Supplemental Fig. S1 The location of the Maximilian sunflower collection sites sampled across southern Manitoba in 2012 are indicated by red dots and the location of the two common garden sites used for evaluation in 2013 and 2014 are indicated by blue dots.
**Supplemental Fig. S2** Mean likelihood of models K=1-10 +/- 1 standard deviation as produced in STRUCTURE for 90 Maximilian sunflower samples examined using genotype-by-sequencing
Supplemental Fig. S3 Delta K likelihood of models K=1-10 as produced in STRUCTURE following Evanno’s method for 90 Maximilian sunflower samples examined using genotype-by-sequencing
Supplemental Fig. S4 Scree plot showing the breakdown of principal components describing population structure for the filter10 dataset
Supplemental Fig. S5 Linkage disequilibrium spanning a ~350 MB distance between SNPs. Note: the green line denotes an $r^2$ value of 0.2, while the red line denotes the expected decay of linkage as per Hill and Weir (1988)
Supplemental Fig. S6 Linkage disequilibrium spanning a ~275 BP distance between SNPs. Note: the green line denotes an $r^2$ value of 0.2, while the red line denotes the expected decay of linkage as per Hill and Weir (1988).