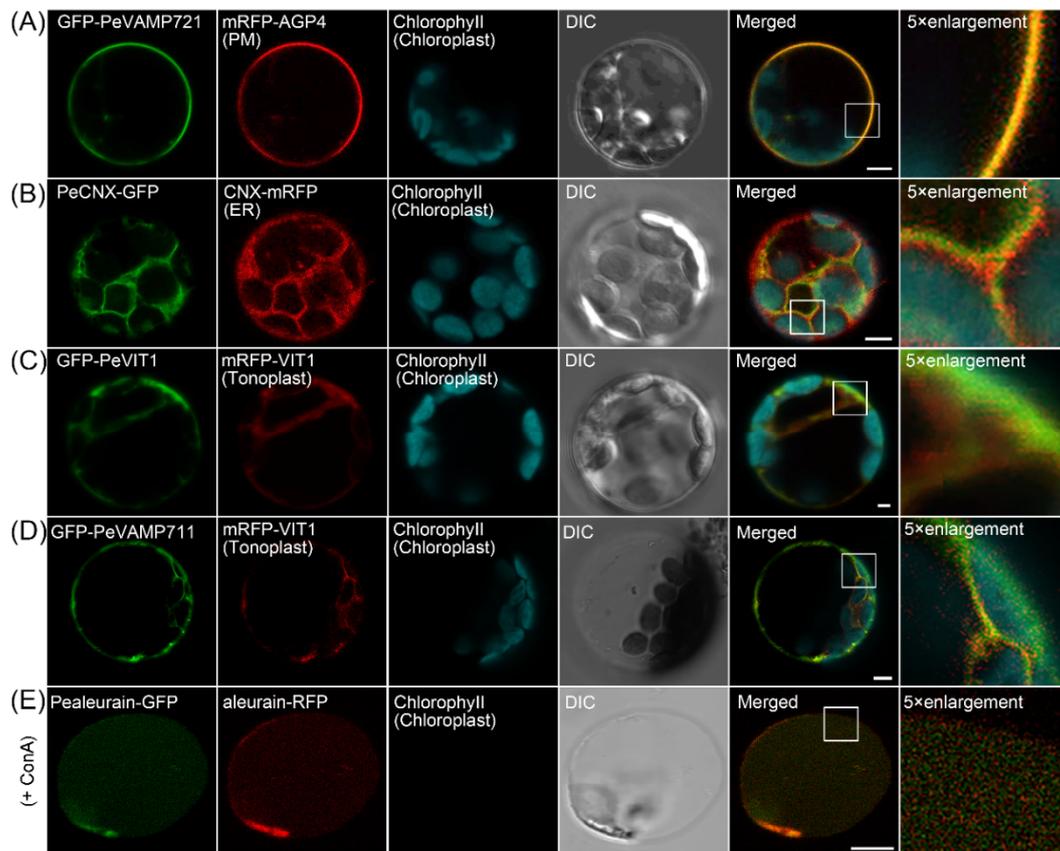


## SUPPLEMENTAL FIGURES



**Supplementary Fig. 1, related to Fig. 4. Subcellular localization of organelle markers from moso bamboo on PM, ER, and vacuole in Arabidopsis protoplasts.**

(A) Co-expression of GFP-PeVAMP721 with Arabidopsis PM marker protein mRFP-AGP4;

