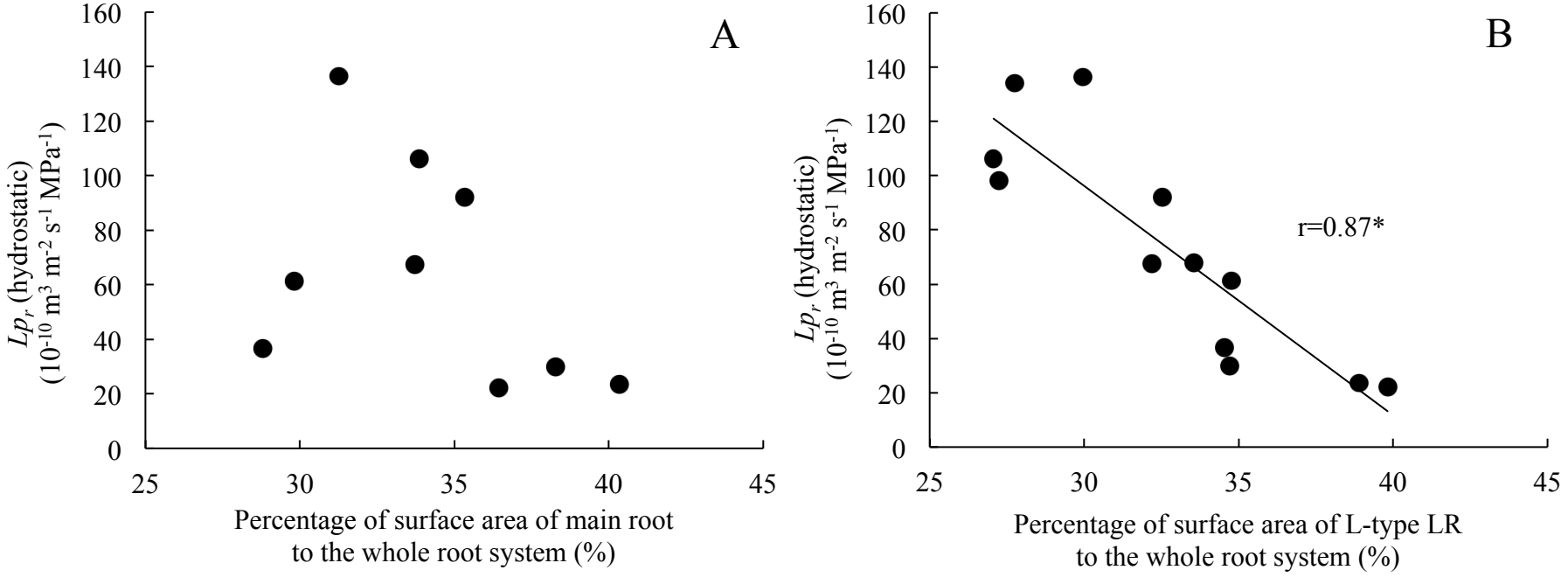

Fig. S1. Correlation between the percentage of surface area of main root (A) and L-type LR (B) to the whole root system and Lp_r (hydrostatic) for IRAT 109 (94-day-old) and Taichung 65 (98-day-old) grown under continuous waterlogged (CWL) and continuous drought (CD) conditions (n=12 plants). * indicates significant at $P < 0.05$.

