naramatar ID	parameter description	Box-Cox power remarks a shapiro-Wilk P- transformation parameters Shapiro-Wilk P- transformation parameters Shapiro-Wilk P- threshold Sh	
parameter ID A101 A	parameter description Actin region ratio on stage A	p a value lower E-06 lower E-05 lower E-04 lower E-03 upper E-03 upper E-04 upper E-05 u	E-05 upper E-06
A101_A1B A101_C	Actin region ratio on stage A1B	-4.5	0
A102_A1B	Actin region ratio on stage C Actin region ratio in bud on stage A1B	4.4 0.1 0.7470911 0 0 0 8 92 56	33 2
A102_C A103_A1B	Actin region ratio in bud on stage C Relative Distance of actin patch center from neck in mother cell on stage A1B	3.9	27 1 23 1
A103_C	Relative Distance of actin patch center from neck in mother cell on stage C	-0.19 0.4 0.1304921 0 0 0 3 26 5	0
A104_A1B A104_C	Relative Distance of actin patch center from neck in bud on stage A1B Relative Distance of actin patch center from neck in bud on stage C	1.59	26 1 0
A105	Actin a ratio	0.19 0 0.1665998 2 3 4 15 27 1	0
A105_A A106	Actin a ratio on stage A Actin b ratio	0.3	0 2
A106_A A107	Actin b ratio on stage A	3.4	0
A107_A1B	Actin c (api) ratio Actin c (api) ratio on stage A1B	0.9 0.5 0.7978062 3 4 11 24 12 1	0
A107_C A108	Actin c (api) ratio on stage C Actin d (iso) ratio	0 0.5 0.01182741 0 0 0 0 0 0 0.8 0.3 0.938068 0 2 21 85 29 19	0 12
A108_A1B	Actin d (iso) ratio on stage A1B	0.09 0.1 0.3854804 30 59 95 186 5 1	0
A108_C A109	Actin d (iso) ratio on stage C Actin e ratio	1.09	4
A109_A1B	Actin e ratio on stage A1B	0 0.5 0.386843 0 0 0 0 20 6 0.59 0 0.7474786 2 2 3 14 46 18	4
A109_C A110	Actin e ratio on stage C Actin f ratio	0.59	5 39 2
A110_A1B A110_C	Actin f ratio on stage A1B Actin f ratio on stage C	0.5	4 2
A111	Actin a or e ratio	0 0 0.6148689 0 1 1 4 23 3	1
A112 A112 A1B	Actin b, c or d ratio Actin b, c or d ratio on stage A1B	3 0.4 0.8400847 0 2 5 38 0 0 9.3 0.2 0.4590497 0 0 0 0 9 0	0
A112_C	Actin b, c or d ratio on stage C	0.8 0.5 0.6391424 0 0 4 28 33 10	4
A113 A113_A	No actin patch found ratio No actin patch found ratio on stage A	0.19	18 0
A113_A1B A113_C	No actin patch found ratio on stage A1B No actin patch found ratio on stage C	-0.5	659 58 276 27
A114	Actin a ratio on no bud cells	0.19 0.2 0.2993725 0 2 2 4 4 0	0
A115 A116	Actin b ratio on no bud cells Actin c (api) ratio on budded cells	3.3	0
A117	Actin d (iso) ratio on budded cells	0.8 0.1 0.2717625 9 19 43 130 19 7	2
A118 A119	Actin e ratio on budded cells Actin f ratio on budded cells	-0.4 0 0.8749632 2 6 9 27 6 3 1.09 0.5 0.6266766 0 0 1 13 85 47	1 25 1
A120_A	Total length of actin patch link on stage A Total length of actin patch link on stage A Total length of actin patch link on stage A1B	0.4 0.5 0.2018034 0 0 0 2 3 1	0
A120_A1B A120_C	Total length of actin patch link on stage A1B Total length of actin patch link on stage C	0.4	0
A121_A	Maximam actin patch length on stage A	1.4	2
A121_A1B A121_C	Maximam actin patch length on stage A1B Maximam actin patch length on stage C	1.9 0.4 0.01532162 0 0 0 0 28 14	8 .
A122_A A122_A1B	Number of actin patches on stage A Number of actin patches on stage A1B	0 0 0.4116851 0 0 1 9 3 1 -0.09 0 0.4650623 0 0 0 7 1 0	0
A122_C	Number of actin patches on stage C	-0.4 0.1 0.4505667 0 0 3 11 1 0	0
A123_A A123_A1B	Ratio of actin patch region to actin region on stage A Ratio of actin patch region to actin region on stage A1B	-0.09	0
A123_C	Ratio of actin patch region to actin region on stage C	0.5 0 0.01398349 0 0 0 0 0 0	ō
A7-1_A A7-1_A1B	Actin region size in mother cell on stage A Actin region size in mother cell on stage A1B	-1 0 0.2161669 0 0 0 0 17 1 -1.69 0.2 0.7778094 17 26 37 58 0 0	0
A7-1_C	Actin region size in mother cell on stage C	-2.8 0.4 0.5538489 7 10 14 29 0 0	0
A7-2_A1B A7-2_C	Actin region size in bud on stage A1B Actin region size in bud on stage C	-2.2 0.5 0.6230879 28 42 75 129 152 110 -2.29 0.2 0.7247337 17 24 59 110 34 1	78 5 0
A8-1_A A8-1_A1B	Actin region brightness in mother cell on stage A Actin region brightness in mother cell on stage A1B	-0.09 0 0.2028748 0 0 0 5 28 8 -0.69 0 0.2134714 12 19 37 73 1 0	2
A8-1_C	Actin region brightness in mother cell on stage C	-1 0 0.1526456 8 15 39 106 0 0	0
A8-2_A1B A8-2_C	Actin region brightness in bud on stage A1B Actin region brightness in bud on stage C	-0.4 0 0.2188785 2 2 23 113 23 4 0.19 0 0.2823809 0 0 1 9 59 27	0 13
A9_A1B	Ratio of actin region to bud neck on stage A1B	3 0.4 0.4775739 1 7 22 78 77 24	8
A9_C ACV101_A	Ratio of actin region to bud neck on stage C Coefficient of variation of actin region ratio on stage A	-0.09	0 7
ACV101_A1B	Coefficient of variation of actin region ratio on stage A1B	-3.2 0.5 0.3059015 4 8 12 23 0 0	0
ACV101_C ACV102_A1B	Coefficient of variation of actin region ratio on stage C Coefficient of variation of actin region ratio in bud on stage A1B	-0.9	0
ACV102_C ACV103_A1B	Coefficient of variation of actin region ratio in bud on stage C	0.19 0.4 0.0760756 1 1 2 6 75 25 tranformation failed.*	10
ACV103_C	Coefficient of variation of relative Distance of actin patch center from neck in mother cell on stage A1B Coefficient of variation of relative Distance of actin patch center from neck in mother cell on stage C	tranformation failed.* -1	
ACV104_A1B ACV104 C	Coefficient of variation of relative Distance of actin patch center from neck in bud on stage A1B Coefficient of variation of relative Distance of actin patch center from neck in bud on stage C	-0.69	0
ACV120_A	Coefficient of variation of total length of actin patch link on stage A	0.19 0 0.233139 0 0 0 0 4 0	0
ACV120_A1B ACV120 C	Coefficient of variation of total length of actin patch link on stage A1B Coefficient of variation of total length of actin patch link on stage C	-0.4	0 (
ACV121_A	Coefficient of variation of maximam actin patch length on stage A	0.3 0 0.1883555 0 0 0 0 8 1	0
ACV121_A1B ACV121_C	Coefficient of variation of maximam actin patch length on stage A1B Coefficient of variation of maximam actin patch length on stage C	0.09	0 (
ACV122_A	Coefficient of variation of number of actin patches on stage A	-1.19 0.4 0.7436074 0 0 0 1 43 9	1 (
ACV122_A1B ACV122_C	Coefficient of variation of number of actin patches on stage A1B Coefficient of variation of number of actin patches on stage C	-2.5	0 (
ACV123_A ACV123_A1B	Coefficient of variation of ratio of actin patch region to actin region on stage A Coefficient of variation of ratio of actin patch region to actin region on stage A1B	0.8	7 6
