



**Supplementary Figure S2.** Sources of variation for nine tocochromanol grain phenotypes in the Ames panel. The phenotypic variance was statistically partitioned into the following components: G: genotype; G×Y: genotype × year; Y: year; Field: tier(year), pass(tier × year), range(tier × year); Plate: plate(year); and REV: residual error variance. Variance components were estimated by refitting the full model from Equation 1 with genotype as a random effect.