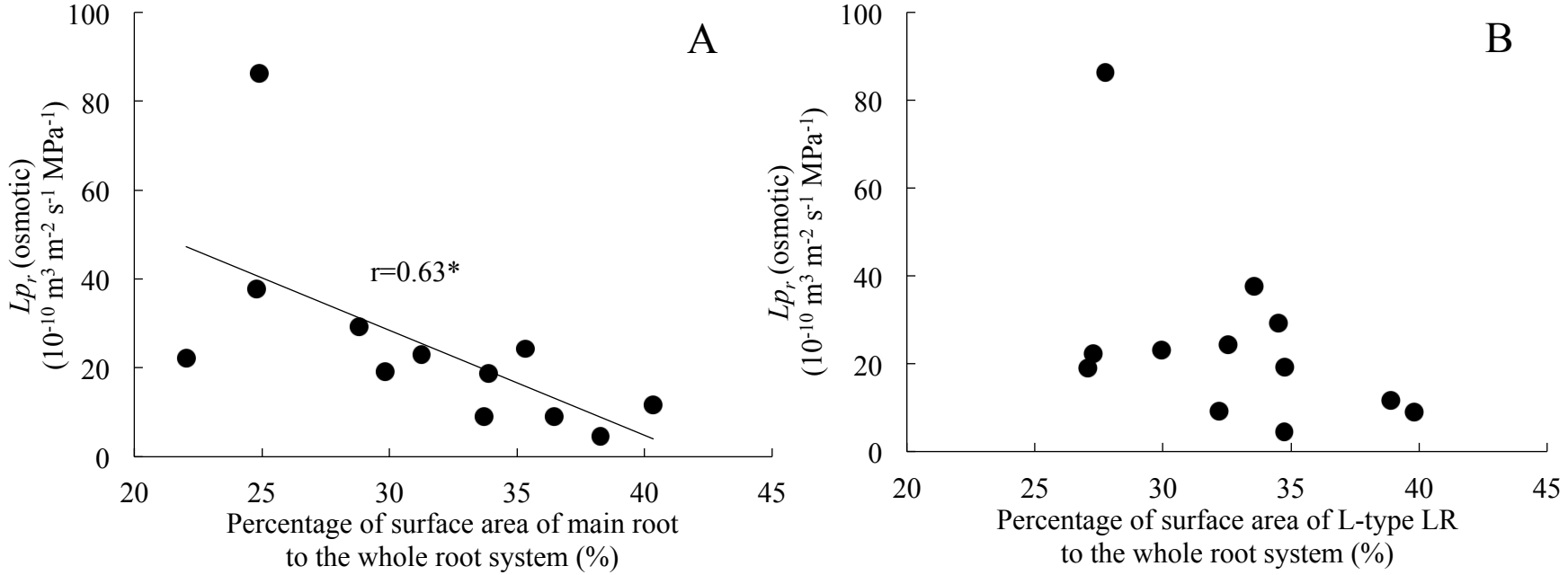

Fig. S2. Correlation between the percentage of surface area of main root (A) and L-type LR (B) to the whole root system and Lp_r (osmotic) for IRAT 109 (94-day-old) and Taichung 65 (98-day-old) grown under continuous waterlogged (CWL) and continuous drought (CD) conditions (n=12 plants). * indicates significant at P <0.05.