ACV123_C	Coefficient of variation of ratio of actin patch region to actin region on stage C	0.09 0.1 0.3318284 0 1 1 3 20 3	0
ACV7-1_A ACV7-1_A1B	Coefficient of variation of actin region size in mother cell on stage A Coefficient of variation of actin region size in mother cell on stage A1B	1.9 0 0.2857953 0 0 0 1 25 9 -1.5 0.5 0.938158 1 1 3 3 8 0	5
ACV7-1_C	Coefficient of variation of actin region size in mother cell on stage C	0.19 0.2 0.1549494 0 0 0 0 17 9	4
ACV7-2_A1B ACV7-2_C	Coefficient of variation of actin region size in bud on stage A1B Coefficient of variation of actin region size in bud on stage C	-1.59	12
ACV8-1_A	Coefficient of variation of actin region brightness in mother cell on stage A	0.5 0.4 0.4138529 0 0 0 0 37 26	12
ACV8-1_A1B ACV8-1_C	Coefficient of variation of actin region brightness in mother cell on stage A1B Coefficient of variation of actin region brightness in mother cell on stage C	-2 0.5 0.8519044 0 1 1 6 43 5 -0.59 0 0.4181792 2 3 3 10 43 16	6
ACV8-2_A1B ACV8-2_C	Coefficient of variation of actin region brightness in bud on stage A1B	0.19 0.3 0.9390217 0 0 1 5 87 44	28 1 13
ACV9_A1B	Coefficient of variation of actin region brightness in bud on stage C Coefficient of variation of ratio of actin region to bud neck on stage A1B	0.69 0.2 0.3896076 0 0 0 0 129 78	48 2
ACV9_C C101_A1B	Coefficient of variation of ratio of actin region to bud neck on stage C Cell size on stage A1B	0.19	41 2 184 15
C101_C	Cell size on stage C	-5.09	121 9
C102_A1B C102_C	Contour length of cell on stage A1B Contour length of cell on stage C	-3.5	180 15 131 10
C103_A	Long axis length of mother cell on stage A	-1.3 0.4 0.9628943 26 39 59 119 441 333	265 22
C103_A1B C103_C	Long axis length of mother cell on stage A1B Long axis length of mother cell on stage C	-9.5 0.2 0.4734091 59 80 126 194 299 196	263 22 148 12
C104_A C104_A1B	Short axis length of mother cell on stage A Short axis length of mother cell on stage A1B	-5 0.4 0.5016054 53 72 118 215 238 156 0.9 0.5 0.08855558 13 22 45 79 276 189	120 8 152 12
C104_C	Short axis length of mother cell on stage C	-2.59 0.3 0.982465 27 41 70 130 223 145	112 9
C105_A1B C105_C	Neck position on stage A1B Neck position on stage C	-3.7	0
C106_A1B	Bud growth direction on stage A1B	-2.59 0.4 0.9653951 186 213 254 350 3 1	0 (
C106_C C107_A1B	Bud growth direction on stage C Long axis length in bud on stage A1B	5.3	3 : 167 15
C107_C	Long axis length in bud on stage C	-9.4 0.4 0.5407798 52 66 91 140 277 177	134 10
C108_A1B C108_C	Short axis length in bud on stage A1B Short axis length in bud on stage C	0.5 0 0.3955689 1 4 9 42 226 180 -5.8 0 0.3907453 42 57 86 134 131 67	158 146 30
C109_A1B C109_C	Neck width on stage A1B Neck width on stage C		235 209 158 13
C11-1_A	Mother cell size on stage A	-0.69 0.2 0.6088509 16 35 59 123 363 254	208 175
C11-1_A1B C11-1_C	Mother cell size on stage A1B Mother cell size on stage C		203 17 137 11
C11-2_A1B	Area of daughter cell on stage A1B	-0.5 0.4 0.483006 4 11 22 51 208 158	135 11
C11-2_C C110_A1B	Area of daughter cell on stage C Length from bud tip to mother cell's long axis on stage A1B	-3.2 0 0.6179518 47 66 99 143 220 142 -1.19 0.2 0.8651853 121 155 195 248 65 41	101 6 29 2
C110_C	Length from bud tip to mother cell's long axis on stage C	2.4 0 0.2746956 12 24 47 105 80 61	53 4
C111_A1B C111_C	Length from bud tip to mother cell's short axis on stage A1B Length from bud tip to mother cell's short axis on stage C	5 0.1 0.225279 0 0 0 4 454 365 -2.59 0.4 0.8447992 4 6 9 25 190 112	311 27 70 4
C112_A1B	Distance from neck to mother cell's center on stage A1B	9.69 0.2 0.1724213 0 0 1 9 546 426	348 30
C112_C C113_A1B	Distance from neck to mother cell's center on stage C Distance from bud tip to mother cell's long axis along bud direction on stage A1B	-9 0.5 0.4964077 14 19 36 72 272 187 0.69 0.5 0.4167292 2 3 10 39 222 173	138 10 149 12
C113_C	Distance from bud tip to mother cell's long axis along bud direction on stage C	-5.4 0 0.2046782 19 23 44 80 190 124	93 5
C114_A1B C114_C	Roundness of bud on stage A1B Roundness of bud on stage C	9.89 0 0.01924864 0 6 13 38 436 331	140 111 277 243
C115_A C115_A1B	Roundness of mother cell on stage A Roundness of mother cell on stage A1B	0.8 0.2 0.5129879 104 122 149 197 605 451	379 324 179 133
C115_C	Roundness of mother cell on stage C	1.59 0.2 0.052322 52 77 110 152 503 366	290 239
C116_A1B C116_C	Ratio of roundness of mother cell to that of bud on stage A1B Ratio of roundness of mother cell to that of bud on stage C	4.59	25 1 76 6
C117_A1B	Ratio of the countour length on stage A1B	3 0.2 0.782273 1 3 10 27 107 79	66 5
C117_C C118_A1B	Ratio of the countour length on stage C Ratio of the cell sizes on stage A1B	7.3 0.5 0.7021601 4 8 21 62 341 227 1.59 0.2 0.7032583 1 3 10 29 115 86	161 12 69 6
C118_C	Ratio of the cell sizes on stage C	4.5 0.5 0.8510557 3 7 19 54 383 250	174 13
C119 C12-1 A	Ratio of no bud Contour length of mother cell on stage A	-0.5	0 (
C12-1_A1B	Contour length of mother cell on stage A1B	1.19 0.4 0.495004 11 13 24 62 380 279	226 19
C12-1_C C12-2_A1B	Contour length of mother cell on stage C Contour length of daughter cell on stage A1B		141 11 136 11
C12-2_C	Contour length of daughter cell on stage C	-5.3 0 0.7168341 25 47 69 129 266 158	123 8
C120	Ratio of small bud	0.09 0 0.8260927 11 29 49 116 13 6	3 2
C121	Ratio of medium bud	1.4 0.3 0.6988064 0 0 0 16 11 4	

C123	Ratio of small bud to budded cells	-0.59	0.5	0.8821826	15	20	33	55	10		1	0
C123_A1B C123_C	Ratio of small bud on stage A1B Ratio of small bud on stage C	-0.59 -0.59	0.2 1.00E-10	0.2634125 9.46E-25	20	32 0	45 0	76 0	15 113	111	0 107	0 105
C124 C124 A1B	Ratio of medium bud to budded cells Ratio of medium bud on stage A1B	1.3 1.69	0.2	0.7521018 0.6590436	0	0	2	20 20	25 13	10	6	5
C124_C C125	Ratio of medium bud on stage C Ratio of large bud to budded cells	0.09	0.2	0.1711773 0.7820759	0 2	0	0	118 23	40 59	8 27	1 14	0
C125_A1B C125_C	Ratio of large bud on stage A1B Ratio of large bud on stage C	0.19 9.89	0.4	0.943427 0.02322952	0	0	17 0	44 0	93 0	60	43	27 0
C126_A C126_A1B	Unevenness of brightness on stage A Unevenness of brightness on stage A1B	0.19 -1.19	0.5 0.5	0.3120364 0.01275793	3	7	13 23	35 45	39 17	19 1	9	5
C126_C C127_A	Unevenness of brightness on stage C Unevenness of cell wall thickness on stage A	-0.3 -3.3	0.5 0.4	0.03568889 6.51E-07	2	6	14 9	26 71	33 67	13 10	4	0
C127_A1B C127_C	Unevenness of cell wall thickness on stage A1B Unevenness of cell wall thickness on stage C	-5.09 -1.9	0 0.2	0.9675893 0.008599054	34 0	62 0	104 0	188 12	2 47	0 16	0 2	0
