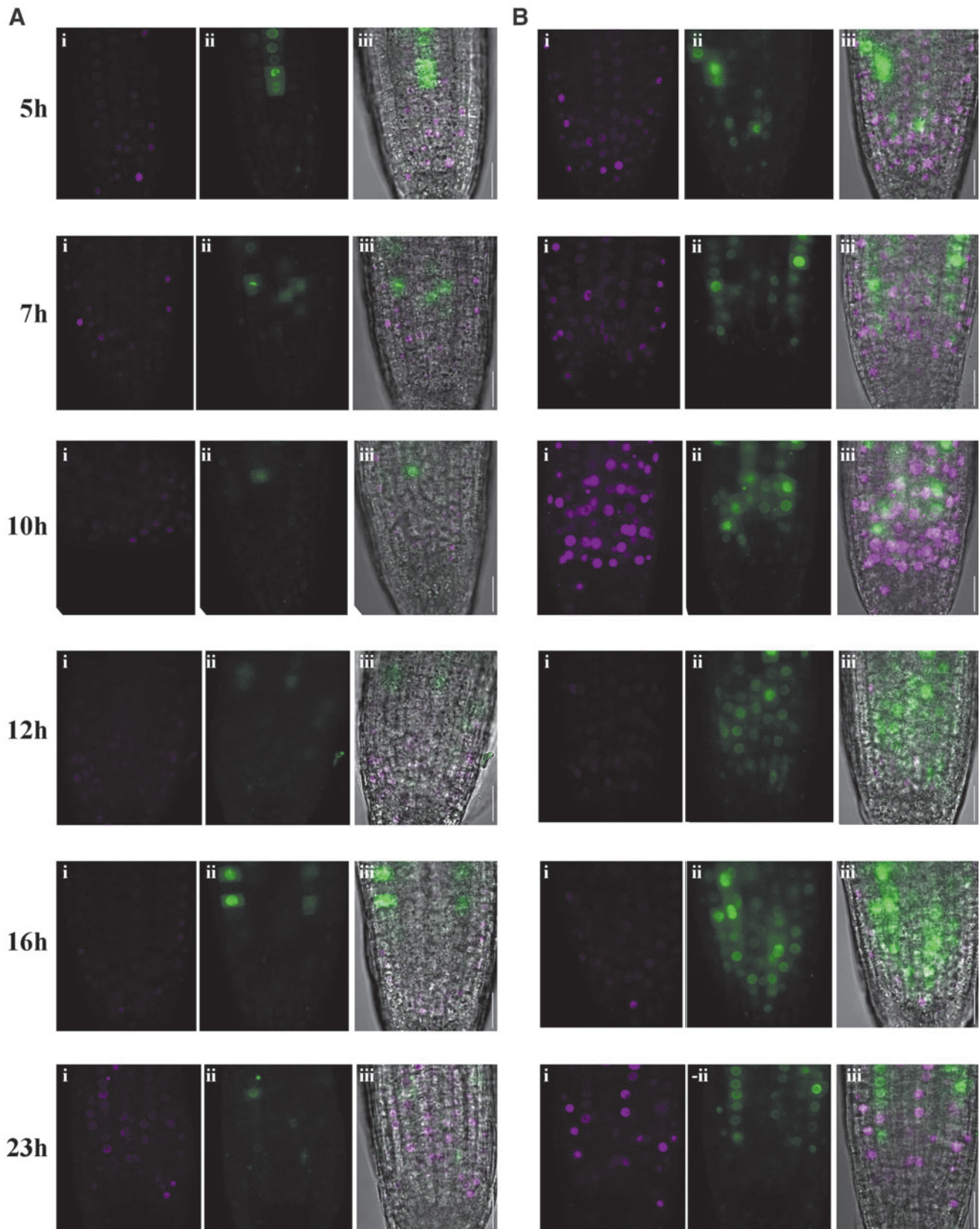
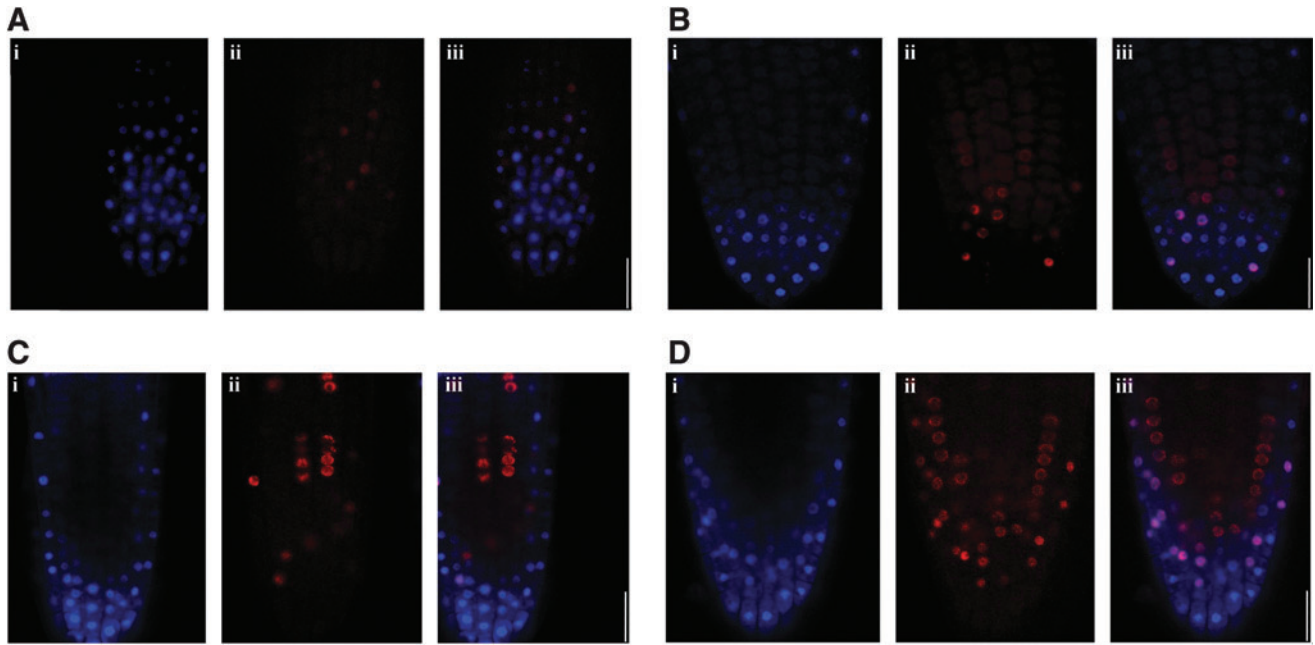


