Supplementary materials

Panicle angle is an important factor in tef lodging tolerance

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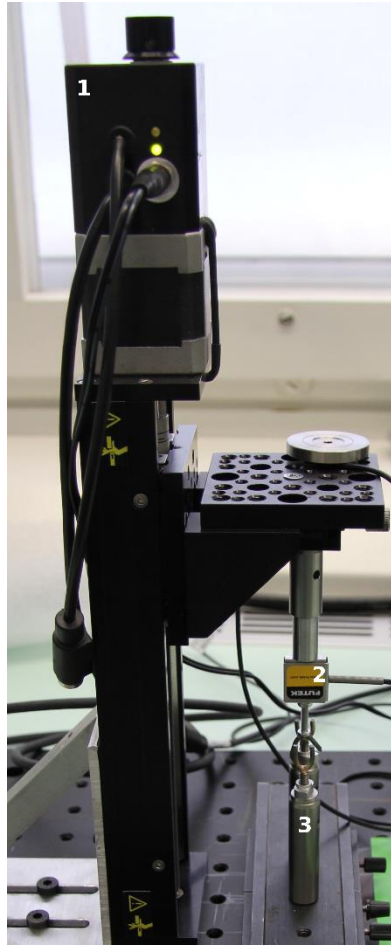
Supplementary Figure S1 The custom 3-point bending setup. 1) Zaber robot used to control and measure movement, 2) Futek load cell to measure force, 3) Support to hold sample.
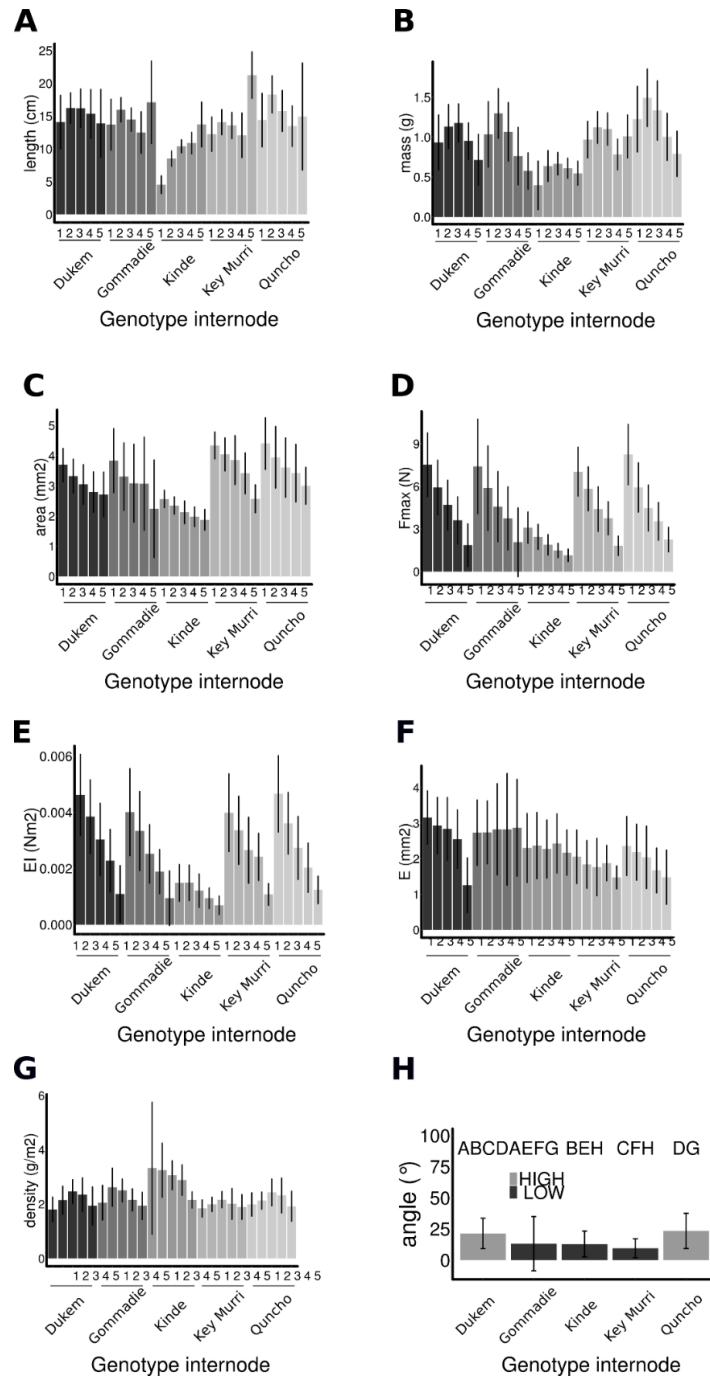
Supplementary Figure S2 Morphological and mechanical properties per internode from the different tef genotypes. The following properties were measured for each internode of the main stem of each ecotype. A) length, B) mass, C) cross-sectional area, D) breaking force, E) flexural rigidity, F) Youngs's modulus, G) the density computed from the length, area and mass, and. H) the angle of immature stems. The culm used for these studies contained flowers that had not fully emerged.

