Diversity of maize shoot apical meristem architecture and its relationship to plant morphology

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**Figure S1. SAM phenotype distributions.** Four inbred parental lines and distributions for their populations for remaining traits. SAM height, arc length, and volume show similar distributions; SAM width and midpoint width are highly similar as well. P2-P1 internode is most similar to SAM widths, while SAM height:width ratio captures largely unique information that is slightly related to SAM volume. These similarities reflect correlations observed among the traits. SAM width-related traits have very normal distributions, while height-related traits seem to be nearly bi-modal due to a small number of higher values.
Figure S2. **F1 SAM size.** Each of eight inbred NAM founder lines were crossed to B73 and Mo17 and examined for outside-parent heterosis. Significant cases are shown starred and highlighted in blue (for crosses to B73) or red (for crosses to Mo17). Many lines showed heterosis when crossed to Mo17, for most traits. Only P39 exhibited heterosis when crossed to B73, indicating they contain unique alleles contributing to their large SAM size. Most inbred x B73 crosses showed near-midparent values.
Figure S3. SAM height in B73-Mo17 reciprocal crosses. Reciprocal crosses between B73 and Mo17 show F1 SAM height near midparent values, indicating a lack of heterosis for meristem height in this cross and absence of parental effects.
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Available for download as Excel files at http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.115.017541/-/DC1

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