SUPPLEMENTARY FIG. S2. The distribution of GFP-tagged markers in different cell types in embryonic root of germinating Arabidopsis seeds. The *white box* indicates the cell proliferation zone in which all the measurements of cellular redox state were made. (A) *PLT3::GFP*. (B) *WOX5::GFP* (C) *WOL::GFP*. Scale bar = 25 μm .



SUPPLEMENTARY FIG. S3. The use of Cytrap markers to identify nuclei in the S and G2/M phases of the cell cycle in the proliferation zones of the embryonic roots of Arabidopsis seedlings. Expression of cell cycle tracking in plant cell (Cytrap) markers showing S (*pHTR2::CDT1a-RFP*) (i) and G2/M (*pCYCB1::CYCB1-GFP*) (ii) phase nuclei in the proliferation zone of the embryonic root apical meristem in either the absence (A) or presence of HU (B). HU, hydroxyurea.



SUPPLEMENTARY FIG. S4. EdU incorporation and DAPI staining of roots. Roots were stained with DAPI (i) and EdU (ii) or both (iii) in the absence (A, B) or presence of HU (C). Samples were also incubated in EdU (ii) for 2 h and then stained with DAPI (i) at 17 h of HU treatment (D). Scale bar 25 μm . EdU, 5-ethynyl-2'-deoxyuridine.