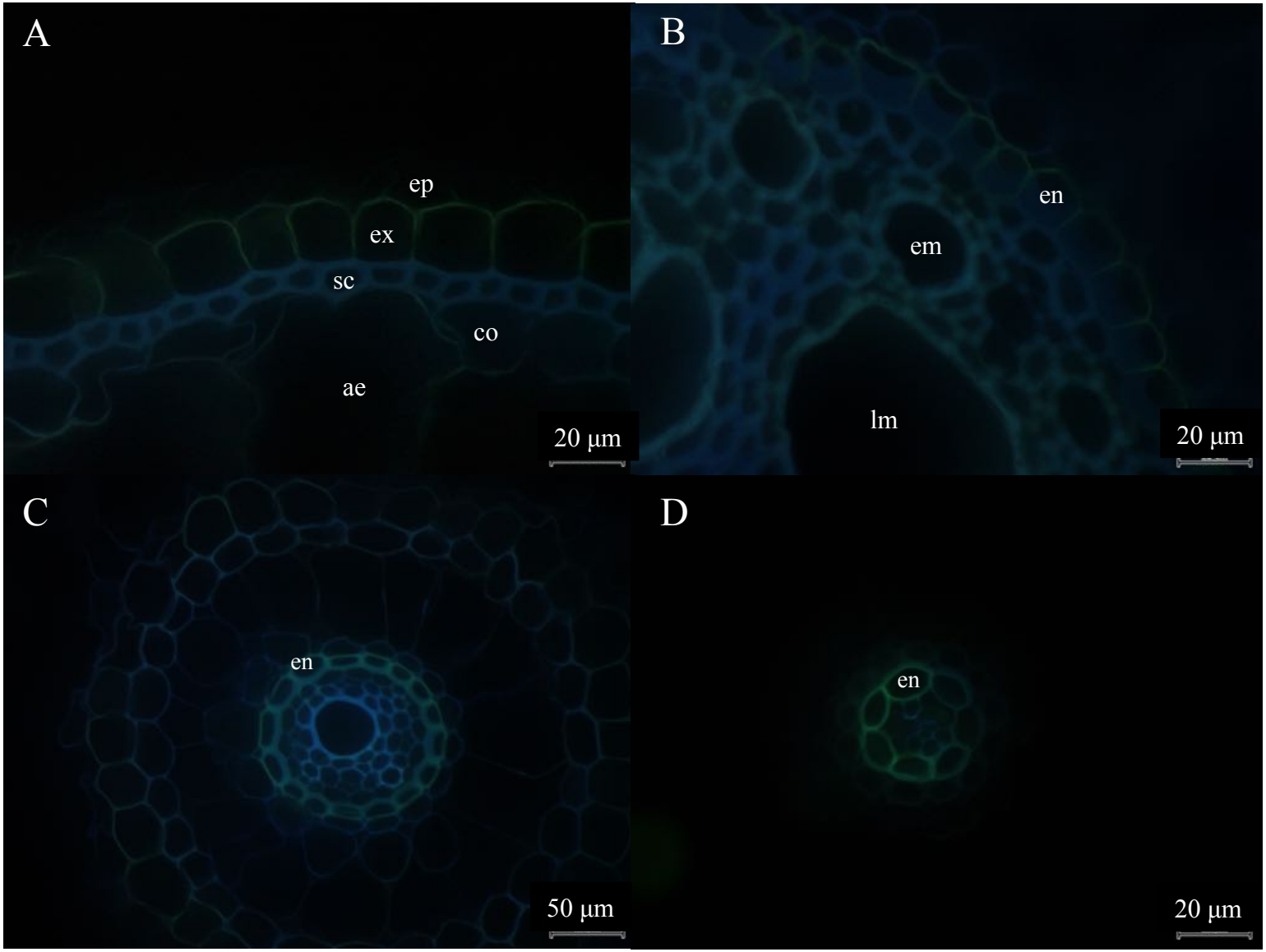

Fig. S3. Cross sections of the middle portions of main root (A and B), L-type lateral root (C) and S-type lateral root (D) of IRAT 109 grown under continuous drought (CD) condition in soil till two weeks after heading observed with an epifluorescence microscope using an ultraviolet filter set (excitation filter BP 330-385, dichroic mirror FT 400, barrier filter LP 420; Model: IX70, inverted fluorescence microscope, Olympus, Tokyo, Japan). Suberin deposition stained with Fluorol Yellow 088 are shown in fluorescence yellow color under ultraviolet light. A, outer part of main root; B, central cylinder; ep, epidermis; ex, exodermis; sc, sclerenchyma; co, cortical parenchyma; en, endodermis; ae, aerenchyma; lm, late metaxylem. Bars represent 20 µm (A, B, D) and 50 µm (C).

