

**Figure S3.** Population structure analysis of the Wisconsin Diversity panel. (A) Principal component analysis (PCA) plot colored by group classification of lines [Flint, Iodent, Non-Stiff Stalk (NSS), Stiff Stalk Synthetic (SSS), Popcorn, Sweet corn, Tropical, Unknown (i.e., genotyped but ambiguous group), and Not available (i.e., not genotyped)] following that of Hansey et al. (2011). (B) Distruct plot of fastSTRUCTURE subpopulation membership with K = 6. (C) PCA plot colored according to the fastSTRUCTURE subpopulation membership with K=6. Individuals with assignment values (Q) less than 50% were classified as admixed. Populations 1, 2, and 4 predominantly contained lines belonging to the NSS group; population 3 mostly had lines from the popcorn and sweet corn groups; population 5 mainly included lines from the tropical group; and population 6 primarily had lines from the SSS group.