
Bil-7	CS22579	8263	1	16	C	NA
Vr2-1	CS22580	8401	1	17	T	NA
Vr2-6	CS22581	8402	1	18	C	NA
Spr1-2	CS22582	8382	1	19	T	NA
Spr1-6	CS22583	8383	1	20	-	NA
m2-1	CS22584	8349	1	21	T	NA
m2-3	CS22585	8350	1	22	C	NA
Ull2-5	CS22586	8397	1	23	C	NA
Ull2-3	CS22587	8396	1	24	$\Gamma$	NA
Zdr-1	CS22588	8409	1	25	C	NA
Zdr-6	CS22589	8410	1	26	C	NA
Bor-1	CS22590	5837	2	27	$_{ m T}$	NA
Bor-4	CS22591	8268	1	28	C	NA
Pu2-7	CS22592	8362	1	29	$\begin{array}{c} T \end{array}$	NA
Pu2-23	CS22593	8361	1	$\begin{vmatrix} 29 \\ 30 \end{vmatrix}$	$\frac{1}{C}$	NA NA
Lp2-2	CS22593 CS22594	8332	1	31	C	NA NA
_						
Lp2-6	CS22595	8333	1	32	T	NA
HR-5	CS22596	8309	1	33	T	NA
HR-10	CS22597	8308	1	34	T	NA
NFA-8	CS22598	8346	1	35	T	NA
NFA-10	CS22599	8345	1	36	C	NA
Sq-1	CS22600	8384	1	37	C	NA
Sq-8	CS22601	8385	1	38	$\Gamma$	NA
CIBC-5	CS22602	8277	1	39	C	NA
CIBC-17	CS22603	8276	1	40	C	NA
Tamm-2	CS22604	8390	1	41	C	NA
Tamm-27	CS22605	8391	1	42	C	NA
Kz-1	CS22606	8320	1	43	Č	NA
Kz-9	CS22607	8322	1	44	C	NA
Got-7	CS22608	8299	1	45	$\begin{array}{ c c }\hline T\end{array}$	NA NA
			1	46	$\frac{1}{T}$	NA NA
Got-22	CS22609	8298			1	
Ren-1	CS22610	8367	1	47	T	NA
Ren-11	CS22611	8368	1	48	T	NA
Uod-1	CS22612	8398	1	49	T	NA
Uod-7	CS22613	8399	1	50	T	NA
Cvi-0	CS22614	8281	1	51	T	NA
Lz-0	CS22615	8336	1	52	C	NA
Ei-2	CS22616	8289	1	53	T	NA
Gu-0	CS22617	8301	1	54	T	NA
Ler-1	CS22618	8324	1	55	C	NA
Nd-1	CS22619	8344	1	56	$\Gamma$	NA
C24	CS22620	8273	1	57	$_{ m T}$	NA
N13	CS22491	8429	1	58	$_{\mathrm{T}}$	NA
Wei-0	CS22622	8404	1	59	T	NA
Ws-0	CS22623	8405	1	60	T	NA
Col-0	CS22625	8279	1	62	$\mid { m T} \mid$	NA NA
An-1	CS22626	8253	1	63	$\frac{1}{C}$	NA NA
Van-0	CS22627	8400	1	64	$\begin{array}{ c c }\hline T\end{array}$	NA NA
Br-0	CS22628	8269	1	65	$\frac{1}{C}$	NA NA
Est-1	CS22628 CS22629	8291	1	66	$\begin{array}{ c c }\hline T \end{array}$	NA NA
Ag-0		8291 8251	1	67	$\begin{array}{ c c }\hline 1 \\ C \end{array}$	NA NA
_	CS22630				C	
Gy-0	CS22631	8302	1	68		NA NA
Ra-0	CS22632	8364	1	69	T	NA
Bay-0	CS22633	8260	1	70	C	NA
Ga-0	CS22634	8295	1	71	T	NA
Mrk-0	CS22635	8339	1	72	C	NA
Mz-0	CS22636	8342	1	73	T	NA
Wt-5	CS22637	8407	1	74	C	NA
Ct-1	CS22639	8280	1	76	T	NA
Mr-0	CS22640	8338	1	77	C	NA
Tsu-1	CS22641	8394	1	78	$\Gamma$	NA
Nok-3	CS22643	8347	1	80	T	NA
Wa-1	CS22644	8403	1	81	T	NA
Se-0	CS22646	8379	1	83	T	NA
Ts-1	CS22647	8392	1	84	$_{\mathrm{T}}$	NA
Ts-5	CS22648	8393	1	85	$\overline{\mathbf{C}}$	NA
Pro-0	CS22649	8360	1	86	T	NA
LL-0	CS22650	8328	1	87	T	NA
Kondara	CS22651	8319	1	88	C	NA NA
Shahdara	CS22652	8248	1	89	$\stackrel{\circ}{\text{C}}$	NA NA
Sorbo	CS22653	8381	1	90	$\stackrel{\circ}{\operatorname{C}}$	NA NA
1 ~3100	5522000	1 0001	1 ~	1 00	1	1

Kin-0	CS22654	8316	1	91	Τ	NA	
Ms-0	CS22655	8340	1	92	$\mathbf{C}$	NA	
Bur-0	CS22656	8272	1	93	T	NA	
Edi-0	CS22657	8288	1	94	T	NA	
Oy-0	CS22658	8352	1	95	С	NA	
Ws-2	CS22659	8406	1	96	T	NA	

### 6.64 SNP AtMSQTsnp 159(chrom=2, pos=13265124, alignment id=2127, alignment start=13265029)

	-	NA	A	С	G	Т	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	1	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	46	0	2	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	3	0	45	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 539: detailed difference for SNP AtMSQTsnp 159  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	Т	NA
Bor-1	CS22590	5837	1	27	${ m T}$	C
NFA-10	CS22599	8345	1	36	$\mathbf{C}$	T
CIBC-17	CS22603	8276	1	40	$\mathbf{C}$	T
Ren-11	CS22611	8368	1	48	${ m T}$	NA
Lz-0	CS22615	8336	1	52	${ m T}$	C
Ler-1	CS22618	8324	1	55	${ m T}$	C
Kin-0	CS22654	8316	1	91	NA	C

### 6.65 SNP AtMSQTsnp 164(chrom=2, pos=14003409, alignment id=2631, alignment start=14003272)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	9	0	0	0	0	0	0	0	0	0	0
A	0	27	1	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	58	0	5	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 541: detailed difference for SNP AtMSQTsnp 164

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	A	NA
Kno-10	CS22566	8317	1	3	A	NA
Kno-18	CS22567	8318	1	4	A	NA
Rmx-A02	CS22568	8370	1	5	A	NA
Rmx-A180	CS22569	8371	1	6	A	NA
Pna-17	CS22570	8359	1	7	$^{\mathrm{C}}$	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	9	$^{\mathrm{C}}$	NA

Lv-1	CS22574	6043	2	11	C	NA
Lv-5	CS22575	6046	2	12	С	NA
Fb-2	CS22576	8292	1	13	A	NA
Fb-4		8293	1	14	A	NA NA
	CS22577					
Bil-5	CS22578	8262	1	15	С	NA
Bil-7	CS22579	8263	1	16	C	NA
Vr2-1	CS22580	8401	1	17	C	NA
Vr2-6	CS22581	8402	1	18	C	NA
Spr1-2	CS22582	8382	1	19	$\stackrel{\circ}{\mathrm{C}}$	NA
*						
Spr1-6	CS22583	8383	1	20	С	NA
m2-1	CS22584	8349	1	21	С	NA
m2-3	CS22585	8350	1	22	C	NA
Ull2-5	CS22586	8397	1	23	С	NA
Ull2-3	CS22587	8396	1	$\begin{vmatrix} 26\\24 \end{vmatrix}$	$\tilde{C}$	NA
Zdr-1	CS22588	8409	1	25	C	NA
Zdr-6	CS22589	8410	1	26	С	NA
Bor-1	CS22590	5837	2	27	A	NA
Bor-4	CS22591	8268	1	28	A	NA
Pu2-7	CS22592	8362	1	$\begin{bmatrix} 20 \\ 29 \end{bmatrix}$	$\frac{\alpha}{C}$	NA
Pu2-23	CS22593	8361	1	30	С	NA
Lp2-2	CS22594	8332	1	31	C	NA
Lp2-6	CS22595	8333	1	32	С	NA
HR-10	CS22597	8308	1	34	A	NA
NFA-10	CS22599	8345	1	36	C	NA
Sq-1	CS22600	8384	1	37	С	NA
Sq-8	CS22601	8385	1	38	С	NA
CIBC-5	CS22602	8277	1	39	A	NA
CIBC-17	CS22602	8276	1	$\begin{vmatrix} 39 \\ 40 \end{vmatrix}$	$\frac{\Lambda}{C}$	NA
Tamm-27	CS22605	8391	1	42	C	NA
Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	C	NA
Got-7	CS22608	8299	1	45	С	NA
Got-22	CS22609	8298		46	C	NA
			1			
Ren-1	CS22610	8367	1	47	C	NA
Ren-11	CS22611	8368	1	48	C	NA
Uod-1	CS22612	8398	1	49	A	NA
Uod-7	CS22613	8399	1	50	C	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	C	NA
Gu-0	CS22617	8301	1	54	С	NA
Ler-1	CS22618	8324	1	55	A	NA
Nd-1	CS22619	8344	1	56	A	NA
C24	CS22620	8273	1	57	A	NA
N13	CS22491	8429	1	58	C	NA
Ws-0	CS22623	8405	1	60	C	NA
			1	$\begin{vmatrix} 60 \\ 61 \end{vmatrix}$	$\stackrel{\circ}{\mathrm{C}}$	NA
Yo-0	CS22624	8408				
Col-0	CS22625	8279	1	62	С	NA
An-1	CS22626	8253	1	63	C	NA
Van-0	CS22627	8400	1	64	С	NA
Est-1	CS22629	8291	1	66	C	NA
				67		NA NA
Ag-0	CS22630	8251	1		A	
Gy-0	CS22631	8302	1	68	C	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	С	NA
Mz-0	CS22636	8342	1	73	C	NA
Wt-5	CS22637	8407	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	C	NA
Ct-1	CS22639	8280	1	76	C	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	A	NA
Mt-0	CS22642	8341	1	79	C	NA
Nok-3	CS22643	8347	1	80	$\frac{C}{C}$	NA NA
Wa-1	CS22644	8403	1	81	C	NA
Fei-0	CS22645	8294	1	82	C	NA
Se-0	CS22646	8379	1	83	С	NA
Ts-5	CS22648	8393	1	85	$\ddot{\mathrm{C}}$	NA
Pro-0			1		$\frac{C}{C}$	NA NA
	CS22649	8360		86		
LL-0	CS22650	8328	1	87	С	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	С	NA
Sorbo	CS22653	8381	1	$\begin{vmatrix} 99 \\ 90 \end{vmatrix}$	A	NA NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	С	NA
Bur-0	CS22656	8272	1	93	С	NA
Edi-0	CS22657	8288	1	94	A	NA
Oy-0	CS22658	8352	1	95	C	NA NA
Ws-2	CS22659	8406	1	96	A	NA

Table 542: SNP AtMSQTsnp 169(chromosome=2, position=15801542, alignment id=396, alignment start=15801112)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	64	0	0	0	0	0	0	0
T	0	1	0	0	0	34	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
СТ	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 543: detailed difference for SNP AtMSQTsnp 169

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Τ	NA
Shahdara	CS22652	8248	1	89	G	NA

### 6.67 SNP AtMSQTsnp 170(chrom=2, pos=15986354, alignment id=2292, alignment start=15986145)

Table 544: SNP AtMSQTsnp 170(chromosome=2, position=15986354, alignment id=2292, alignment start=15986145)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	0	0	0	0	0	0	0	0	0
A	0	42	2	0	0	0	0	0	0	0	0	0
C	0	44	0	4	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 545: detailed difference for SNP AtMSQTsnp 170  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	С	NA
Kno-10	CS22566	8317	1	3	С	NA
Kno-18	CS22567	8318	1	4	A	NA
Rmx-A02	CS22568	8370	1	5	C	NA
Pna-17	CS22570	8359	1	7	C	NA
Eden-1	CS22572	6009	4	9	C	NA
Eden-2	CS22573	8287	1	10	C	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Fb-2	CS22576	8292	1	13	C	NA
Fb-4	CS22577	8293	1	14	C	NA
Bil-5	CS22578	8262	1	15	C	NA
Bil-7	CS22579	8263	1	16	C	NA
Vr2-1	CS22580	8401	1	17	C	NA
Vr2-6	CS22581	8402	1	18	C	NA
Spr1-2	CS22582	8382	1	19	A	NA
Spr1-6	CS22583	8383	1	20	С	NA
m2-1	CS22584	8349	1	21	A	NA
Ull2-5	CS22586	8397	1	23	A	NA
Zdr-1	CS22588	8409	1	25	C	NA
Zdr-6	CS22589	8410	1	26	C	NA
Bor-1	CS22590	5837	2	27	C	NA
Bor-4	CS22591	8268	1	28	C	NA
Pu2-7	CS22592	8362	1	29	A	NA

		ì				1
Pu2-23	CS22593	8361	1	30	A	NA
Lp2-2	CS22594	8332	1	31	С	NA
Lp2-6	CS22595	8333	1	32	С	NA
HR-5	CS22596	8309	1	33	C	NA
HR-10	CS22597	8308	1	34	С	NA
NFA-8	CS22598	8346	1	35	С	NA
NFA-10	CS22599	8345	1	36	Ā	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	$\frac{1}{C}$	NA
CIBC-5	CS22602	8277	1	39	A	NA NA
CIBC-3	CS22602 CS22603	8276	1	40	A	NA NA
Tamm-2	CS22604	8390	1	40	C	NA NA
					C	
Tamm-27	CS22605	8391	1	42		NA
Kz-1	CS22606	8320	1	43	C	NA
Kz-9	CS22607	8322	1	44	C	NA
Got-7	CS22608	8299	1	45	A	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	С	NA
Ren-11	CS22611	8368	1	48	A	NA
Uod-1	CS22612	8398	1	49	A	NA
Uod-7	CS22613	8399	1	50	С	NA
Cvi-0	CS22614	8281	1	51	С	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	С	NA
Gu-0	CS22617	8301	1	54	C	NA
Ler-1	CS22618	8324	1	55	Ā	NA
Nd-1	CS22619	8344	1	56	A	NA
C24	CS22620	8273	1	57	$\frac{\Lambda}{C}$	NA NA
N13	CS22491	8429	1	58	$\stackrel{\circ}{\text{C}}$	NA NA
Wei-0	CS22622	8404	1	59	C	NA NA
Ws-0			1	60	A	NA NA
	CS22623	8405			C	
Yo-0	CS22624	8408	1	61	1	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	A	NA
Van-0	CS22627	8400	1	64	A	NA
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22630	8251	1	67	C	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	A	NA
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	A	NA
Wt-5	CS22637	8407	1	74	С	NA
Ct-1	CS22639	8280	1	76	С	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	A	NA
Mt-0	CS22642	8341	1	79	C	NA
Nok-3	CS22643	8347	1	80	A	NA
Wa-1	CS22644	8403	1	81	C	NA
Fei-0	CS22645	8294	1	82	$\stackrel{\circ}{\mathrm{C}}$	NA
Se-0	CS22646	8379	1	83	A	NA NA
Ts-1		8392	1	84	A	NA NA
Ts-5	CS22647 CS22648			85	A	NA NA
		8393	1			
Pro-0	CS22649	8360	1	86	A	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	C	NA
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	A	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	A	NA
Edi-0	CS22657	8288	1	94	A	NA

# 6.68 SNP AtMSQTsnp 173(chrom=2, pos=16908190, alignment id=728, alignment start=16908054)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	2	0	0	0	0	0	0	0
A	0	0	45	0	1	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	50	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0

AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 547: detailed difference for SNP AtMSQTsnp 173

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	NA	G
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Sorbo	CS22653	8381	1	90	NA	G
Ms-0	CS22655	8340	1	92	A	G

### $6.69 \quad SNP \ AtMSQTsnp \ 174 (chrom=2, pos=17121378, alignment \ id=2453, alignment \ start=17121159)$

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	9	0	12	0	0	0	0	0	0	0
A	0	0	31	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	46	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 549: detailed difference for SNP AtMSQTsnp 174

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	1	9	NA	G
			_	_		
Eden-1	CS22572	6009	2	9	NA	G
Eden-1	CS22572	6009	3	9	NA	G
Lv-1	CS22574	6043	1	11	NA	G
Lv-1	CS22574	6043	2	11	NA	G
Fb-2	CS22576	8292	1	13	NA	G
Ull2-5	CS22586	8397	1	23	NA	G
CIBC-17	CS22603	8276	1	40	NA	G
Van-0	CS22627	8400	1	64	NA	A
Ag-0	CS22630	8251	1	67	NA	A
Ga-0	CS22634	8295	1	71	NA	G
Mrk-0	CS22635	8339	1	72	NA	A
Ct-1	CS22639	8280	1	76	NA	A
Mr-0	CS22640	8338	1	77	NA	G
Mt-0	CS22642	8341	1	79	NA	A
Nok-3	CS22643	8347	1	80	NA	A
Wa-1	CS22644	8403	1	81	NA	A
LL-0	CS22650	8328	1	87	NA	G
Kondara	CS22651	8319	1	88	NA	A
Oy-0	CS22658	8352	1	95	NA	G
Ws-2	CS22659	8406	1	96	NA	A

## $6.70 \quad \text{SNP AtMSQTsnp } 177 \text{(chrom=2, pos=17859964, alignment id=118, alignment start=17859576)}$

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	1	28	0	1	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0

G	0	0	0	0	68	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 551: detailed difference for SNP AtMSQTsnp 177  $\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Bor-1	CS22590	5837	1	27	A	G
Ts-1	CS22647	8392	1	84	NA	G
Ms-0	CS22655	8340	1	92	$\overline{AG}$	A

# 6.71 SNP AtMSQTsnp 184(chrom=2, pos=18752840, alignment id=1423, alignment start=18752604)

	T											
	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	17	0	0	0	6	0	0	0	0	0	0
A	0	21	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${\rm T}$	0	54	1	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 553: detailed difference for SNP AtMSQTsnp 184