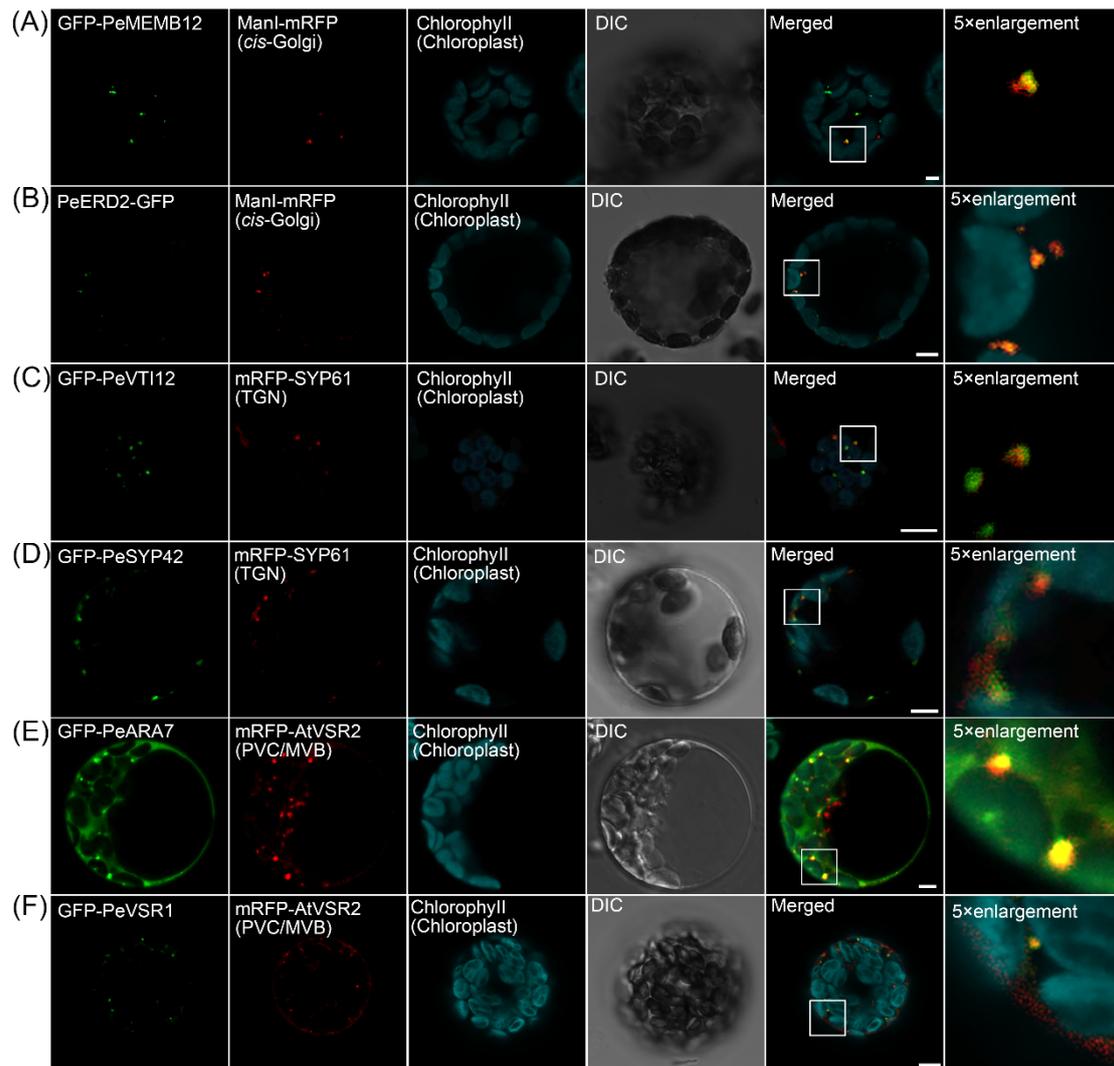
(B) Co-expression of PeCNX-GFP with Arabidopsis ER marker CNX-mRFP;

(C) Co-expression of GFP-PeVIT1 with Arabidopsis tonoplast marker mRFP-AtVIT1;

(D) Co-expression of GFP-PeVAMP711 with Arabidopsis tonoplast marker mRFP-AtVIT1;

(F) Co-expression of Pealeurain-GFP with Arabidopsis lytic vacuole marker aleurain-mRFP. Protoplasts were treated with ConCA (200 nM) immediately after transformation, followed by incubation for 8 h before confocal imaging.

DIC, differential interference contrast. Scale bar = 5  $\mu$ m.



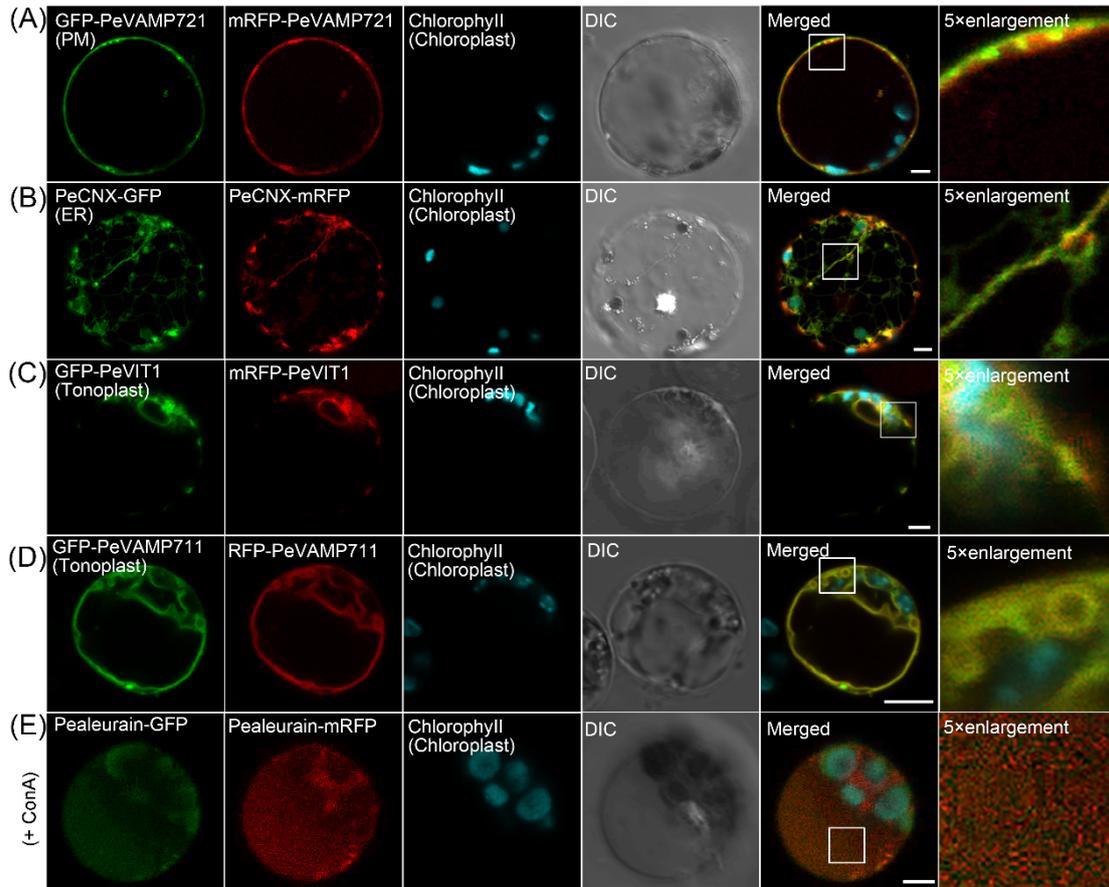
**Supplementary Fig. 2, related to Fig. 5. Subcellular localization of organelle markers from moso bamboo on endosomal compartments in Arabidopsis protoplasts.**

