

Supporting Information

Hoth *et al.* 10.1073/pnas.0803835105

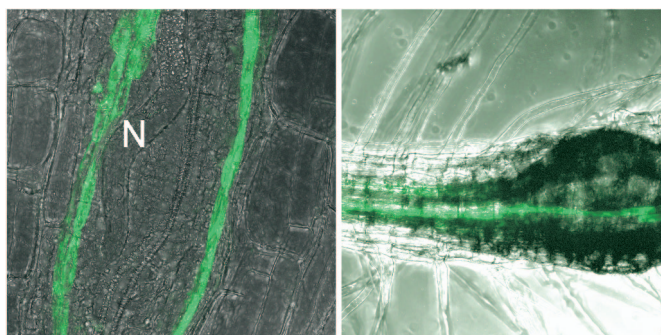


Fig. S1. Fluorescence of sGFP in RKs on $P_{AtSUC2}:GFP$ plants at 4 dai (*Left*) and 12 dai (*Right*). Fluorescence is restricted to the phloem. CCs, as indicated by the activity of the *AtSUC2* promoter, are present. The typical two strands of phloem are intact and pass the forming GCs. Because of the lateral view, only one strand of phloem is visible in the right panel. (N, nematode).

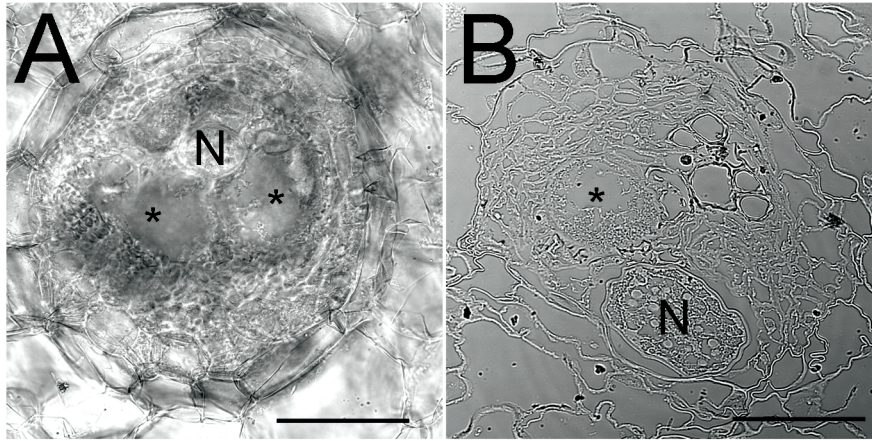


Fig. S2. Transmitted light images of the RKs shown in Fig. 2 at 4 dai (A) and 12 dai (B). GCs are labeled by an asterisk (N, nematode).