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	T	NA
Rmx-A02	CS22568	8370	1	5	T	NA
Rmx-A180	CS22569	8371	1	6	T	NA
Pna-17	CS22570	8359	1	7	A	NA
Pna-10	CS22571	8358	1	8	NA	T
Eden-1	CS22572	6009	1	9	NA	T
Eden-1	CS22572	6009	2	9	NA	T
Eden-1	CS22572	6009	3	9	NA	T
Lv-1	CS22574	6043	1	11	NA	T
Lv-5	CS22575	6046	1	12	NA	T
Fb-2	CS22576	8292	1	13	T	NA
Fb-4	CS22577	8293	1	14	$\Gamma$	NA
Bil-5	CS22578	8262	1	15	$\Gamma$	NA
Bil-7	CS22579	8263	1	16	$\Gamma$	NA
Vr2-6	CS22581	8402	1	18	$\Gamma$	NA
Spr1-2	CS22582	8382	1	19	T	NA
Spr1-6	CS22583	8383	1	20	$\Gamma$	NA
m2-1	CS22584	8349	1	21	$\Gamma$	NA
m2-3	CS22585	8350	1	22	$\Gamma$	NA
Ull2-5	CS22586	8397	1	23	$\Gamma$	NA
Zdr-1	CS22588	8409	1	25	$\Gamma$	NA
Zdr-6	CS22589	8410	1	26	$\Gamma$	NA
Bor-1	CS22590	5837	1	27	$\Gamma$	A
Bor-1	CS22590	5837	2	27	$\Gamma$	NA
Bor-4	CS22591	8268	1	28	$\mid \mathrm{T}$	NA
Pu2-7	CS22592	8362	1	29	$\mid \mathrm{T} \mid$	NA
Pu2-23	CS22593	8361	1	30	$\Gamma$	NA
Lp2-2	CS22594	8332	1	31	$\Gamma$	NA
Lp2-6	CS22595	8333	1	32	$\Gamma$	NA
HR-5	CS22596	8309	1	33	${ m T}$	NA
HR-10	CS22597	8308	1	34	$\Gamma$	NA
NFA-8	CS22598	8346	1	35	$\Gamma$	NA
NFA-10	CS22599	8345	1	36	$\Gamma$	NA
Sq-1	CS22600	8384	1	37	$\Gamma$	NA

CIBC-5         CS22602         8277         1         39         T         NA           CIBC-17         CS22604         8390         1         40         T         NA           Tamm-2         CS22604         8390         1         41         T         NA           Kz-1         CS22606         8320         1         43         T         NA           Kz-9         CS22608         8299         1         45         A         NA           Got-7         CS22608         8299         1         45         A         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-1         CS22611         8368         1         48         A         NA           Ren-1         CS22618         3399         1         50         T         NA           Lz-0         CS22615         8366         1         51         T         NA           Lz-0         CS22618         8281         1         51         T         NA           Lz-0         CS22618         8289         1         53         A         NA           Gu-0 <t< th=""><th>  Sq-8</th><th>CS22601</th><th>8385</th><th>1</th><th>38</th><th>A</th><th>NA</th></t<>	Sq-8	CS22601	8385	1	38	A	NA
CIBC-17         CS22603         8276         1         40         T         NA           Tamm-2         CS22604         8390         1         41         T         NA           Kz-9         CS22606         8320         1         43         T         NA           Kz-9         CS22608         8299         1         45         A         NA           Got-2         CS22609         8298         1         46         A         NA           Got-2         CS22609         8298         1         46         A         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-11         CS22613         8368         1         48         A         NA           Lo-0         CS22613         8399         1         50         T         NA           Ei-2         CS22616         8289         1         53         A         NA           Cyi-0         CS22618         8360         1         52         T         NA           Gi-2         CS22616         8283         1         53         A         NA           Gu-0 <t< td=""><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	_						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1						
Kz-1         CS22606         8320         1         43         T         NA           Kz-9         CS22607         8322         1         44         T         NA           Got-7         CS22608         8299         1         45         A         NA           Got-22         CS22609         8298         1         46         A         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-11         CS22611         8368         1         48         A         NA           Uod-7         CS22613         8399         1         50         T         NA           Lz-0         CS22615         8336         1         52         T         NA           Eè-2         CS22616         8289         1         53         A         NA           Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           Ws-0         C							
Kg-9							
Got-7         CS22608         8299         1         45         A         NA           Got-22         CS22609         8298         1         46         A         NA           Ren-1         CS22610         8367         1         47         A         NA           Ren-11         CS22613         8368         1         48         A         NA           Cvi-0         CS22613         8399         1         50         T         NA           Lz-0         CS22615         8336         1         52         T         NA           Ei-2         CS22616         8289         1         53         A         NA           Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           N3         CS22619         8434         1         56         A         NA           Ws-0         CS22623         8405         1         60         A         NA           N3         CS226	1						
Got-22         CS22609         8298         1         46         A         NA           Ren-1         CS22610         83667         1         47         A         NA           Ren-11         CS22611         8368         1         48         A         NA           Uod-7         CS22613         8399         1         50         T         NA           Cvi-0         CS22615         8336         1         52         T         NA           Ei-2         CS22616         8289         1         53         A         NA           Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22621         8408         1         60         A         NA           Vo-0         CS22624         8408         1         61         A         NA           Vo-0         CS22624         8408         1         61         A         NA           Van-0         C							
Ren-1         CS22610         8367         1         47         A         NA           Ren-11         CS22611         8368         1         48         A         NA           Uod-7         CS22613         8399         1         50         T         NA           Cvi-0         CS22614         8281         1         51         T         NA           Lz-0         CS22615         8336         1         52         T         NA           Ei-2         CS22617         8301         1         54         T         NA           Gu-0         CS22618         8324         1         55         A         NA           Ler-1         CS22619         8344         1         56         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22625         8253         1         63         T         NA           Van-0         CS22							
Ren-11							
Uod-7         CS22613         8399         1         50         T         NA           Cvi-0         CS22614         8281         1         51         T         NA           Lz-0         CS22615         8336         1         52         T         NA           Ei-2         CS22616         8289         1         53         A         NA           Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22629         8291         1         58         T         NA           Ws-0         CS22623         8408         1         61         A         NA           Yo-0         CS22625         8253         1         63         T         NA           An-1         CS22626         8253         1         63         T         NA           Ag-0         CS22631<							
Cvi-0         CS22614         8281         1         51         T         NA           Lz-0         CS22615         8336         1         52         T         NA           Ei-2         CS22617         8301         1         53         A         NA           Gu-0         CS22618         8324         1         55         A         NA           Ler-1         CS22619         8344         1         56         A         NA           Nd-1         CS22619         8344         1         56         A         NA           V313         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           V5-0         CS22623         8405         1         60         A         NA           V6-0         CS22623         8279         1         62         T         NA           Van-0         CS22626         8253         1         63         T         NA           Van-0         CS22631         8301         1         66         T         NA           Gy-0         CS226							
Lz-0         CS22615         8336         1         52         T         NA           Ei-2         CS22616         8289         1         53         A         NA           Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           V24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Vo-0         CS22625         8279         1         62         T         NA           Lst-1         CS22626         8253         1         63         T         NA           Sest-1         CS22626         8291         1         66         T         NA           Ag-0         CS22631							
Ei-2         CS22616         8289         1         53         A         NA           Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Yo-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Ag-0         CS22626         8251         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Gy-0         CS22632 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Gu-0         CS22617         8301         1         54         T         NA           Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22624         8408         1         60         A         NA           Yo-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Van-0         CS22636         8253         1         63         T         NA           Est-1         CS22629         8291         1         66         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Bay-0         CS22634         8364         1         69         A         NA           Mz-0         CS22635							
Ler-1         CS22618         8324         1         55         A         NA           Nd-1         CS22619         8344         1         56         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         T         NA           Van-0         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Bay-0         CS22633         8260         1         70         A         NA           Mrk-0         CS226	1						
Nd-1         CS22619         8344         1         56         A         NA           C24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Yo-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           An-1         CS22629         8291         1         66         T         NA           Lest-1         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Bay-0         CS22633         8260         1         70         A         NA           Mrk-0         CS22634         8295         1         71         T         NA           Mz-0         CS22639	1						
C24         CS22620         8273         1         57         T         NA           N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Est-1         CS22630         8251         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Ra-0         CS22631         8302         1         68         T         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Tsu-1         CS2263							
N13         CS22491         8429         1         58         T         NA           Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22631         8302         1         68         T         NA           Gy-0         CS22631         8302         1         68         T         NA           Bay-0         CS22632         8364         1         69         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mrk-0         CS22636         8342         1         73         A         NA           Tsu-1         CS2							
Ws-0         CS22623         8405         1         60         A         NA           Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Van-0         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Ag-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         76         T         NA           Tsu-1         CS2							
Yo-0         CS22624         8408         1         61         A         NA           Col-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Ag-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS2							
Col-0         CS22625         8279         1         62         T         NA           An-1         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Mrk-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22636         8342         1         73         A         NA           Tsu-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         C							
An-1         CS22626         8253         1         63         T         NA           Van-0         CS22627         8400         1         64         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22636         8342         1         73         A         NA           Mz-0         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS2							
Van-0         CS22627         8400         1         64         T         NA           Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Tsu-1         CS22639         8280         1         76         T         NA           Mt-0         CS22641         8394         1         78         A         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS							
Est-1         CS22629         8291         1         66         T         NA           Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Fei-0         CS22648         8379         1         83         T         NA           Ts-1         CS22	1						
Ag-0         CS22630         8251         1         67         A         NA           Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22646         8379         1         83         T         NA           Ts-1         CS22							
Gy-0         CS22631         8302         1         68         T         NA           Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Ts-1         CS22648         8393         1         85         T         NA           Ts-5         CS22							
Ra-0         CS22632         8364         1         69         A         NA           Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS2							
Bay-0         CS22633         8260         1         70         A         NA           Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Mt-0         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Pro-0         CS22648         8393         1         85         T         NA           LL-0         CS22							
Ga-0         CS22634         8295         1         71         T         NA           Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         C							
Mrk-0         CS22635         8339         1         72         A         NA           Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo							
Mz-0         CS22636         8342         1         73         A         NA           Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS2							
Ct-1         CS22639         8280         1         76         T         NA           Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22654         8316         1         91         A         NA           Ms-0         C							
Tsu-1         CS22641         8394         1         78         A         NA           Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22654         8316         1         90         T         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0							
Mt-0         CS22642         8341         1         79         T         NA           Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Bur-0         CS22656         8272         1         93         A         NA	1						
Nok-3         CS22643         8347         1         80         T         NA           Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Bur-0         CS22656         8272         1         93         A         NA							
Fei-0         CS22645         8294         1         82         A         NA           Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA							
Se-0         CS22646         8379         1         83         T         NA           Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA							
Ts-1         CS22647         8392         1         84         A         NA           Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA		CS22645		1			
Ts-5         CS22648         8393         1         85         T         NA           Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA	1			1			
Pro-0         CS22649         8360         1         86         T         NA           LL-0         CS22650         8328         1         87         T         NA           Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA	Ts-1	CS22647	8392	1			
LL-0     CS22650     8328     1     87     T     NA       Kondara     CS22651     8319     1     88     T     NA       Sorbo     CS22653     8381     1     90     T     NA       Kin-0     CS22654     8316     1     91     A     NA       Ms-0     CS22655     8340     1     92     T     NA       Bur-0     CS22656     8272     1     93     A     NA	Ts-5	CS22648	8393	1			
Kondara         CS22651         8319         1         88         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA	Pro-0	CS22649	8360	1	86		
Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         A         NA	LL-0	CS22650	8328	1			
Kin-0     CS22654     8316     1     91     A     NA       Ms-0     CS22655     8340     1     92     T     NA       Bur-0     CS22656     8272     1     93     A     NA	Kondara	CS22651	8319	1	88	$\Gamma$	NA
Ms-0 CS22655 8340 1 92 T NA Bur-0 CS22656 8272 1 93 A NA	Sorbo	CS22653	8381	1	90	$\mid T \mid$	NA
Bur-0 CS22656 8272 1 93 A NA	Kin-0	CS22654	8316	1	91		NA
	Ms-0	CS22655	8340	1	92	$\Gamma$	NA
Edi-0   CS22657   8288   1   94   T   NA	Bur-0		8272	1	93	A	NA
	Edi-0	CS22657	8288	1	94	T	NA

# 6.72 SNP AtMSQTsnp 186(chrom=3, pos=298210, alignment id=777, alignment start=297801)

Table 554: SNP AtMSQTsnp 186(chromosome=3, position=298210, alignment id=777, alignment start=297801)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	38	5	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	56	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 555: detailed difference for SNP AtMSQTsnp 186

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	A	NA
Kno-10	CS22566	8317	1	3	A	NA
Kno-18	CS22567	8318	1	4	A	NA
Rmx-A02	CS22568	8370	1	5	A	NA

Rmx-A180	CS22569	8371	1	6	T	NA
Pna-17	CS22570	8359	1	7	A	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	$\frac{1}{2}$	12	A	NA
Fb-2	CS22576	8292	1	13	T	NA
Fb-4	CS22577	8293	1	14	A	NA NA
Bil-5	CS22578	8262	1	15	T	NA NA
Bil-7	CS22579	8263	1	16	$\frac{1}{T}$	NA NA
Vr2-1			1			NA NA
	CS22580	8401		17	A	
Vr2-6	CS22581	8402	1	18	A	NA
Spr1-2	CS22582	8382	1	19	T	NA
Spr1-6	CS22583	8383	1	20	T	NA
m2-1	CS22584	8349	1	21	T	NA
m2-3	CS22585	8350	1	22	A	NA
Ull2-5	CS22586	8397	1	23	T	NA
Ull2-3	CS22587	8396	1	24	T	NA
Zdr-1	CS22588	8409	1	25	T	NA
Zdr-6	CS22589	8410	1	26	T	NA
Bor-1	CS22590	5837	2	27	T	NA
Bor-4	CS22591	8268	1	28	T	NA
Pu2-7	CS22592	8362	1	29	T	NA
Pu2-23	CS22593	8361	1	30	T	NA
Lp2-2	CS22594	8332	1	31	$\frac{1}{T}$	NA
_	CS22595	8333	1	32	A	NA NA
Lp2-6				33		NA NA
HR-5	CS22596	8309	1		A	
HR-10	CS22597	8308	1	34	T	NA NA
NFA-8	CS22598	8346	1	35	T	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	T	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	41	T	NA
Tamm-27	CS22605	8391	1	42	T	NA
Kz-1	CS22606	8320	1	43	T	NA
Kz-9	CS22607	8322	1	44	T	NA
Got-7	CS22608	8299	1	45	Ā	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	$\frac{\pi}{T}$	NA NA
Ren-11	CS22611	8368	1	48	$\frac{1}{T}$	NA NA
Uod-1		1			$\frac{1}{T}$	NA NA
	CS22612	8398	1	49	1	
Uod-7	CS22613	8399	1	50	T	NA
Cvi-0	CS22614	8281	1	51	T	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	T	NA
Gu-0	CS22617	8301	1	54	T	NA
Ler-1	CS22618	8324	1	55	T	NA
Nd-1	CS22619	8344	1	56	T	NA
C24	CS22620	8273	1	57	A	NA
N13	CS22491	8429	1	58	T	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	Т	NA
Yo-0	CS22624	8408	1	61	T	NA
Col-0	CS22625	8279	1	62	Т	NA
An-1	CS22626	8253	1	63	Ā	NA
Van-0	CS22627	8400	1	64	T	NA
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	$\begin{array}{c c} T \\ T \end{array}$	NA NA
Ag-0	CS22630	8251	1	67	A	NA NA
Gy-0	CS22631	8302	1	68	A	NA NA
Ra-0		8364	1	69	A	NA NA
	CS22632					
Bay-0	CS22633	8260	1	70	A	NA NA
Ga-0	CS22634	8295	1	71	T	NA
Mrk-0	CS22635	8339	1	72	T	NA
Mz-0	CS22636	8342	1	73	T	NA
Wt-5	CS22637	8407	1	74	T	NA
Ct-1	CS22639	8280	1	76	T	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	Т	NA
Mt-0	CS22642	8341	1	79	Т	NA
Nok-3	CS22643	8347	1	80	Т	NA
Wa-1	CS22644	8403	1	81	Т	NA
Fei-0	CS22645	8294	1	82	$\overline{\mathrm{T}}$	NA
Se-0	CS22646	8379	1	83	Ā	NA
Ts-1	CS22647	8392	1	84	A	NA
Ts-5	CS22648	8393	1	85	A	NA NA
Pro-0	CS22649	8360	1	86	$\begin{array}{c c} T \\ T \end{array}$	NA NA
LL-0	CS22650	8328	1	87	A	NA NA
1 0	1 2222000	1 0020	1 -		1 **	1

Kondara	CS22651	8319	1	88	Т	l NA	
Shahdara	CS22652	8248	1	89	$\overline{\mathrm{T}}$	NA	
Sorbo	CS22653	8381	1	90	${ m T}$	NA	
Kin-0	CS22654	8316	1	91	A	NA	
Ms-0	CS22655	8340	1	92	T	NA	
Bur-0	CS22656	8272	1	93	T	NA	
Edi-0	CS22657	8288	1	94	A	NA	
Oy-0	CS22658	8352	1	95	T	NA	
Ws-2	CS22659	8406	1	96	T	NA	
	Sorbo Kin-0 Ms-0 Bur-0 Edi-0 Oy-0	Shahdara         CS22652           Sorbo         CS22653           Kin-0         CS22654           Ms-0         CS22655           Bur-0         CS22656           Edi-0         CS22657           Oy-0         CS22658	Shahdara         CS22652         8248           Sorbo         CS22653         8381           Kin-0         CS22654         8316           Ms-0         CS22655         8340           Bur-0         CS22656         8272           Edi-0         CS22657         8288           Oy-0         CS22658         8352	Shahdara         CS22652         8248         1           Sorbo         CS22653         8381         1           Kin-0         CS22654         8316         1           Ms-0         CS22655         8340         1           Bur-0         CS22656         8272         1           Edi-0         CS22657         8288         1           Oy-0         CS22658         8352         1	Shahdara         CS22652         8248         1         89           Sorbo         CS22653         8381         1         90           Kin-0         CS22654         8316         1         91           Ms-0         CS22655         8340         1         92           Bur-0         CS22656         8272         1         93           Edi-0         CS22657         8288         1         94           Oy-0         CS22658         8352         1         95	Shahdara         CS22652         8248         1         89         T           Sorbo         CS22653         8381         1         90         T           Kin-0         CS22654         8316         1         91         A           Ms-0         CS22655         8340         1         92         T           Bur-0         CS22656         8272         1         93         T           Edi-0         CS22657         8288         1         94         A           Oy-0         CS22658         8352         1         95         T	Shahdara         CS22652         8248         1         89         T         NA           Sorbo         CS22653         8381         1         90         T         NA           Kin-0         CS22654         8316         1         91         A         NA           Ms-0         CS22655         8340         1         92         T         NA           Bur-0         CS22656         8272         1         93         T         NA           Edi-0         CS22657         8288         1         94         A         NA           Oy-0         CS22658         8352         1         95         T         NA

