



**Supplemental Figure 5. Additional PIN7 cDNA complementation tests. Related to Figure 4.**

- (A) Even in time-lapse hypocotyl phototropic bending experiments, there is no significant difference between the *pin7-2* mutant and wild type.
- (B) SCR promoter-driven PIN7a-GFP and PIN7b-RFP constructs in the *pin347* complementation tests for hypocotyl phototropic bending.
- (C) The ability PIN7::PIN7a-GFP and PIN7::PIN7b-RFP cDNAs to rescue root gravitropic defects of the *pin347* mutant (as quantified by its downward growth).
- (D–G) Additional phenotypes of the *pin347* plants carrying the PIN7a-GFP and PIN7b-RFP cDNAs. This includes tests for the gravitropic set-point angle, as a parameter of orthogravitropism of lateral roots (D), hypocotyl bending angle induced by gravity (E), the number of rosette branches arising after decapitation (F) and the rosette stage defects (G).

On the box plots, the middle line corresponds to median, the box corresponds to the 25% and 75% quartiles, the whiskers represent minima and maxima. On (B), (D) and (F), the data are means  $\pm$  S. E. Asterisks represent significance between respective line and mutant *pin347* control (\* $P < 0.05$ , \*\*\* $P < 0.001$  by ANOVA).