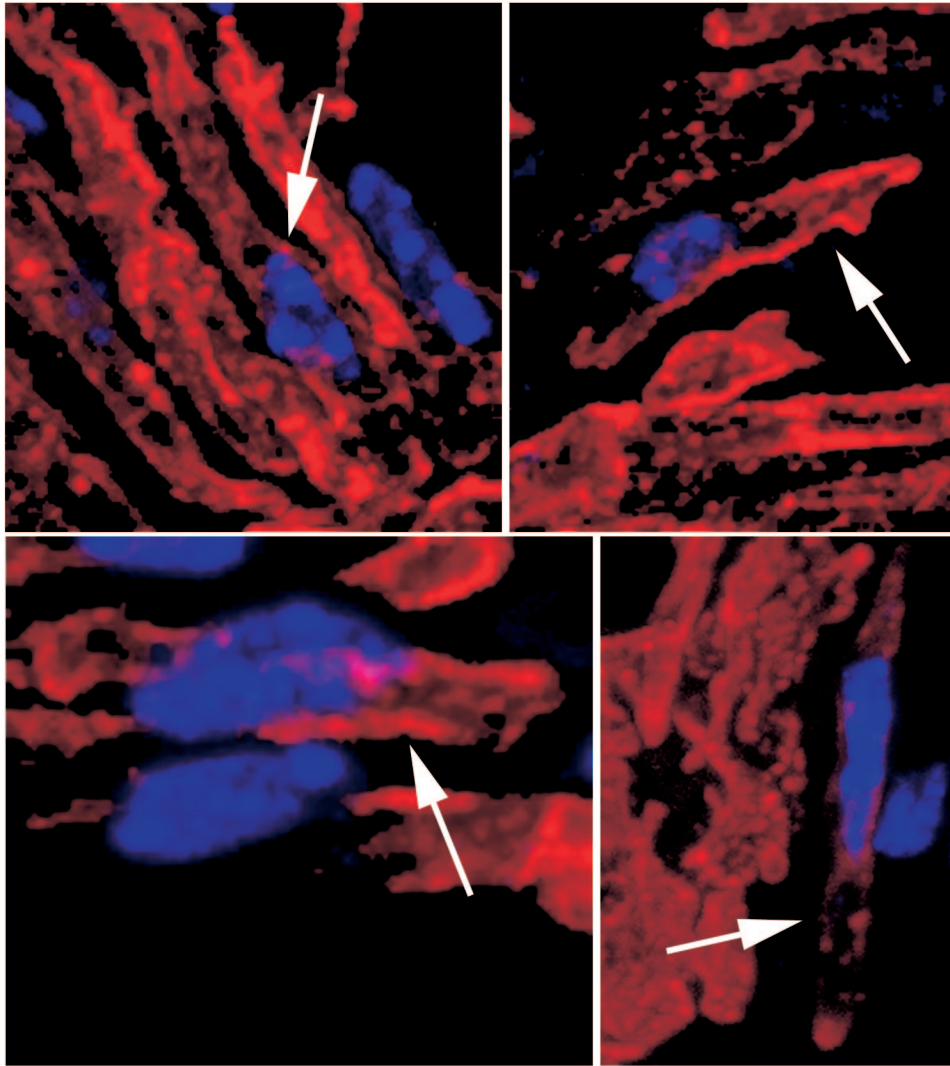


Fig. S3. nSEs containing nuclei at high magnification. Images of several nSEs containing nuclei (arrows). Nuclei (stained with DAPI) are clearly inside cells labeled by the RS6 antibody. Red fluorescence results from Cy2-labeled secondary antibody.