C128_A1B C128_C	Length from bud neck to the farthest point on mother cell on stage A1B Length from bud neck to the farthest point on mother cell on stage C	-3.4 -9.3	0 0.2	0.3084129 0.969171	12 27	20 46	47 81	96 137	390 317	278 203	218 147	173 114
C13_A C13_A1B	Fitness on stage A Fitness on stage A1B	3.3 -1.4	0.1 0.4	0.2084447 0.9858574	0 25	1 32	18 62	60 116	414 193	304 110	223 68	176 54
C13_C CCV101_A1B	Fitness on stage C Coefficient of variation of cell size on stage A1B	1 0.3	0.4 0.4	0.5071835 0.9919243	0 1	0 1	0 7	14 25	313 209	187 173	131 135	114 112
CCV101_C CCV102_A1B	Coefficient of variation of cell size on stage C Coefficient of variation of contour length of cell on stage A1B	-1.8 2.5	0.5 0.3	0.05873611 0.2428103	4 0	8	18 0	38 2	112 267	59 210	20 173	6 151
CCV102_C CCV103_A	Coefficient of variation of contour length of cell on stage C Coefficient of variation of long axis length of mother cell on stage A	-1.4 1.5	0.5 0.5	0.3409607 0.9835347	2	1	10 5	24 21	83 237	35 185	11 141	118
CCV103_A1B CCV103_C	Coefficient of variation of long axis length of mother cell on stage A1B Coefficient of variation of long axis length of mother cell on stage C	2.19	0.4	0.8685102 0.0615804	0	0	1 2	13	373 148	298 101	269 66	246 38
CCV104_A CCV104_A1B	Coefficient of variation of short axis length of mother cell on stage A Coefficient of variation of short axis length of mother cell on stage A1B	-0.3 1.19	0.5	0.4194873 0.5715956	26 3	43 6	89 11	150 45	94 173	32 120	14 92	9 76
CCV104_C CCV105_A1B CCV105_C	Coefficient of variation of short axis length of mother cell on stage C Coefficient of variation of neck position on stage A1B Coefficient of variation of neck position on stage C	-0.19 1.4 -0.5	0.3 0.5 0.1	0.6395727 0.3778828 0.3133055	0	6 0 3	8 0 9	25 5 18	79 274 118	48 208 61	28 159 36	18 136 22
CCV105_C CCV106_A1B CCV106_C	Coefficient of variation of bud growth direction on stage A1B Coefficient of variation of bud growth direction on stage C	0	0	0.3621566 0.3893706	0	0	2	5	228 199	151 101	108 67	91 44
CCV107_A1B CCV107_C	Coefficient of variation of long axis length in bud on stage A1B Coefficient of variation of long axis length in bud on stage C	2 1.5	0.3	0.9524302 0.8227942	0	0	0	2	163 262	83 184	49 133	37 110
CCV108_A1B CCV108_C	Coefficient of variation of short axis length in bud on stage A1B Coefficient of variation of short axis length in bud on stage C	-0.9 -1.8	0.5 0.5	0.4606125 0.5908068	1	3	10 3	21 10	56 6	24	13	10
CCV109_A1B CCV109_C	Coefficient of variation of neck width on stage A1B Coefficient of variation of neck width on stage C	-1.69 -1.59	0.1 0.5	0.6417236 0.8822255	1	3	11 2	32 11	98 7	34 0	7	0
CCV11-1_A CCV11-1_A1B	Coefficient of variation of mother cell size on stage A Coefficient of variation of mother cell size on stage A1B	1.19 1.5	0.1 0.3	0.789343 0.1969034	2	10 3	24 9	77 35	167 235	112 179	66 155	52 141
CCV11-1_C CCV11-2_A1B	Coefficient of variation of mother cell size on stage C Coefficient of variation of area of daughter cell on stage A1B	-1.09 -1.19	0.5 0.4	0.0146794 0.5756487	2	9	17 7	32 17	110 58	61 16	34 8	15 4
CCV11-2_C CCV110_A1B	Coefficient of variation of area of daughter cell on stage C Coefficient of variation of length from bud tip to mother cell's long axis on stage A1B	0 0.8	0.4 0	0.2937449 0.6507492	0	0	0	3 0	123 251	72 169	40 127	27 104
CCV110_C CCV111_A1B	Coefficient of variation of length from bud tip to mother cell's long axis on stage C Coefficient of variation of length from bud tip to mother cell's short axis on stage A1B	-0.4 2.3	0 0.5	0.317121 0.4585435	0	0	1	9	131 60	64 24	42 13	28 10
CCV111_C CCV112_A1B	Coefficient of variation of length from bud tip to mother cell's short axis on stage C Coefficient of variation of distance from neck to mother cell's center on stage A1B	-1.09	0.5	0.3681662 0.5930897	0	0	5	24 10	15 235	6 171	127	104
CCV112_C CCV113_A1B	Coefficient of variation of distance from neck to mother cell's center on stage C Coefficient of variation of distance from bud tip to mother cell's long axis along bud direction on stage A1B	0.4 -3	0.3 0.5	0.384355 0.000300043	0	2	4	1 14	247 140	171 89	127 63	101 39
CCV113_C CCV114_A1B CCV114_C	Coefficient of variation of distance from bud tip to mother cell's long axis along bud direction on stage C Coefficient of variation of roundness of bud on stage A1B	-2.7 -0.09	0.5 0.3	0.612815 0.5550702	0	1	6 4 0	13 12	43 88	0 51	0 34	0 23
CCV115_A	Coefficient of variation of roundness of bud on stage C Coefficient of variation of roundness of mother cell on stage A	0.09 -1.5 1.09	0.5 0.5	0.8349372 0.4462298	0 10	0 13 0	27	61	209 250 369	107 164	62 125	45 101
CCV115_A1B CCV115_C CCV116_A1B	Coefficient of variation of roundness of mother cell on stage A1B Coefficient of variation of roundness of mother cell on stage C Coefficient of variation of ratio of roundness of mother cell to that of bud on stage A1B	0.09 -0.3	0.5 0.4 0.5	0.1092667 0.6631648 0.9708734	0 0 0	1 2	2 2 4	3 8 8	245 94	272 159 52	219 122 33	188 100 21
CCV116_A1B CCV116_C CCV117_A1B	Coefficient of variation of ratio of foundness of mother cell to that of bud on stage ATB Coefficient of variation of ratio of five countour length on stage ATB	-0.3 -0.19 -1.69	0.5 0.2	0.3212024 0.2352574	0	0	0 11	2 36	165 30	82 7	49 2	34 0
CCV117_C CCV118 A1B	Coefficient of variation of ratio of the countour length on stage C Coefficient of variation of ratio of the countour length on stage C Coefficient of variation of ratio of the cell sizes on stage A1B	-0.09 -3.7	0.3 0.5	0.2996922	0	0 10	0 22	5 42	69 9	29 0	12	6
CCV118_C CCV12-1 A	Coefficient of variation of ratio of the cell sizes on stage C Coefficient of variation of contour length of mother cell on stage A	-0.19 0.5	0.5 0.1	0.2491767	0	0 20	0 47	3	51 148	16 87	4	3 43
CCV12-1_A1B CCV12-1 C	Coefficient of variation of contour length of mother cell on stage A1B Coefficient of variation of contour length of mother cell on stage C	2.3 -1.3	0.5 0.5	0.3456114 0.004878267	0 2	0	5 16	17 31	277 100	220 51	183 30	164
CCV12-2_A1B CCV12-2_C	Coefficient of variation of contour length of daughter cell on stage A1B Coefficient of variation of contour length of daughter cell on stage C	-0.59 1.19	0.5 0.5	0.8573086 0.1954487	0	1	5	15 0	72 167	30 86	13 51	6 37
CCV126_A CCV126_A1B	Coefficient of variation of unevenness of brightness on stage A Coefficient of variation of unevenness of brightness on stage A1B	0.3 -0.59	0.1 0.3	0.5575543 0.4777744	0	0	0	6	59 28	27 6	13 2	8
