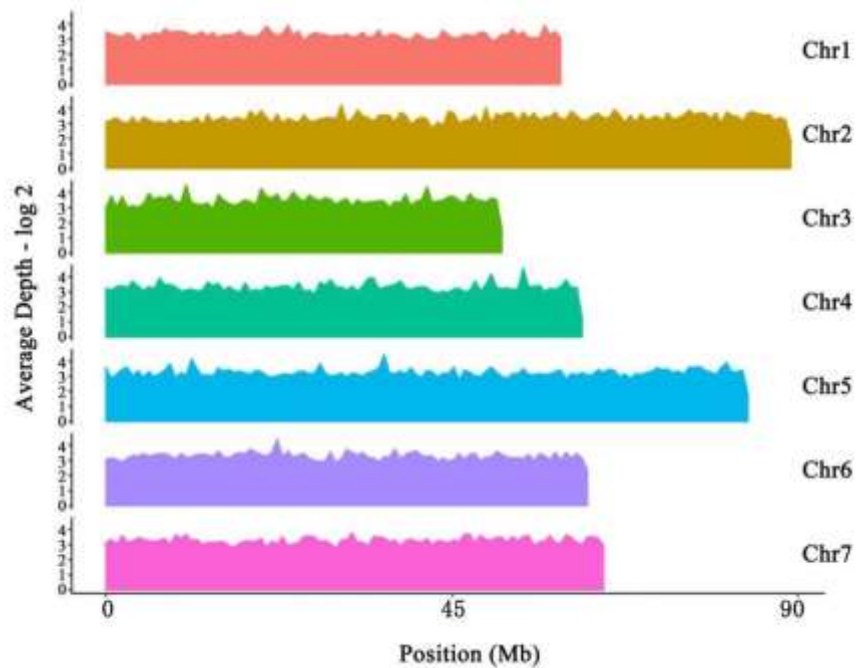


1 **Appendix A**

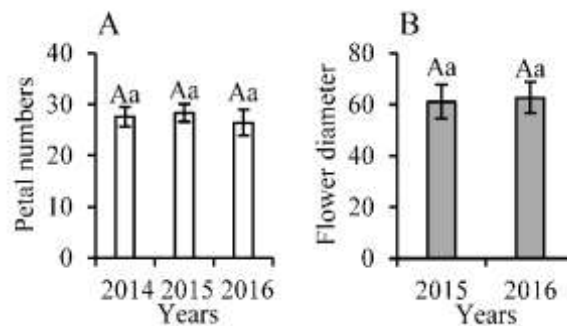
2



**Appendix A** Chromosome coverage depth of the parent ‘Sun City’

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4



5

6 **Appendix B** Analysis of variance of petal number and flower diameter in different  
 7 years. There is no significance difference for petal number (A) and flower diameter (B)  
 8 in the different years that the traits were measured.

9 Note: The capital letter ‘A’ represents  $P < 0.01$ , and the lowercase letter ‘a’ represents  
 10  $P < 0.05$ .

11

12 **Appendix C** Summary of the markers on qpnun-3-1 in the YS population

Marker	Position	LOD	R <sup>2</sup> (%)
chr3_6521321	37.31	5.85	10.63
chr3_2336827	37.50	6.29	11.61
chr3_2014196	37.75	6.77	12.65
chr3_6305260	37.92	6.99	13.14

