Supplemental Fig. S1. Heat map of the genomic relationship coefficients (K-matrix) for 91 maize inbred lines using 26,769 single-nucleotide polymorphisms. Rows and columns represent different inbred lines and genomic coefficients were calculated between each inbred combination. Dark red represents high genomic coefficients (high genetic relatedness between inbred lines) and white and light-yellow represent low genomic coefficients (low genetic relatedness between inbred lines). Hierarchical clusters using the K-matrix are represented by different heterotic groups (Stiff-stalk synthetic, Iodent, and Lancaster).
Supplemental Fig. S2. Schematic illustration of the mating factorial of 36 stiff-stalk synthetic by 53 non-stiff-stalk synthetic lines. A total of 522 single-cross hybrids indicated by the orange squares were planted at two N fertilizer rates (0 and 252 kg N ha\(^{-1}\)) across 10 environments in Illinois from 2011 to 2016. Rows and columns represent different inbred lines.