

**Supplemental Table 4:** Overview of the results of the segregation analysis on kanamycin and hygromycin of T3 seeds, collected from T2 plants containing only a recombined allele (PCR1+ and PCR2-; Fig. 5) in module 1.

T3 seeds	Selection on Kanamycin				Selection on Hygromycin		
	R	S	$K_{R/S}^1$	$\chi^2$ P-value (fits ratio)	R	S	$H_{R/S}^1$
AP1-7-4/K2	75	28	<b>2.7</b>	0.61 (3:1)	0	121	<b>0</b>
AP1-7-4/K3	78	31	<b>2.5</b>	0.43 (3:1)	0	112	<b>0</b>
AP1-7-4/K4	82	40	<b>2.1</b>	0.05 (3:1)	0	121	<b>0</b>
AP1-7-4/K5	80	31	<b>2.6</b>	0.48 (3:1)	0	135	<b>0</b>
AP1-7-4/K6	97	38	<b>2.6</b>	0.40 (3:1)	0	140	<b>0</b>
AP1-7-4/K8	71	19	<b>3.7</b>	0.40 (3:1)	0	89	<b>0</b>
AP1-7-4/K9	97	39	<b>2.5</b>	0.32 (3:1)	0	136	<b>0</b>
AP1-7-4/K14	98	36	<b>2.7</b>	0.62 (3:1)	0	138	<b>0</b>
AP1-7-4/K16	93	37	<b>2.5</b>	0.36 (3:1)	0	122	<b>0</b>
AP1-7-4/K17	83	7	<b>11.86</b>		0	107	<b>0</b>
AP1-14-4/K1	85	0			0	106	<b>0</b>
AP1-14-4/K5	73	31	<b>2.35</b>	0.26 (3:1)	0	63	<b>0</b>
AP1-14-4/K6	80	33	<b>2.42</b>	0.30 (3:1)	0	118	<b>0</b>
AP1-14-4/K7	73	33	<b>2.21</b>	0.14 (3:1)	0	71	<b>0</b>
AP1-14-4/K9	124	0			0	120	<b>0</b>
AP1-14-4/K10	65	31	<b>2.1</b>	0.1 (3:1)	0	118	<b>0</b>
AP1-14-4/K11	69	23	<b>3</b>	1 (3:1)	0	116	<b>0</b>
AP1-14-4/K12	96	27	<b>3.6</b>	0.43 (3:1)	0	107	<b>0</b>
AP1-14-4/K14	78	33	<b>2.33</b>	0.25 (3:1)	0	124	<b>0</b>
AP1-8-12/K1	122	0			0	115	<b>0</b>
AP1-8-12/K2	91	32	<b>2.84</b>	0.80 (3:1)	0	129	<b>0</b>
AP1-8-12/K4	91	25	<b>3.64</b>	0.39 (3:1)	0	111	<b>0</b>
AP1-8-12/K5	94	41	<b>2.29</b>	0.15 (3:1)	0	133	<b>0</b>
AP1-8-12/K6	77	25	<b>3.08</b>	0.91 (3:1)	0	114	<b>0</b>
AP1-8-12/K7	80	0			0	85	<b>0</b>
AP1-8-12/K8	86	21	<b>4.01</b>	0.20 (3:1)	0	108	<b>0</b>
AP1-8-12/K9	103	0			0	136	<b>0</b>
AP1-8-12/K10	209	61	<b>3.4</b>	0.36 (3:1)	0	139	<b>0</b>
AP1-8-12/K12	92	22	<b>4.18</b>	0.16 (3:1)	0	123	<b>0</b>

AP1-8-12/K13	90	31	<b>2.9</b>	0.87 (3:1)	0	98	<b>0</b>
AP1-8-12/K15	93	31	<b>3</b>	1 (3:1)	0	133	<b>0</b>
AP1-10-4/K1	124	0			0	132	<b>0</b>
AP1-10-4/K2	110	0			0	108	<b>0</b>
AP1-10-4/K5	88	35	<b>2.5</b>	0.38 (3:1)	0	135	<b>0</b>
AP1-10-4/K7	72	25	<b>2.88</b>	0.86 (3:1)	0	121	<b>0</b>
AP1-10-4/K9	89	28	<b>3.18</b>	0.79 (3:1)	0	130	<b>0</b>
AP1-10-4/X	111	0			0	112	<b>0</b>
AP1-10-4/Y	97	35	<b>2.77</b>	0.69 (3:1)	0	122	<b>0</b>

<sup>1</sup> K<sub>R/S</sub>: ratio resistant to sensitive plants on kanamycin.

<sup>2</sup> H<sub>R/S</sub>: ratio resistant to sensitive plants on hygromycin.