### 6.73 SNP AtMSQTsnp 187(chrom=3, pos=580470, alignment id=55, alignment start=580026)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	4	0	0	0	0	0	0	0	0	0
A	0	1	61	0	0	1	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	30	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 557: detailed difference for SNP AtMSQTsnp 187

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	NA	A
Fb-2	CS22576	8292	1	13	NA	A
Bor-1	CS22590	5837	1	27	A	T
Tsu-1	CS22641	8394	1	78	NA	A
Fei-0	CS22645	8294	1	82	NA	A

# 6.74 SNP AtMSQTsnp 188(chrom=3, pos=2072780, alignment id=649, alignment start=2072648)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	65	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	1	0	32	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	1	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 559: detailed difference for SNP AtMSQTsnp 188  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	C	NA
Bor-1	CS22590	5837	1	27	$\Gamma$	C
Van-0	CS22627	8400	1	64	CT	C

Table 560: SNP AtMSQTsnp 189(chromosome=3, position=2231938, alignment id=779, alignment start=2231413)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	43	3	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	49	0	0	4	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 561: detailed difference for SNP AtMSQTsnp 189

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	A	NA
Kno-10	CS22566	8317	1	3	A	NA
Kno-18	CS22567	8318	1	$\begin{vmatrix} 3 \\ 4 \end{vmatrix}$	G	NA
Rmx-A02	CS22568	8370	1	5	A	NA
Rmx-A180	CS22569	8371	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	G	NA
Pna-17	CS22570	8359	1	7	A	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	G	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	$\frac{1}{2}$	11	A	NA
Lv-5	CS22575	6046	$\frac{1}{2}$	12	A	NA NA
Fb-2	CS22576	8292	1	13	G	NA NA
Fb-4	CS22577	8293	1	14	A	NA NA
Bil-5	CS22578	8262	1	15	A	NA NA
Bil-7	CS22579	8263	1	16	A	NA NA
Vr2-1	CS22513	8401	1	17	A	NA NA
Vr2-6	CS22580 CS22581	8402	1	18	G	NA NA
Spr1-6	CS22581 $CS22583$	8383	1	$\begin{vmatrix} 18 \\ 20 \end{vmatrix}$	G	NA NA
m2-1	CS22583 $CS22584$	8349	1	$\begin{bmatrix} 20\\21 \end{bmatrix}$	G	NA NA
m2-3		8350		$\begin{bmatrix} 21 \\ 22 \end{bmatrix}$		NA NA
	CS22585		1		A	
Ull2-5	CS22586	8397	1	23	G	NA NA
Ull2-3	CS22587	8396	1	24	A	NA NA
Zdr-1	CS22588	8409	1	25	G	NA NA
Zdr-6	CS22589	8410	1	26	G	NA
Bor-1	CS22590	5837	2	27	A	NA
Bor-4	CS22591	8268	1	28	A	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	A	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	A	NA
HR-5	CS22596	8309	1	33	G	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	G	NA
NFA-10	CS22599	8345	1	36	G	NA
Sq-1	CS22600	8384	1	37	G	NA
Sq-8	CS22601	8385	1	38	G	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA
Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	A	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	G	NA
Ren-11	CS22611	8368	1	48	G	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	G	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	G	NA
Ei-2	CS22616	8289	$\frac{1}{1}$	53	G	NA
Gu-0	CS22617	8301	1	54	Ğ	NA NA
Ler-1	CS22618	8324	1	55	A	NA
Nd-1	CS22619	8344	1	56	A	NA NA
C24	CS22620	8273	1	57	A	NA NA
N13	CS22491	8429	1	58	A	NA NA
1110		0 120	*	1 30	l **	-111

Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	G	NA
Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	G	NA
Van-0	CS22627	8400	1	64	G	NA
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	G	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	G	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	A	NA
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	A	NA
Wt-5	CS22637	8407	1	74	A	NA
Ct-1	CS22639	8280	1	76	G	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	A	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	G	NA
Sorbo	CS22653	8381	1	90	G	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	G	NA
Bur-0	CS22656	8272	1	93	G	NA
Oy-0	CS22658	8352	1	95	G	NA
Ws-2	CS22659	8406	1	96	A	NA

### 6.76 SNP AtMSQTsnp 191(chrom=3, pos=2236458, alignment id=2592, alignment start=2236406)

Table 562: SNP AtMSQTsnp 191(chromosome=3, position=2236458, alignment id=2592, alignment start=2236406)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	0	0	0	0	0	0	0	0
A	0	1	60	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	1	37	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 563: detailed difference for SNP AtMSQTsnp 191

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Zdr-6	CS22589	8410	1	26	NA	A
Bor-1	CS22590	5837	1	27	$\mathbf{C}$	A

#### 6.77 SNP AtMSQTsnp 194(chrom=3, pos=3679541, alignment id=1632, alignment start=3679103)

 $\begin{array}{llll} {\rm Table} & 564: & {\rm SNP} & {\rm AtMSQTsnp} & 194 ({\rm chromosome=3, position=3679541, alignment id=1632, alignment start=3679103}) \end{array}$ 

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	AG 0 0	0	0	0	0

A	0	1	43	0	0	1	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	1	0	0	0	53	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	1	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 565: detailed difference for SNP AtMSQTsnp 194

nati	vename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Ede	n-1	CS22572	6009	4	9	Т	NA
Lv-	1	CS22574	6043	2	11	A	NA
Bor	-1	CS22590	5837	1	27	A	$\mid$ T
Van	-0	CS22627	8400	1	64	$\operatorname{AT}$	$\mid$ T

### 6.78 SNP AtMSQTsnp 197(chrom=3, pos=4818602, alignment id=435, alignment start=4818362)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	4	0	0	0	0	0	0	0	0	0
A	0	0	62	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	27	0	0	0	0	0	0	0
${f T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 567: detailed difference for SNP AtMSQTsnp 197

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Fb-2	CS22576	8292	1	13	NA	A
Van-0	CS22627	8400	1	64	AG	A
Wa-1	CS22644	8403	1	81	NA	A
Sorbo	CS22653	8381	1	90	NA	A
Ws-2	CS22659	8406	1	96	NA	A

## $6.79 \quad SNP \ AtMSQTsnp \ 198 (chrom=3, pos=5235571, alignment \ id=1612, alignment \ start=5235221)$

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	24	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	1	0	0	0	75	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	${ m T}$	NA

### 6.80 SNP AtMSQTsnp 203(chrom=3, pos=6890665, alignment id=73, alignment start=6890596)

	-	NA	Α	С	G	T	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	4	0	0	2	0	0	0	0	0	0
A	0	2	48	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	42	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	1	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 571: detailed difference for SNP AtMSQTsnp 203

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	NA	T
Bil-5	CS22578	8262	1	15	NA	A
Ull2-5	CS22586	8397	1	23	NA	$\mid$ T
Got-22	CS22609	8298	1	46	NA	A
Ren-11	CS22611	8368	1	48	A	NA
An-1	CS22626	8253	1	63	NA	A
Van-0	CS22627	8400	1	64	$\operatorname{AT}$	A
Bay-0	CS22633	8260	1	70	NA	A

#### 6.81 SNP AtMSQTsnp 205(chrom=3, pos=7392098, alignment id=91, alignment start=7391896)

Table 572: SNP AtMSQTsnp 205(chromosome=3, position=7392098, alignment id=91, alignment start=7391896)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	66	0	6	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	25	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 573: detailed difference for SNP AtMSQTsnp 205

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	С	NA
Kno-10	CS22566	8317	1	3	C	NA
Kno-18	CS22567	8318	1	4	T	NA
Rmx-A02	CS22568	8370	1	5	C	NA
Rmx-A180	CS22569	8371	1	6	C	NA
Pna-17	CS22570	8359	1	7	C	NA
Pna-10	CS22571	8358	1	8	C	NA
Eden-1	CS22572	6009	4	9	C	NA
Eden-2	CS22573	8287	1	10	C	NA

Lv-1	CS22574	6043	2	11	C	NA
Lv-5	CS22575	6046	2	12	C	NA
Fb-2	CS22576	8292	1	13	С	NA
Fb-4	CS22577	8293	1	14	T	NA
Bil-5	CS22578	8262	1	15	C	NA
Bil-7			1	16	$\frac{C}{C}$	NA NA
	CS22579	8263				
Vr2-1	CS22580	8401	1	17	C	NA
Vr2-6	CS22581	8402	1	18	C	NA
Spr1-2	CS22582	8382	1	19	С	NA
Spr1-6	CS22583	8383	1	20	C	NA
m2-1	CS22584	8349	1	21	С	NA
m2-3	CS22585	8350	1	22	C	NA
Ull2-5	CS22586	8397	1	23	$\stackrel{\circ}{\text{C}}$	NA NA
Ull2-3	CS22587	8396	1	24	C	NA
Zdr-1	CS22588	8409	1	25	C	NA
Zdr-6	CS22589	8410	1	26	T	NA
Bor-1	CS22590	5837	2	27	C	NA
Bor-4	CS22591	8268	1	28	С	NA
Pu2-7	CS22592	8362	1	29	C	NA
					$\frac{C}{C}$	NA NA
Pu2-23	CS22593	8361	1	30		
Lp2-2	CS22594	8332	1	31	C	NA
Lp2-6	CS22595	8333	1	32	С	NA
HR-5	CS22596	8309	1	33	T	NA
HR-10	CS22597	8308	1	34	T	NA
NFA-10	CS22599	8345	1	36	С	NA
Sq-1	CS22600	8384	1	37	$\stackrel{\circ}{\mathrm{T}}$	NA
_						
Sq-8	CS22601	8385	1	38	C	NA
CIBC-5	CS22602	8277	1	39	C	NA
CIBC-17	CS22603	8276	1	40	C	NA
Tamm-2	CS22604	8390	1	41	T	NA
Tamm-27	CS22605	8391	1	42	${ m T}$	NA
Kz-1	CS22606	8320	1	43	T	NA
Kz-1 Kz-9	CS22607	8322	1	44	$\frac{1}{C}$	NA NA
Got-7	CS22608	8299	1	45	T	NA
Got-22	CS22609	8298	1	46	T	NA
Ren-1	CS22610	8367	1	47	C	NA
Ren-11	CS22611	8368	1	48	$\Gamma$	NA
Uod-1	CS22612	8398	1	49	С	NA
Uod-7	CS22613	8399	1	50	C	NA
Cvi-0	CS22614	8281	1	51	T	NA
Lz-0	CS22615	8336	1	52	C	NA
Ei-2	CS22616	8289	1	53	С	NA
Gu-0	CS22617	8301	1	54	C	NA
Ler-1	CS22618	8324	1	55	С	NA
Nd-1	CS22619	8344	1	56	C	NA
C24	CS22620	8273	1	57	C	NA
					$\begin{array}{ c c }\hline C \\ T \end{array}$	
N13	CS22491	8429	1	58		NA
Wei-0	CS22622	8404	1	59	C	NA
Ws-0	CS22623	8405	1	60	С	NA
Yo-0	CS22624	8408	1	61	C	NA
Col-0	CS22625	8279	1	62	C	NA
An-1	CS22626	8253	1	63	С	NA
Van-0	CS22627	8400	1	64	C	NA
Br-0	CS22628	8269	1	65	C	NA NA
Est-1	CS22629	8291	1	66	C	NA
Ag-0	CS22630	8251	1	67	T	NA
Gy-0	CS22631	8302	1	68	T	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	С	NA
Ga-0	CS22634	8295	1	71	C	NA
Mrk-0	CS22635	8339	1	72	$\stackrel{\circ}{\mathrm{T}}$	NA
Mz-0			1	73	C	NA NA
	CS22636	8342				
Wt-5	CS22637	8407	1	74	C	NA
Ct-1	CS22639	8280	1	76	C	NA
Mr-0	CS22640	8338	1	77	T	NA
Tsu-1	CS22641	8394	1	78	C	NA
Mt-0	CS22642	8341	1	79	С	NA
Nok-3	CS22643	8347	1	80	C	NA
Wa-1	CS22644	8403	1	81	$\frac{C}{C}$	NA NA
	CS22645				$\begin{array}{c c} C \\ T \end{array}$	NA NA
Fei-0		8294	1	82		
Se-0	CS22646	8379	1	83	T	NA
Ts-1	CS22647	8392	1	84	T	NA
Ts-5	CS22648	8393	1	85	T	NA
Pro-0	CS22649	8360	1	86	T	NA
Kondara	CS22651	8319	1	88	$\overline{\mathbf{C}}$	NA
Shahdara	CS22652	8248	1	89	C	NA NA
Sorbo	CS22652 CS22653				C	NA NA
		8381	1	90		
Kin-0	CS22654	8316	1	91	T	NA
Ms-0	CS22655	8340	1	92	C	NA
Bur-0	CS22656	8272	1	93	T	NA
Oy-0	CS22658	8352	1	95	С	NA

Ws-2	CS22659	8406	1	96	l C	NA	
'' 5 <del>-</del>	0522000	0100	+	00		1111	1

#### 6.82 SNP AtMSQTsnp 214(chrom=3, pos=9747261, alignment id=641, alignment start=9747158)

Table 574: SNP AtMSQTsnp 214(chromosome=3, position=9747261, alignment id=641, alignment start=9747158)

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	41	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	4	0	0	54	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 575: detailed difference for SNP AtMSQTsnp 214

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	1	9	G	NA
Eden-1	CS22572	6009	2	9	G	NA
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Van-0	CS22627	8400	1	64	$\overline{AG}$	A

#### 6.83 SNP AtMSQTsnp 220(chrom=3, pos=11398207, alignment id=1053, alignment start=11398071)

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	3	2	0	2	0	0	0	0	0	0	0
A	0	0	35	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	2	0	53	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{AT}$	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 577: detailed difference for SNP AtMSQTsnp 220

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	NA	A
Eden-1	CS22572	6009	3	9	NA	G
Vr2-1	CS22580	8401	1	17	NA	A
Spr1-2	CS22582	8382	1	19	NA	G
Bor-1	CS22590	5837	1	27	G	A
Van-0	CS22627	8400	1	64	G	A
Shahdara	CS22652	8248	1	89	G	NA

#### 6.84 SNP AtMSQTsnp 222(chrom=3, pos=15880426, alignment id=823, alignment start=15879997)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	42	0	0	0	0	0	0	0
T	0	2	0	0	0	54	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 579: detailed difference for SNP AtMSQTsnp 222

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	T	NA
Lv-1	CS22574	6043	2	11	T	NA
Ren-1	CS22610	8367	1	47	G	NA
Ren-11	CS22611	8368	1	48	G	NA

### 6.85 SNP AtMSQTsnp 223(chrom=3, pos=16489589, alignment id=2208, alignment start=16489217)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	2	44	0	1	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	3	0	49	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	1	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 581: detailed difference for SNP AtMSQTsnp 223

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	$pcr\_call$	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Bor-1	CS22590	5837	1	27	G	A
CIBC-5	CS22602	8277	1	39	A	G
CIBC-17	CS22603	8276	1	40	G	A
Ra-0	CS22632	8364	1	69	G	A
Fei-0	CS22645	8294	1	82	$\overline{AG}$	G

# 6.86 SNP AtMSQTsnp 231(chrom=3, pos=18590671, alignment id=883, alignment start=18590590)

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	3	0	0	0	0	0	0	0
A	0	28	9	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	3	0	0	57	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0

CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 583: detailed difference for SNP AtMSQTsnp 231  $\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Rmx-A180	CS22569	8371	1	6	NA	G
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Bil-5	CS22578	8262	1	15	NA	G
Spr1-6	CS22583	8383	1	20	A	NA
HR-10	CS22597	8308	1	34	A	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	A	NA
Ren-11	CS22611	8368	1	48	G	NA
Uod-1	CS22612	8398	1	49	A	NA
Uod-7	CS22613	8399	1	50	A	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	A	NA
C24	CS22620	8273	1	57	A	NA
An-1	CS22626	8253	1	63	A	NA
Br-0	CS22628	8269	1	65	A	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22630	8251	1	67	A	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	A	NA
Bay-0	CS22633	8260	1	70	A	NA
Wt-5	CS22637	8407	1	74	A	NA
Tsu-1	CS22641	8394	1	78	A	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	A	NA
Ts-1	CS22647	8392	1	84	A	NA
Ts-5	CS22648	8393	1	85	A	NA
LL-0	CS22650	8328	1	87	A	NA
Shahdara	CS22652	8248	1	89	G	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	NA	G

## 6.87 SNP AtMSQTsnp 232(chrom=3, pos=18980664, alignment id=829, alignment start=18980171)

Table 584: SNP AtMSQTsnp 232(chromosome=3, position=18980664, alignment id=829, alignment start=18980171)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	19	44	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	36	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 585: detailed difference for SNP AtMSQTsnp 232  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Kno-18	CS22567	8318	1	4	A	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	9	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Ull2-5	CS22586	8397	1	23	A	NA
Zdr-1	CS22588	8409	1	25	A	NA
Bor-1	CS22590	5837	1	27	A	NA
Got-7	CS22608	8299	1	45	A	NA
Ren-11	CS22611	8368	1	48	A	NA