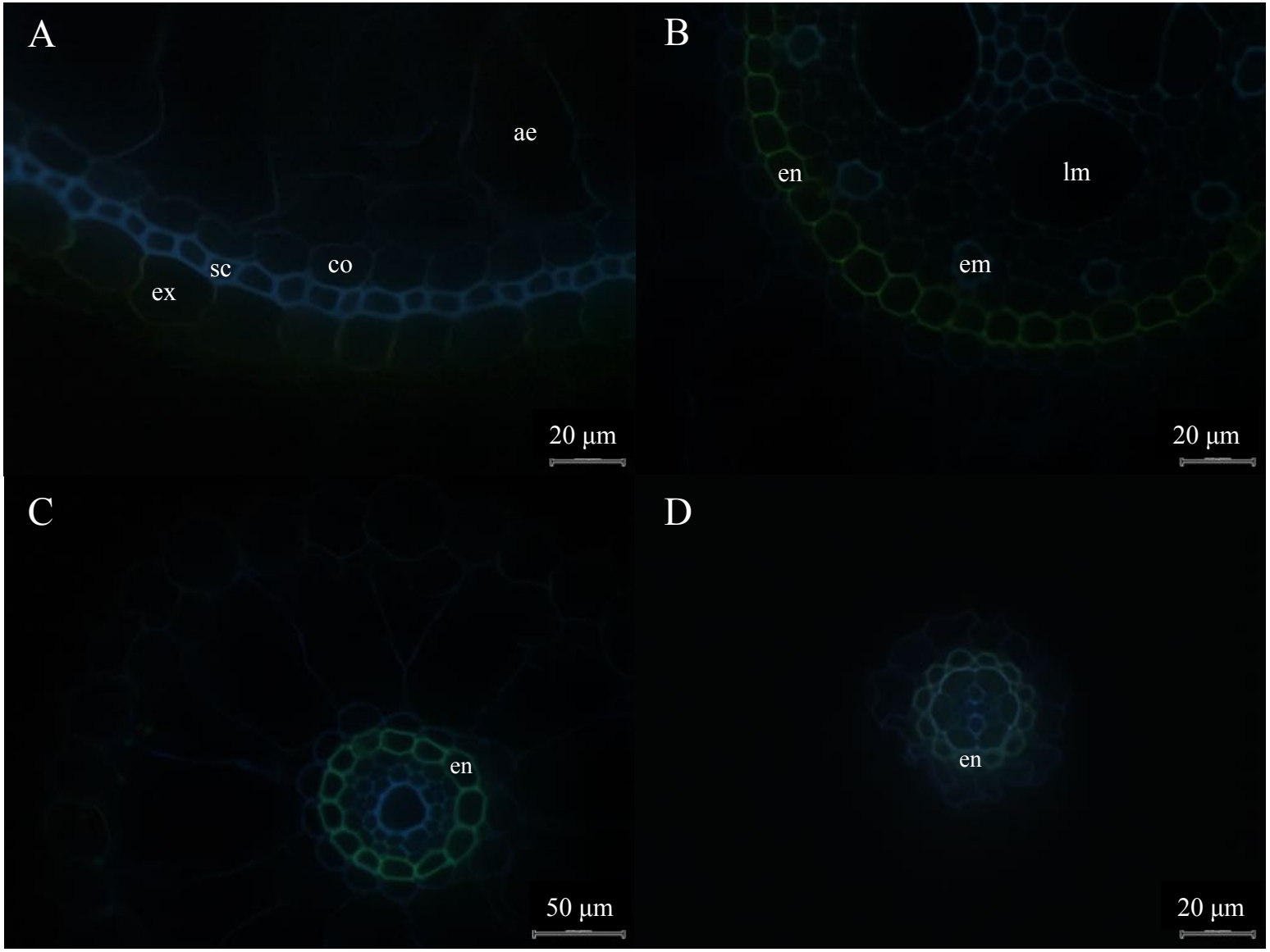

Fig. S4. Cross sections of the middle portions of main root (A and B), L-type lateral root (C) and S-type lateral root (D) of Taichung 65 grown under continuous waterlogged (CWL) condition in soil till two weeks after heading observed with an epifluorescence microscope using an ultraviolet filter set (excitation filter BP 330-385, dichroic mirror FT 400, barrier filter LP 420; Model: IX70, inverted fluorescence microscope, Olympus, Tokyo, Japan). Suberin deposition stained with Fluorol Yellow 088 are shown in fluorescence yellow color under ultraviolet light. A, outer part of main root; B, central cylinder; ex, exodermis; sc, sclerenchyma; co, cortical parenchyma; en, endodermis; ae, aerenchyma; lm, late metaxylem. Bars represent 20 µm (A, B, D) and 50 µm (C).