A

0.44

156.º

0.14

177.º

0.15

177.º

0.16

84.º

0.16

84.º

0.14

B
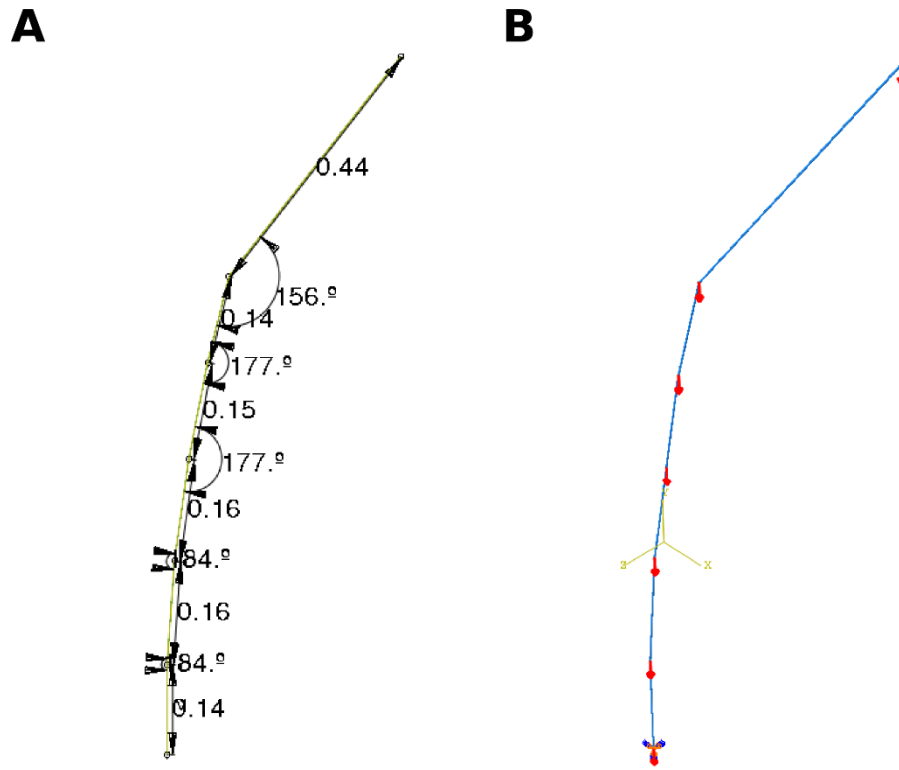
Supplementary Figure S3 Diagram of the model. A) The length of the internodes was set according to the measured values. The angle between each internode was the average of the angle of the pre-flowering stems. The angle between the panicle and the main stem was measured in post-flowering stems. B) The model was secured at the bottom to prevent translation or rotation. A force of 10 N was applied to the entire model to represent gravity.