Wei-0	CS22622	8404	1	59	A	NA	
Est-1	CS22629	8291	1	66	A	NA	
Ra-0	CS22632	8364	1	69	A	NA	
Bay-0	CS22633	8260	1	70	A	NA	
Ga-0	CS22634	8295	1	71	A	NA	
Mz-0	CS22636	8342	1	73	A	NA	
Tsu-1	CS22641	8394	1	78	A	NA	
Fei-0	CS22645	8294	1	82	A	NA	
Se-0	CS22646	8379	1	83	A	NA	
Shahdara	CS22652	8248	1	89	$^{\mathrm{C}}$	NA	
Edi-0	CS22657	8288	1	94	A	NA	

## 6.88 SNP AtMSQTsnp 235(chrom=3, pos=19930624, alignment id=833, alignment start=19930188)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	59	6	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	35	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 587: detailed difference for SNP AtMSQTsnp 235

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	A	NA
Kno-10	CS22566	8317	1	3	A	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	G	NA
Rmx-A180	CS22569	8371	1	6	G	NA
Pna-17	CS22570	8359	1	7	A	NA
Pna-10	CS22571	8358	1	8	A	NA
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	2	12	A	NA
Fb-2	CS22576	8292	1	13	A	NA
Fb-4	CS22577	8293	1	14	A	NA
Bil-5	CS22578	8262	1	15	A	NA
Bil-7	CS22579	8263	1	16	A	NA
Vr2-1	CS22580	8401	1	17	A	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	A	NA
Spr1-6	CS22583	8383	1	20	G	NA
m2-1	CS22584	8349	1	21	A	NA
m2-3	CS22585	8350	1	22	A	NA
Ull2-5	CS22586	8397	1	23	A	NA
Ull2-3	CS22587	8396	1	24	A	NA
Zdr-1	CS22588	8409	1	25	A	NA
Zdr-6	CS22589	8410	1	26	A	NA
Bor-1	CS22590	5837	2	27	A	NA
Bor-4	CS22591	8268	1	28	A	NA
Pu2-7	CS22592	8362	1	29	A	NA
Pu2-23	CS22593	8361	1	30	A	NA
Lp2-2	CS22594	8332	1	31	A	NA
Lp2-6	CS22595	8333	1	32	A	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	G	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA

Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	A	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	A	NA
Ren-11	CS22611	8368	1	48	G	NA
Uod-1	CS22612	8398	1	49	A	NA
Uod-7	CS22613	8399	1	50	G	NA
Cvi-0	CS22614	8281	1	51	G	NA
Lz-0	CS22615	8336	1	52	G	NA
Ei-2	CS22616	8289	1	53	G	NA
Gu-0	CS22617	8301	1	54	G	NA
Ler-1	CS22618	8324	1	55	A	NA
Nd-1	CS22619	8344	1	56	G	NA NA
C24	CS22620	8273	1	57	G	NA NA
N13	CS22491	8429	1	58	A	NA NA
Wei-0	CS22491 CS22622	8404	1	59	A	NA NA
Ws-0	CS22623	8405	1	60	A	NA
Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	62	A	NA
An-1	CS22626	8253	1	63	A	NA
Van-0	CS22627	8400	1	64	G	NA
Br-0	CS22628	8269	1	65	G	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	G	NA
Bay-0	CS22633	8260	1	70	A	NA
Ga-0	CS22634	8295	1	71	G	NA
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	A	NA
Mr-0	CS22640	8338	1	77	A	NA
Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	G	NA
Nok-3	CS22643	8347	1	80	A	NA
Wa-1	CS22644	8403	1	81	A	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	G	NA NA
Sorbo	CS22653	8381	1	90	A	NA NA
Kin-0	CS22654	8316	1	91	G	NA NA
Ms-0	CS22655	8340	1	92	G	NA NA
Bur-0	CS22656	8272	1	93	A	NA NA
1						NA NA
Edi-0	CS22657	8288	1	94	A	
Oy-0	CS22658	8352	1	95	A	NA NA
Ws-2	CS22659	8406	1	96	A	NA

# $6.89 \quad SNP \ AtMSQTsnp \ 237 (chrom=3, \ pos=20483289, \ alignment \ id=1645, \ alignment \ start=20482976)$

	-	NA	A	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	2	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	23	0	44	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	25	0	0	0	4	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm CG}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	1	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 589: detailed difference for SNP AtMSQTsnp 237  $\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
	_		_	3	T per_ean	NA
Kno-10	CS22566	8317	1			
Rmx-A02	CS22568	8370	1	5	T	NA
Rmx-A180	CS22569	8371	1	6	T	NA
Pna-17	CS22570	8359	1	7	T	NA
Eden-1	CS22572	6009	1	9	T	NA
Eden-1	CS22572	6009	4	9	Т	NA
Eden-2	CS22573	8287	1	10	T	NA
Lv-1	CS22574	6043	1	11	NA	С
Lv-5	CS22575	6046	2	12	С	NA
Fb-2	CS22576	8292	1	13	NA	$\mathbf{C}$
Vr2-1	CS22580	8401	1	17	T	NA
Vr2-6	CS22581	8402	1	18	T	NA
Spr1-6	CS22583	8383	1	20	$\mid T \mid$	NA
m2-1	CS22584	8349	1	21	C	NA
Pu2-23	CS22593	8361	1	30	C	NA
Lp2-2	CS22594	8332	1	31	C	NA
HR-10	CS22597	8308	1	34	C	NA
Sq-1	CS22600	8384	1	37	C	NA
Tamm-2	CS22604	8390	1	41	$\Gamma$	NA
Tamm-27	CS22605	8391	1	42	T	NA
Kz-1	CS22606	8320	1	43	C	NA
Ren-1	CS22610	8367	1	47	С	NA
Ren-11	CS22611	8368	1	48	C	NA
Cvi-0	CS22614	8281	1	51	C	NA
Ler-1	CS22618	8324	1	55	C	NA
N13	CS22491	8429	1	58	${ m T}$	NA
Wei-0	CS22622	8404	1	59	C	NA
Ws-0	CS22623	8405	1	60	${ m T}$	NA
Yo-0	CS22624	8408	1	61	$_{ m T}$	NA
Col-0	CS22625	8279	1	62	$\mathbf{C}$	NA
An-1	CS22626	8253	1	63	C	NA
Van-0	CS22627	8400	1	64	$\overline{\mathrm{CT}}$	NA
Br-0	CS22628	8269	1	65	C	NA
Gy-0	CS22631	8302	1	68	C	NA
Ra-0	CS22632	8364	1	69	$\begin{array}{c} T \end{array}$	NA
Bay-0	CS22633	8260	1	70	$\frac{1}{T}$	NA
Mrk-0	CS22635	8339	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	C	NA
Wt-5	CS22637	8407	1	74	C	NA
Tsu-1	CS22641	8394	1	78	$\begin{array}{ c c }\hline T\end{array}$	NA NA
Mt-0	CS22641 CS22642	8341	1	79	$\begin{array}{c} 1 \\ \mathbf{T} \end{array}$	NA NA
Wa-1	CS22644 CS22644	8403	1	81	C	NA NA
Se-0			1	83	$\begin{array}{c} C \\ T \end{array}$	NA NA
Ts-5	CS22646	8379	1	85	$\begin{array}{c} 1 \\ T \end{array}$	NA NA
Pro-0	CS22648	8393			$\begin{array}{c c} 1 \\ T \end{array}$	
	CS22649	8360	1	86	$\frac{1}{C}$	NA
LL-0	CS22650	8328	1	87		NA
Shahdara	CS22652	8248	1	89	C	NA
Sorbo	CS22653	8381	1	90	C	NA
Kin-0	CS22654	8316	1	91	T	NA
Bur-0	CS22656	8272	1	93	T	NA
Edi-0	CS22657	8288	1	94	С	NA
Ws-2	CS22659	8406	1	96	Т	NA

## 6.90 SNP AtMSQTsnp 242(chrom=3, pos=21632608, alignment id=138, alignment start=21632379)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	3	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	63	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	1	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 591: detailed difference for SNP AtMSQTsnp 242  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	С	NA
Bil-5	CS22578	8262	1	15	NA	C
Bil-7	CS22579	8263	1	16	NA	C
Ren-11	CS22611	8368	1	48	$^{\mathrm{C}}$	NA
Van-0	CS22627	8400	1	64	CT	C
Ag-0	CS22630	8251	1	67	NA	C

#### 6.91 SNP AtMSQTsnp 244(chrom=3, pos=23053878, alignment id=1662, alignment start=23053771)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	3	0	0	0	0	0	0	0
A	0	2	60	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	1	0	29	0	0	0	0	0	0	0
${f T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 593: detailed difference for SNP AtMSQTsnp 244

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	G
Eden-1	CS22572	6009	4	9	A	NA
Vr2-6	CS22581	8402	1	18	NA	A
HR-10	CS22597	8308	1	34	NA	G
CIBC-5	CS22602	8277	1	39	A	G
CIBC-17	CS22603	8276	1	40	G	A
Ren-11	CS22611	8368	1	48	NA	G
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	NA	A

### 6.92 SNP AtMSQTsnp 249(chrom=4, pos=1055234, alignment id=482, alignment start=1055093)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	68	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	28	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 595: detailed difference for SNP AtMSQTsnp 249  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Bor-1	CS22590	5837	1	27	A	G
Ms-0	CS22655	8340	1	92	$\overline{AG}$	A

#### 6.93 SNP AtMSQTsnp 254(chrom=4, pos=2441217, alignment id=233, alignment start=2440917)

Table 596: SNP AtMSQTsnp 254(chromosome=4, position=2441217, alignment id=233, alignment start=2440917)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	6	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	0	0	0	0	0	0	0
A	0	2	36	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	1	1	53	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 597: detailed difference for SNP AtMSQTsnp 254

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	-	NA
Spr1-2	CS22582	8382	1	19	-	NA
Bor-1	CS22590	5837	1	27	$\mathbf{C}$	A
Kz-9	CS22607	8322	1	44	-	NA
Ren-11	CS22611	8368	1	48	$\mathbf{C}$	NA
Wt-5	CS22637	8407	1	74	NA	C
Kondara	CS22651	8319	1	88	-	NA
Shahdara	CS22652	8248	1	89	-	NA
Sorbo	CS22653	8381	1	90	-	NA
Ms-0	CS22655	8340	1	92	A	NA

### 6.94 SNP AtMSQTsnp 260(chrom=4, pos=5775707, alignment id=933, alignment start=5775541)

Table 598: SNP AtMSQTsnp 260(chromosome=4, position=5775707, alignment id=933, alignment start=5775541)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	3	0	0	0	0	0	0	0	0
Α	0	2	33	0	0	0	0	0	0	0	0	0
С	0	0	1	50	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	1	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 599: detailed difference for SNP AtMSQTsnp  $260\,$ 

		1	11:4-			11
nativename	stkparent	$ecotype\_id$	duplicate	$accession\_id$	pcr_call	$sequenom\_call$
Kno-10	CS22566	8317	1	3	NA	A
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	NA	C
Lv-1	CS22574	6043	2	11	A	NA
Vr2-6	CS22581	8402	1	18	NA	C
Zdr-1	CS22588	8409	1	25	C	A
Tamm-27	CS22605	8391	1	42	NA	A
Wei-0	CS22622	8404	1	59	NA	C
Van-0	CS22627	8400	1	64	AC	A
Est-1	CS22629	8291	1	66	NA	A

#### 6.95 SNP AtMSQTsnp 263(chrom=4, pos=7077926, alignment id=495, alignment start=7077771)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	2	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	33	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	1	0	1	0	59	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 601: detailed difference for SNP AtMSQTsnp 263

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Kno-10	CS22566	8317	1	3	NA	Т
Eden-1	CS22572	6009	4	9	${ m T}$	NA
Bor-1	CS22590	5837	1	27	${ m T}$	C
Pu2-23	CS22593	8361	1	30	NA	C
Kz-1	CS22606	8320	1	43	NA	C

#### 6.96 SNP AtMSQTsnp 266(chrom=4, pos=8078648, alignment id=238, alignment start=8078388)

Table 602: SNP AtMSQTsnp 266(chromosome=4, position=8078648, alignment id=238, alignment start=8078388)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	29	0	0	0	0	0	0	0
${ m T}$	0	1	0	0	0	68	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	1	0	0	0	1	0	0	0	0	0	0

Table 603: detailed difference for SNP AtMSQTsnp 266  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Τ	NA
Ren-11	CS22611	8368	1	48	$\operatorname{GT}$	NA
Van-0	CS22627	8400	1	64	$\operatorname{GT}$	T

#### 6.97 SNP AtMSQTsnp 267(chrom=4, pos=8297960, alignment id=499, alignment start=8297594)

Table 604: SNP AtMSQTsnp 267(chromosome=4, position=8297960, alignment id=499, alignment start=8297594)

	-	NA	A	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	16	0	20	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mid T \mid$	0	27	0	0	0	6	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0

AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	1	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 605: detailed difference for SNP AtMSQTsnp 267

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Pna-17	CS22570	8359	1	7	C	NA
Eden-1	CS22572	6009	4	9	T	NA
Eden-2	CS22573	8287	1	10	T	NA
Lv-1	CS22574	6043	2	11	$\Gamma$	NA
Lv-5	CS22575	6046	2	12	$\Gamma$	NA
Fb-2	CS22576	8292	1	13	$\Gamma$	NA
Fb-4	CS22577	8293	1	14	T	NA
Bil-5	CS22578	8262	1	15	T	NA
Bil-7	CS22579	8263	1	16	T	NA
Spr1-2	CS22582	8382	1	19	T	NA
m2-1	CS22584	8349	1	21	C	NA
m2-3	CS22585	8350	1	22	C	NA
Zdr-6	CS22589	8410	1	26	C	NA
HR-5	CS22596	8309	1	33	T	NA
NFA-8	CS22598	8346	1	35	T	NA
NFA-10	CS22599	8345	1	36	$\Gamma$	NA
Tamm-2	CS22604	8390	1	41	${ m T}$	NA
Tamm-27	CS22605	8391	1	42	${ m T}$	NA
Kz-1	CS22606	8320	1	43	C	NA
Got-22	CS22609	8298	1	46	C	NA
Ren-11	CS22611	8368	1	48	C	NA
Cvi-0	CS22614	8281	1	51	C	NA
Ei-2	CS22616	8289	1	53	$\Gamma$	NA
Gu-0	CS22617	8301	1	54	$\Gamma$	NA
Ler-1	CS22618	8324	1	55	C	NA
N13	CS22491	8429	1	58	${ m T}$	NA
Wei-0	CS22622	8404	1	59	${ m T}$	NA
Ws-0	CS22623	8405	1	60	С	NA
Col-0	CS22625	8279	1	62	${ m T}$	NA
An-1	CS22626	8253	1	63	T	NA
Van-0	CS22627	8400	1	64	CT	C
Br-0	CS22628	8269	1	65	C	NA
Est-1	CS22629	8291	1	66	T	NA
Gy-0	CS22631	8302	1	68	T	NA
Mz-0	CS22636	8342	1	73	T	NA
Ct-1	CS22639	8280	1	76	${ m T}$	NA
Mt-0	CS22642	8341	1	79	С	NA
Wa-1	CS22644	8403	1	81	C	NA
Fei-0	CS22645	8294	1	82	$\Gamma$	NA
Ts-1	CS22647	8392	1	84	C	NA
Ts-5	CS22648	8393	1	85	C	NA
Pro-0	CS22649	8360	1	86	${ m T}$	NA
Oy-0	CS22658	8352	1	95	C	NA
Ws-2	CS22659	8406	1	96	${ m T}$	NA

## 6.98 SNP AtMSQTsnp 274(chrom=4, pos=9213312, alignment id=2778, alignment start=9213072)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	6	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	84	3	0	0	0	0	0	0
$\Gamma$	0	3	0	0	4	94	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 607: detailed difference for SNP AtMSQTsnp 274

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	T	NA
Lv-1	CS22574	6043	2	11	$\Gamma$	NA
Ren-11	CS22611	8368	1	48	G	NA
NC-6		8246	1	294	$\Gamma$	G
Sf-1	N6855	8380	1	300	G	T
PHW-34	N6034	8244	1	304	T	G
Hs-0	N1237	8310	1	308	G	NA
Co	N3180	8278	1	321	T	NA
Per-1	N1445	8354	1	334	NA	G
Pi-0	N1455	8356	1	336	T	G
Lom1-1		6042	1	351	NA	G
Lom1-1		6042	2	351	NA	T
Gul1-2		8234	1	356	G	T
Stu1-1		6088	1	363	G	T
Lis-1		8326	1	365	NA	G
Lis-2		8222	1	366	NA	G
Lis-2		8222	2	366	NA	G
HSm		8236	1	380	NA	G
DraII-1		8284	1	381	Т	G

# 6.99 SNP AtMSQTsnp 278(chrom=4, pos=9377790, alignment id=2783, alignment start=9377549)

Table 608: SNP AtMSQTsnp 278(chromosome=4, position=9377790, alignment id=2783, alignment start=9377549)

	-	NA	A	С	G	T	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	10	0	18	0	0	0	0	0	0	0
A	0	6	46	0	3	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	5	2	0	105	0	0	0	0	0	0	0
${\rm T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 609: detailed difference for SNP AtMSQTsnp 278

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	A	NA
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Bil-5	CS22578	8262	1	15	A	NA
Bor-1	CS22590	5837	1	27	G	A
Nd-1	CS22619	8344	1	56	NA	G
C24	CS22620	8273	1	57	G	NA
Col-0	CS22625	8279	1	62	A	NA
Ws-2	CS22659	8406	1	96	NA	G
NC-6		8246	1	294	G	A
Dem-4		8233	1	297	NA	A
Sf-1	N6855	8380	1	300	A	G
Gr-1	N1199	8300	1	302	A	NA
Hi-0	N1227	8304	1	307	NA	A
Hs-0	N1237	8310	1	308	G	NA
PHW-2	N6002	8243	1	313	NA	A
Seattle-0	N6187	8245	1	314	NA	G
H55	N923	8303	1	323	G	NA
Lu-1	N1353	8334	1	328	NA	G
Mir-0	N1379	8337	1	329	NA	A
Nw-0	N1409	8348	1	331	NA	G
Pla-0	N1459	8357	1	337	NA	G
Rak-2	N1485	8365	1	338	NA	G
Rubezhnoe-1	N927	8375	1	339	NA	G
Santa Clara	N8069	8377	1	340	NA	A
Sap-0	N1507	8378	1	341	NA	G
Stw-0	N1539	8388	1	343	NA	G
Ta-0	N1549	8389	1	344	NA	G
Tu-0	N1567	8395	1	345	NA	G
Fly2-2		6024	1	346	NA	A