(A-B) Co-expression of GFP-PeMEMB12 (A) or PeERD2-GFP (B) with Arabidopsis *cis*-Golgi marker ManI-mRFP.

(C-D) Co-expression of GFP-PeVTI12 (C) or GFP-PeSYP42 (D) with Arabidopsis TGN marker mRFP-AtSYP61.

(E-F) Co-expression of GFP-PeARA7 (E) or GFP-PeVSR1 (F) with Arabidopsis PVC/MVB marker mRFP-AtVSR2.

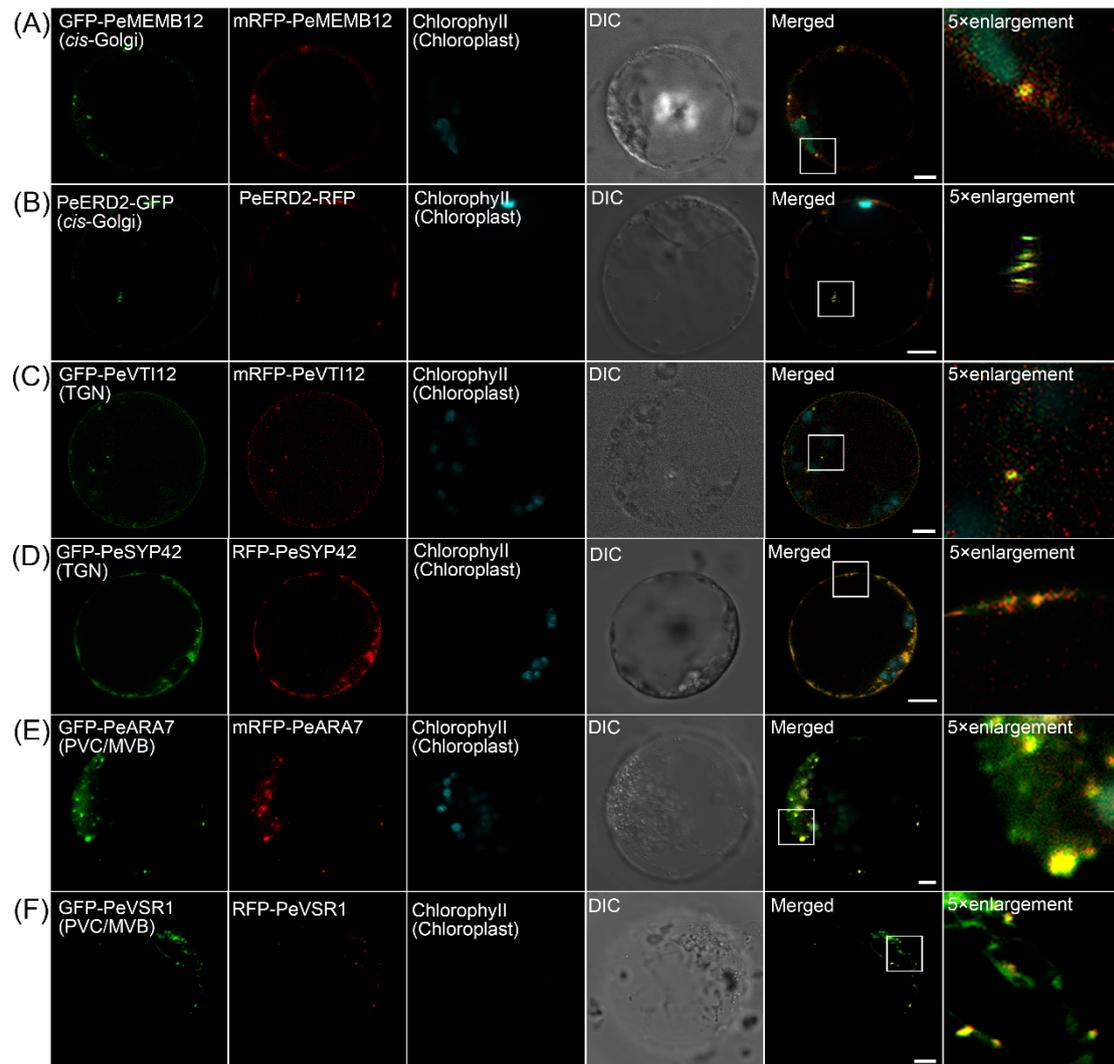
DIC, differential interference contrast. Scale bar = 5  $\mu$ m.