CCV126_C CCV127_A	Coefficient of variation of unevenness of brightness on stage C Coefficient of variation of unevenness of cell wall thickness on stage A	0.19 -1.4	0	0.6131775 0.2466837	0	0 16	1 27	9 53	26 0	8	3	2
CCV127_A1B CCV127_C	Coefficient of variation of unevenness of cell wall thickness on stage A1B Coefficient of variation of unevenness of cell wall thickness on stage C	0.69 -0.19	0.1 0.5	0.6342823 0.000262986	0 10	0 15	0 24	1 55	3 120	0 64	0 39	0 21
CCV128_A1B CCV128_C	Coefficient of variation of length from bud neck to the farthest point on mother cell on stage A1B Coefficient of variation of length from bud neck to the farthest point on mother cell on stage C	0.69 -1.3	0.1 0.5	0.3898981 0.6298476	0	0	2	5 5	320 141	260 88	211 42	190 21
CCV13_A CCV13_A1B	Coefficient of variation of fitness on stage A Coefficient of variation of fitness on stage A1B	-1.5 -0.09	0.1 0.3	0.1185179 0.6898895	8	9	12 0	34 0	20 229	5 160	2 109	0 87
CCV13_C D102_A	Coefficient of variation of fitness on stage C Distance from nuclear center to mother tip on stage A	-1.4 -1.5	0.5 0.1	0.2761928 0.9470334	0 17	0 24	0 40	0 73	43 402	2 276	0 222	0 183
D103_C D104_A1B	Distance from mother nuclear center to mother tip on stage C Distance from nuclear center to mothre tip on stage A1B	-1 -6.7	0.1 0.1	0.6151047 0.9918664	12 67	17 94	27 121	53 170	237 259	146 171	106 132	80 90
D105_A D106_C	Ratio of D102 to C103 on stage A Ratio of D103 to C103 on stage C	-8.3 -2.2	0.4	0.6609518 0.3670988	5 26	12 35	21 51	38 80	62 62	24 31	12 16	10 7
D107_A1B D108_C	Ratio of D104 to C103 on stage A1B Distance from neck to mother cell's nucleus center on stage C	-3.9 -0.9	0.3 0.5	0.9614454 0.9441793	15 24	28 42	39 71	62 156	66 166	37 116	24 94 85	12 77
D109_C D110_A1B D112_C	Distance from neck to bud's nucleus center on stage C Distance from neck to nucleus center on stage A1B Ratio of D108 to C128 on stage C	-2.9 -0.3 2.19	0.1 0.5 0.3	0.798246 0.7624604 0.4580493	25 0 34	34 0 59	56 3 96	103 9 202	161 161 36	113 108 16	85 77 8	57 65 2
D112_C D113_C D114_A1B	Ratio of D109 to C107 on stage C Ratio of D109 to C107 on stage C Ratio of D110 to C128 on stage A1B	-1.09 0.19	0.3 0 0.2	0.7243116 0.6658261	6 13	10 17	24 28	62 48	21 47	8 27	1	1 5
D116_C D117_A	Distance between two nucleus center through middle point of neck on stage C Distance from mother cell's center to nucleus center on stage A	-2 -3.2	0.5 0.5	0.6774495 0.8166432	18	34 17	72 32	149 59	215 85	157 48	126 14	110
D117_C D118_A1B	Distance from mother cell's center to mother cell's nucleus center on stage C Distance from mother cell's center to nucleus center in A1B	-1 -2.9	0.4 0.5	0.7848248 0.9119916	4 15	15 22	34 32	78 58	139 132	78 81	52 45	36 17
D119_C D121_C	Distance from bud center to bud's nucleus center on stage C Distance from bud nucleus center to bud tip on stage C	-1.9 2.19	0.5 0.4	0.02205292 0.5556698	6	11 0	21 1	54 4	90 289	55 182	37 132	19 102
D123_C D125_C	Ratio of D121 to C107 on stage C Distance between nuclear gravity center in mother and mother hip on stage C	6.5 -0.69	0.5 0	0.6620942 0.5025395	0 5	0 10	1 17	9 34	107 322	45 202	25 142	13 115
D126_A1B D127_A	Distance between nuclear gravity center and mother hip on stage A1B Distance between nuclear brightest point and cell tip on stage A	-6.4 -0.69	0.1 0.2	0.9367487 0.9802447	46 10	67 16	91 30	134 53	193 425	129 310	83 236	35 196
D128_C D129_A1B	Distance between nuclear brightest point in mother and mother tip on stage C Distance between nuclear brightest point and mother tip on stage A1B	-1.4 -7.2	0.5 0.4	0.6075864 0.2163839	13 41	14 59	23 82	47 118	242 193	147 136	107 95	79 55
D130_C D131_C	Distance between nuclear brightest point in mother and middle point of neck on stage C Distance between nuclear brightest point in bud and middle point of neck on stage C	-1.4 -2.9	0.4 0.5	0.7614802 0.9824412	38 16	69 25	118 47	220 91	151 189	110 141	88 114	69 95
D132_A1B D134_C	Distance between nuclear brightest point and middle point of neck on stage A1B Distance between two nuclear brightest points through the middle point of neck on stage C	-2.09 -3.59	0 0.5	0.7168703 0.8912987 0.8599841	0 36	60	5 110	25 198	170 192 112	109 136	71 110	52 88
D135_A D135_C D136_A1B	Distance between nuclear brightest point and cell center on stage A Distance between nuclear brightest point in mother and mother center on stage C Distance between nuclear brightest point and mother center on stage A1B	-1.9 -0.3 -1.4	0.4 0.1 0.3	0.6685366 0.2280419	1 14 0	1 25 1	4 47 6	24 125 30	112 159 90	59 96 46	30 61 23	12 48 9
D137_C D139_C	Distance between nuclear brightest point in bud and bud center on stage C Distance between nuclear brightest point in bud and bud center on stage C Distance between nuclear brightest point in bud and bud tip on stage C	-1.9 0.09	0.4 0.5	0.6432095 0.9034298	2 2	6	14 5	43 17	89 287	53 181	28 135	13 102
D14-1_A D14-1_C	Area of nucleus region in mother cell on stage A Area of nucleus region in mother cell on stage C	-5.3 -3.4	0.1 0	0.816878 0.91623	3	5	18 12	43 31	0 23	0	0	0
D14-2_C D14-3_A1B	Area of nucleus region in bud on stage C Area of nucleus region on stage A1B	-4.2 -4.2	0.2 0.3	0.9652645 0.1105693	4 2	5 2	6	10	28 0	ŏ	0	0
D14-3_C D141_C	Area of nucleus region on stage C Distance between nuclear brightest point in mother and mother hip on stage C	-3.59 -0.4	0	0.903349 0.212667	3	5	7 12	11 24	42 417	0 261	0 189	0 151
D142_A1B D143_A1B	Distance between nuclear brightest point and mother hip on stage A1B Distance from neck to nucleus border point close to neck on stage A1B	-7.3 0.5	0	0.2691046 0.4891323	57 0	75 0	95	160 11	129 76	50 37	0 25	0 20
D143_C D144_C	Distance from neck to mother's nucleus border point close to neck on stage C Distance from neck to nucleus border point close to neck on bud's nucleus on stage C	1.19 -3.4	0.2 0.5	0.3559779 0.6552013	4 20	15 30	33 51	79 97	127 98	93 57	73 27	60 12
D145_A1B D145_C	Distance between nuclear outline point D7 and mother hip on stage A1B Distance between nuclear outline point D7 and mother hip on stage C	1.09 2.69	0.5 0.4	0.7439143 0.1553439	5 0	10 0	21 3	62 15	222 480	172 341	140 248	119 195
D146_C D147_A	Distance between nuclear outline point D8 in bud and bud tip on stage C Relative distance of nuclear gravity center to cell center on stage A	-0.9 -2.7	0.5 0.3	0.08477693 0.651371	3 20	3 26	5 41	11 65	75 13	42 4	28 1	14 0
