

**Table S4A The effect of desiccation stress on crossover rate, by seasons** (based on the Student's *t*-test for paired samples)

Interval	Autumn hybrids					Winter hybrids				
	Recombination rate (%) ± SE		Effect of treatment			Recombination rate (%) ± SE		Effect of treatment		
	Normal conditions	Desiccation stress	<i>t</i>	<i>p</i>	<i>p</i> (FDR)	Normal conditions	Desiccation stress	<i>t</i>	<i>p</i>	<i>p</i> (FDR)
Chromosome X										
<i>y-cv</i>	12.20 ± 0.49	13.11 ± 0.35	-1.698	0.140	0.202	10.97 ± 0.51	10.03 ± 0.37	1.905	0.105	0.195
<i>cv-v</i>	19.18 ± 0.54	23.80 ± 0.24	-8.596	1·10 <sup>-4</sup>	<b>8·10<sup>-4</sup></b>	21.44 ± 0.53	24.30 ± 0.33	-4.545	0.004	<b>0.052</b>
<i>v-f</i>	19.90 ± 0.70	23.88 ± 0.50	-4.351	0.005	<b>0.013</b>	23.29 ± 0.69	24.12 ± 0.20	-1.228	0.265	0.313
Chromosome 2										
<i>al-dp</i>	7.39 ± 0.49	7.51 ± 0.25	-0.388	0.712	0.712	10.62 ± 0.45	9.56 ± 0.42	3.492	0.013	<b>0.085</b>
<i>dp-b</i>	24.90 ± 0.52	24.05 ± 0.44	1.873	0.110	0.179	23.04 ± 0.60	23.92 ± 0.83	-1.626	0.155	0.252
<i>b-pr</i>	3.32 ± 0.34	3.69 ± 0.45	-0.902	0.402	0.436 <sup>#</sup>	3.95 ± 0.38	3.90 ± 0.44	0.172	0.869	0.869
<i>pr-c</i>	14.84 ± 0.49	18.73 ± 0.27	-8.097	2·10 <sup>-4</sup>	<b>8·10<sup>-4</sup></b>	19.85 ± 0.51	19.98 ± 0.36	-0.217	0.835	0.869
<i>c-px</i>	18.72 ± 0.42	22.29 ± 0.44	-11.299	3·10 <sup>-5</sup>	<b>4·10<sup>-4</sup></b>	21.95 ± 0.59	24.32 ± 0.71	-2.405	0.053	0.192
<i>px-sp</i>	5.37 ± 0.31	4.14 ± 0.39	2.151	0.075	0.139 <sup>#</sup>	3.68 ± 0.32	4.52 ± 0.42	-2.179	0.072	0.192
Chromosome 3										
<i>ru-h</i>	20.33 ± 0.34	21.30 ± 0.57	-1.296	0.243	0.287	20.25 ± 0.68	19.21 ± 0.62	1.918	0.104	0.195
<i>h-th</i>	15.26 ± 0.28	17.59 ± 0.49	-4.286	0.005	<b>0.013</b>	17.23 ± 0.48	18.00 ± 0.50	-1.519	0.180	0.260
<i>th-sr</i>	15.11 ± 0.43	17.62 ± 0.41	-3.300	0.016	<b>0.035</b>	15.51 ± 0.46	17.85 ± 1.09	-2.161	0.074	0.192
<i>sr-e</i>	6.12 ± 0.12	5.54 ± 0.46	1.455	0.196	0.255	7.00 ± 0.37	6.48 ± 0.48	1.252	0.257	0.313

FDR-corrected significances *p*(FDR)<0.1 are bolded.

# = violation of normality according to the Shapiro-Wilk test; see Table S4B below for a non-parametric test

**Table S4B The effect of desiccation stress on crossover rate, by seasons** (based on the Wilcoxon signed-rank test)

Interval	Autumn hybrids					Winter hybrids				
	Recombination rate (%) ± SE		Effect of treatment			Recombination rate (%) ± SE		Effect of treatment		
	Normal conditions	Desiccation stress	W	p	p(FDR)	Normal conditions	Desiccation stress	W	p	p(FDR)
Chromosome X										
<i>y-cv</i>	12.20 ± 0.49	13.11 ± 0.35	6	0.219	0.316	10.97 ± 0.51	10.03 ± 0.37	23	0.156	0.254
<i>cv-v</i>	19.18 ± 0.54	23.80 ± 0.24	0	0.016	<b>0.035</b>	21.44 ± 0.53	24.30 ± 0.33	0	0.016	0.202
<i>v-f</i>	19.90 ± 0.70	23.88 ± 0.50	0	0.016	<b>0.035</b>	23.29 ± 0.69	24.12 ± 0.20	8	0.375	0.488
Chromosome 2										
<i>al-dp</i>	7.39 ± 0.49	7.51 ± 0.25	13	0.938	0.938	10.62 ± 0.45	9.56 ± 0.42	27	0.031	0.202
<i>dp-b</i>	24.90 ± 0.52	24.05 ± 0.44	23	0.156	0.254	23.04 ± 0.60	23.92 ± 0.83	4	0.109	0.236
<i>b-pr</i>	3.32 ± 0.34	3.69 ± 0.45	7	0.297	0.322	3.95 ± 0.38	3.90 ± 0.44	13	0.938	0.938
<i>pr-c</i>	14.84 ± 0.49	18.73 ± 0.27	0	0.016	<b>0.035</b>	19.85 ± 0.51	19.98 ± 0.36	12	0.813	0.881
<i>c-px</i>	18.72 ± 0.42	22.29 ± 0.44	0	0.016	<b>0.035</b>	21.95 ± 0.59	24.32 ± 0.71	3	0.078	0.203
<i>px-sp</i>	5.37 ± 0.31	4.14 ± 0.39	25	0.078	0.145	3.68 ± 0.32	4.52 ± 0.42	3	0.078	0.203
Chromosome 3										
<i>ru-h</i>	20.33 ± 0.34	21.30 ± 0.57	7	0.297	0.322	20.25 ± 0.68	19.21 ± 0.62	23	0.156	0.254
<i>h-th</i>	15.26 ± 0.28	17.59 ± 0.49	0	0.016	<b>0.035</b>	17.23 ± 0.48	18.00 ± 0.50	9	0.469	0.554
<i>th-sr</i>	15.11 ± 0.43	17.62 ± 0.41	0	0.016	<b>0.035</b>	15.51 ± 0.46	17.85 ± 1.09	3	0.078	0.203
<i>sr-e</i>	6.12 ± 0.12	5.54 ± 0.46	21	0.297	0.322	7.00 ± 0.37	6.48 ± 0.48	22	0.219	0.316

FDR-corrected significances  $p(\text{FDR}) < 0.1$  are bolded.