

Figure S1 Schematic illustration of factorial. Schematic view of factorial of 123 Dent and 86 Flint lines for illustration purposes. The lines appear in approximately chronological order. Produced and tested hybrids are indicated by orange squares.

Figure S2 Regional correlation of r linkage statistic

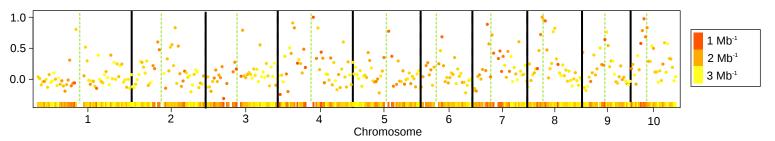


Figure S2 Correlation of r linkage statistic between Dent and Flint lines in consecutive bins of 5 megabase (Mb) width. The different colors of the points and the heatmap in the bottom of each sub-plot indicate the marker density within the bin (Mb⁻¹). The green, dashed vertical bars indicate the physical positions of the centromeres, the solid, black bars separate the chromosomes

3 SI F. Technow et al.

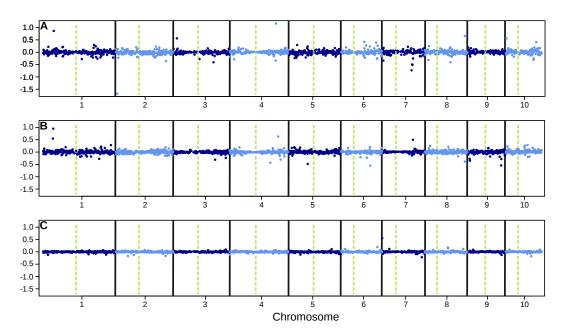


Figure S3 Marker effect estimates for grain yield. Posterior means of marker effect estimates for grain yield obtained by BayesB, using a subset of 1617 markers, and all 1254 hybrids. (A) additive marker effects for Dent, (B) additive marker effects for Flint, (C) dominance marker effects. The green, dashed vertical bars indicate the physical positions of the centromeres, the solid, black bars separate the chromosomes

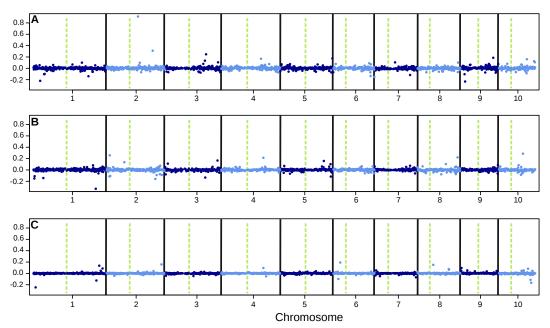


Figure S4 Marker effect estimates for grain moisture. Posterior means of marker effect estimates for grain moisture obtained by BayesB, using a subset of 1617 markers, and all 1254 hybrids. (A) additive marker effects for Dent, (B) additive marker effects for Flint, (C) dominance marker effects. The green, dashed vertical bars indicate the physical positions of the centromeres, the solid, black bars separate the chromosomes

Files S1-S4

 $A vailable \ for \ download \ as \ . csv \ files \ at \ http://www.genetics.org/lookup/suppl/doi:10.1534/genetics.114.165860/-/DC1$

- File S1 Marker genotypes of Dent lines
- File S2 Marker genotypes of Flint lines
- File S3 Map of marker data
- File S4 Phenotypic data of the single-cross hybrids