

Supplemental figure 3

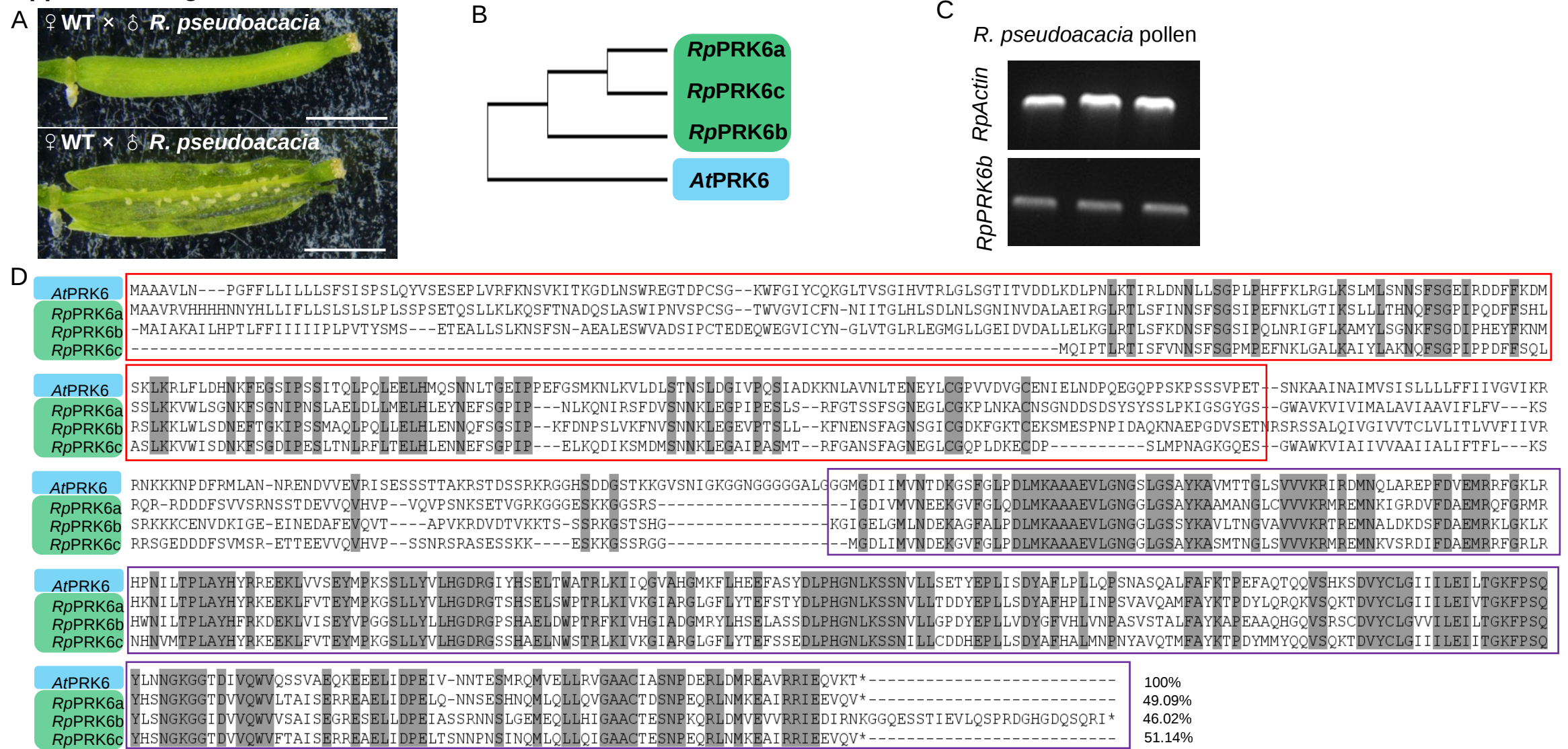


Fig. S3 PRK6 homologs in *R. pseudoacacia* and their potential involvement in cross-species pollination.

(A) Mature siliques of wild-type *A. thaliana* (♀) pollinated with *R. pseudoacacia* pollen (♂), showing the absence of seed development. Scale bars, 1 mm.

(B) Phylogenetic analysis of PRK6 homologs from *A. thaliana* (*AtPRK6*) and *R. pseudoacacia* (*RpPRK6a*, *RpPRK6b*, and *RpPRK6c*).

(C) Reverse transcription-polymerase chain reaction (RT-PCR) analysis of *RpPRK6b* expression in *R. pseudoacacia* pollen; *RpActin* served as the internal reference gene.

(D) Amino acid sequence alignment of PRK6 homologs from *A. thaliana* and *R. pseudoacacia*. Gray shading indicates identical residues; the red box marks the extracellular leucine-rich repeat (LRR) domain, and the purple box marks the intracellular kinase domain. Numbers on the right indicate the percentage identity of each sequence to *AtPRK6* (100%, 49.09%, 46.02%, and 51.14% for *AtPRK6*, *RpPRK6a*, *RpPRK6b*, and *RpPRK6c*, respectively).