D147_A1B D147_C	Relative distance of nuclear gravity center to mother center on stage A1B Relative distance of nuclear gravity center in mother to mother center on stage C	0.5 -0.09	0	0.8806506 0.5182649	3 6	5 10	8 23	26 57	25 26	7 9	4	1
D148_A D148_A1B	Relative distance of nuclear brightest point to cell center on stage A Relative distance of nuclear brightest point to mother center on stage A1B	-2.2 -0.19	0.5	0.9355095 0.4689639	1	5	10	30 25	19 17	5 6	2	1
D148_C D149_C	Relative distance of nuclear brightest point in mother to mother center on stage C Relative distance of nuclear gravity center in bud to bud center on stage C	-3 -1.69	0.5 0.4	0.384978 0.000669424	29 5	51 8	93 18	182 44	18 21	3 6	0	0
D15-1_A D15-1_C	Sum of brightness on stage region in mother cell on stage A Sum of brightness on stage region in mother cell on stage C Sum of brightness on stage region in which certain C	-0.19 -0.9	0.4 0.4	0.3256059 0.1943305 0.3003641	0 0 0	0 0 0	0 1	0 6 2	50 27	17 7 8	11 2 4	8 1
D15-2_C D15-3_A1B D15-3_C	Sum of brightness on stage region in bud on stage C Sum of brightness on stage region on stage A1B Sum of brightness on stage region on stage C	-0.69 -0.5 -0.8	0.5 0.3 0.5	0.3002541 0.01431579 0.1480998	0	0	0 0 0	1 3	26 29 29	8 9	4 3 4	1 2 2
D15-3_C D150_C D151_C	Sum of brightness on stage region on stage C Relative distance of nuclear brightest point in bud to bud center on stage C Distance ratio of two nuclei from neck on stage C	-0.8 -2.5 -2.5	0.5 0.3 0	0.1480998 0.2347508 0.3236396	0 5 3	9 10	24 19	50 45	29 10 52	9 3 23	4 0 12	0
D152_A1B D152_C	Distaller latio of work industrial meets of stage C Mobility of nucleus in mother cell on stage A1B Mobility of nucleus in mother cell on stage on stage C	-1.59 0.59	0.5 0.2	0.9977955 0.8994541	8 11	14 23	22 41	44 107	50 54	24 34	14 19	8
D153_C D154_A	Mobility of nucleus in but on stage C Angle between C1D1-1 and C1C1-2 on stage A	-1.4 1	0.5	0.9813613 0.584759	3 17	6 23	20 41	48 94	21 18	7 5	3	0
D154_A1B D154_C	Angle between C1D1-1 and C1C1-2 on stage A1B Angle between C1D1-1 and C1C1-2 on stage C	1.19 -3.8	0 0.4	0.5181723 0.2311631	17 86	24 103	33 140	68 213	24 0	9	3	1
D155_A D155_A1B	Angle between C1D2-1 and C1C1-2 on stage A Angle between C1D2-1 and C1C1-2 on stage A1B	3.09 1.9	0.1 0	0.9054513 0.880878	2 5	2 14	11 25	34 59	31 18	15 4	9	5
D155_C D156_C	Angle between C1D2-1 and C1C1-2 on stage C Angle between C2D1-2 and C2C4-2 on stage C	-3 2.59	0.5 0.2	0.2354745 0.7588918	53 0	65 0	106 1	163 6	0 34	0 15	0 6	0 3
D157_C D158_C	Angle between C2D2-2 and C2C4-2 on stage C Angle between D1-101-2 and C1-1C1-2 on stage C	1.9 2.09	0.1 0.4	0.8437746 0.2454565	0 37	0 49	3 71	8 121	38 6	19 1	8	0
D159_C	Angle between D2-1D2-2 and C1-1C1-2 on stage C	1.69	0.3	0.2302082	40	54	76	123	4	1	0	0

D16-1_A D16-1_C D16-2_C	Maximum brightness of a nucleus in the mother cell on stage A Maximum brightness of a nucleus in the mother cell on stage C Maximum brightness of nucleus in bud on stage C	0.3 -0.5 -0.3	0 0.5 0.5	0.4347573 0.1218515 0.3345798	0 0 0	0 0 0	0 0 1	0 3 3	8 7 8	0 0 0	0 0	0
D16-3_A1B D16-3_C D161_A1B	Maximum brightness of nucleus on stage A1B Maximum brightness of nuclei on stage C slope of mother nucleus on stage A1B	0.19 -0.09 -1.19	0.1 0.3 0.1	0.9206925 0.2012522 0.08211884	0 0 14	0 0 25	0 0 45	0 2 82	2 9 0	0 0 0	0 0 0	0 0 0
D162_C D163_C D165_A1B	slope between two nuclei to neck position on stage C Angle between D2-1D2-2 and C1C4-1 on stage C slope of nuleus to neck position on stage A1B	-0.09 -0.3 1.69	0.4 0.5 0.5	0.8491606 0.7504395 0.3352716	0 0 0	0	0 0 1	5 5 6	63 65 11	33 35 1	24 21 0	14 11 0
D166_C D167_C	Angle between D1-1D1-2 and C4-1C4-2 on stage C Angle between D2-1D2-2 and C4-1C4-2 on stage C	-1.59 -1	0.5 0.5	0.2995779 0.818714	3	6	14 6	31 15	38 51	17 21	9	2
D169_A1B D169_C D17-1 A	Angle between C4-1D1-1 and C4-1C1 on stage A1B Angle between C4-1D1-1 and C4-1C1 on stage C Fitness to elliose of the nucleus in the mother cell on stage A	-2.09 -0.5 -0.59	0.5 0.3 0.5	0.8860898 0.3623802 0.08099866	12 0 0	22 0 0	33 3 3	70 9 21	36 45 98	6 16 57	1 10 38	1 5 22
D17-1_C D17-2_C	Fitness to ellipse of the nucleus in the mother cell on stage C Fitness to ellipse of the nucleus in the daughter cell on stage C	-1.69 -1.3	0.5 0.5	0.1719729 0.286989	20 1	46 3	87 17	175 61	21 65	7 30	1 11	0 2
D17-3_A1B D170_A1B D170_C	Fitness to ellipse of the nucleus on stage A1B Angle between C4-1D2-1 and C4-1C1 on stage A1B Angle between C4-1D2-1 and C4-1C1 on stage C	-1.59 -0.5 -2.2	0.5 0.4 0.2	0.7457444 0.9207678 0.3972747	3 0 6	11 3 9	27 8 15	71 27 33	6 70 8	1 19 0	0 5 0	0 1 0
D172_A1B D173_A	Angle between C4-1D4 and C4-1C1 on stage A1B nucleus maximum radius in mother cell on stage A	0.5 -8.5	0.1	0.4958313 0.6967636	0	0	0 12	4 34	1	0	0	0
D173_C D174_C D175_A1B	nucleus maximum radius in mother cell on stage C nucleus maximum radius in bud on stage C nucleus maximum radius on stage A1B	-4.2 -8.5 -5.3	0 0.3 0	0.9410588 0.7491418 0.3125709	0 4 1	2 5 3	6 8 12	20 15 36	50 2 0	7 0 0	0 0 0	0 0 0
D176_A D176_C	nucleus diameter in mother cell on stage A nucleus diameter in mother cell on stage C	-8.9 -5.09	0	0.5226224 0.6933249	4	10 7	18 10	56 37	0 15	0	0	0
D177_C D178_A1B D179 A	nucleus diameter in bud on stage C nucleus diameter on stage A1B nucleus minimum radius in mother cell on stage A	-6.3 -5.3 -7.8	0 0.1 0.3	0.7824082 0.3643013 0.9318891	4 1 3	7 2 4	9 9 9	15 30 28	1 0 141	0 0 38	0 0 5	0 0 0
D179_C D180_C	nucleus minimum radius in mother cell on stage C nucleus minimum radius in bud on stage C	-6.3 -6.2 -6.1	0 0 0	0.4861358 0.1967463 0.7371608	6 5	10 5 3	18 7 5	45 16 15	14 5 0	0 0 0	0	0 0 0
D181_A1B D182_A D182_C	nucleus minimum radius on stage A1B nucleus roundness in mother cell on stage A nucleus roundness in mother cell on stage C	-6.1 -6 -3.7	0.5 0.4	0.3276656 0.968755	0	0	1	7	135 29	70 3	40 2	26 2
D183_C D184_A1B D185_C	nucleus roundness in bud on stage C nucleus roundness on stage A1B Total length of two straight segments D11-1C4-1 and D11-2C4-1 on stage C	-3.8 -3.7 -9.3	0.5 0.4 0.2	0.1285242 0.228644 0.5487107	0 0 44	0 0 61	0 0 101	1 8 161	75 2 302	36 0 192	24 0 155	12 0 117
D186_C D188_A	Total length of two straight segments D12-104-1 and D12-204-1 on stage C Total length of two straight segments D12-104-1 and D12-204-1 on stage C Distance between nuclear gravity center and brightest point on stage A	-8.9 -4.7	0.2	0.4988377 0.08582834	41 16	63 25	102 48	163 109	310 0	208	160	128 0