**Supplementary Fig. 3, related to Fig. 4. Colocalization analysis of different fluorescent tag fused markers on PM, ER, and vacuole in moso bamboo protoplasts.**

- (A) Colocalization of GFP-PeVAMP721 with mRFP-PeVAMP721;
- (B) Colocalization of PeCNX-GFP with PeCNX-mRFP;
- (C) Colocalization of GFP-PeVIT1 with mRFP-PeVIT1;
- (D) Colocalization of GFP-PeVAMP711 with mRFP-PeVAMP711;
- (E) Colocalization of Pealeurain-GFP with aleurain-mRFP after ConcA (200 nM) treatment.

DIC, differential interference contrast. Scale bar = 5  $\mu$ m.



**Supplementary Fig. 4, related to Fig. 5. Colocalization analysis of different fluorescent tag fused markers on endosomal compartments in moso bamboo protoplasts.**

(A) Colocalization of GFP-PeMEMB12 or with mRFP-PeMEMB12;

(B) Colocalization of PeERD2-GFP with PeERD2-mRFP;

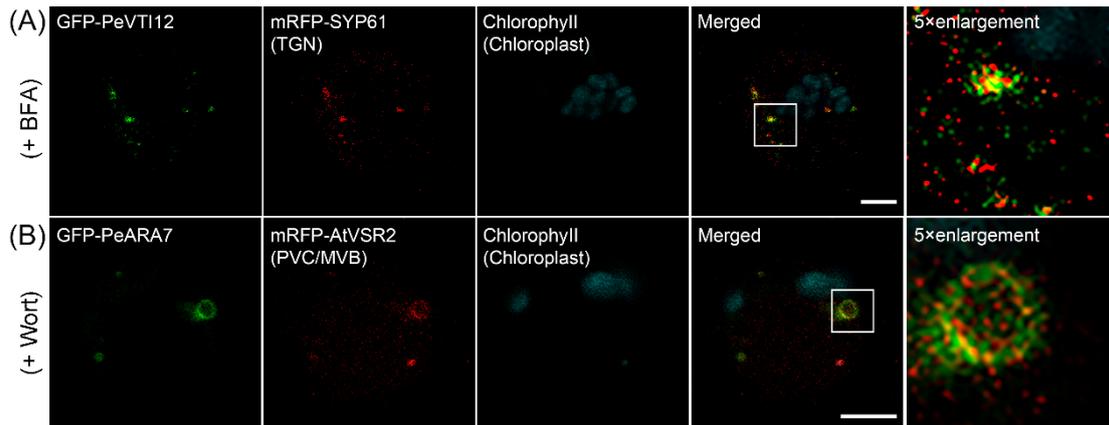
(C) Colocalization of GFP-PeVTI12 with mRFP-PeVTI12;

(D) Colocalization of GFP-PeSYP42 with mRFP-PeSYP42;

(E) Colocalization of GFP-PeARA7 with mRFP-PeARA7;

(F) Colocalization of GFP-PeVSR1 with mRFP-PeVSR1;

DIC, differential interference contrast. Scale bar = 5  $\mu$ m.



**Supplementary Fig. 5, related to Fig. 6. Response of endosomal markers to pharmaceutical treatment in moso bamboo protoplasts.**

(A) Subcellular localization analysis of TGN localized GFP-PeVTI12 with Arabidopsis TGN marker mRFP-SYP61 after BFA treatment.

(G) Subcellular localization analysis of GFP-PeARA7 with Arabidopsis PVC/MVB marker mRFP-AtVSR2 after wortmannin (Wort) treatment.

Scale bar = 5  $\mu$ m.