Supplementary Table 1: P-element abundance in the experimental populations. The abundance was estimated as fraction of reads mapping to the P-element (in reads per million: rpm). Samples consisted either of mixes of males and females (sex: fm) or solely of females (sex: f). As P-element abundance differs between males and females ($females/male = 1.132$; supplementary table 2) we corrected the P-element abundance (rpm corr.: $fm_{corr} = (f + f/1.132)/2$) in samples where only females were used. t.: temperature regime (hot or cold); rep.: replicate; gen.: generation; reads: total number of reads mapping to the P-element; rpm: P-element abundance in reads per million; u' effective transposition rate (estimated from rpm corr: $u' = (t_n/t_{n-1})^{(1/10)} - 1$)

t.	rep.	gen.	sex	reads	rpm	rpm corr.	u'
hot	1	0	f	2363	16.98	15.99	na
hot	1	10	fm	4390	69.54	69.54	0.1586
hot	1	20	fm	46805	284.48	284.48	0.1513
hot	1	30	fm	21287	280.74	280.74	-0.0013
hot	1	40	fm	32070	288.79	288.79	0.0028
hot	1	50	fm	15551	282.00	282.00	-0.0024
hot	1	60	fm	26823	299.56	299.56	0.0061
hot	3	0	f	3130	15.72	14.80	na
hot	3	10	fm	5017	100.61	100.61	0.2115
hot	3	20	fm	40777	257.24	257.24	0.0984
hot	3	30	fm	16352	241.68	241.68	-0.0062
hot	3	40	fm	35415	248.02	248.02	0.0026
hot	3	50	fm	13931	248.42	248.42	0.0002
hot	3	60	fm	13528	263.10	263.10	0.0058
hot	5	0	f	4252	18.50	17.42	na
hot	5	10	fm	7343	88.67	88.67	0.1770
hot	5	20	fm	45969	312.47	312.47	0.1342
hot	5	30	fm	12395	300.92	300.92	-0.0038
hot	5	40	fm	28617	302.61	302.61	0.0006
hot	5	50	fm	19349	282.47	282.47	-0.0069
hot	5	60	fm	16281	279.22	279.22	-0.0012
cold	1	0	f	2363	16.98	15.99	na
cold	1	10	fm	1461	22.38	22.38	0.0344
cold	1	20	fm	2889	36.04	36.04	0.0488
cold	1	30	fm	3003	55.61	55.61	0.0443
cold	1	40	fm	2588	130.56	130.56	0.0891
cold	3	0	f	3130	15.72	14.80	na
cold	3	10	fm	2701	35.45	35.45	0.0915
cold	3	20	fm	2634	55.90	55.90	0.0466
cold	3	30	fm	5438	89.35	89.35	0.0480
cold	3	40	fm	4518	199.19	199.19	0.0835
cold	5	0	f	4252	18.50	17.42	na
cold	5	10	fm	1548	24.16	24.16	0.0335
cold	5	20	fm	1545	33.60	33.60	0.0335
cold	5	30	fm	2801	45.41	45.41	0.0306
cold	5	40	fm	2113	104.43	104.43	0.0868