D190_A1B D188_C D189_C	Distance between nuclear gravity center and brightest point on stage ATB Distance between nuclear gravity center and brightest point in mother on stage C Distance between nuclear gravity center and brightest point in b	-2.2 -3.9 -2.8	0.4 0.5 0.4	0.04017414 0.3704214 0.5699407	2 10 4	3 22 7	12 50 17	34 95 38	0 0 0	0 0 0	0 0 0	0 0 0
D191_A D191_C	Average of nuclear brightness on stage A Average of nuclear brightness in mother on stage C	0.3 -0.4	0.4 0.5	0.1712413 0.0100173	0	0	0	0	8	4	0	0
D192_C D193_A1B D193_C	Average of nuclear brightness in bud on stage C Average of nuclear brightness on stage A1B Average of nuclear brightness on stage C	-0.09 0.09 -0.09	0.5 0.2 0.3	0.05962986 0.6058382 0.01320149	0 0 0	0 0 0	0 0 0	3 1 5	10 4 8	2 0 1	0	0 0 0
D194_A D194_C	Maximal intensity of nuclear brightness divided by average on stage A Maximal intensity of nuclear brightness divided by average in mother on stage C	-3.9 3.09	0.3 0.5	0.4871078 0.08126308	1	2	7	29 3	105 177	4 54	0 13	0 2
D195_C D196_A1B D196_C	Maximal intensity of nuclear brightness divided by average in bud on stage C Maximal intensity of nuclear brightness divided by average on stage A1B Maximal intensity of nuclear brightness divided by average on stage C	-3 2 -2.09	0 0.4 0	0.8872584 0.8931738 0.4531271	4 0 0	4 0 0	12 1 0	32 4 9	33 277 106	0 92 13	0 20 1	0 8 0
D197_C D198_C	nuclei size ratio on stage C Ratio of nuclear brightness on stage C	2.8 1.9	0.1 0.4	0.9137347 0.5610672	0	0	4	12 3	267 157	112 61	54 31	32 18
D199 D200 D201	Ratio of A (Nuclear) Ratio of A1 (Nuclear) Ratio of B (Nuclear)	-0.59 0.8 0.8	0.5 0.2 0	0.4527562 0.7355319 0.08278472	25 2 9	36 9 9	55 34 9	88 105 9	17 24 48	0 13 34	0 6 24	0 1 21
D202 D203	Ratio of C (Nuclear) Ratio of D (Nuclear)	1.3 0	0.1 0.5	0.854205 8.14E-17	0	0	0	0	75 140	43 48	30 14	17 4
D204 D205 D206	Ratio of E (Nuclear) Ratio of F (Nuclear) Ratio of F (Nuclear) Ratio of A (Nuclear) to no bud cells	-0.69 0 9.89	0.5 0.2 0	7.79E-09 4.10E-17 1.44E-15	0 0 0	0 0 17	0 0 46	0 0 93	0 4 0	0 0 0	0 0 0	0 0 0
D207 D208	Ratio of A1 (Nuclear) to budded cells Ratio of B (Nuclear) to budded cells	2.5 0.69	0 0.1	0.8956956 0.2402615	0	0	8	25 9	51 34	19 21	8 19	3 13
D209 D210 D211	Ratio of C (Nuclear) to budded cells Ratio of A (Nuclear) to A, A1, B and C cells Ratio of A1 (Nuclear) to A, A1, B and C cells	-0.59 0.3	0 0.5 0.4	0.1357304 0.8649651 0.649329	0 24 13	0 34 33	0 45 77	0 85 157	94 18 27	54 0 14	36 0 7	23 0 3
D212 D213 D214	Ratio of B (Nuclear) to A, A1, B and C cells Ratio of C (Nuclear) to A, A1, B and C cells	0.8 1 0.9	0.1	0.06620688 0.7853454 0.859407	0 0 11	0 0 17	0	0 2 70	55 69	37 41 4	29 29 2	23 19
D214 D215 D216	Ratio of A1 (Nuclear) to A1, B and C cells Ratio of B (Nuclear) to A1, B and C cells Ratio of C (Nuclear) to A1, B and C cells	0.69 0.4	0.5 0.1 0.5	0.859407 0.324889 0.5161974	0 2	0	28 0 9	9 27	18 39 58	25 28	19 14	0 15 6
DCV102_A DCV103_C DCV104_A1B	Coefficient of variation of distance from nuclear center to mother tip on stage A Coefficient of variation of distance from mother nuclear center to mother tip on stage C Coefficient of variation of distance from nuclear center to mothre tip on stage ATB	1 1.3 0.8	0 0.1 0.4	0.3203975 0.6858635 0.4412556	0 1 0	0 3 0	3 6 0	9 19 0	111 124 264	68 75 194	38 45 153	27 29 127
DCV105_A DCV106_C	Coefficient of variation of ratio of D102 to C103 on stage A Coefficient of variation of ratio of D103 to C103 on stage C	-1.19 1.5	0.4 0.4	0.2554281 0.7232177	6 2	7	9	26 18	9 105	2 58	0 33	0 17
DCV107_A1B DCV108_C DCV109_C	Coefficient of variation of ratio of D104 to C103 on stage A1B Coefficient of variation of distance from neck to mother cell's nucleus center on stage C Coefficient of variation of distance from neck to bud's nucleus center on stage C	0 0.19 0.4	0.5 0.5 0.3	0.2275903 0.2341263 0.9548198	0	0 0 0	4 2 0	12 11 7	88 131 20	51 66 11	32 40 3	18 25 2
DCV110_A1B DCV112_C	Coefficient of variation of distance from neck to nucleus center on stage A1B Coefficient of variation of ratio of D108 to C128 on stage C	-0.5 -0.59	0.5 0.5	0.2936726 0.5194092	0	1 5	2 10	7 20	69 90	44 39	31 17	20 12
DCV113_C DCV114_A1B DCV116_C	Coefficient of variation of ratio of D109 to C107 on stage C Coefficient of variation of ratio of D110 to C128 on stage A1B Coefficient of variation of distance between two nucleus cnters through middle point of neck on stage C	0.5 -0.5 3.3	0.1 0.3 0.3	0.726478 0.8585266 0.07768723	0 1 0	1 1 0	3 3 0	11 6 0	16 73 173	8 46 98	3 31 67	2 19 51
DCV117_A DCV117_C	Coefficient of variation of distance from mother cell's center to nucleus center on stage A Coefficient of variation of distance from mother cell's center to mother cell's nucleus center on stage C	1.8 0.9	0.1 0.5	0.9748527 0.3035905	0	0 2	0 7	5 20	24 50	11 16	6 3	3
DCV118_A1B DCV119_C DCV121_C	Coefficient of variation of distance from mother cell's center to nucleus center on stage A1B Coefficient of variation of distance from bud center to bud's nucleus center on stage C Coefficient of variation of distance from bud nucleus center to bud tip on stage C	-1.09 1.8 1.19	0.1 0 0.3	0.09588848 0.8458007 0.2058264	0 0 0	2 0 0	3 0 1	12 1 8	52 59 57	26 26 38	7 14 25	2 9 22
DCV123_C DCV125_C DCV126_A1B	Coefficient of variation of ratio of D121 to C107 on stage C Coefficient of variation of distance between nuclear gravity center in mother and mother hip on stage C	-1.19 2.69 0.19	0.3 0.3 0.5	0.000515785 0.2759282 0.3900801	8 0 0	14 0 0	25 2 0	52 6	9 107 278	3 72 201	0 47 155	0 37 129
DCV127_A DCV128_C	Coefficient of variation of distance between nuclear gravity center and mother hip on stage A1B Coefficient of variation of distance between nuclear brightest point and cell tip on stage A Coefficient of variation of distance between nuclear brightest point in mother and mother tip on stage C	0.3 2.4	0.5 0.5	0.4171907 0.663537	0	0	3	12 12	119 142	70 90	36 63	24 37
DCV129_A1B DCV130_C DCV131_C	Coefficient of variation of distance between nuclear brightest point and mother tip on stage A1B Coefficient of variation of distance between nuclear brightest point in mother and middle point of neck on stage C Coefficient of variation of distance between nuclear brightest point in bud and middle point of neck on stage C	-0.5 0.9 -1.09	0.1 0.5 0.5	0.3764595 0.5975005 0.877302	0 0 4	0 0 5	1 0 18	14 6 43	38 170 20	9 107 5	3 65 3	1 44 0
DCV132_A1B DCV134_C	Coefficient of variation of distance between nuclear brightest point and middle point of neck on stage A1B Coefficient of variation of distance between two nuclear brightest points through middle point of neck on stage C	-1.8 3.09	0.2	0.6635823 0.76556	1 0	3 0	8	25 0	0 202	0 131	0 98	0 71