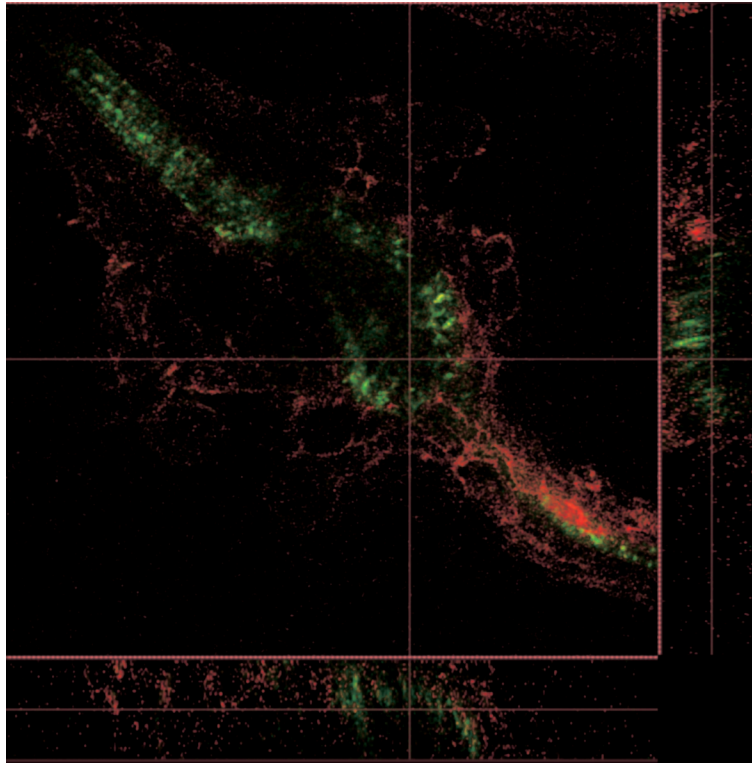
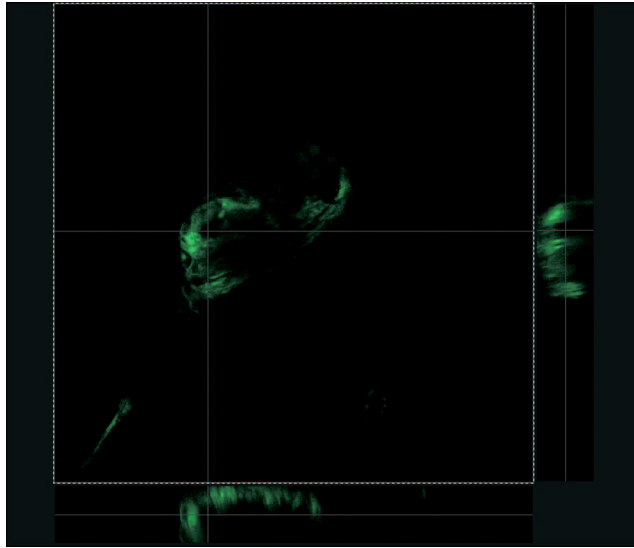
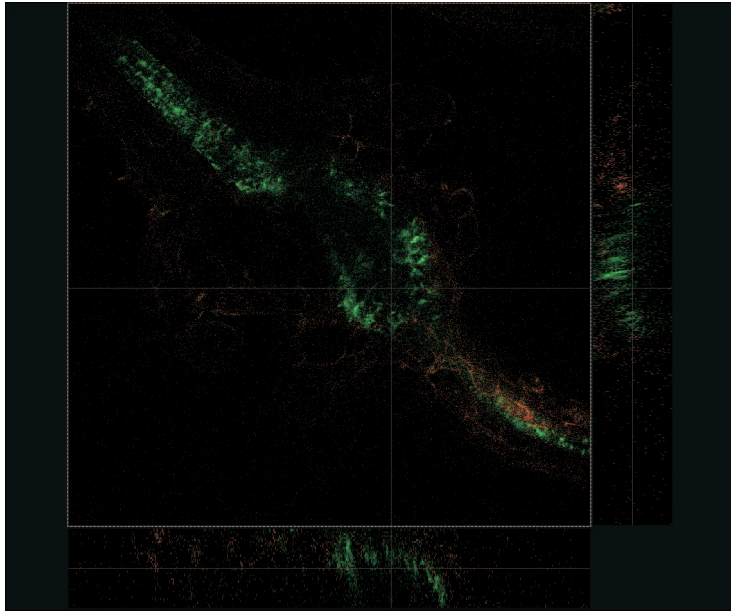


Fig. S4. Z-section through an RK on a *P_{35S}::MP17-GFP* plant at 18 d. Fluorescence is restricted to the periphery of the RK and absent from the position of the GCs. The red color results from the autofluorescence of phenolics in the cell wall.



Movie S1. Three-dimensional reconstruction of sGFP fluorescence in a root-knot on a $P_{AtUC2}:sGFP$ plant. Fluorescence surrounds the giant cells. Approximately half of the root-knot is shown.

[Movie S1 \(AVI\)](#)



Movie S2. Scan through approximately half a root-knot on a *P_{35S}:MP17-GFP* plant (z-section). Plasmodesmata, indicated by MP17-GFP fluorescence, are predominantly found in the tissue surrounding giant cells.

[Movie S2 \(AVI\)](#)