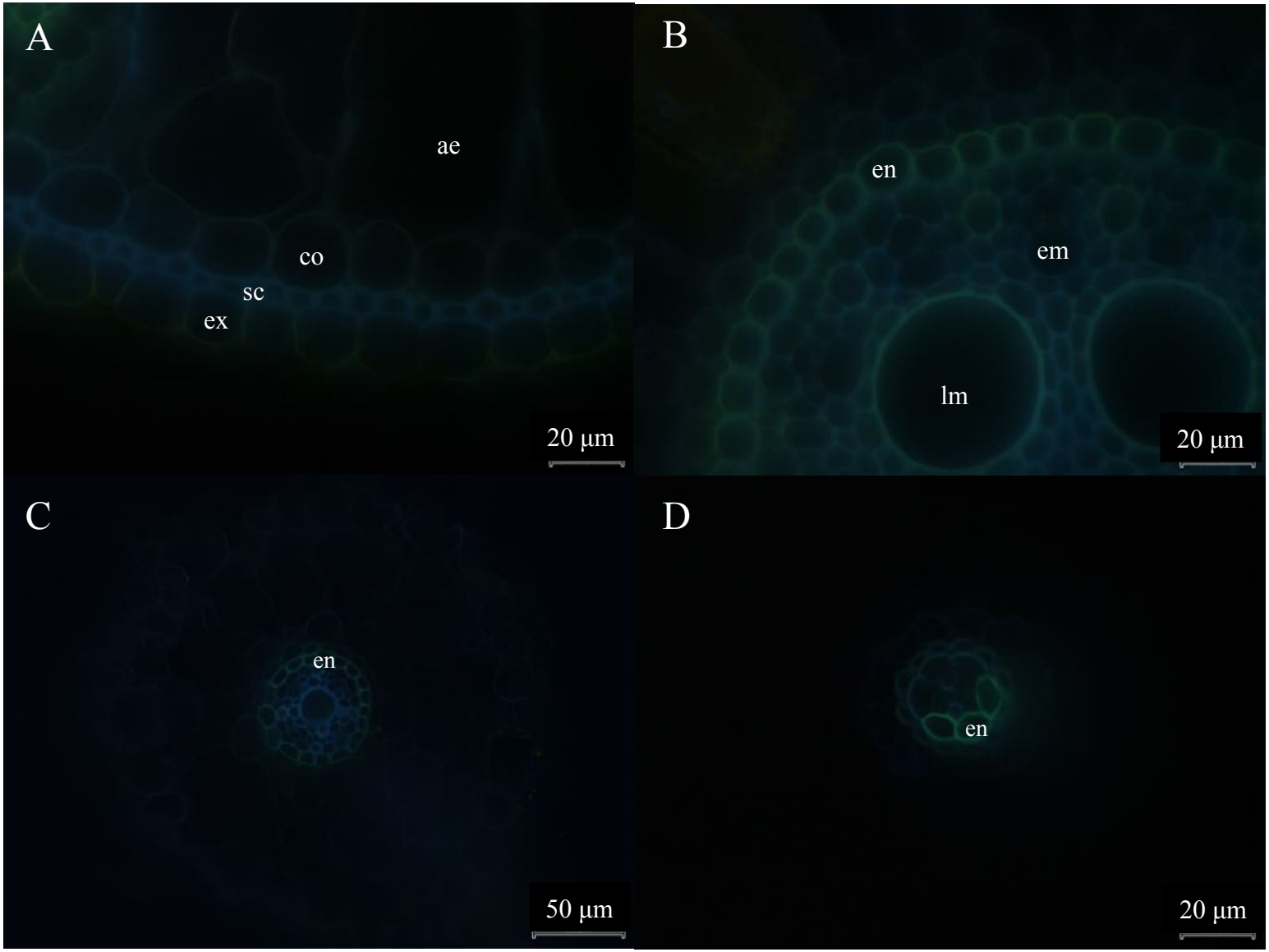

Fig. S5. Cross sections of the middle portions of main root (A and B), L-type lateral root (C) and S-type lateral root (D) of Taichung 65 grown under continuous drought (CD) condition in soil till two weeks after heading observed with an epifluorescence microscope using an ultraviolet filter set (excitation filter BP 330-385, dichroic mirror FT 400, barrier filter LP 420; Model: IX70, inverted fluorescence microscope, Olympus, Tokyo, Japan). Suberin deposition stained with Fluorol Yellow 088 are shown in fluorescence yellow color under ultraviolet light. A, outer part of main root; B, central cylinder; ex, exodermis; sc, sclerenchyma; co, cortical parenchyma; en, endodermis; ae, aerenchyma; lm, late metaxylem. Bars represent 20 µm (A, B, D) and 50 µm (C).

