

**Figure S1** Distribution of mesocotyl length in 12 F2 populations

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**Figure S2** Distribution of mesocotyl length in XI-1A, AUS and XI-1B panel

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**Figure S3** LD decay along the whole genome of the AUS and XI-1A panel

**Figure S4** Population and kinship analysis for the XI-1B panel

A, PCA analysis; B, Kinship analysis