

## SUPPLEMENTARY DATA

FIG. S1. Confocal images of controls of gelatin-Oregon Green on tannin-free plant materials: young stem from *Hedera helix* L., (A) chlorophyll and (B) gelatin-O, and leaflet from *Phyllostachis* Siebold & Zucc. sp., (C) chlorophyll and (D) gelatin-O, with no marking in the cells.

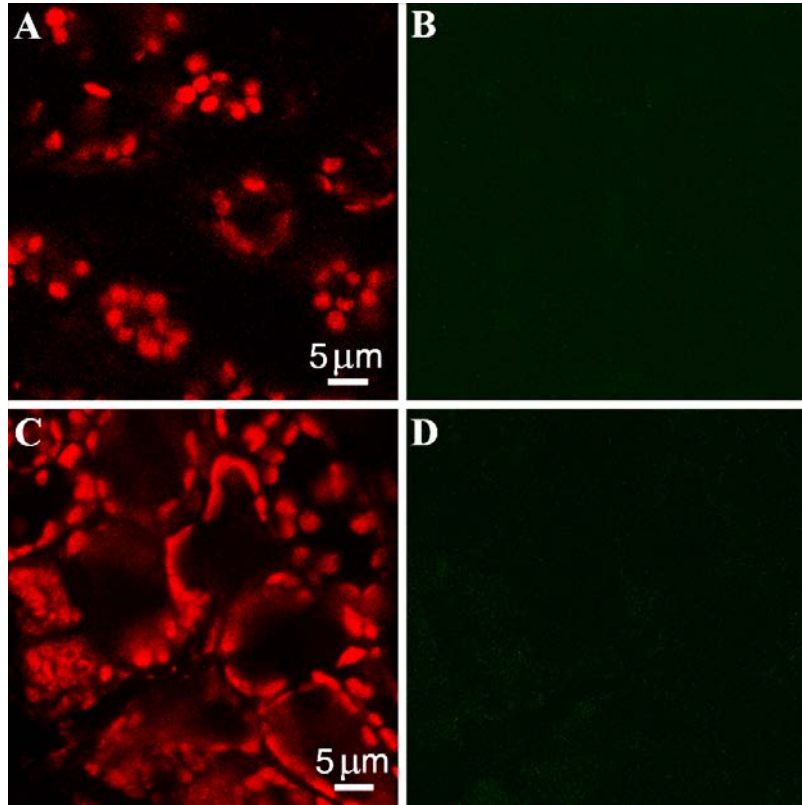


FIG. S2. Chloroplasts from *Vitis* mesocarp cells viewed in (A) light and (B) epifluorescence (FITC filter) microscopy.

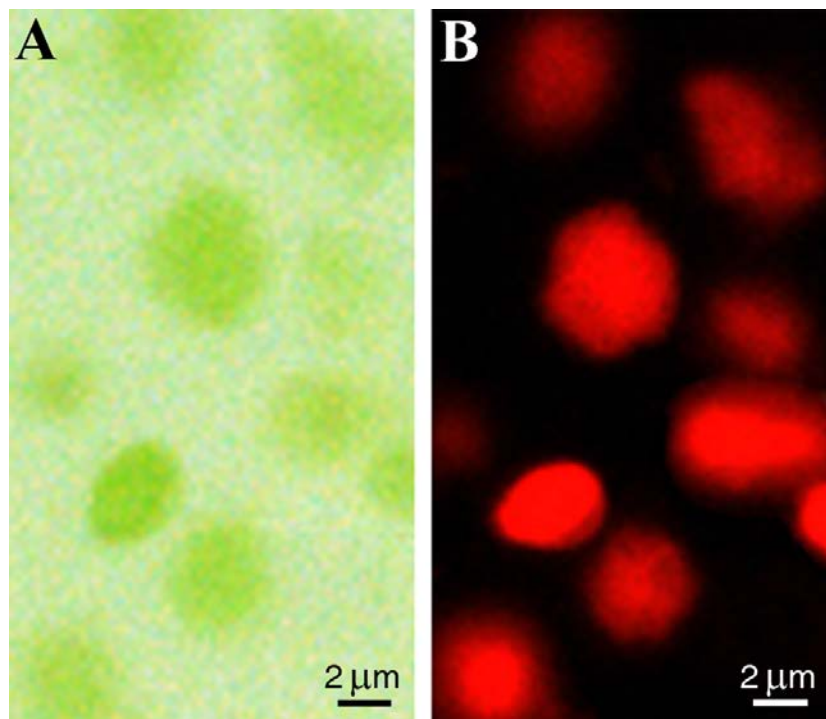


FIG. S3. Various aspects of tannosome shuttles from diverse plant divisions. From (A) *Equisetum arvense*; (B) *Cycas revoluta*; (C) *Ginkgo biloba*; (D) *Dyospiros kaki*; (E) *Dyospiros kaki*, a shuttle entering the vacuole with remnants of grana inside; (F) *Dryopteris* sp.; (G) *Pinus sylvestris*; (H) *Chamaerops humilis*; (I) *Chamaerops humilis*, a shuttle containing coiled thylakoids and tannosomes; (J) *Saccharum* sp.; (K) *Saccharum* sp., a shuttle filled with coiled thylakoids followed by a smaller shuttle entering the vacuole; (L) *Cupressus macrocarpa*, a shuttle with its two well visible membranes. Pearling thylakoids and tannosomes are marked with blue and red arrowheads, respectively. cy, cytoplasm; t, tonoplast; v vacuole.