Lom1-1	6042	1	351	A	NA
Lom1-1	6042	2	351	A	G
Lill-1	8242	1	353	NA	G
Gul1-2	8234	1	356	NA	A
B1-2	8256	1	357	NA	G
B5-1	8259	1	360	NA	G
Dra3-1	8283	1	361	NA	A
Kni-1	6040	1	362	NA	A
Kni-1	6040	2	362	NA	A
Lis-2	8222	1	366	NA	G
Lis-2	8222	2	366	NA	G
Kulturen-1	8240	1	372	A	NA
Sr:5	8386	1	377	NA	G
Duk	6008	2	378	A	G
DraII-1	8284	1	381	$\overline{AG}$	A

# 6.100 SNP AtMSQTsnp 279(chrom=4, pos=9580049, alignment id=2788, alignment start=9579976)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	10	0	16	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	54	0	1	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	113	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	1	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 611: detailed difference for SNP AtMSQTsnp  $279\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
RRS-10	CS22565	8372	1	2	NA	T
Kno-10	CS22566	8317	1	3	NA	$\mid \mathrm{T}$
Eden-1	CS22572	6009	4	9	$^{\rm C}$	NA
Zdr-1	CS22588	8409	1	25	NA	C
Kent		8238	1	289	NA	$\Gamma$
Lund		8335	1	292	NA	$\mid T \mid$
Bg-2	CS22342	8261	1	299	NA	$\Gamma$
Bu-0	N1007	8271	1	305	NA	T
Hi-0	N1227	8304	1	307	NA	$\Gamma$
Hs-0	N1237	8310	1	308	NA	$\Gamma$
Is-0	N1241	8312	1	309	NA	C
PHW-2	N6002	8243	1	313	NA	C
Alc-0	N1656	8252	1	315	NA	$\Gamma$
Bla-1	N971	8264	1	316	NA	$\Gamma$
Co	N3180	8278	1	321	NA	$\mid \mathrm{T}$
In-0	N1239	8311	1	324	NA	$\mid \mathrm{T}$
Nw-0	N1409	8348	1	331	NA	$\mid T \mid$
Ost-0	N1431	8351	1	332	NA	C
Pi-0	N1455	8356	1	336	C	$\Gamma$
Pla-0	N1459	8357	1	337	NA	C
Rubezhnoe-1	N927	8375	1	339	NA	$\Gamma$
Tu-0	N1567	8395	1	345	NA	C
Hov4-1		8306	1	348	NA	C
B4-1		8258	1	359	NA	C
B5-1		8259	1	360	NA	C
Nyl-2		6064	1	375	NA	$\mid \mathrm{T}$
Nyl-2		6064	2	375	NA	$\mid \mathrm{T}$
Sanna-2		8376	1	376	NA	C
DraII-1		8284	1	381	CT	$\mid \mathrm{T}$

6.101 SNP AtMSQTsnp 281(chrom=4, pos=10482088, alignment id=956, alignment start=10482038)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	3	0	4	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	1	0	48	0	1	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	42	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 613: detailed difference for SNP AtMSQTsnp 281

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	С	NA
Lv-1	CS22574	6043	1	11	NA	T
Spr1-6	CS22583	8383	1	20	NA	C
Ws-0	CS22623	8405	1	60	NA	C
Van-0	CS22627	8400	1	64	C	$\mid$ T
Est-1	CS22629	8291	1	66	NA	$\mid$ T
Bay-0	CS22633	8260	1	70	NA	$\Gamma$
Mrk-0	CS22635	8339	1	72	NA	C
Wt-5	CS22637	8407	1	74	NA	T

### 6.102 SNP AtMSQTsnp 282(chrom=4, pos=10659455, alignment id=505, alignment start=10659034)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	2	0	0	0	0	0	0
A	0	1	29	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	0	0	63	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	1	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 615: detailed difference for SNP AtMSQTsnp 282

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Kno-10	CS22566	8317	1	3	NA	Т
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	T	NA
Lp2-2	CS22594	8332	1	31	NA	$\Gamma$
Ren-11	CS22611	8368	1	48	$\Gamma$	NA

# 6.103 SNP AtMSQTsnp 285(chrom=4, pos=11326190, alignment id=507, alignment start=11325921)

 $\begin{tabular}{llll} Table & 616: & SNP & AtMSQTsnp & 285 (chromosome=4, & position=11326190, alignment id=507, alignment start=11325921) \\ \end{tabular}$ 

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
- NA A	0	0	0	0	0	0	0	0	0	0	0	0

C	0	1	0	33	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	61	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	1	0	0	0	0	1	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 617: detailed difference for SNP AtMSQTsnp 285

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	С	NA
Van-0	CS22627	8400	1	64	CT	$\mid$ T

# 6.104 SNP AtMSQTsnp 286(chrom=4, pos=11580143, alignment id=1019, alignment start=11579700)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	54	0	5	1	0	0	0	0	0	0	0
G	0	39	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 619: detailed difference for SNP AtMSQTsnp 286

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	G	NA
Kno-10	CS22566	8317	1	3	G	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	C	NA
Rmx-A180	CS22569	8371	1	6	C	NA
Pna-17	CS22570	8359	1	7	G	NA
Pna-10	CS22571	8358	1	8	G	NA
Eden-1	CS22572	6009	4	9	C	NA
Eden-2	CS22573	8287	1	10	C	NA
Lv-1	CS22574	6043	2	11	C	NA
Lv-5	CS22575	6046	2	12	C	NA
Fb-2	CS22576	8292	1	13	C	NA
Fb-4	CS22577	8293	1	14	C	NA
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	C	NA
Vr2-6	CS22581	8402	1	18	C	NA
Spr1-2	CS22582	8382	1	19	G	NA
Spr1-6	CS22583	8383	1	20	C	NA
m2-1	CS22584	8349	1	21	C	NA
m2-3	CS22585	8350	1	22	C	NA
Ull2-5	CS22586	8397	1	23	C	NA
Ull2-3	CS22587	8396	1	24	G	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	С	NA
Bor-1	CS22590	5837	1	27	C	G
Bor-1	CS22590	5837	2	27	C	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	C	NA
Pu2-23	CS22593	8361	1	30	C	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	С	NA
HR-5	CS22596	8309	1	33	C	NA
HR-10	CS22597	8308	1	34	С	NA
NFA-8	CS22598	8346	1	35	C	NA

		1	I .	l	l ==	1
NFA-10	CS22599	8345	1	36	G	NA
Sq-1	CS22600	8384	1	37	С	NA
Sq-8	CS22601	8385	1	38	С	NA
CIBC-5	CS22602	8277	1	39	С	NA
CIBC-17	CS22603	8276	1	40	G	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-1	CS22606	8320	1	43	С	NA
Kz-9	CS22607	8322	1	44	С	NA
Got-7	CS22608	8299	1	45	G	NA
Got-22	CS22609	8298	1	46	G	NA
Ren-1	CS22610	8367	1	47	С	NA
Ren-11	CS22611	8368	1	48	С	NA
Uod-1	CS22612	8398	1	49	С	NA
Uod-7	CS22613	8399	1	50	G	NA
Lz-0	CS22615	8336	1	52	C	NA
Ei-2	CS22616	8289	1	53	G	NA
Gu-0	CS22617	8301	1	54	C	NA
Ler-1	CS22618	8324	1	55	$\stackrel{\circ}{\mathrm{C}}$	NA NA
Nd-1	CS22619	8344	1	56	G	NA NA
C24	CS22619 CS22620	8273	1	57	G	NA NA
N13	CS22491	8429	1	58	C	NA NA
Wei-0					G	NA NA
	CS22622	8404	1	59		
Ws-0	CS22623	8405	1	60	С	NA
Yo-0	CS22624	8408	1	61	G	NA
Col-0	CS22625	8279	1	62	G	NA
An-1	CS22626	8253	1	63	G	NA
Van-0	CS22627	8400	1	64	C	NA
Br-0	CS22628	8269	1	65	C	NA
Est-1	CS22629	8291	1	66	C	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	C	NA
Ra-0	CS22632	8364	1	69	С	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	C	NA
Mrk-0	CS22635	8339	1	72	G	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	С	NA
Mr-0	CS22640	8338	1	77	C	NA
Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	G	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	С	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	С	NA
Ts-5	CS22648	8393	1	85	С	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	C	NA
Kondara	CS22651	8319	1	88	C	NA
Shahdara	CS22652	8248	1	89	C	NA
Sorbo	CS22653	8381	1	90	C	NA
Kin-0	CS22654	8316	1	$\begin{vmatrix} 30 \\ 91 \end{vmatrix}$	C	NA
Ms-0	CS22655	8340	1	$\begin{vmatrix} 91\\92 \end{vmatrix}$	$\stackrel{\circ}{\mathrm{C}}$	NA NA
Bur-0	CS22656	8272	1	93	$\stackrel{\circ}{\mathrm{C}}$	NA NA
Edi-0	CS22657	8288	1	94	G	NA NA
Oy-0	CS22658	8352	1	95	G	NA NA
Ws-2	CS22659	8406	1	96	C	NA NA
VV 5-2	0.522059	3400	1	<i>9</i> 0		INA

# 6.105 SNP AtMSQTsnp 288(chrom=4, pos=11984772, alignment id=1376, alignment start=11984495)

Table 620: SNP AtMSQTsnp 288(chromosome=4, position=11984772, alignment id=1376, alignment start=11984495)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	4	0	0	0	0	0	0	0
A	0	1	45	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	1	1	0	46	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 621: detailed difference for SNP AtMSQTsnp 288

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
Rmx-A02	CS22568	8370	1	5	NA	G
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	1	11	NA	G
Lv-1	CS22574	6043	2	11	NA	G
Fb-4	CS22577	8293	1	14	NA	G
m2-1	CS22584	8349	1	21	NA	A
Bor-1	CS22590	5837	1	27	G	A
Pu2-7	CS22592	8362	1	29	NA	A
Shahdara	CS22652	8248	1	89	G	NA

# 6.106 SNP AtMSQTsnp 292(chrom=4, pos=12404111, alignment id=2534, alignment start=12403706)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	1	0	2	0	2	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	32	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	1	0	59	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 623: detailed difference for SNP AtMSQTsnp 292  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	C
Eden-1	CS22572	6009	4	9	${ m T}$	NA
Lv-1	CS22574	6043	1	11	NA	T
Ren-1	CS22610	8367	1	47	$^{\mathrm{C}}$	NA
Ren-11	CS22611	8368	1	48	${ m T}$	NA
Cvi-0	CS22614	8281	1	51	NA	C
Ct-1	CS22639	8280	1	76	${ m T}$	C
Ws-2	CS22659	8406	1	96	NA	T

## 6.107 SNP AtMSQTsnp 294(chrom=4, pos=13576588, alignment id=960, alignment start=13576336)

Table 624: SNP AtMSQTsnp 294(chromosome=4, position=13576588, alignment id=960, alignment start=13576336)

	-	NA	Α	С	G	${\rm T}$	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	55	0	0	0	0	0	0	0
$\Gamma$	0	1	0	0	1	42	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 625: detailed difference for SNP AtMSQTsnp 294

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call

Eden-1	CS22572	6009	4	9	Т	NA
Lv-1	CS22574	6043	2	11	G	NA
Bor-1	CS22590	5837	1	27	$\Gamma$	G

### 6.108 SNP AtMSQTsnp 300(chrom=4, pos=15765120, alignment id=1685, alignment start=15764920)

Table 626: SNP AtMSQTsnp 300(chromosome=4, position=15765120, alignment id=1685, alignment start=15764920)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	52	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	46	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 627: detailed difference for SNP AtMSQTsnp 300

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Bor-1	CS22590	5837	1	27	A	G

# 6.109 SNP AtMSQTsnp 304(chrom=4, pos=16272521, alignment id=2262, alignment start=16272270)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	5	0	5	0	0	0	0	1	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	33	0	1	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	0	0	51	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 629: detailed difference for SNP AtMSQTsnp 304

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Т	NA
Fb-4	CS22577	8293	1	14	NA	C
Vr2-6	CS22581	8402	1	18	${ m T}$	NA
CIBC-5	CS22602	8277	1	39	$\mathbf{C}$	$\mid$ T
CIBC-17	CS22603	8276	1	40	NA	C
Ren-1	CS22610	8367	1	47	NA	CT
Br-0	CS22628	8269	1	65	NA	$\mid$ T
Est-1	CS22629	8291	1	66	NA	C
Mrk-0	CS22635	8339	1	72	NA	C
Mt-0	CS22642	8341	1	79	NA	T
Nok-3	CS22643	8347	1	80	NA	$\mid$ T
Fei-0	CS22645	8294	1	82	NA	$\mid$ T
Se-0	CS22646	8379	1	83	NA	$\mid$ T
Shahdara	CS22652	8248	1	89	$^{\mathrm{C}}$	NA
Ws-2	CS22659	8406	1	96	NA	C

# 6.110 SNP AtMSQTsnp 306(chrom=4, pos=16742071, alignment id=2714, alignment start=16741855)

	-	NA	A	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	15	9	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	1	0	39	0	0	0	0	0	0	0	0
G	0	1	0	1	30	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	1	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 631: detailed difference for SNP AtMSQTsnp 306

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	С
Eden-1	CS22572	6009	4	9	G	NA
Ull2-5	CS22586	8397	1	23	NA	G
Zdr-6	CS22589	8410	1	26	NA	C
Lp2-6	CS22595	8333	1	32	NA	C
CIBC-5	CS22602	8277	1	39	G	C
CIBC-17	CS22603	8276	1	40	NA	G
Got-22	CS22609	8298	1	46	CG	G
Ren-11	CS22611	8368	1	48	C	NA
Cvi-0	CS22614	8281	1	51	NA	G
C24	CS22620	8273	1	57	NA	C
N13	CS22491	8429	1	58	NA	G
Wei-0	CS22622	8404	1	59	NA	C
Yo-0	CS22624	8408	1	61	NA	C
Van-0	CS22627	8400	1	64	NA	C
Br-0	CS22628	8269	1	65	NA	C
Ag-0	CS22630	8251	1	67	NA	C
Mrk-0	CS22635	8339	1	72	NA	С
Mz-0	CS22636	8342	1	73	NA	G
Wt-5	CS22637	8407	1	74	NA	C
Mt-0	CS22642	8341	1	79	NA	G
Fei-0	CS22645	8294	1	82	NA	C
Se-0	CS22646	8379	1	83	NA	C
Ts-1	CS22647	8392	1	84	NA	C
Kin-0	CS22654	8316	1	91	NA	C
Ms-0	CS22655	8340	1	92	NA	G
Bur-0	CS22656	8272	1	93	NA	G
Oy-0	CS22658	8352	1	95	NA	G

## 6.111 SNP AtMSQTsnp 307(chrom=4, pos=17038400, alignment id=2205, alignment start=17038096)

Table 632: SNP AtMSQTsnp 307(chromosome=4, position=17038400, alignment id=2205, alignment start=17038096)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	39	0	0	1	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\Gamma$	0	2	2	0	0	51	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 633: detailed difference for SNP AtMSQTsnp 307

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Τ	NA
Fb-4	CS22577	8293	1	14	Τ	A
CIBC-5	CS22602	8277	1	39	Τ	A
CIBC-17	CS22603	8276	1	40	A	T
Shahdara	CS22652	8248	1	89	$\Gamma$	NA

### 6.112 SNP AtMSQTsnp 310(chrom=4, pos=17608924, alignment id=1999, alignment start=17608717)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	6	4	0	0	0	0	0	0	0	0
A	0	2	51	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	1	35	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 635: detailed difference for SNP AtMSQTsnp 310  $\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	С
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	NA	A
Bil-7	CS22579	8263	1	16	NA	A
Vr2-6	CS22581	8402	1	18	NA	C
Ull2-3	CS22587	8396	1	24	NA	A
Bor-1	CS22590	5837	1	27	C	A
Ren-11	CS22611	8368	1	48	C	NA
Nd-1	CS22619	8344	1	56	NA	C
Nok-3	CS22643	8347	1	80	NA	C
Wa-1	CS22644	8403	1	81	NA	A
Fei-0	CS22645	8294	1	82	NA	A
Kondara	CS22651	8319	1	88	NA	A
Shahdara	CS22652	8248	1	89	A	NA

# 6.113 SNP AtMSQTsnp 312(chrom=4, pos=17803781, alignment id=1985, alignment start=17803605)

 $\begin{array}{lll} {\rm Table~636:~SNP~AtMSQTsnp~312(chromosome=4,~position=17803781,~alignment~id=1985,~alignment~start=17803605)} \end{array}$ 

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	1	0	2	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	29	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	2	0	0	0	66	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 637: detailed difference for SNP AtMSQTsnp 312

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call

Pna-10	CS22571	8358	1	8	NA	Т	
Eden-1	CS22572	6009	4	9	T	NA	
Lv-1	CS22574	6043	2	11	T	NA	
Bil-7	CS22579	8263	1	16	NA	$\Gamma$	
Ull2-3	CS22587	8396	1	24	NA	$^{\circ}$ C	

### 6.114 SNP AtMSQTsnp 315(chrom=4, pos=18560343, alignment id=2289, alignment start=18560103)

Table 638: SNP AtMSQTsnp 315(chromosome=4, position=18560343, alignment id=2289, alignment start=18560103)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	0	13	0	0	0	0	0	0
A	0	0	20	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	2	0	0	0	61	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 639: detailed difference for SNP AtMSQTsnp 315

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Pna-10	CS22571	8358	1	8	NA	T
Eden-1	CS22572	6009	4	9	${ m T}$	NA
Ull2-3	CS22587	8396	1	24	NA	A
Bor-4	CS22591	8268	1	28	NA	T
Lp2-6	CS22595	8333	1	32	NA	T
Ren-11	CS22611	8368	1	48	${ m T}$	NA
Nd-1	CS22619	8344	1	56	NA	T
C24	CS22620	8273	1	57	NA	T
N13	CS22491	8429	1	58	NA	T
Ga-0	CS22634	8295	1	71	NA	T
Mz-0	CS22636	8342	1	73	NA	A
Nok-3	CS22643	8347	1	80	NA	T
Kondara	CS22651	8319	1	88	NA	T
Shahdara	CS22652	8248	1	89	NA	T
Sorbo	CS22653	8381	1	90	NA	T
Oy-0	CS22658	8352	1	95	NA	T
Ws-2	CS22659	8406	1	96	NA	T