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chr3_6740211	38.09	7.08	13.34
chr3_6457745	38.19	7.13	13.43
RW35C24-248	38.30	7.14	13.45
chr3_32140101	38.53	7.12	13.41
chr3_6284843	38.55	7.12	13.41
chr3_6997215	38.59	7.12	13.41
chr3_6997476	38.63	7.11	13.40
chr3_6284666	39.18	7.19	13.56
chr3_19875168	39.22	7.18	13.54
chr3_7081075	39.24	7.17	13.54
chr3_629217	39.71	7.06	13.30
chr3_7484851	40.02	6.81	12.75
chr3_6938352	40.05	6.79	12.70
chr3_629193	40.08	6.74	12.61
chr3_811282	40.28	6.50	12.06
chr3_767190	40.74	5.93	10.81
chr3_7485181	40.82	5.83	10.60
chr3_767481	40.83	5.83	10.59
chr3_728655	45.37	5.84	10.61
chr3_3418734	45.39	5.86	10.66
chr3_3940077	45.69	6.31	11.65
chr3_3616066	46.41	7.13	13.44
chr3_8450109	46.51	7.23	13.65
chr3_8250939	46.60	7.31	13.82
chr3_8251089	46.98	7.62	14.50
chr3_8813002	46.99	7.63	14.51
chr3_3615772	47.63	8.03	15.36
chr3_8251166	47.66	8.04	15.39
chr3_3615758	47.67	8.05	15.40
chr3_8711710	47.74	8.09	15.49
chr3_1562727	47.76	8.11	15.52
chr3_2336808	47.85	8.13	15.57
chr3_2336522	47.86	8.13	15.58
chr3_6305280	47.94	8.17	15.65
chr3_6284655	48.15	8.22	15.75
chr3_6740187	48.71	7.98	15.25
chr3_6050198	49.09	7.94	15.16
chr3_2804517	49.13	7.93	15.15
chr3_4986581	49.23	7.94	15.18
chr3_7081352	49.79	8.04	15.38

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chr3_6521071	50.01	8.10	15.51
chr3_6521012	50.09	8.14	15.60
chr3_13160177	50.27	8.32	15.96
chr3_6284885	50.82	8.90	17.18
chr3_33584637	50.87	8.97	17.32
chr3_4986249	51.35	9.56	18.51
RW35C24-259	51.74	10.08	19.56
chr3_6284618	52.43	10.95	21.29
chr3_9354935	53.16	11.37	22.11
chr3_7557943	53.78	11.34	22.06
chr3_7557931	53.82	11.33	22.03
chr3_8105458	54.09	11.23	21.84
chr3_7686732	54.13	11.22	21.82
chr3_7103365	54.15	11.21	21.80
chr3_29310469	54.37	11.06	21.51
chr3_8169873	54.53	10.94	21.27
chr3_7701017	54.54	10.93	21.26
chr3_8170129	54.58	10.93	21.25
chr3_7745752	54.67	10.99	21.37
chr3_7745462	54.69	11.00	21.39
chr3_8812754	54.95	11.12	21.62
chr3_7745725	55.14	11.11	21.61
chr3_7081069	55.21	11.09	21.57
chr3_7700730	55.86	10.83	21.06
chr3_8400047	55.91	10.81	21.02
chr3_7678507	57.32	10.26	19.94
Rh58-267	57.92	9.99	19.39
chr3_7678265	59.05	9.77	18.94
chr3_9658632	59.34	9.70	18.80
chr3_23249588	59.88	9.54	18.47
chr3_6536758	60.59	9.37	18.13
chr3_10582357	64.64	7.41	14.04
E4M4-71	65.14	6.81	12.74
695-236	65.19	6.75	12.61
chr3_11594336	65.27	6.72	12.55
chr3_10272801	65.35	6.63	12.36
chr3_11211736	65.52	6.60	12.30
chr3_12407504	65.65	6.58	12.25
chr3_12407712	65.67	6.58	12.25
chr3_9354640	65.72	6.61	12.31

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chr3_11594372	65.77	6.64	12.38
chr3_9009486	65.80	6.65	12.40
chr3_20116156	65.85	6.67	12.45
chr3_9545582	66.46	6.92	12.98
Rw11E5-181	66.98	7.05	13.27
chr3_20116153	67.28	7.09	13.35
chr3_436945	68.70	6.93	13.00
chr3_14756769	69.14	6.83	12.78
chr3_9799920	69.52	6.75	12.61
chr3_13011401	70.17	6.61	12.30
chr3_10060643	70.18	6.60	12.29

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