DCV135_A DCV135_C DCV136_A1B	Coefficient of variation of distance between nuclear brightest point and cell center on stage A Coefficient of variation of distance between nuclear brightest point in mother and mother center on stage C Coefficient of variation of distance between nuclear brightest point and mother center on stage A1B	2.9 2.5 0.09	0.5 0.1 0.4	0.2818894 0.925229 0.9316296	0 0 0	0 0 0	0 0 0	2 4 1	32 130 4	16 60 0	5 33 0	2 21 0
DCV137_C DCV139_C	Coefficient of variation of distance between nuclear brightest point in bud and bud center on stage C Coefficient of variation of distance between nuclear brightest point in bud and bud tip on stage C	1.19 1.8	0.1 0.4	0.815889 0.8353037	0	0	1	5 12	21 77	6 47	3 31	2 23
DCV14-1_A DCV14-1_C DCV14-2_C	Coefficient of variation of area of nucleus region in mother cell on stage A Coefficient of variation of area of nucleus region in mother cell on stage C Coefficient of variation of area of nucleus region on stage C	0.09 -0.59 -1.3	0.2 0.1 0.5	0.287943 0.8668097 0.865255	0 0 0	0 0 0	0 1 1	0 5 11	306 90 135	168 32 66	99 10 30	59 5 12
DCV14-3_A1B DCV14-3_C DCV141_C	Coefficient of variation of area of nucleus region on stage A1B Coefficient of variation of area of nucleus region on stage C Coefficient of variation of area of nucleus region on stage C	-0.59 -1.59	0.5 0.2 0	0.3307375 0.3017811 0.9975976	0 3 2	3 5 2	7 6 5	30 14 18	49 86 73	25 14 41	17 1 22	12 0 17
DCV142_A1B DCV143_A1B	Coefficient of variation of distance between nuclear brightest point and mother hip on stage C Coefficient of variation of distance between nuclear brightest point and mother hip on stage A1B Coefficient of variation of distance from neck to nucleus border point close to neck on stage A1B	1.3 0.59 0.3	0	0.5468525 0.6667339	0	0	0	1 2	45 12	15	5 1	2
DCV143_C DCV144_C DCV145_A1B	Coefficient of variation of distance from neck to mother's nucleus border point close to neck on stage C Coefficient of variation of distance from neck to nucleus border point close to neck on bud's nucleus on stage C Coefficient of variation of distance between nuclear outline point D7 and mother hip on stage A1B	1.19 0.59 0.09	0.3 0.3 0.5	0.4814867 0.6149799 0.9117897	0 0 0	0 0 0	0 1 0	2 7 0	135 39 74	81 15 35	46 5 15	33 3 6
DCV145_C DCV146_C	Coefficient of variation of distance between nuclear outline point D7 and mother hip on stage C Coefficient of variation of distance between nuclear outline point D8 in bud and bud tip on stage C	1.3 0.8	0.1 0.1	0.925896 0.7843106	1	3	8	22 6	68 30	33 13	18 7	8 5
DCV147_A DCV147_A1B DCV147_C	Coefficient of variation of relative distance of nuclear gravity center to cell center on stage A Coefficient of variation of relative distance of nuclear gravity center to mother center on stage A1B Coefficient of variation of relative distance of nuclear gravity center in mother to mother center on stage C	-0.09 -0.8 1.09	0.3 0.4 0.1	0.03561532 0.149935 0.9503205	3 1 0	7 1 2	11 6 5	26 16 18	10 8 27	3 1 5	3 0 2	1 0 1
DCV148_A DCV148_A1B	Coefficient of variation of relative distance of nuclear brightest point to cell center on stage A Coefficient of variation of relative distance of nuclear brightest point to mother center on stage A1B	3 -1.09	0.3 0.4	0.6968213 0.09733149	0	0	0	3 33	23 4	3	2	2
DCV148_C DCV149_C DCV15-1_A	Coefficient of variation of relative distance of nuclear brightest point in mother to mother center on stage C Coefficient of variation of relative distance of nuclear gravity center in bud to bud center on stage C Coefficient of variation of sum of brightness on stage region in mother cell on stage A	2.5 1.3 -1.09	0.2 0.2 0	0.867457 0.9690902 0.473447	0 0 0	0 0 1	0 1 2	4 5 11	91 15 0	41 7 0	19 4 0	10 2 0
DCV15-1_C DCV15-2_C DCV15-3 A1B	Coefficient of variation of sum of brightness on stage region in mother cell on stage C Coefficient of variation of sum of brightness on stage region in bud on stage C	-0.19 0	0 0.1 0.5	0.69214 0.6908326 0.9568412	0 0 0	0 0 0	0 9 0	2 32 7	6 1 14	2 0 3	1 0 0	0 0 0
DCV15-3_C DCV150_C	Coefficient of variation of sum of brightness on stage region on stage A1B Coefficient of variation of sum of brightness on stage region on stage C Coefficient of variation of relative distance of nuclear brightnest point in bud to bud center on stage C	-0.5 0.8	0.5 0.4	0.7229175 0.6349541	0	0	1 2	9 8	2	0	0	0
DCV151_C DCV152_A1B DCV152_C	Coefficient of variation of distance ratio of two nuclei from neck on stage C Coefficient of variation of mobility of nucleus in mother cell on stage A1B Coefficient of variation of mobility of nucleus in mother cell on stage on stage C	-1.3 -1.5 0.19	0.5 0.5 0.5	0.6575856 0.1601762 0.2906061	1 0 0	1 0 0	2 0 0	5 3	111 35 58	55 5 29	29 1 18	12 0 8
DCV153_C DCV154_A	Coefficient of variation of mobility of nucleus in bud on stage C Coefficient of variation of angle between C1D1-1 and C1C1-2 on stage A	0.5 -0.69	0.2 0.2	0.8610078 0.6977411	0	0	0 5	4 20	52 27	20 9	11 3	3 1
DCV154_A1B DCV154_C DCV155_A	Coefficient of variation of angle between C1D1-1 and C1C1-2 on stage A1B Coefficient of variation of angle between C1D1-1 and C1C1-2 on stage C Coefficient of variation of angle between C1D2-1 and C1C1-2 on stage C	5.6 0.8 -3.09	0.5 0.5 0	0.186287 0.1731575 0.7765078	0 0 15	0 0 26	0 2 40	2 6 73	181 65 11	113 24 0	78 13 0	49 4 0
DCV155_A1B DCV155_C	Coefficient of variation of angle between C1D2-1 and C1C1-2 on stage A1B Coefficient of variation of angle between C1D2-1 and C1C1-2 on stage C	-0.5 0.3	0.2 0.5	0.7138576 0.4891537	1	1 3	5	16 15	40 53	10 19	3 11	0
DCV156_C DCV157_C DCV158_C	Coefficient of variation of angle between C2D1-2 and C2C4-2 on stage C Coefficient of variation of angle between C2D2-2 and C2C4-2 on stage C Coefficient of variation of angle between D1-1D1-2 and C1-1C1-2 on stage C	-1.3 0.3 -0.19	0.3 0.4 0.4	0.1144109 0.3636308 0.7317281	3 1 0	7 3 0	13 9 0	46 34 1	4 20 166	0 8 87	0 2 53	0 1 32
DCV159_C DCV16-1_A	Coefficient of variation of angle between D2-1D2-2 and C1-1C1-2 on stage C Coefficient of variation of maximum brightness of a nucleus in the mother cell on stage A	0.19 -1.5	0.1 0.2	0.9002221 0.1060885	0	0	0	0 24	168 0	91 0	54 0	38 0
DCV16-1_C DCV16-2_C DCV16-3_A1B	Coefficient of variation of maximum brightness of a nucleus in the mother cell on stage C Coefficient of variation of maximum brightness of a nucleus in the daughter cell on stage C Coefficient of variation of maximum brightness of nucleus on stage A1B	0.5 -0.3 0.09	0.4 0.5 0	0.07184963 0.6008803 0.7463258	0 0 2	0 0 3	0 1 5	1 8 8	5 0 0	0 0 0	0 0 0	0 0 0
