Supplemental Figure S1. Plots of traits against genotype at marker loci significant in the association analyses of three winter barley germplasm arrays. Error bars are ±1 standard error. Parallel responses indicate that association is not related to the difference between germplasm sources. Nonparallel responses indicate genetic-background interactions of different types. First, if one line has a slope of zero and the other one does not, then the latter is causing the significant association (“driving the association”). Second, if both lines change in opposite directions, both groups could be responsible for the association, but the interaction is worth exploring. a) malt extract and \( \beta \) glucan content in CAP I array of barley for the Oregon intermated lines (red line) and the non-Oregon intermated lines (blue line) at Corvallis 2005/2006 and Pendleton 2005/2006; b) malt extract content, \( \beta \) glucan content, and diastatic power in CAP II population for the Oregon CAP I related lines (red line) and the Oregon unrelated lines (blue line) at Corvallis 2007/2008 and Pendleton 2007/2008; c) malt extract, \( \beta \) glucan, and diastatic power in CAP II population for the CAP I related lines with an infusion of new alleles from Bu27 not in CAP I (red line) and sets of sister lines with a sib in CAP I (blue line) at Corvallis 2007/2008 and Pendleton 2007/2008; d) malt extract, \( \beta \) glucan, and diastatic power in CAP II population for the set of sister lines with a sib in CAP I (red line) and Idaho and Nebraska lines never used as parents in CAP I (blue line) at Corvallis 2007/2008 and Pendleton 2007/2008; and e) malt extract, \( \beta \) glucan, and diastatic power in CAP III population for the set of intermated CAP I lines (red line) and CAP I lines with infusion from Doyce—not a parent of CAP I (blue line) at Corvallis 2008/2009 and Pendleton 2008/2009.