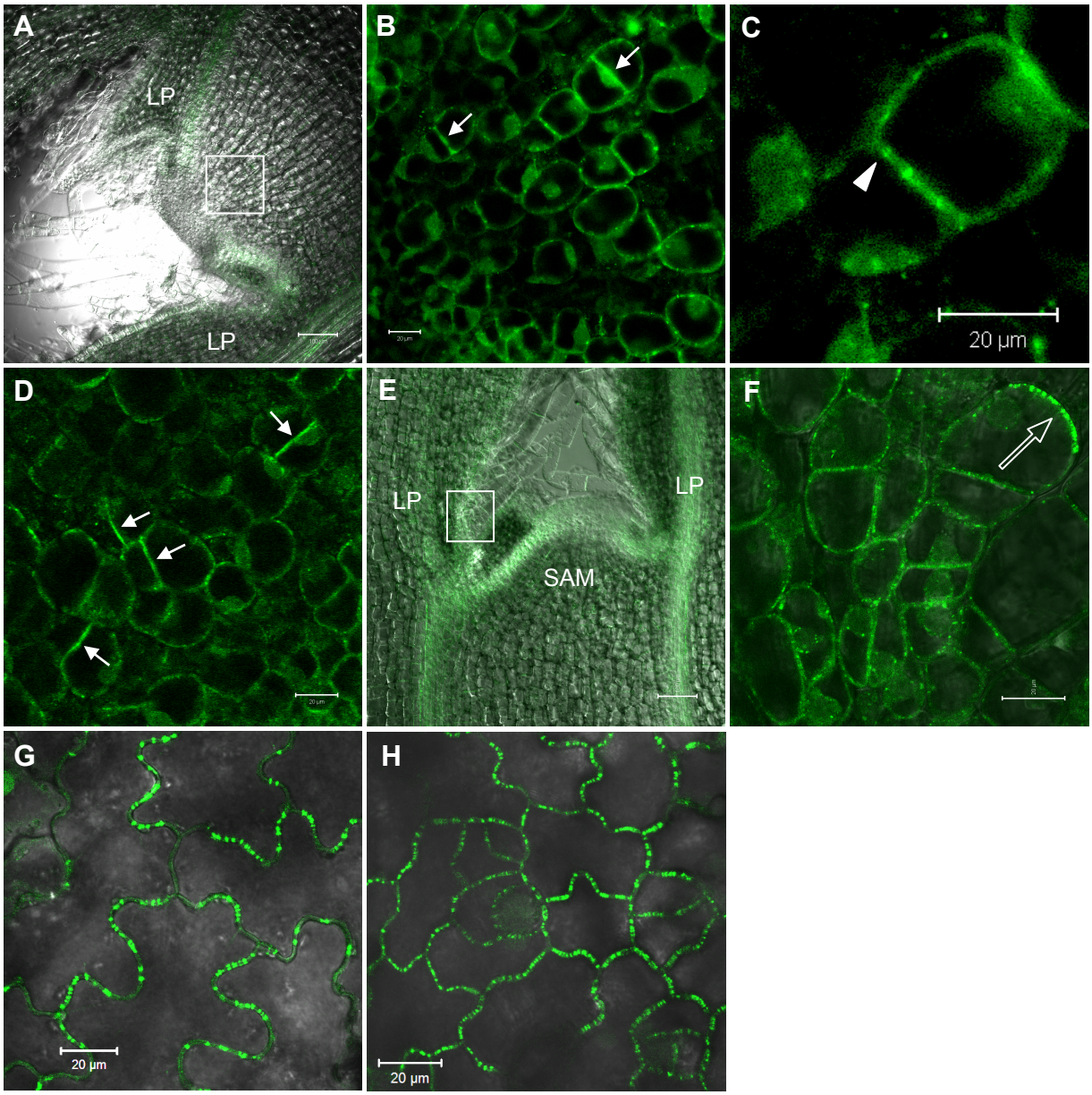
The Constitutive Expression of Arabidopsis Plasmodesmal-Associated Class 1 Reversibly Glycosylated Polypeptide Impairs Plant Development and Virus Spread

Raul Zavaliev, Guy Sagi, Abed Gera and Bernard L. Epel

Supplementary Figure S1.



Supplementary Figure S1. Confocal micrographs showing AtRGP2:GFP localization in shoot apical meristem, and in sink and source leaf epidermis of 35S::*AtRGP2:GFP* transgenic tobacco. A to C, Median longitudinal sections through apical meristem, showing high fluorescence of Golgi vesicles around nucleus and in cell plate (B, arrows) and possibly forming plasmodesmata (C, arrowhead). D, Transverse section in rib zone of apical meristem showing high fluorescence in the cell plates of dividing cells. E and F, Longitudinal sections through apical meristem showing elongating trichome tip cell with fluorescent Golgi vesicles highly enriched in the growing wall (F, empty arrow). B and C are magnifications from region marked in A; F is magnification from region marked in E. G and H, Source and sink leaf epidermis respectively, showing AtRGP2:GFP localization in Pd. A to F, are 65 µm tissue sections were made from mature plant shoot apices imbedded in 3% (w/v) Bacto™ Agar, using Vibrotome (Leica, VT1000S model, Germany). GFP fluorescence was viewed and photographed using a confocal laser scanning microscope (CLSM) (Zeiss, LSM 510 model, Germany). GFP excitation was performed with an argon laser set to 488 nm and 30% output, fluorescence passed through 488 nm and 543 nm dichromatic mirrors and emission was detected with 505-530 nm band-path filter. Image analysis was performed with the Zeiss LSM-5 image browser. LP (leaf primordium); SAM (shoot apical meristem). Bar = 100 µm (A and E); 20 µm (B to D and F to H).