# 6.115 SNP AtMSQTsnp 321(chrom=5, pos=625679, alignment id=2386, alignment start=625179)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	8	18	0	0	0	0	0	0	0	0
A	0	1	27	2	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	2	41	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 641: detailed difference for SNP AtMSQTsnp 321

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Kno-18	CS22567	8318	1	4	NA	A
Eden-1	CS22572	6009	4	9	$^{\mathrm{C}}$	NA
Lv-5	CS22575	6046	1	12	NA	C
Lv-5	CS22575	6046	2	12	NA	C
Spr1-6	CS22583	8383	1	20	NA	C
Bor-1	CS22590	5837	1	27	$^{\mathrm{C}}$	A
Bor-4	CS22591	8268	1	28	NA	C
Pu2-7	CS22592	8362	1	29	NA	C
NFA-10	CS22599	8345	1	36	NA	C
CIBC-5	CS22602	8277	1	39	A	C
CIBC-17	CS22603	8276	1	40	С	A
Tamm-27	CS22605	8391	1	42	NA	A
Kz-9	CS22607	8322	1	44	NA	A
Ren-1	CS22610	8367	1	47	NA	C
Uod-7	CS22613	8399	1	50	NA	A
Lz-0	CS22615	8336	1	52	NA	C
Ei-2	CS22616	8289	1	53	NA	C
N13	CS22491	8429	1	58	NA	C
Ws-0	CS22623	8405	1	60	NA	A
Gy-0	CS22631	8302	1	68	NA	C
Ra-0	CS22632	8364	1	69	A	C
Wt-5	CS22637	8407	1	74	NA	C
Ct-1	CS22639	8280	1	76	NA	C
Fei-0	CS22645	8294	1	82	NA	C
Se-0	CS22646	8379	1	83	NA	C
Ts-1	CS22647	8392	1	84	NA	C
Pro-0	CS22649	8360	1	86	NA	C
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	NA	A
Kin-0	CS22654	8316	1	91	NA	C
Ms-0	CS22655	8340	1	92	NA	A
Edi-0	CS22657	8288	1	94	NA	A

## 6.116 SNP AtMSQTsnp 323(chrom=5, pos=872350, alignment id=532, alignment start=872097)

Table 642: SNP AtMSQTsnp 323(chromosome=5, position=872350, alignment id=532, alignment start=872097)

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	2	55	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	33	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	1	0	0	0	0	0	0	0
$\operatorname{AT}$	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 643: detailed difference for SNP AtMSQTsnp 323

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	A	NA
Bil-5	CS22578	8262	1	15	NA	A
Bor-1	CS22590	5837	1	27	A	G
Van-0	CS22627	8400	1	64	$\overline{AG}$	A
Ts-1	CS22647	8392	1	84	NA	A
Ms-0	CS22655	8340	1	92	$\overline{AG}$	G

# 6.117 SNP AtMSQTsnp 325(chrom=5, pos=1214057, alignment id=2388, alignment start=1213621)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	18	0	13	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	2	0	40	0	1	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	1	0	25	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 645: detailed difference for SNP AtMSQTsnp 325

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Kno-18	CS22567	8318	1	4	NA	T
Eden-1	CS22572	6009	4	9	C	NA
Lv-1	CS22574	6043	2	11	C	NA
Lv-5	CS22575	6046	1	12	NA	C
Lv-5	CS22575	6046	2	12	NA	C
Fb-2	CS22576	8292	1	13	NA	C
Spr1-6	CS22583	8383	1	20	NA	T
m2-1	CS22584	8349	1	21	NA	C
Bor-1	CS22590	5837	1	27	T	C
Bor-4	CS22591	8268	1	28	NA	C
Pu2-7	CS22592	8362	1	29	NA	C
NFA-10	CS22599	8345	1	36	NA	C
Sq-1	CS22600	8384	1	37	NA	C
Kz-9	CS22607	8322	1	44	NA	T
Got-7	CS22608	8299	1	45	NA	T
Ren-1	CS22610	8367	1	47	NA	C
Uod-7	CS22613	8399	1	50	NA	T
Lz-0	CS22615	8336	1	52	NA	T
Ei-2	CS22616	8289	1	53	NA	C
Ler-1	CS22618	8324	1	55	NA	C
Wei-0	CS22622	8404	1	59	NA	T
Ws-0	CS22623	8405	1	60	NA	C
Yo-0	CS22624	8408	1	61	NA	T
Gy-0	CS22631	8302	1	68	NA	T
Ra-0	CS22632	8364	1	69	NA	T
Ga-0	CS22634	8295	1	71	NA	C
Mrk-0	CS22635	8339	1	72	C	T
Ct-1	CS22639	8280	1	76	NA	C
Mr-0	CS22640	8338	1	77	NA	C
Mt-0	CS22642	8341	1	79	NA	T
Ts-1	CS22647	8392	1	84	NA	C
Ts-5	CS22648	8393	1	85	NA	C
Kin-0	CS22654	8316	1	91	NA	T
Ms-0	CS22655	8340	1	92	NA	T
Bur-0	CS22656	8272	1	93	NA	C

# $6.118 \quad SNP \ AtMSQTsnp \ 327 (chrom=5, \ pos=1497133, \ alignment \ id=2105, \ alignment \ start=1496987)$

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	25	0	0	1	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	15	0	0	15	1	0	0	0	0	0	0
$\mid T \mid$	0	27	0	0	0	15	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 647: detailed difference for SNP AtMSQTsnp 327

		4	J1: 4 .	:-:1	11	11
	stkparent	ecotype_id	duplicate	accession_id	pcr_call T	sequenom_call
	CS22565	8372	1	2		NA
	CS22567	8318	1	4	T	NA
	CS22568	8370	1	5	T	NA
	CS22569	8371	1	6	T	NA
	CS22570	8359	1	7	T	NA
	CS22572	6009	4	9	T	NA
	CS22575	6046	2	12	G	NA
1 * 1	CS22583	8383	1	20	G	NA
	CS22586	8397	1	23	T	NA
	CS22588	8409	1	25	T	NA
	CS22593	8361	1	30	T	NA
1 -	CS22594	8332	1	31	G	NA
	CS22596	8309	1	33	G	NA
	CS22598	8346	1	35	T	NA
	CS22599	8345	1	36	G	NA
	CS22602	8277	1	39	Τ	NA
	CS22603	8276	1	40	G	${ m T}$
	CS22604	8390	1	41	G	NA
	CS22605	8391	1	42	G	NA
	CS22606	8320	1	43	T	NA
Kz-9   (	CS22607	8322	1	44	G	NA
	CS22608	8299	1	45	${ m T}$	NA
Uod-1	CS22612	8398	1	49	${ m T}$	NA
Lz-0	CS22615	8336	1	52	G	NA
Ei-2	CS22616	8289	1	53	${ m T}$	NA
Gu-0	CS22617	8301	1	54	${ m T}$	NA
Ler-1	CS22618	8324	1	55	${ m T}$	NA
Wei-0	CS22622	8404	1	59	G	NA
Ws-0	CS22623	8405	1	60	${ m T}$	NA
Yo-0	CS22624	8408	1	61	${ m T}$	NA
Col-0	CS22625	8279	1	62	${ m T}$	NA
Br-0	CS22628	8269	1	65	${ m T}$	NA
Gy-0	CS22631	8302	1	68	G	NA
Mrk-0	CS22635	8339	1	72	G	NA
Mz-0	CS22636	8342	1	73	${ m T}$	NA
Ct-1	CS22639	8280	1	76	G	NA
Tsu-1	CS22641	8394	1	78	${ m T}$	NA
Wa-1	CS22644	8403	1	81	G	NA
	CS22647	8392	1	84	${ m T}$	NA
	CS22648	8393	1	85	${ m T}$	NA
	CS22651	8319	1	88	NA	G
	CS22655	8340	1	92	G	NA
	CS22656	8272	1	93	${ m T}$	NA
	CS22658	8352	1	95	$\dot{\mathrm{T}}$	NA
	CS22659	8406	1	96	NA	${ m T}$

# 6.119 SNP AtMSQTsnp 331(chrom=5, pos=1931167, alignment id=1633, alignment start=1931083)

Table 648: SNP AtMSQTsnp 331(chromosome=5, position=1931167, alignment id=1633, alignment start=1931083)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	50	0	0	0	0	0	0	0	0	0	0
G	0	43	0	0	7	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 649: detailed difference for SNP AtMSQTsnp  $331\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	G	NA
Kno-10	CS22566	8317	1	3	G	NA
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	G	NA

D   A100	CCCOCTCO	0.071	l -1	l c		l D.T.A
Rmx-A180	CS22569	8371	1	6	C	NA NA
Pna-17	CS22570	8359	1	7	C	NA
Eden-1	CS22572	6009	4	9	G	NA
Eden-2	CS22573	8287	1	10	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Lv-5	CS22575	6046	2	12	G	NA
Fb-2	CS22576	8292	1	13	G	NA
Fb-4	CS22577	8293	1	14	С	NA
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	С	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	С	NA
Spr1-6	CS22583	8383	1	20	С	NA
m2-1	CS22584	8349	1	21	G	NA
m2-3	CS22585	8350	1	22	G	NA
Ull2-5	CS22586	8397	1	23	G	NA
Ull2-3	CS22587	8396	1	$\begin{vmatrix} 26 \\ 24 \end{vmatrix}$	C	NA
Zdr-1	CS22588	8409	1	25	C	NA
Zdr-6	CS22589	8410	1	$\begin{vmatrix} 26 \\ 26 \end{vmatrix}$	$\stackrel{\circ}{\text{C}}$	NA NA
Bor-1	CS22590	5837	$\frac{1}{2}$	$\begin{vmatrix} 20\\27 \end{vmatrix}$	G	NA NA
Bor-4	CS22590 CS22591	8268	$\begin{vmatrix} z \\ 1 \end{vmatrix}$	28	G	NA NA
Pu2-7	CS22591 CS22592	8362	1	$\begin{vmatrix} 26 \\ 29 \end{vmatrix}$	G	NA NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	С	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	G	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	G	NA
NFA-10	CS22599	8345	1	36	G	NA
Sq-1	CS22600	8384	1	37	C	NA
Sq-8	CS22601	8385	1	38	G	NA
CIBC-5	CS22602	8277	1	39	С	NA
CIBC-17	CS22603	8276	1	40	С	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-1	CS22606	8320	1	43	C	NA
Kz-9	CS22607	8322	1	44	С	NA
Got-7	CS22608	8299	1	45	С	NA
Got-22	CS22609	8298	1	46	С	NA
Ren-1	CS22610	8367	1	47	С	NA
Ren-11	CS22611	8368	1	48	С	NA
Uod-1	CS22612	8398	1	49	С	NA
Uod-7	CS22613	8399	1	50	C	NA
Cvi-0	CS22614	8281	1	51	G	NA
Lz-0	CS22615	8336	1	52	C	NA
Ei-2	CS22616	8289	1	53	C	NA
Gu-0	CS22617	8301	1	54	C	NA
Ler-1	CS22618	8324	1	55	G	NA
Nd-1	CS22619	8344	1	56	C	NA
C24	CS22620	8273	1	57	C	NA NA
N13	CS22491	8429	1	58	G	NA NA
Wei-0	CS22491 CS22622	8404	1	59	C	NA NA
					G	
Ws-0	CS22623	8405	1	60		NA
Yo-0	CS22624	8408	1	61	G	NA
Col-0	CS22625	8279	1	62	G	NA
An-1	CS22626	8253	1	63	C	NA
Van-0	CS22627	8400	1	64	C	NA
Br-0	CS22628	8269	1	65	C	NA
Est-1	CS22629	8291	1	66	G	NA
Ag-0	CS22630	8251	1	67	C	NA
Gy-0	CS22631	8302	1	68	C	NA
Ra-0	CS22632	8364	1	69	C	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	С	NA
Mrk-0	CS22635	8339	1	72	С	NA
Mz-0	CS22636	8342	1	73	С	NA
Wt-5	CS22637	8407	1	74	C	NA
Ct-1	CS22639	8280	1	76	С	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	C	NA
Mt-0	CS22642	8341	1	79	С	NA
Nok-3	CS22643	8347	1	80	С	NA
Wa-1	CS22644	8403	1	81	С	NA
Fei-0	CS22645	8294	1	82	С	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	C	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	C	NA
I	1	į.	i .	i .	1	i .

Shahdara	CS22652	8248	1	89	$\mid C \mid$	NA	
Sorbo	CS22653	8381	1	90	$^{\mathrm{C}}$	NA	
Kin-0	CS22654	8316	1	91	С	NA	
Ms-0	CS22655	8340	1	92	G	NA	
Bur-0	CS22656	8272	1	93	G	NA	
Edi-0	CS22657	8288	1	94	G	NA	
Oy-0	CS22658	8352	1	95	$^{\mathrm{C}}$	NA	
Ws-2	CS22659	8406	1	96	C	NA	

# 6.120 SNP AtMSQTsnp 334(chrom=5, pos=2244739, alignment id=1995, alignment start=2244524)

	-	NA	A	С	G	${ m T}$	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	2	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	50	0	3	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	1	0	3	0	40	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 651: detailed difference for SNP AtMSQTsnp 334

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Pna-17	CS22570	8359	1	7	NA	C
Eden-1	CS22572	6009	4	9	T	NA
CIBC-5	CS22602	8277	1	39	C	${ m T}$
CIBC-17	CS22603	8276	1	40	T	C
Uod-7	CS22613	8399	1	50	NA	C
Ra-0	CS22632	8364	1	69	C	T
Wt-5	CS22637	8407	1	74	T	C
Tsu-1	CS22641	8394	1	78	T	C
Nok-3	CS22643	8347	1	80	C	T
Fei-0	CS22645	8294	1	82	NA	T

# 6.121 SNP AtMSQTsnp 343(chrom=5, pos=3606967, alignment id=538, alignment start=3606683)

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	53	0	1	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	0	0	0	0	0	0	0	0
${ m T}$	0	1	0	0	0	45	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{AT}$	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 653: detailed difference for SNP AtMSQTsnp 343

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	Τ	NA
Bor-1	CS22590	5837	1	27	$\mathbf{C}$	Т

#### 6.122 SNP AtMSQTsnp 350(chrom=5, pos=5005750, alignment id=1459, alignment start=5005363)

 $\begin{array}{lll} {\rm Table} & 654: & {\rm SNP} & {\rm AtMSQTsnp} & 350 ({\rm chromosome}{=}5, & {\rm position}{=}5005750, \ {\rm alignment} \ {\rm id}{=}1459, \ {\rm alignment} \ {\rm start}{=}5005363) \end{array}$ 

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	35	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	63	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 655: detailed difference for SNP AtMSQTsnp 350

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Shahdara	CS22652	8248	1	89	G	NA

#### 6.123 SNP AtMSQTsnp 351(chrom=5, pos=5319138, alignment id=126, alignment start=5318924)

	-	NA	Α	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	28	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	70	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 657: detailed difference for SNP AtMSQTsnp 351

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA

## 6.124 SNP AtMSQTsnp 355(chrom=5, pos=6708014, alignment id=547, alignment start=6707732)

 $\begin{array}{lll} {\rm Table~658:~SNP~AtMSQTsnp~355(chromosome=5,~position=6708014,~alignment~id=547,~alignment~start=6707732)} \end{array}$ 

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	23	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	1	66	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0

	GT	0	0	0	0	0	0	0	0	0	0	0	0	
--	----	---	---	---	---	---	---	---	---	---	---	---	---	--

Table 659: detailed difference for SNP AtMSQTsnp 355

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Т	NA
Bor-1	CS22590	5837	1	27	Т	G

### 6.125 SNP AtMSQTsnp 358(chrom=5, pos=7279057, alignment id=550, alignment start=7278798)

Table 660: SNP AtMSQTsnp 358(chromosome=5, position=7279057, alignment id=550, alignment start=7278798)

	-	NA	A	С	G	Τ	AC	AG	AT	$\overline{\text{CG}}$	CT	$\operatorname{GT}$
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	36	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	61	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 661: detailed difference for SNP AtMSQTsnp 358

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	G	NA
Bor-1	CS22590	5837	1	27	A	G

## 6.126 SNP AtMSQTsnp 359(chrom=5, pos=7442381, alignment id=1363, alignment start=7442039)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	38	0	0	0	0	0	0	0
Τ	0	1	0	0	0	57	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	1	0	0	0	0	0	0	0

Table 663: detailed difference for SNP AtMSQTsnp 359

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Kno-18	CS22567	8318	1	4	NA	Т
Eden-1	CS22572	6009	4	9	$\Gamma$	NA
Van-0	CS22627	8400	1	64	GT	G
Ms-0	CS22655	8340	1	92	NA	G

# 6.127 SNP AtMSQTsnp 360(chrom=5, pos=7842993, alignment id=174, alignment start=7842900)

Table 664: SNP AtMSQTsnp 360(chromosome=5, position=7842993, alignment id=174, alignment start=7842900)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	6	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$^{\rm C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	56	0	0	2	0	0	0	0	0	0	0
T	0	27	0	0	0	1	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 665: detailed difference for SNP AtMSQTsnp 360

