

Table S7 Principal components of parallel traits

32 principal components of 32 parallel traits in Paxton and Priest Lake F₂ individuals. Classification of the species divergence of each principal component (based on model selection technique described in the 'Identifying parallel phenotypic evolution' subsection of the Methods) as parallel, single lake, opposite or not able to be classified (-) is shown under 'PC divergence category'. The number of QTL detected for parallel principal components is also shown. For the effect categories of QTL that underlie parallel principal components that explain up to 90 percent of the cumulative variance, refer to Figure S5.

Principal component	Standard deviation	Percent of variance	Cumulative percent of variance	PC divergence category	Number of QTL detected
Comp.1	2.516	19.8	19.8	Parallel	1
Comp.2	1.939	11.7	31.5	Parallel	0
Comp.3	1.601	8.0	39.5	Parallel	2
Comp.4	1.502	7.0	46.6	Parallel	5
Comp.5	1.303	5.3	51.9	Parallel	1
Comp.6	1.223	4.7	56.6	-	-
Comp.7	1.185	4.4	60.9	Parallel	4
Comp.8	1.125	4.0	64.9	Parallel	3
Comp.9	1.053	3.5	68.4	Parallel	3
Comp.10	0.998	3.1	71.5	Single lake	-
Comp.11	0.992	3.1	74.5	-	-
Comp.12	0.907	2.6	77.1	Parallel	2
Comp.13	0.869	2.4	79.5	-	-
Comp.14	0.849	2.2	81.7	Parallel	0
Comp.15	0.839	2.2	83.9	Parallel	1
Comp.16	0.799	2.0	85.9	Parallel	1
Comp.17	0.745	1.7	87.7	Parallel	0
Comp.18	0.718	1.6	89.3	-	-
Comp.19	0.658	1.4	90.6	Parallel	0
Comp.20	0.639	1.3	91.9	Opposite	-
Comp.21	0.619	1.2	93.1	Parallel	2
Comp.22	0.574	1.0	94.1	-	-
Comp.23	0.543	0.9	95.0	-	-
Comp.24	0.534	0.9	95.9	Single lake	-
Comp.25	0.516	0.8	96.8	Parallel	0
Comp.26	0.474	0.7	97.5	-	-
Comp.27	0.432	0.6	98.0	-	-
Comp.28	0.407	0.5	98.6	-	-
Comp.29	0.388	0.5	99.0	-	-
Comp.30	0.373	0.4	99.5	-	-
Comp.31	0.337	0.4	99.8	Parallel	0
Comp.32	0.235	0.2	100.0	Single lake	-