Table S9 Accuracy of WP prediction for environment E3 with QP and GWP in CV1

	LL				LW			
	SE		ME		SE		ME	
PopId	QP[a]	GWP[b]	QP[c]	GWP[d]	QP[a]	GWP[b]	QP[c]	GWP[d]
1	0.32(2.8)	0.51(0.59)	0.34(3.3, **0.06**)	0.55(0.62, 0.08)	0.12(1.5)	0.36(2.00)	0.13(2.1, 0.08)	0.41(2.15, 0.14)
2	0.09(1.7)	0.35(2.89)	0.04(1.6, -0.56)	0.36(8.00, 0.03)	0.23(2.8)	0.52(1.26)	0.16(1.8, -0.30)	0.55(2.44, 0.06)
3	0.07(1.3)	0.24(2.43)	0.06(1.7, **-0.14**)	0.26(3.33, 0.08)	0.27(2.1)	0.27(0.00)	0.27(3.0, **0.00**)	0.37(0.37, 0.37)
4	0.30(2.9)	0.50(0.67)	0.28(3.3, **-0.07**)	0.54(0.93, 0.08)	0.01(1.3)	0.18(17.00)	0.05(2.4, 4.00)	0.29(4.80, 0.61)
5	0.23(2.7)	0.44(0.91)	0.21(3.0, **-0.09**)	0.46(1.19, 0.05)	0.04(1.4)	0.30(6.50)	0.04(1.6, 0.00)	0.39(8.75, 0.30)
6	0.36(2.5)	0.47(0.31)	0.24(2.8, -0.33)	0.54(1.25, 0.15)	0.09(1.8)	0.31(2.44)	0.06(1.6, -0.33)	0.35(4.83, 0.13)
7	0.26(2.4)	0.49(0.88)	0.25(2.4, **-0.04**)	0.55(1.20, 0.12)	0.19(2.0)	0.42(1.21)	0.21(2.5, **0.11**)	0.50(1.38, 0.19)
8	0.06(1.7)	0.32(4.33)	0.07(2.0, **0.17**)	0.35(4.00, 0.09)	0.14(2.2)	0.48(2.43)	0.15(1.9, **0.07**)	0.49(2.27, 0.02)
9	0.18(2.3)	0.42(1.33)	0.22(2.5, 0.22)	0.45(1.05, 0.07)	0.17(2.6)	0.45(1.65)	0.25(2.1, 0.47)	0.48(0.92, 0.07)
10	0.11(2.6)	0.42(2.82)	0.12(2.8, **0.09**)	0.48(3.00, 0.14)	0.33(3.3)	0.56(0.70)	0.25(3.1, -0.24)	0.56(1.24, **0.00**)
11	0.31(2.7)	0.54(0.74)	0.31(3.0, **0.00**)	0.56(0.81, 0.04)	0.10(2.1)	0.36(2.60)	0.11(3.1, **0.10**)	0.41(2.73, 0.14)
12	0.18(2.3)	0.43(1.39)	0.17(2.6, **-0.06**)	0.50(1.94, 0.16)	0.07(1.3)	0.28(3.00)	0.17(3.3, 1.43)	0.38(1.24, 0.36)
13	0.19(2.8)	0.41(1.16)	0.19(2.9, **0.00**)	0.43(1.26, 0.05)	0.06(2.0)	0.26(3.33)	0.15(3.5, 1.50)	0.35(1.33, 0.35)
14	0.16(2.1)	0.31(0.94)	0.12(2.3, -0.25)	0.35(1.92, 0.13)	0.10(1.6)	0.32(2.20)	0.12(1.9, **0.20**)	0.42(2.50, 0.31)
15	0.05(1.4)	0.25(4.00)	0.08(1.9, **0.60**)	0.30(2.75, 0.20)	0.16(2.0)	0.40(1.50)	0.18(2.8, **0.12**)	0.48(1.67, 0.20)
16	0.10(1.9)	0.32(2.20)	0.07(2.0, -0.30)	0.33(3.71, 0.03)	0.08(1.7)	0.36(3.50)	0.21(3.2, 1.62)	0.45(1.14, 0.25)
17	0.07(1.5)	0.32(3.57)	0.07(1.2, **0.00**)	0.37(4.29, 0.16)	0.12(2.0)	0.38(2.17)	0.23(3.7, 0.92)	0.45(0.96, 0.18)
18	0.01(1.0)	0.17(16.00)	0.03(1.2, **2.00**)	0.21(6.00, 0.24)	0.33(2.4)	0.33(0.00)	0.30(2.5, -0.09)	0.39(0.30, 0.18)
19	0.25(2.8)	0.46(0.84)	0.20(2.1, -0.20)	0.47(1.35, 0.02)	0.21(2.1)	0.44(1.10)	0.29(2.7, 0.38)	0.46(0.59, 0.05)
20	0.13(1.9)	0.34(1.62)	0.05(2.4, -0.62)	0.39(6.80, 0.15)	0.15(2.1)	0.43(1.87)	0.24(2.7, 0.60)	0.46(0.92, 0.07)
21	0.24(2.6)	0.47(0.96)	0.33(3.4, 0.38)	0.54(0.64, 0.15)	0.21(2.5)	0.38(0.81)	0.11(2.1, -0.48)	0.42(2.82, 0.11)
22	0.21(1.9)	0.38(0.81)	0.22(2.4, **0.05**)	0.40(0.82, 0.05)	0.09(1.4)	0.35(2.89)	0.11(2.0, **0.22**)	0.43(2.91, 0.23)
23	0.21(1.8)	0.32(0.52)	0.21(2.6, **0.00**)	0.42(1.00, 0.31)	0.14(2.1)	0.38(1.71)	0.20(2.9, 0.43)	0.42(1.10, 0.11)
24	0.04(1.6)	0.26(5.50)	0.05(1.8, **0.25**)	0.27(4.40, 0.04)	0.34(2.2)	0.41(0.21)	0.38(3.0, 0.12)	0.48(0.26, 0.17)
25	0.11(2.0)	0.37(2.36)	0.15(2.6, 0.36)	0.40(1.67, 0.08)	0.11(1.6)	0.29(1.64)	0.16(2.4, 0.45)	0.34(1.12, 0.17)
Mean	0.17(2.1)	0.38(1.24)	0.16(2.4, -0.04)	0.42(1.57, 0.10)	0.15(2.0)	0.37(1.40)	0.18(2.6, 0.18)	0.43(1.37, 0.16)

[a] In parentheses is the number of QTL identified by QP based on the SE model; [b] In parentheses is the gain in prediction accuracy with GWP over QP based on the SE model; [c] The first value in parentheses is the number of QTL identified by QP based on the ME model; and the second one the gain

with ME over SE for QP; [d] The first value in parentheses is the gain in accuracy with GWP over QP based on the ME model; and the second one is the gain with ME over SE using GWP. Bold in parentheses indicates the number is not significant at $\alpha = 0.05$.