



**Figure S1.** Phenotypes of WT and three transgenic Arabidopsis overexpressing TaKNOX14-D. (A): TaKNOX14-D gene was detected in transgenic lines. M: marker 2000, 1000bp and 750bp represented the length of sequence, the sequence length of TaKNOX14-D was 930bp. (B): GUS staining of root, leaf, stem and pod. (C): The expression pattern of IPT, AUX and Ga20ox gene in four Arabidopsis lines. (D) and (E): Seed length and width after mechanical damage, bar=1mm. twenty seeds were randomly chosen and the seed width/length were counted. \*,  $P < 0.05$ ; \*\*,  $P < 0.01$  (Student's t-test)