

Table S5. Detailed information of the QTL detected for each parental map

Traits: RR= rot rating estimate on a 1-5 scale (1 = 0 to 20% rot and 5 = 81 to 100% rot); PR= percentage of rotted fruit per 0.09 m² sample; YR= yield rating on a 1-9 scale (9 is best); Y= yield (g/0.09 m²); BW= berry weight (g/berry). The years data were collected follow the trait abbreviations. Position: Position of the maximum LOD score obtained in the CIM analysis. LOD score: Maximum LOD score obtained for the QTL

Cross	Parental map	Trait	LG	Marker	Position	LOD Score	Additive	R ²
BB x CQ	BB	RR11-13	Vm8	59.00	37.10	8.58	0.35	0.28
			Vm1	39.00	34.80	3.26	-0.16	0.09
		PR11-13	Vm5	13.00	1.80	3.37	0.17	0.09
			Vm8	71.00	51.90	4.68	0.21	0.14
		Y11-13	Vm11	67.00	62.50	4.48	-0.21	0.13
			Vm2	15.00	10.30	3.34	-0.81	0.13
		Y14-15	Vm6	3.00	0.00	5.66	-86.02	0.21
			Vm6	28.00	28.10	3.48	0.17	0.11
	CQ	BW14-15	Vm12	69.00	54.40	3.75	-0.24	0.20
			Vm11	59.00	32.10	4.77	-0.28	0.17
		RR11-13	Vm7	91.00	48.10	4.25	0.20	0.13
			Vm11	50.00	29.80	4.62	-0.21	0.15
		PR14-15	Vm11	23.00	12.10	4.16	-3.18	0.31
			Vm8	66.00	56.70	4.04	1.22	0.15
		Y11-13	Vm11	135.00	77.70	4.60	0.93	0.17
			Vm11	125.00	69.80	4.30	-79.40	0.17
BB x CU	CU	Y11-13	Vm7	17.00	44.20	5.09	-0.30	0.19
		BW14-15	Vm6	14.00	15.40	3.41	0.12	0.11
CU x US89-3	CU	RR11-13	Vm3-3	10.00	27.20	3.97	-0.68	0.21
			Vm5-1	23.00	72.70	4.29	0.66	0.23
		PR16	Vm6	64.00	96.30	3.06	0.55	0.11
			Vm5-1	4.00	10.60	2.50	-3.23	0.21
		Y11-13	Vm12-1	49.00	66.50	3.77	3.17	0.30
			Vm2-1	65.00	139.10	5.51	0.78	0.27
		Y16	Vm3-1	9.00	12.70	3.60	0.55	0.16
			Vm2-1	30.00	49.20	2.95	-59.82	0.11
		BW16	Vm2-1	67.00	146.50	2.60	-59.56	0.09
			Vm9-1	57.00	68.80	5.40	93.11	0.23
			Vm11-1	18.00	47.60	7.63	117.69	0.38
			Vm5-2	39.00	80.70	2.99	-0.26	0.15
	US89-3	RR11-13	Vm8	120.00	139.90	3.74	0.83	0.33
			Vm11	35.00	24.30	4.73	-0.84	0.29
		PR16	Vm9	20.00	14.80	2.60	2.09	0.13
			Vm10	10.00	9.60	5.33	0.80	0.32
		Y11-13	Vm11	22.00	11.90	2.67	0.52	0.14
			Vm3-1	51.00	43.80	2.88	-109.57	0.33
		Y16	Vm8	63.00	61.30	5.65	154.95	0.36
			VmT5/6-1	43.00	30.40	2.91	-0.26	0.13
		BW16	Vm7-1	23.00	10.90	4.40	-0.35	0.23
			Vm10	10.00	9.60	5.26	0.36	0.28
BB x US89-3	BB	RR11-13	Vm8	42.00	67.10	4.48	0.66	0.21
			Vm2	28.00	28.10	4.97	1.28	0.25
		Y11-13	Vm8	11.00	16.70	3.51	-0.67	0.16
			Vm8	50.00	67.60	3.03	0.62	0.14
		Y16	Vm1	13.00	12.80	6.29	-45.38	0.34
			Vm6	38.00	35.60	3.52	33.43	0.23
		BW16	Vm10	43.00	45.00	2.95	-29.96	0.18
			Vm11	57.00	99.40	2.55	-16.90	0.06
	US89-3	RR11-13	Vm12	25.00	46.90	3.46	-24.28	0.12
			Vm5	57.00	83.10	3.09	0.13	0.16
		Y11-13	Vm12	22.00	36.90	3.40	0.14	0.19
			Vm1	81.00	69.50	3.86	0.66	0.21
		Y16	Vm3	107.00	72.20	3.95	1.09	0.25
			Vm12	97.00	85.00	2.81	-0.66	0.15
		BW16	Vm9	164.00	102.70	3.42	-34.28	0.21
			Vm1	8.00	4.80	5.93	0.18	0.33
			Vm9	156.00	101.00	3.89	0.16	0.25