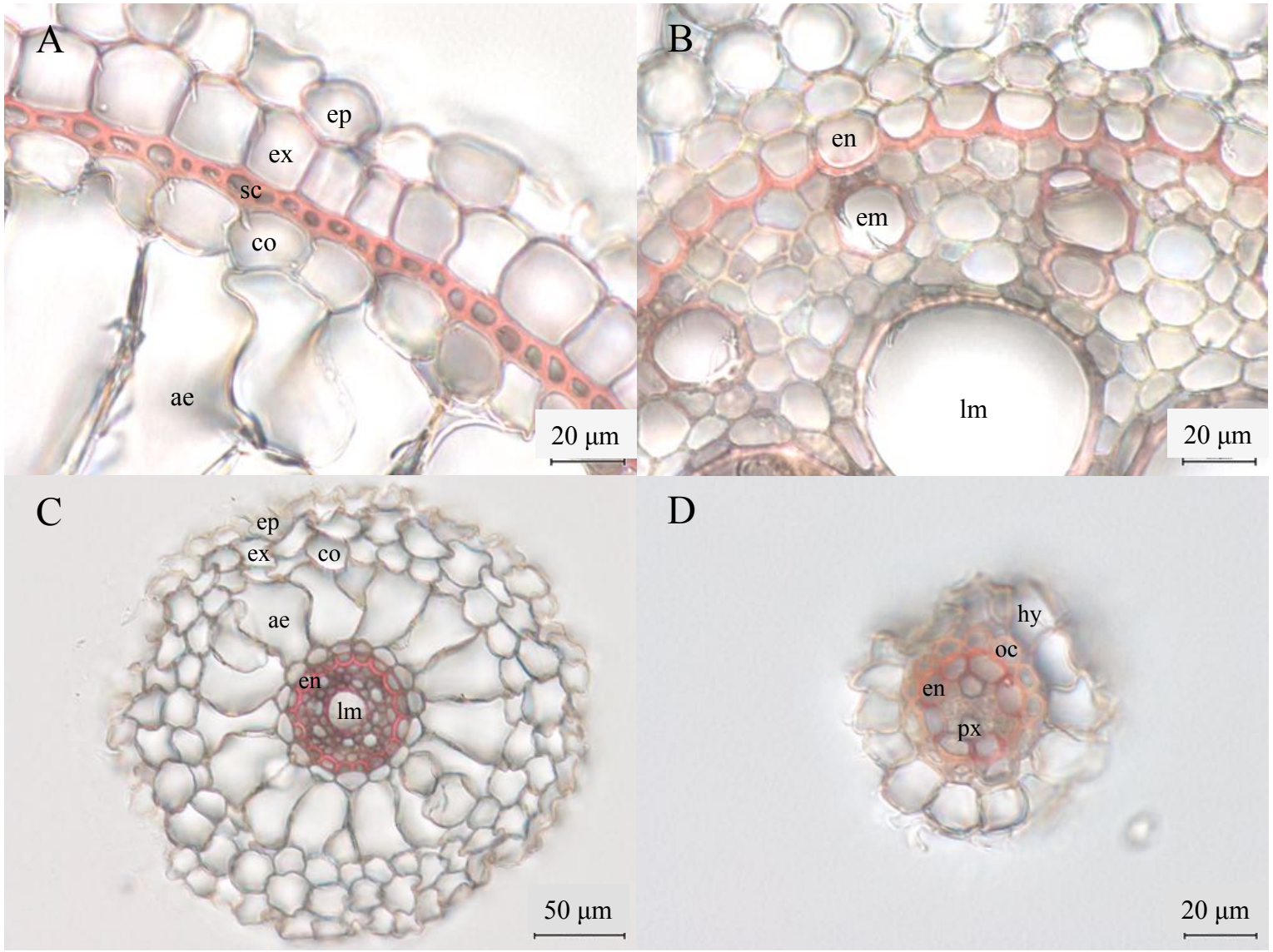

Fig. S6. Cross sections of the middle portions of main root (A and B), L-type lateral root (C) and S-type lateral root (D) of IRAT 109 grown under continuous drought (CD) condition in soil till two weeks after heading observed with a light microscope. Lignin deposition stained with phloroglucinol and HCl are shown in red color. A, outer part of main root; B, central cylinder; ep, epidermis; ex, exodermis; hy, hypodermis; sc, sclerenchyma; co, cortical parenchyma; en, endodermis; oc, outer cortex; ae, aerenchyma; lm, late metaxylem; em, early metaxylem; px, protoxylem. Bars represent 20 µm (A, B, D) and 50 µm (C).