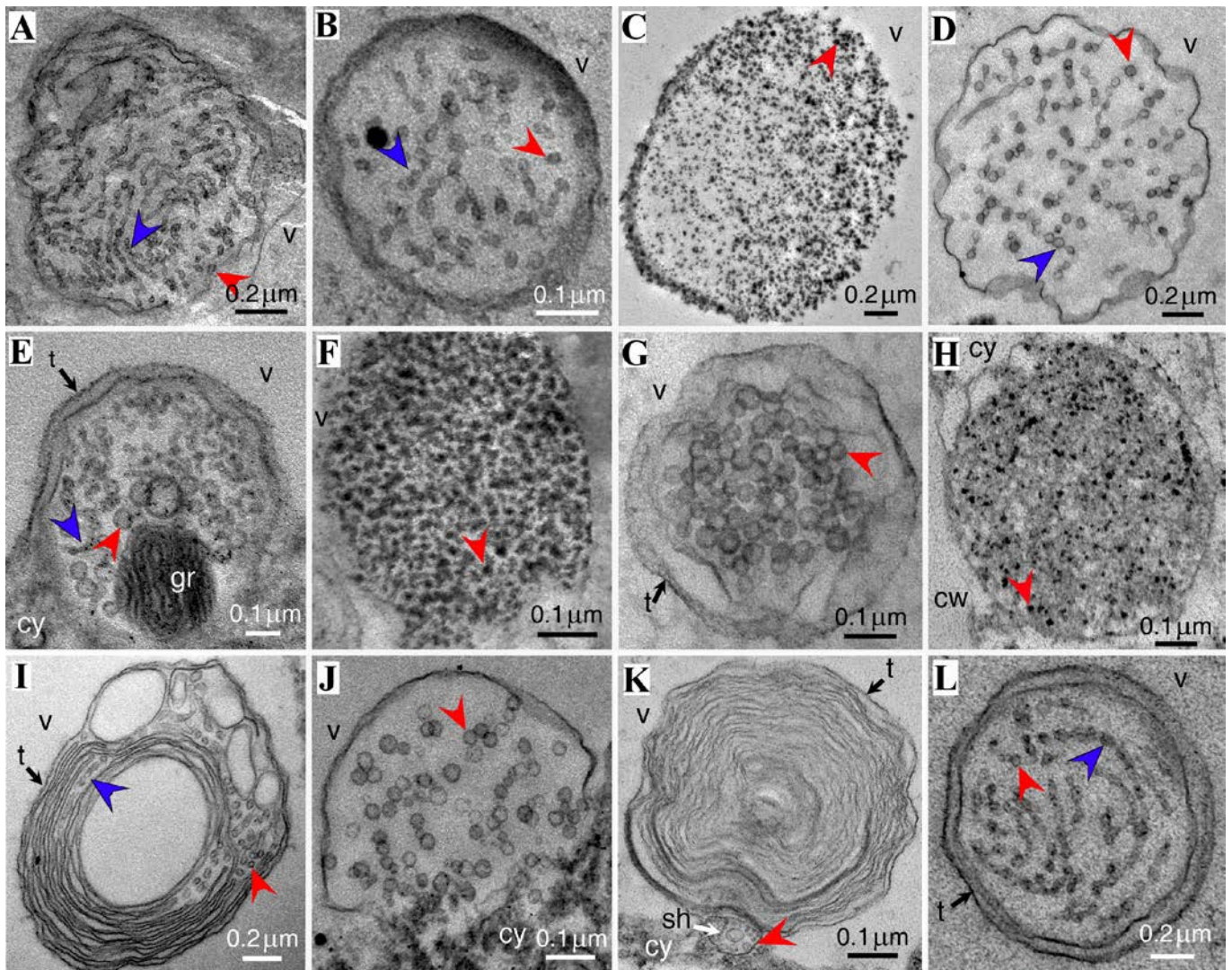


FIG. S4. Epifluorescence micrographs of tannin accretions from diverse divisions. From (A) *Equisetum arvense*; (B) *Cycas revoluta*; (C) *Ginkgo biloba*; (D) *Cupressus macrocarpa*; (E) *Dryopteris* sp.; (F) *Pinus sylvestris*; (G) *Chamaerops humilis*; (H) *Dyospiros kaki*. Note the chlorophyll autofluorescence (red) of the shuttles accompanied by the autofluorescence of the tannins (blue); chloroplasts nearby. Due to strong galloylation of kaki tannins (Table 1), tannin autofluorescence of accretions from *Dyospiros* was little quenched. ch, chloroplast; sh, shuttle.

