



**Figure S18** Box-and-whisker plots of estimates of broad-sense heritability ( $\hat{H}^2$ ) on an entry-mean basis for canopy height across two years under two irrigation regimes, water-limited (WL) and well-watered (WW). The total number of times that the high-throughput plant phenotyping (HTPP) system was driven over the entire set of experimental plots to collect canopy height data was 18 and 22 for 2011 and 2012, respectively. The horizontal black line inside the box is the median.