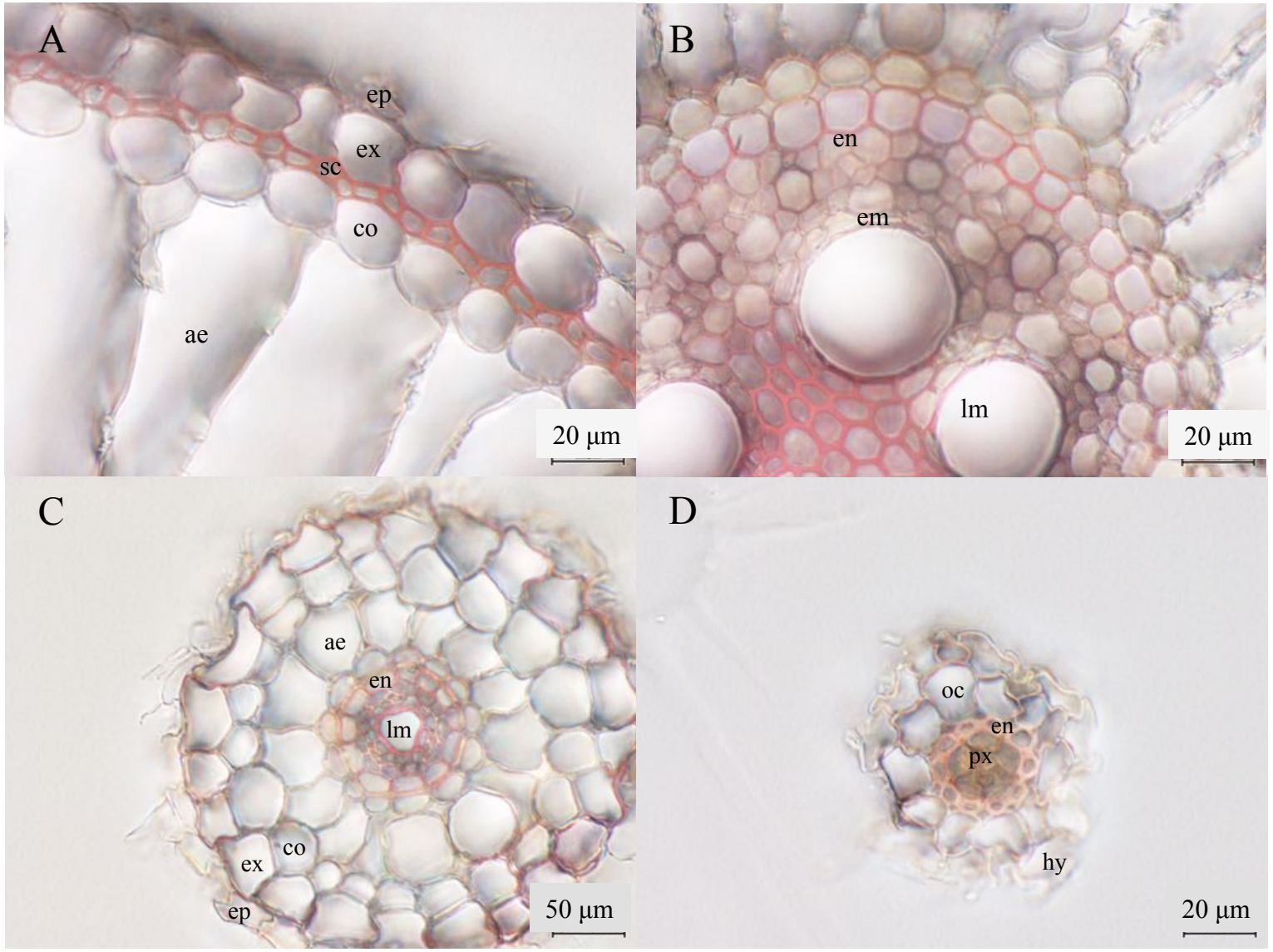

Fig. S7. Cross sections of the middle portions of main root (A and B), L-type lateral root (C) and S-type lateral root (D) of Taichung 65 grown under continuous waterlogged (CWL) condition in soil till two weeks after heading observed with a light microscope. Lignin deposition stained with phloroglucinol and HCl are shown in red color. A, outer part of main root; B, central cylinder; ep, epidermis; ex, exodermis; hy, hypodermis; sc, sclerenchyma; co, cortical parenchyma; en, endodermis; oc, outer cortex; ae, aerenchyma; lm, late metaxylem; em, early metaxylem; px, protoxylem. Bars represent 20 µm (A, B, D) and 50 µm (C).

