Table S8 Proportional similarity of QTL use underlying parallel traits

(Starts on next page) For each QTL, 'PVE in Priest' and 'PVE in Paxton' were determined using a 'multiple QTL linear model' containing genotypic effects of each QTL affecting the same trait (as well as family identity and sex as covariates). These models were run for each lake separately. If the QTL genotype (both additive and dominant components) did not show a significant effect when dropped from a 'single lake, single QTL linear model' then it was not entered in the multiple QTL model for that lake. In this case, the PVE column is left blank. In each lake, proportional contributions of QTL to traits were calculated by scaling the PVEs of all QTL affecting the same trait so that they summed to 1. The proportional similarity of a QTL was taken as the overlap in the proportional contributions of that QTL in the two lakes. The 'proportional similarity of QTL use' underlying any given trait is then the sum of the proportional similarities of all QTL affecting that trait.

Trait	QTL (LG # @ position (cM))	PVE in Priest	Proportional Contribution in Priest	PVE in Paxton	Proportional Contribution in Paxton	Proportional Similarity
plate count	16@10.0	4.79	0.31			0.00
plate count	2@24.0	3.39	0.22	1.28	0.10	0.10
plate count	7@33.9	7.32	0.47	12.04	0.90	0.47
long gill raker count	7@35.1	6.51	1.00	6.23	0.56	0.56
long gill raker count	3@36.0			4.93	0.44	0.00
short gill raker count	1@21.2	4.13	1.00	4.89	0.52	0.52
short gill raker count	7@35.0			4.54	0.48	0.00
y1	8@18.0	1.58	1.00	4.18	1.00	1.00
x2	14@38.8	1.70	0.57			0.00
x2	4@23.8	1.26	0.43	1.11	0.32	0.32
x2	7@0.0			2.38	0.68	0.00
y3	4@71.4	5.29	1.00			0.00
y3	7@6.0			8.86	1.00	0.00
y4	7@35.0			4.08	1.00	0.00
y5	7@35.5	4.34	1.00	2.44	0.41	0.41
y5	19@2.0			3.57	0.59	0.00
x6	13@27.7	3.11	0.50			0.00
x6	4@20.8	3.06	0.50			0.00
x6	7@34.2			3.40	1.00	0.00
y7	2@33.6	1.43	0.12	3.14	1.00	0.12
y7	7@35.5	5.98	0.49			0.00
y7	9@10.0	4.74	0.39			0.00
y10	1@19.1	2.61	0.71	0.73	0.11	0.11
y10	14@12.0	1.07	0.29	3.51	0.51	0.29
y10	4@58.0			2.68	0.39	0.00
y11	11@28.0	2.45	1.00			0.00
y11	1@21.2			2.60	0.44	0.00
y11	4@30.0			3.24	0.56	0.00
y12	13@27.7	1.54	0.49	1.35	0.19	0.19
y12	19@0.0	1.61	0.51	3.14	0.44	0.44
y12	4@28.1			2.69	0.37	0.00
x13	7@28.0	2.30	1.00	1.31	0.30	0.30
x13	1@18.1			3.11	0.70	0.00
x16	1@21.7	4.53	0.54	2.31	0.37	0.37
x16	12@5.2	3.79	0.46	1.16	0.18	0.18
x16	13@20.0			2.83	0.45	0.00
y16	13@28.8	3.03	0.45	2.08	1.00	0.45
y16	21@42.8	3.70	0.55			0.00
x17	12@6.4	6.00	0.62			0.00

Trait	QTL (LG # @ position (cM))	PVE in Priest	Proportional Contribution in Priest	PVE in Paxton	Proportional Contribution in Paxton	Proportional Similarity
x17	14@34.8	3.68	0.38			0.00
x18	7@32.2	2.06	1.00	3.84	1.00	1.00
y18	11@34.0	2.71	1.00	0.88	0.26	0.26
y18	4@36.0			2.47	0.74	0.00
x20	12@4.4	4.15	0.55			0.00
x20	4@20.0	3.40	0.45	1.61	0.37	0.37
x20	1@25.3			2.78	0.63	0.00
x21	1@20.0			2.51	1.00	0.00
x22	7@33.9			3.94	1.00	0.00
y25	12@13.2	4.71	1.00	5.64	1.00	1.00
y26	1@21.7	3.02	0.38			0.00
y26	12@13.2	2.07	0.26	3.00	0.48	0.26
y26	14@36.5	1.62	0.20			0.00
y26	19@0.6	1.21	0.15	3.22	0.52	0.15
y27	12@13.2	3.47	0.34	2.87	0.35	0.34
y27	17@21.7	4.36	0.43	3.17	0.38	0.38
y27	8@19.0	2.36	0.23	2.21	0.27	0.23
centroid size	1@24.6	6.40	1.00			0.00
centroid size	19@0.1			2.96	1.00	0.00