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Pna-10	CS22571	8358	1	8	Т	NA
Eden-1	CS22572	6009	3	9	NA	G
Eden-2	CS22573	8287	1	10	G	NA
Lv-1	CS22574	6043	1	11	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Lv-5	CS22575	6046	2	12	G	NA
Fb-2	CS22576	8292	1	13	G	NA
Fb-4	CS22577	8293	1	14	G	NA
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	G	NA
Spr1-6	CS22583	8383	1	20	G	NA
m2-1	CS22584	8349	1	$\begin{bmatrix} 20 \\ 21 \end{bmatrix}$	G	NA
m2-3	CS22585	8350	1	$\begin{bmatrix} 21 \\ 22 \end{bmatrix}$	G	NA
Ull2-3	CS22587	8396	1	$\begin{vmatrix} 22\\24 \end{vmatrix}$	G	NA NA
Zdr-1	CS22587 CS22588	8409	1	$\begin{vmatrix} 24\\25 \end{vmatrix}$	T	NA NA
Zdr-1 Zdr-6	CS22589	8410	1	$\begin{vmatrix} 25\\26 \end{vmatrix}$	G	NA NA
Bor-1	CS22589 CS22590	5837	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$\begin{vmatrix} 26 \\ 27 \end{vmatrix}$	G	NA NA
Bor-4	CS22590 CS22591	8268	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	$\begin{vmatrix} 27 \\ 28 \end{vmatrix}$	G	NA NA
				$\begin{vmatrix} 28 \\ 29 \end{vmatrix}$	G	
Pu2-7	CS22592	8362	1			NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	T	NA
HR-10	CS22597	8308	1	34	T	NA
NFA-8	CS22598	8346	1	35	T	NA
NFA-10	CS22599	8345	1	36	T	NA
Sq-1	CS22600	8384	1	37	T	NA
Sq-8	CS22601	8385	1	38	T	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22603	8276	1	40	T	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-1	CS22606	8320	1	43	G	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	T	NA
Got-22	CS22609	8298	1	46	T	NA
Ren-1	CS22610	8367	1	47	T	NA
Ren-11	CS22611	8368	1	48	T	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	$\Gamma$	NA
Cvi-0	CS22614	8281	1	51	G	NA
Lz-0	CS22615	8336	1	52	$\Gamma$	NA
Ei-2	CS22616	8289	1	53	T	NA
Gu-0	CS22617	8301	1	54	G	NA
Ler-1	CS22618	8324	1	55	$\stackrel{\smile}{\mathrm{T}}$	NA
Nd-1	CS22619	8344	1	56	G	NA NA
N13	CS22491	8429	1	58	G	NA NA
Wei-0	CS22491 CS22622	8404	1	59	G	NA NA
Ws-0	CS22622 CS22623	8405	1	60	G	NA NA
			1 1	61	G	
Yo-0	CS22624	8408				NA NA
Col-0	CS22625	8279	1	62	G	NA
An-1	CS22626	8253	1	63	G	NA
Van-0	CS22627	8400	1	64	G	NA
Br-0	CS22628	8269	1	65	G	NA
Ag-0	CS22630	8251	1	67	G	NA

Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	$\Gamma$	NA
Bay-0	CS22633	8260	1	70	$\Gamma$	NA
Ga-0	CS22634	8295	1	71	T	NA
Mrk-0	CS22635	8339	1	72	G	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	G	NA
Tsu-1	CS22641	8394	1	78	T	NA
Mt-0	CS22642	8341	1	79	G	NA
Nok-3	CS22643	8347	1	80	Т	NA
Wa-1	CS22644	8403	1	81	T	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	G	NA
Shahdara	CS22652	8248	1	89	T	NA
Sorbo	CS22653	8381	1	90	T	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	T	NA
Bur-0	CS22656	8272	1	93	T	NA
Edi-0	CS22657	8288	1	94	G	NA
Ws-2	CS22659	8406	1	96	G	NA

# 6.128 SNP AtMSQTsnp 361(chrom=5, pos=7881430, alignment id=1986, alignment start=7881187)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	2	46	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	0	0	52	0	0	0	0	0	0	0
${f T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{AT}$	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 667: detailed difference for SNP AtMSQTsnp 361

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Shahdara	CS22652	8248	1	89	A	NA

# 6.129 SNP AtMSQTsnp 368(chrom=5, pos=14216131, alignment id=1035, alignment start=14215995)

 $\begin{array}{lll} {\rm Table~668:} & {\rm SNP~AtMSQTsnp~368(chromosome=5,~position=14216131,~alignment~id=1035,~alignment~start=14215995)} \end{array}$ 

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
_	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	43	3	0	1	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	51	0	0	2	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 669: detailed difference for SNP AtMSQTsnp 368

nativename RRS-10	stkparent CS22565	ecotype_id 8372	duplicate	accession_id 2	pcr_call	sequenom_call NA
I			1		A	
Kno-10	CS22566	8317	1	3	A	NA
Kno-18	CS22567	8318	1	4	A	NA
Rmx-A02	CS22568	8370	1	5	A	NA
Rmx-A180	CS22569	8371	1	6	A	NA
Pna-17	CS22570	8359	1	7	G	NA
Pna-10	CS22570	8358	1	8	A	NA
I						
Eden-1	CS22572	6009	4	9	A	NA
Eden-2	CS22573	8287	1	10	A	NA
Lv-1	CS22574	6043	2	11	G	NA
Lv-5	CS22575	6046	2	12	G	NA
Fb-2	CS22576	8292	1	13	G	NA
Fb-4		8293	1	14		NA NA
I	CS22577				A	l
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	G	NA
•					G	l
Spr1-6	CS22583	8383	1	20		NA
m2-1	CS22584	8349	1	21	A	NA
m2-3	CS22585	8350	1	22	A	NA
Ull2-5	CS22586	8397	1	23	G	NA
Ull2-3	CS22587	8396	1	$\frac{1}{24}$	A	NA
Zdr-1	CS22588	8409	1	$\begin{vmatrix} 24\\25\end{vmatrix}$	G	NA
I					G	l
Zdr-6	CS22589	8410	1	26		NA
Bor-1	CS22590	5837	1	27	A	G
Bor-1	CS22590	5837	2	27	A	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Ğ	NA
Pu2-23	CS22592 $CS22593$	8361	1	$\begin{vmatrix} 29\\30 \end{vmatrix}$	A	NA NA
I						
Lp2-2	CS22594	8332	1	31	A	NA
Lp2-6	CS22595	8333	1	32	A	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	A	NA
I						
NFA-10	CS22599	8345	1	36	G	NA
Sq-1	CS22600	8384	1	37	G	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	A	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	$\begin{vmatrix} 10 \\ 41 \end{vmatrix}$	G	NA
I			1	$\begin{vmatrix} 41\\42 \end{vmatrix}$	G	NA NA
Tamm-27	CS22605	8391				
Kz-1	CS22606	8320	1	43	G	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	G	NA
Got-22	CS22609	8298	1	46	G	NA
Ren-1	CS22610	8367	1	47	G	NA
Ren-11		8368	1	48	G	NA
	CS22611					l
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	G	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	A	NA
Ei-2	CS22616	8289	1	53	A	NA
I				54		NA NA
Gu-0	CS22617	8301	1		A	l
Ler-1	CS22618	8324	1	55	G	NA
Nd-1	CS22619	8344	1	56	G	NA
C24	CS22620	8273	1	57	A	NA
N13	CS22491	8429	1	58	G	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	G	NA NA
I						
Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	62	G	NA
An-1	CS22626	8253	1	63	A	NA
Van-0	CS22627	8400	1	64	A	NA
Br-0	CS22628	8269	1	65	G	NA
Est-1	CS22629	8291	1	66	A	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	A	NA
Bay-0	CS22633	8260	1	70	A	NA
Ga-0	CS22634		1	$\begin{vmatrix} 70 \\ 71 \end{vmatrix}$	A	NA NA
		8295				
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	A	NA
Wt-5	CS22637	8407	1	74	A	NA
	CS22639	8280	1	76	A	NA
Ct-1	COZZONS					

Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	A	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA
Pro-0	CS22649	8360	1	86	G	NA
LL-0	CS22650	8328	1	87	G	NA
Kondara	CS22651	8319	1	88	G	NA
Shahdara	CS22652	8248	1	89	G	NA
Sorbo	CS22653	8381	1	90	G	NA
Kin-0	CS22654	8316	1	91	G	NA
Ms-0	CS22655	8340	1	92	G	NA
Bur-0	CS22656	8272	1	93	G	NA
Edi-0	CS22657	8288	1	94	A	NA
Oy-0	CS22658	8352	1	95	G	NA
Ws-2	CS22659	8406	1	96	G	NA

# 6.130 SNP AtMSQTsnp 370(chrom=5, pos=15065196, alignment id=756, alignment start=15065018)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	6	0	0	1	0	0	0	0	0	0	0
A	0	7	39	0	3	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	0	1	0	39	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 671: detailed difference for SNP AtMSQTsnp 370

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	1	11	A	G
Lv-1	CS22574	6043	2	11	A	NA
Lv-5	CS22575	6046	1	12	A	G
Lv-5	CS22575	6046	2	12	A	NA
Bil-5	CS22578	8262	1	15	A	NA
Bil-7	CS22579	8263	1	16	A	G
Bor-1	CS22590	5837	1	27	G	A
Ren-11	CS22611	8368	1	48	A	NA
Ts-5	CS22648	8393	1	85	A	NA
Kondara	CS22651	8319	1	88	NA	G
Ws-2	CS22659	8406	1	96	A	NA

# 6.131 SNP AtMSQTsnp 372(chrom=5, pos=15569205, alignment id=926, alignment start=15568698)

	-	NA	A	С	G	T	AC	AG	AT	CG	СТ	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	6	17	0	1	0	0	0	0	0	0	0
A	0	2	41	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	33	0	0	0	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
AG	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0

CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 673: detailed difference for SNP AtMSQTsnp 372

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Kno-18	CS22567	8318	1	4	G	NA
Rmx-A02	CS22568	8370	1	5	NA	A
Pna-17	CS22570	8359	1	7	G	NA
Eden-1	CS22572	6009	3	9	NA	G
Eden-2	CS22573	8287	1	10	G	NA
Fb-2	CS22576	8292	1	13	G	NA
Vr2-1	CS22580	8401	1	17	G	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	A	NA
Spr1-6	CS22583	8383	1	20	G	NA
m2-1	CS22584	8349	1	21	G	NA
m2-3	CS22585	8350	1	22	NA	A
Ull2-3	CS22587	8396	1	24	G	NA
Bor-1	CS22590	5837	1	27	G	NA
Bor-1	CS22590	5837	2	27	G	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	NA	A
Lp2-2	CS22594	8332	1	31	G	NA
HR-5	CS22596	8309	1	33	G	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-10	CS22599	8345	1	36	G	NA
CIBC-5	CS22602	8277	1	39	G	NA
CIBC-17	CS22602	8276	1	$\begin{vmatrix} 33 \\ 40 \end{vmatrix}$	G	NA
Tamm-2	CS22604	8390	1	41	NA	A
Got-22	CS22609	8298	1	46	NA	A
Ren-11	CS22611	8368	1	48	A	NA
Uod-7	CS22613	8399	1	50	G	NA
Gu-0	CS22617	8301	1	54	NA	A
Yo-0	CS22624	8408	1	61	G	NA
Col-0	CS22625	8279	1	$\begin{vmatrix} 61 \\ 62 \end{vmatrix}$	G	NA
An-1	CS22626	8253	1	63	G	NA
Van-0	CS22627	8400	1	$\begin{vmatrix} 63 \\ 64 \end{vmatrix}$	NA	A
Est-1	CS22629	8291	1	66	NA	A
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	NA	A
Bay-0	CS22633	8260	1	70	NA	A
Mrk-0	CS22635	8339	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	G	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	NA	A
Mr-0	CS22640	8338	1	77	NA	A
Tsu-1	CS22641	8394	1	78	NA	A
Wa-1	CS22644	8403	1	81	NA	A
Fei-0	CS22645	8294	1	82	G	NA
Ts-1	CS22647	8392	1	84	G	NA
Ts-5	CS22648	8393	1	85	G	NA NA
Pro-0	CS22649	8360	1	86	G	NA NA
LL-0	CS22649 CS22650	8328	1	87	G	NA NA
Shahdara	CS22652	8248	1	89	NA	A
Sorbo	CS22652 CS22653	8381	1	90	NA NA	A
Ms-0	CS22655 CS22655	8340	1	90	G	NA
Edi-0	CS22657	8288	1	94	NA	A
Ws-2	CS22659	8406	1	96	G	NA
VV S-2	OS22009	0400	1	90	G	INA

# 6.132 SNP AtMSQTsnp 373(chrom=5, pos=15767945, alignment id=1190, alignment start=15767914)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	13	0	0	0	0	0	0	0
A	0	1	21	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	1	0	54	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0

CG	0	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	
GT	0	0	0	0	0	0	0	0	0	0	0	0	

Table 675: detailed difference for SNP AtMSQTsnp 373

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Rmx-A180	CS22569	8371	1	6	NA	G
Pna-17	CS22570	8359	1	7	NA	A
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	1	11	NA	G
Lv-1	CS22574	6043	2	11	NA	G
Bil-7	CS22579	8263	1	16	NA	G
m2-3	CS22585	8350	1	22	A	G
Bor-1	CS22590	5837	1	27	G	A
Lp2-2	CS22594	8332	1	31	NA	G
CIBC-5	CS22602	8277	1	39	NA	G
Lz-0	CS22615	8336	1	52	NA	G
Gu-0	CS22617	8301	1	54	NA	G
Van-0	CS22627	8400	1	64	NA	G
Ra-0	CS22632	8364	1	69	NA	G
Wt-5	CS22637	8407	1	74	NA	A
Ct-1	CS22639	8280	1	76	NA	G
Ts-1	CS22647	8392	1	84	NA	G
Kin-0	CS22654	8316	1	91	NA	G

# 6.133 SNP AtMSQTsnp 378(chrom=5, pos=17171676, alignment id=1489, alignment start=17171242)

 $\begin{tabular}{llll} Table & 676: & SNP & AtMSQTsnp & 378 (chromosome=5, & position=17171676, alignment id=1489, alignment start=17171242) \\ \end{tabular}$ 

	-	NA	Α	С	G	Т	$^{\mathrm{AC}}$	$\overline{AG}$	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	1	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	2	0	47	0	0	0	0	0	0	0	0
G	0	0	0	1	46	0	0	0	0	0	0	0
T	0	2	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	1	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 677: detailed difference for SNP AtMSQTsnp 378

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Kno-10	CS22566	8317	1	3	G	С
Eden-1	CS22572	6009	4	9	$\mathbf{C}$	NA
Ull2-5	CS22586	8397	1	23	NA	G
Ren-11	CS22611	8368	1	48	$^{\mathrm{C}}$	NA
C24	CS22620	8273	1	57	${ m T}$	NA
Van-0	CS22627	8400	1	64	CG	С
Nok-3	CS22643	8347	1	80	${ m T}$	NA

# 6.134 SNP AtMSQTsnp 379(chrom=5, pos=17629384, alignment id=2039, alignment start=17629093)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	0	0	0	0	0	0	0	0	0
A	0	4	47	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	1	0	43	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0

1	AC	0	0	0	0	0	0	0	0	0	0	0	0
İ	AG	0	0	0	0	0	0	0	0	0	0	0	0
İ	AT	0	0	0	0	0	0	0	0	0	0	0	0
	CG	0	0	0	0	0	0	0	0	0	0	0	0
	$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
	GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 679: detailed difference for SNP AtMSQTsnp 379

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	$sequenom\_call$
Rmx-A02	CS22568	8370	1	5	NA	A
Eden-1	CS22572	6009	4	9	A	NA
Vr2-1	CS22580	8401	1	17	G	NA
Bor-1	CS22590	5837	1	27	G	A
Ren-11	CS22611	8368	1	48	G	NA
Br-0	CS22628	8269	1	65	A	NA
Gy-0	CS22631	8302	1	68	A	NA
Wa-1	CS22644	8403	1	81	A	NA
LL-0	CS22650	8328	1	87	NA	A
Kondara	CS22651	8319	1	88	NA	A

### 6.135 SNP AtMSQTsnp 388(chrom=5, pos=19316200, alignment id=761, alignment start=19315950)

Table 680: SNP AtMSQTsnp 388(chromosome=5, position=19316200, alignment id=761, alignment start=19315950)

	-	NA	Α	С	G	Т	AC	$\overline{AG}$	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	1	24	1	0	0	0	0	0	0	0	0
$^{\rm C}$	0	3	1	70	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 681: detailed difference for SNP AtMSQTsnp 388

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	С	NA
Bor-1	CS22590	5837	1	27	$\mathbf{C}$	A
Ren-1	CS22610	8367	1	47	A	C
Ren-11	CS22611	8368	1	48	A	NA
Bay-0	CS22633	8260	1	70	$\mathbf{C}$	NA
Shahdara	CS22652	8248	1	89	$^{\mathrm{C}}$	NA

# 6.136 SNP AtMSQTsnp 390(chrom=5, pos=20215473, alignment id=970, alignment start=20214933)

Table 682: SNP AtMSQTsnp 390(chromosome=5, position=20215473, alignment id=970, alignment start=20214933)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
Α	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	3	0	64	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	1	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	1	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 683: detailed difference for SNP AtMSQTsnp 390

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	С	NA
Lv-1	CS22574	6043	2	11	С	NA
Bor-1	CS22590	5837	1	27	T	C
Ren-11	CS22611	8368	1	48	С	NA
Van-0	CS22627	8400	1	64	CT	T

# 6.137 SNP AtMSQTsnp 392(chrom=5, pos=20409250, alignment id=994, alignment start=20408706)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	14	0	0	2	0	0	0	0	0	0	0
A	0	19	7	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0
G	0	56	0	0	2	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 685: detailed difference for SNP AtMSQTsnp 392

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	NA	G
Rmx-A180	CS22569	8371	1	6	G	NA
Pna-17	CS22570	8359	1	7	G	NA
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	G	NA
Lv-5	CS22575	6046	1	12	NA	G
Bil-5	CS22578	8262	1	15	G	NA
Bil-7	CS22579	8263	1	16	G	NA
Vr2-1	CS22580	8401	1	17	A	NA
Vr2-6	CS22581	8402	1	18	G	NA
Spr1-2	CS22582	8382	1	19	G	NA
Spr1-6	CS22583	8383	1	20	G	NA
Ull2-5	CS22586	8397	1	23	A	NA
Ull2-3	CS22587	8396	1	24	G	NA
Zdr-1	CS22588	8409	1	25	G	NA
Zdr-6	CS22589	8410	1	26	G	NA
Bor-1	CS22590	5837	2	27	A	NA
Bor-4	CS22591	8268	1	28	G	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	G	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	G	NA
HR-10	CS22597	8308	1	34	G	NA
NFA-8	CS22598	8346	1	35	G	NA
NFA-10	CS22599	8345	1	36	G	NA
Sq-1	CS22600	8384	1	37	G	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	G	NA
Tamm-2	CS22604	8390	1	41	G	NA
Tamm-27	CS22605	8391	1	42	G	NA
Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	A	NA
Got-7	CS22608	8299	1	45	G	NA
Ren-1	CS22610	8367	1	47	A	NA
Ren-11	CS22611	8368	1	48	G	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	G	NA
Cvi-0	CS22614	8281	1	51	G	NA
Lz-0	CS22615	8336	1	52	G	NA
Gu-0	CS22617	8301	1	54	G	NA
Ler-1	CS22618	8324	1	55	G	NA