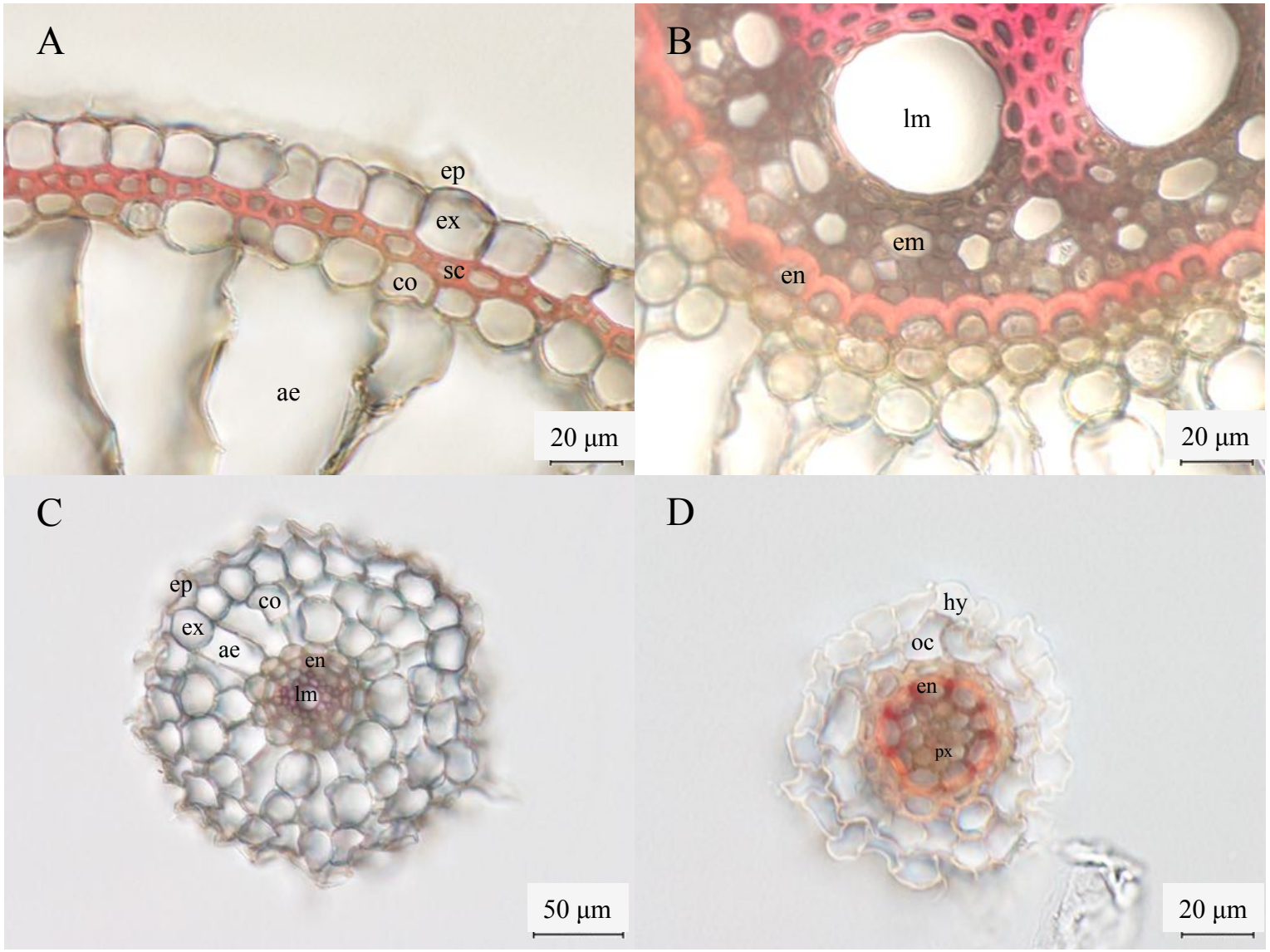

Fig. S8. Cross sections of the middle portions of main root (A and B), L-type lateral root (C) and S-type lateral root (D) of Taichung 65 grown under continuous drought (CD) condition in soil till two weeks after heading observed with a light microscope. Lignin deposition stained with phloroglucinol and HCl are shown in red color. A, outer part of main root; B, central cylinder; ep, epidermis; ex, exodermis; hy, hypodermis; sc, sclerenchyma; co, cortical parenchyma; en, endodermis; oc, outer cortex; ae, aerenchyma; lm, late metaxylem; em, early metaxylem; px, protoxylem. Bars represent 20 µm (A, B, D) and 50 µm (C).