DCV16-3_C DCV161_A1B	Coefficient of variation of maximum brightness of nuclei on stage C Coefficient of variation of slope of mother nucleus on stage A1B	0.09	0.5 0.5	0.3994568 0.667596	0	0	2	2	0 77	0 34	0 21	0 13 7
DCV162_C DCV163_C	Coefficient of variation of slope between two nuclei to neck position on stage C Coefficient of variation of angle between D2-1D2-2 and C1C4-1 on stage C	3.9 2.9	0.4 0.4	0.4989458 0.1744529	0	0	0	0 1	37 24	16 8	10 3	1

DCV165 A1B	Coefficient of variation of slope of nuleus to neck position on stage A1B	-1	0.3	0.7172592	0	2	6	29	5	0	0	0
DCV166 C	Coefficient of variation of angle between D1-1D1-2 and C4-1C4-2 on stage C	1.3	0.1	0.6524721	0	0	1	4	14	3	3	1
DCV167 C	Coefficient of variation of angle between D2-1D2-2 and C4-1C4-2 on stage C	0.9	0.3	0.8314842	ō	ō	ó	8	15	2	ō	ó
DCV169 A1B	Coefficient of variation of angle between C4-1D1-1 and C4-1C1 on stage A1B	-2	0.5	0.3623859	7	13	21	50	4	1	ō	ō
DCV169 C	Coefficient of variation of angle between C4-1D1-1 and C4-1C1 on stage C	1.09	0.5	0.7107411	ò	0	1	4	4	ó	ō	ō
DCV17-1 A	Coefficient of variation of fitness to ellipse of the nucleus in the mother cell on stage A	-0.59	0.4	0.6003537	Ó	Ó	0	6	67	16	5	2
DCV17-1 C	Coefficient of variation of fitness to ellipse of the nucleus in the mother cell on stage C	-0.9	0.5	0.7790395	Ö	1	7	18	18	2	Ö	0
DCV17-2 C	Coefficient of variation of fitness to ellipse of the nucleus in the daughter cell on stage C	-0.19	0	0.8838698	o	1	1	4	54	14	2	1
DCV17-3 A1B	Coefficient of variation of fitness to ellipse of the nucleus on stage A1B	2.59	0.4	0.4940645	Ó	0	0	0	32	13	5	1
DCV170 A1B	Coefficient of variation of angle between C4-1D2-1 and C4-1C1 on stage A1B	0.5	0.5	0.8313629	Ó	1	6	16	24	12	6	6
DCV170 C	Coefficient of variation of angle between C4-1D2-1 and C4-1C1 on stage C	2.59	0.3	0.03403197	Ö	0	0	1	26	10	6	4
DCV172 A1B	Coefficient of variation of angle between C4-1D4 and C4-1C1 on stage A1B	1.8	0.1	0.934589	0	0	0	0	24	11	5	3
DCV173 A	Coefficient of variation of nucleus maximum radius in mother cell on stage A	-0.5	0	0.9835168	0	0	1	7	295	159	80	34
DCV173 C	Coefficient of variation of nucleus maximum radius in mother cell on stage C	-0.19	0	0.4430623	0	0	3	13	11	1	0	0
DCV174 C	Coefficient of variation of nucleusmaximum radius in bud on stage C	-1.69	0.5	0.7486563	1	1	4	14	63	19	3	0
DCV175 A1B	Coefficient of variation of nucleus maximum radius on stage A1B	2.3	0.1	0.957341	0	0	0	0	21	8	3	2
DCV176_A	Coefficient of variation of nucleus diameter in mother cell on stage A	1.09	0.5	0.1603035	0	0	0	0	531	369	271	216
DCV176_C	Coefficient of variation of nucleus diameter in mother cell on stage C	0.3	0	0.6006627	0	0	0	4	36	12	2	1
DCV177_C	Coefficient of variation of nucleus diameter in bud on stage C	-0.69	0.1	0.6940977	0	1	3	8	124	62	29	14
DCV178_A1B	Coefficient of variation of nucleus diameter on stage A1B	2.3	0	0.8925757	0	0	0	0	16	6	3	2
DCV179_A	Coefficient of variation of nucleus minimum radius in mother cell on stage A	0.9	0.2	0.2234765	0	0	0	1	264	166	107	81
DCV179_C	Coefficient of variation of nucleus minimum radius in mother cell on stage C	0.3	0.3	0.6285675	0	0	0	9	102	58	32	18
DCV180_C	Coefficient of variation of nucleus minimum radius in bud on stage C	1.59	0.2	0.052145	0	0	0	0	172	122	85	70
DCV181_A1B	Coefficient of variation of nucleus minimum radius on stage A1B	1.19	0.2	0.5599897	0	0	0	1	108	55	38	26
DCV182_A	Coefficient of variation of nucleus roundness in mother cell on stage A	-0.9	0.5	0.4213621	0	1	2	10	87	45	22	14
DCV182_C	Coefficient of variation of nucleus roundness in mother cell on stage C	-0.5	0.1	0.8154857	0	1	3	9	3	0	0	0
DCV183_C	Coefficient of variation of nucleus roundness in bud on stage C	-1.5	0.5	0.0945298	0	0	0	2	37	6	0	0
DCV184_A1B	Coefficient of variation of nucleus roundness on stage A1B	0.69	0.3	0.6580845	0	0	0	8	2	0	0	0
DCV185_C	Coefficient of variation of Total length of two straight segments D11-1C4-1 and D11-2C4-1 on stage C	-0.3	0.2	0.4762715	0	0	0	3	177	112	83	56
DCV186_C	Coefficient of variation of Total length of two straight segments D12-1C4-1 and D12-2C4-1 on stage C	-1.4	0.5	0.31074	0	0	2	16	148	93	51	27
DCV188_A	Coefficient of variation of distance between nuclear gravity center and brightest point on stage A	1.5	0.1	0.6201998	0	0	0	4	121	78	55	42
DCV190_A1B	Coefficient of variation of distance between nuclear gravity center and brightest point in bud on stage A1B	2	0.5	0.02902724	0	0	0	0	5	1	0	0
DCV188_C	Coefficient of variation of distance between nuclear gravity center and brightest point in mother on stage C	1.5	0.2	0.169783	0	0	0	0	79	40	25	19
DCV189_C	Coefficient of variation of distance between nuclear gravity center and brightest point on stage A	-0.69	0.3	0.4040968	0	3	7	24	3	2	0	0
DCV191_A	Coefficient of variation of average of nuclear brightness on stage A	-0.8	0	0.4834359	1	1	2	10	0	0	0	0
DCV191_C	Coefficient of variation of average of nuclear brightness in mother on stage C	-0.19	0.5	0.697876	0	0	0	0	0	0	0	0
DCV192_C	Coefficient of variation of average of nuclear brightness in bud on stage C	-0.3	0	0.8619413	2	2	3	21	0	0	0	0
DCV193_A1B	Coefficient of variation of average of nuclear brightness on stage A1B	-0.09	0	0.5973198	1	1	2	11	0	0	0	0
DCV193_C	Coefficient of variation of average of nuclear brightness on stage C	-0.5	0.5	0.9606368	0	0	0	2	0	0	0	0
DCV194_A	Coefficient of variation of maximal intensity of nuclear brightness divided by average on stage A	0.8	0.1	0.4648997	0	1	15	126	13	2	1	1
DCV194_C	Coefficient of variation of maximal intensity of nuclear brightness in mother divided by average on stage C	-0.5	0	0.4562136	12	33	77	183	2	0	0	0
DCV195_C	Coefficient of variation of maximal intensity of nuclear brightness in bud divided by average on stage C	0.69	0.4	0.8957901	0	0	0	18	19	6	2	2
DCV196_A1B	Coefficient of variation of maximal intensity of nuclear brightness divided by average on stage A1B	-1.4	0.4	0.5489041	12	44	85	207	0	0	0	0
DCV196_C	Coefficient of variation of maximal intensity of nuclear brightness divided by average on stage C	0.69	0.5	0.72445	0	1	2	9	6	1	1	0
DCV197_C	Coefficient of variation of nuclei size ratio on stage C	-1.3	0.5	0.5533293	0	0	5	19	62	25	11	2
DCV198_C	Coefficient of variation of ratio of nuclear brightness on stage C	-1.59	0.5	0.6749741	0	4	13	36	25	2	0	0

*ACV103_A1B and ACV103_C have no statistics data in this file since some of the wild-type data do not have enough cell data to calculate the standard deviation.