

## Supplemental Figure S1. Kinase expansion rates during land plant evolution.

A) The phylogeny indicates the relationships between the four land plant species analyzed (A: Arabidopsis, P: poplar, R: rice, M: moss). The internal nodes are labeled indicating the common ancestors of the four plants (AP, APR, and APRM). The branches are labeled 1-6 to facilitate comparisons. B) The bar plots depict the differences in expansion rates (y-axis) between RLK/Pelle kinases (R) and other kinases (K). Tests of significant differences in expansion rate between RLK/Pelle kinases and other kinases for each lineage were evaluated using chi square tests, and p values are shown below the bar plots.