

Figure S1. Overexpression of GFP-AtCLASP Induces Stable Microtubule Bundles. Top panels show treatment of low expressing cell with 20 μ M oryzalin. Bottom panels show treatment of high expressing cell with 40 μ M oryzalin. Times are in minutes. Bar, 5 μ m.

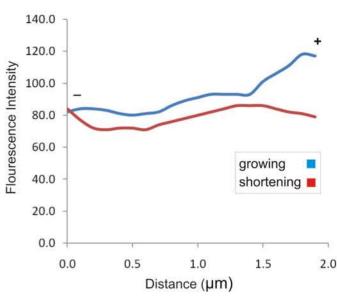


Figure S2. Fluorescence Intensity Plot of GFP-AtCLASP Along Growing and Shrinking Microtubules. Lines were drawn along the last two microns of the plus end. Profiles are shown for two representative microtubules.

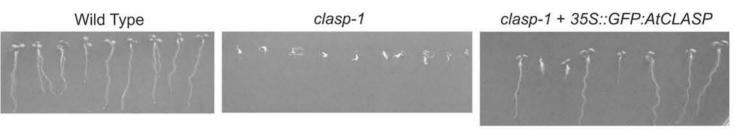


Figure S3. Molecular Complementation of *clasp-1* plants with *35S::GFP:AtCLASP*. Plants were grown on agar plates and photographed at six days. The *clasp-1/GFP:AtCLASP* plants are segregating for the transgene.

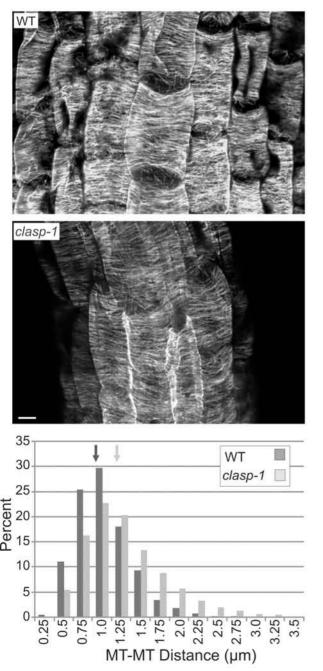


Figure S4. Root Cortical Microtubules are More Sparse in *clasp-1* Compared to Wild Type. Shown are late elongation zones. Arrows indicate means, which are significantly different (T-Test). Bar, $10 \mu m$.

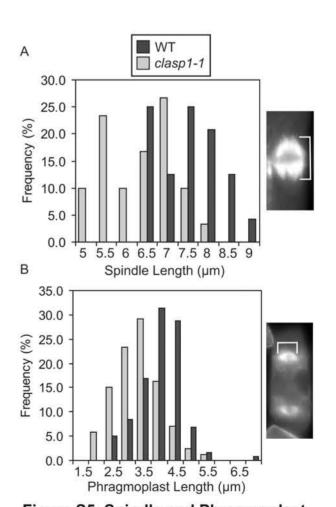


Figure S5. Spindle and Phragmoplast Lengths are Reduced in clasp-1.

Measurements were taken from anti-tubulin immunofluorescence staining in root squashes of 7-day plants. (A) Histogram of wild-type and clasp-1 spindle lengths. (B) Histogram of wild type and clasp-1 phragmoplast lengths. Brackets in images denote length.