C24	CS22620	8273	1	57	G	NA
N13	CS22491	8429	1	58	Ā	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	G	NA
Col-0	CS22625	8279	1	$\begin{vmatrix} 62 \end{vmatrix}$	Ä	NA
An-1	CS22626	8253	1	63	G	NA
Van-0	CS22627	8400	1	64	Ğ	NA
Br-0	CS22628	8269	1	65	Ğ	NA
Est-1	CS22629	8291	1	66	Ä	NA
Ag-0	CS22630	8251	1	67	G	NA
Gy-0	CS22631	8302	1	68	G	NA
Ra-0	CS22632	8364	1	69	Ğ	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	G	NA
Mrk-0	CS22635	8339	1	72	A	NA
Mz-0	CS22636	8342	1	73	G	NA
Wt-5	CS22637	8407	1	74	G	NA
Ct-1	CS22639	8280	1	76	G	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	G	NA
Mt-0	CS22642	8341	1	79	G	NA
Nok-3	CS22643	8347	1	80	G	NA
Wa-1	CS22644	8403	1	81	G	NA
Fei-0	CS22645	8294	1	82	G	NA
Se-0	CS22646	8379	1	83	G	NA
Ts-1	CS22647	8392	1	84	A	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	A	NA
Ms-0	CS22655	8340	1	92	A	NA
Bur-0	CS22656	8272	1	93	G	NA
Edi-0	CS22657	8288	1	94	G	NA
Oy-0	CS22658	8352	1	95	G	NA
Ws-2	CS22659	8406	1	96	G	NA

### 6.138 SNP AtMSQTsnp 394(chrom=5, pos=20518330, alignment id=2759, alignment start=20518241)

Table 686: SNP AtMSQTsnp 394(chromosome=5, position=20518330, alignment id=2759, alignment start=20518241)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	1	0	1	0	0	0	0	0	0	0
A	0	1	55	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	1	0	41	0	0	0	0	0	0	0
Τ	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 687: detailed difference for SNP AtMSQTsnp 394

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Pna-10	CS22571	8358	1	8	NA	G
Eden-1	CS22572	6009	4	9	A	NA
Bor-1	CS22590	5837	1	27	G	A
Fei-0	CS22645	8294	1	82	NA	A

## 6.139 SNP AtMSQTsnp 395(chrom=5, pos=20915321, alignment id=981, alignment start=20915132)

 $\begin{array}{lll} {\rm Table~688:~SNP~AtMSQTsnp~395(chromosome=5,~position=20915321,~alignment~id=981,~alignment~start=20915132)} \end{array}$ 

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0 0	0	0	0	0

A	0	1	58	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	2	0	0	38	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	1	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 689: detailed difference for SNP AtMSQTsnp 395

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	2	11	G	NA
Ren-11	CS22611	8368	1	48	A	NA
Van-0	CS22627	8400	1	64	$\overline{AG}$	A

# 6.140 SNP AtMSQTsnp 397(chrom=5, pos=22040877, alignment id=992, alignment start=22040690)

	-	NA	A	С	G	Τ	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	3	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	1	0	0	67	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	28	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	1	0	0	0	0	0	0

Table 691: detailed difference for SNP AtMSQTsnp 397

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Kno-10	CS22566	8317	1	3	NA	G
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	1	11	NA	G
Lv-1	CS22574	6043	2	11	NA	G
Van-0	CS22627	8400	1	64	GT	Т

# 6.141 SNP AtMSQTsnp 398(chrom=5, pos=22116788, alignment id=642, alignment start=22116605)

Table 692: SNP AtMSQTsnp 398(chromosome=5, position=22116788, alignment id=642, alignment start=22116605)

	-	NA	A	С	G	T	AC	AG	AT	$^{\rm CG}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	4	0	44	1	0	0	0	0	0	0	0
G	0	0	0	0	51	0	0	0	0	0	0	0
$\Gamma$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 693: detailed difference for SNP AtMSQTsnp 398

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	1	9	С	NA
Eden-1	CS22572	6009	2	9	$^{\mathrm{C}}$	NA
Eden-1	CS22572	6009	4	9	$^{\mathrm{C}}$	NA
Lv-1	CS22574	6043	2	11	$^{\mathrm{C}}$	NA
Bor-1	CS22590	5837	1	27	С	G

### 6.142 SNP AtMSQTsnp 399(chrom=5, pos=22414941, alignment id=146, alignment start=22414510)

Table 694: SNP AtMSQTsnp 399(chromosome=5, position=22414941, alignment id=146, alignment start=22414510)

	-	NA	Α	С	G	Т	AC	AG	AT	$^{\mathrm{CG}}$	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	2	62	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	36	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 695: detailed difference for SNP AtMSQTsnp 399

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	4	9	A	NA
Lv-1	CS22574	6043	2	11	A	NA

## 6.143 SNP AtMSQTsnp 404(chrom=5, pos=23270994, alignment id=1391, alignment start=23270845)

Table 696: SNP AtMSQTsnp 404(chromosome=5, position=23270994, alignment id=1391, alignment start=23270845)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	1	0	56	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	41	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 697: detailed difference for SNP AtMSQTsnp 404

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Rmx-A02	CS22568	8370	1	5	NA	Т
Eden-1	CS22572	6009	4	9	C	NA
Shahdara	CS22652	8248	1	89	$\Gamma$	NA

#### 6.144 SNP AtMSQTsnp 406(chrom=5, pos=23815848, alignment id=978, alignment start=23815354)

Table 698: SNP AtMSQTsnp 406(chromosome=5, position=23815848, alignment id=978, alignment start=23815354)

	-	NA	A	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
A	0	65	3	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0
G	0	29	1	0	2	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{CT}$	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 699: detailed difference for SNP AtMSQTsnp 406

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
RRS-10	CS22565	8372	1	2	A	NA NA
Kno-10	CS22566	8317	1	$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	A	NA NA
Kno-18	CS22567	8318	1	$\begin{bmatrix} 3 \\ 4 \end{bmatrix}$	A	NA NA
Rmx-A02	CS22568	8370	1	5	A	NA NA
Rmx-A180	CS22569	8371	1	$\begin{bmatrix} 3 \\ 6 \end{bmatrix}$	A	NA NA
Pna-17	CS22570	8359	1	7	A	NA NA
Pna-10	CS22570 $CS22571$	8358	1	8	A	NA NA
Eden-1	CS22571 $CS22572$	6009	4	$\begin{bmatrix} 3 \\ 9 \end{bmatrix}$	A	NA NA
Eden-1 Eden-2	CS22572 CS22573	8287	1	$\begin{vmatrix} s \\ 10 \end{vmatrix}$	A	NA NA
Lv-1	CS22574	6043	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	11	G	NA NA
Lv-5	CS22574 CS22575	6046	$\begin{bmatrix} \frac{2}{2} \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	G	NA NA
Fb-2	CS22576	8292	$\begin{bmatrix} 2 \\ 1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A	NA NA
Fb-4		8292	1	14	A	NA NA
Bil-5	CS22577	8262	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	G	NA NA
Bil-5 Bil-7	CS22578 CS22579	8263	1	$\begin{vmatrix} 15 \\ 16 \end{vmatrix}$	G	NA NA
Vr2-1			$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	17	G	NA NA
	CS22580	8401				
Vr2-6	CS22581	8402	1 1	18 19	G G	NA NA
Spr1-2	CS22582	8382	1	$\begin{vmatrix} 19 \\ 20 \end{vmatrix}$	A	NA NA
Spr1-6	CS22583	8383				
m2-1	CS22584	8349	1 1	$\begin{array}{ c c c }\hline 21\\22\\ \end{array}$	G	NA NA
m2-3	CS22585	8350			G	NA
Ull2-5	CS22586	8397	1	23	G	NA
Ull2-3	CS22587	8396	1	24	A	NA
Zdr-1	CS22588	8409	1	25	A	NA
Zdr-6	CS22589	8410	1	26	G	NA
Bor-1	CS22590	5837	1	27	G	A
Bor-1	CS22590	5837	2	27	G	NA
Bor-4	CS22591	8268	1	28	A	NA
Pu2-7	CS22592	8362	1	29	G	NA
Pu2-23	CS22593	8361	1	30	A	NA
Lp2-2	CS22594	8332	1	31	G	NA
Lp2-6	CS22595	8333	1	32	G	NA
HR-5	CS22596	8309	1	33	A	NA
HR-10	CS22597	8308	1	34	A	NA
NFA-8	CS22598	8346	1	35	A	NA
NFA-10	CS22599	8345	1	36	A	NA
Sq-1	CS22600	8384	1	37	A	NA
Sq-8	CS22601	8385	1	38	A	NA
CIBC-5	CS22602	8277	1	39	A	NA
CIBC-17	CS22603	8276	1	40	A	NA
Tamm-2	CS22604	8390	1	41	A	NA
Tamm-27	CS22605	8391	1	42	A	NA
Kz-1	CS22606	8320	1	43	A	NA
Kz-9	CS22607	8322	1	44	G	NA
Got-7	CS22608	8299	1	45	A	NA
Got-22	CS22609	8298	1	46	A	NA
Ren-1	CS22610	8367	1	47	A	NA
Ren-11	CS22611	8368	1	48	A	NA
Uod-1	CS22612	8398	1	49	G	NA
Uod-7	CS22613	8399	1	50	A	NA
Cvi-0	CS22614	8281	1	51	A	NA
Lz-0	CS22615	8336	1	52	G	NA
Ei-2	CS22616	8289	1	53	A	NA
Gu-0	CS22617	8301	1	54	A	NA
Ler-1	CS22618	8324	1	55	G	NA
Nd-1	CS22619	8344	1	56	G	NA
C24	CS22620	8273	1	57	Ğ	NA
N13	CS22491	8429	1	58	A	NA
Wei-0	CS22622	8404	1	59	A	NA
Ws-0	CS22623	8405	1	60	A	NA

Yo-0	CS22624	8408	1	61	A	NA
Col-0	CS22625	8279	1	$\begin{vmatrix} 61 \\ 62 \end{vmatrix}$	A	NA
An-1	CS22626	8253	1	$\begin{vmatrix} 62 \\ 63 \end{vmatrix}$	A	NA
Van-0	CS22627	8400	1	64	G	NA
Br-0	CS22628	8269	1	65	Ğ	NA
Est-1	CS22629	8291	1	66	G	NA
Ag-0	CS22630	8251	1	67	Ğ	NA
Gy-0	CS22631	8302	1	68	A	NA
Ra-0	CS22632	8364	1	69	A	NA
Bay-0	CS22633	8260	1	70	G	NA
Ga-0	CS22634	8295	1	71	A	NA
Mrk-0	CS22635	8339	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A	NA
Mz-0	CS22636	8342	1	73	A	NA
Wt-5	CS22637	8407	1	74	A	NA
Ct-1	CS22639	8280	1	76	A	NA
Mr-0	CS22640	8338	1	77	G	NA
Tsu-1	CS22641	8394	1	78	Ä	NA
Mt-0	CS22642	8341	1	79	A	NA
Nok-3	CS22643	8347	1	80	A	NA
Wa-1	CS22644	8403	1	81	A	NA
Fei-0	CS22645	8294	1	82	A	NA
Se-0	CS22646	8379	1	83	A	NA
Ts-1	CS22647	8392	1	84	A	NA
Ts-5	CS22648	8393	1	85	A	NA
Pro-0	CS22649	8360	1	86	A	NA
LL-0	CS22650	8328	1	87	A	NA
Kondara	CS22651	8319	1	88	A	NA
Shahdara	CS22652	8248	1	89	A	NA
Sorbo	CS22653	8381	1	90	A	NA
Kin-0	CS22654	8316	1	91	A	NA
Ms-0	CS22655	8340	1	92	A	NA
Bur-0	CS22656	8272	1	93	G	NA
Edi-0	CS22657	8288	1	94	G	NA
Oy-0	CS22658	8352	1	95	A	NA
Ws-2	CS22659	8406	1	96	A	NA

### 6.145 SNP AtMSQTsnp 408(chrom=5, pos=25301234, alignment id=2690, alignment start=25300706)

Table 700: SNP AtMSQTsnp 408(chromosome=5, position=25301234, alignment id=2690, alignment start=25300706)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	3	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	0	55	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	1	1	0	40	0	0	0	0	0	0	0
${f T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{AT}$	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 701: detailed difference for SNP AtMSQTsnp 408

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Rmx-A02	CS22568	8370	1	5	NA	A
Eden-1	CS22572	6009	4	9	G	NA
Lv-1	CS22574	6043	1	11	NA	A
Lv-1	CS22574	6043	2	11	NA	A
Bor-1	CS22590	5837	1	27	G	A

## 6.146 SNP AtMSQTsnp 409(chrom=5, pos=26029439, alignment id=2404, alignment start=26029366)

		-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	-	0	0	0	0	0	0	0	0	0	0	0	GT 0

NA	0	0	0	0	0	1	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	59	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
T	0	3	0	0	0	37	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 703: detailed difference for SNP AtMSQTsnp 409

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	$sequenom\_call$
Eden-1	CS22572	6009	1	9	Τ	NA
Eden-1	CS22572	6009	2	9	${ m T}$	NA
Eden-1	CS22572	6009	4	9	${ m T}$	NA
Sorbo	CS22653	8381	1	90	NA	${ m T}$

# 6.147 SNP AtMSQTsnp 410(chrom=5, pos=26120955, alignment id=596, alignment start=26120843)

	-	NA	Α	С	G	Τ	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{A}$	0	1	54	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{G}$	0	1	0	0	41	0	0	0	0	0	0	0
${ m T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	1	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
CG	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 705: detailed difference for SNP AtMSQTsnp  $410\,$ 

nativename	stkparent	$ecotype\_id$	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	A	NA
Bor-1	CS22590	5837	1	27	A	G
Van-0	CS22627	8400	1	64	$\overline{AG}$	G
Shahdara	CS22652	8248	1	89	G	NA

# 6.148 SNP AtMSQTsnp 412(chrom=5, pos=26379972, alignment id=2302, alignment start=26379717)

	-	NA	Α	С	G	T	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	0	2	0	0	0	0	0	0	0	0	0
A	0	2	63	0	0	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0
$\mathbf{T}$	0	1	0	0	0	31	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
$\operatorname{GT}$	0	0	0	0	0	0	0	0	0	0	0	0

Table 707: detailed difference for SNP AtMSQTsnp  $412\,$ 

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Eden-1	CS22572	6009	4	9	Τ	NA
Ren-11	CS22611	8368	1	48	A	NA
Cvi-0	CS22614	8281	1	51	NA	A
Mrk-0	CS22635	8339	1	72	NA	A
Shahdara	CS22652	8248	1	89	A	NA

# 6.149 SNP AtMSQTsnp 415(chrom=5, pos=26708459, alignment id=2711, alignment start=26707937)

Table 708: SNP AtMSQTsnp 415(chromosome=5, position=26708459, alignment id=2711, alignment start=26707937)

	-	NA	Α	С	G	Т	AC	AG	AT	CG	CT	GT
-	0	0	0	0	0	0	0	0	0	0	0	0
NA	0	2	9	0	25	0	0	0	0	0	0	0
A	0	1	29	0	1	0	0	0	0	0	0	0
$\mathbf{C}$	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	33	0	0	0	0	0	0	0
$\mathbf{T}$	0	0	0	0	0	0	0	0	0	0	0	0
AC	0	0	0	0	0	0	0	0	0	0	0	0
$\overline{AG}$	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0
$^{\mathrm{CG}}$	0	0	0	0	0	0	0	0	0	0	0	0
CT	0	0	0	0	0	0	0	0	0	0	0	0
GT	0	0	0	0	0	0	0	0	0	0	0	0

Table 709: detailed difference for SNP AtMSQTsnp 415

nativename	stkparent	ecotype_id	duplicate	accession_id	pcr_call	sequenom_call
Rmx-A02	CS22568	8370	1	5	NA	A
Pna-17	CS22570	8359	1	7	NA	G
Pna-10	CS22571	8358	1	8	NA	A
Eden-1	CS22572	6009	1	9	NA	G
Eden-1	CS22572	6009	2	9	NA	G
Eden-1	CS22572	6009	3	9	NA	G
Eden-2	CS22573	8287	1	10	NA	G
Lv-5	CS22575	6046	1	12	NA	G
Lv-5	CS22575	6046	2	12	NA	G
Bil-5	CS22578	8262	1	15	NA	G
Vr2-6	CS22581	8402	1	18	NA	G
Spr1-2	CS22582	8382	1	19	NA	G
m2-3	CS22585	8350	1	22	NA	G
Bor-1	CS22590	5837	1	27	NA	A
Bor-1	CS22590	5837	2	27	NA	G
Lp2-2	CS22594	8332	1	31	NA	G
Lp2-6	CS22595	8333	1	32	NA	G
Sq-8	CS22601	8385	1	38	NA	G
CIBC-5	CS22602	8277	1	39	NA	A
CIBC-17	CS22603	8276	1	40	A	G
Tamm-27	CS22605	8391	1	42	NA	G
Got-7	CS22608	8299	1	45	NA	G
Ren-11	CS22611	8368	1	48	A	NA
Ei-2	CS22616	8289	1	53	NA	G
C24	CS22620	8273	1	57	NA	A
Est-1	CS22629	8291	1	66	NA	G
Ag-0	CS22630	8251	1	67	NA	A
Mrk-0	CS22635	8339	1	72	NA	G
Mz-0	CS22636	8342	1	73	NA	G
Wt-5	CS22637	8407	1	74	NA	A
Wa-1	CS22644	8403	1	81	NA	G
Fei-0	CS22645	8294	1	82	NA	A
Kin-0	CS22654	8316	1	91	NA	A
Bur-0	CS22656	8272	1	93	NA	G
Oy-0	CS22658	8352	1	95	NA	G
Ws-2	CS22659	8406	1	96	NA	G