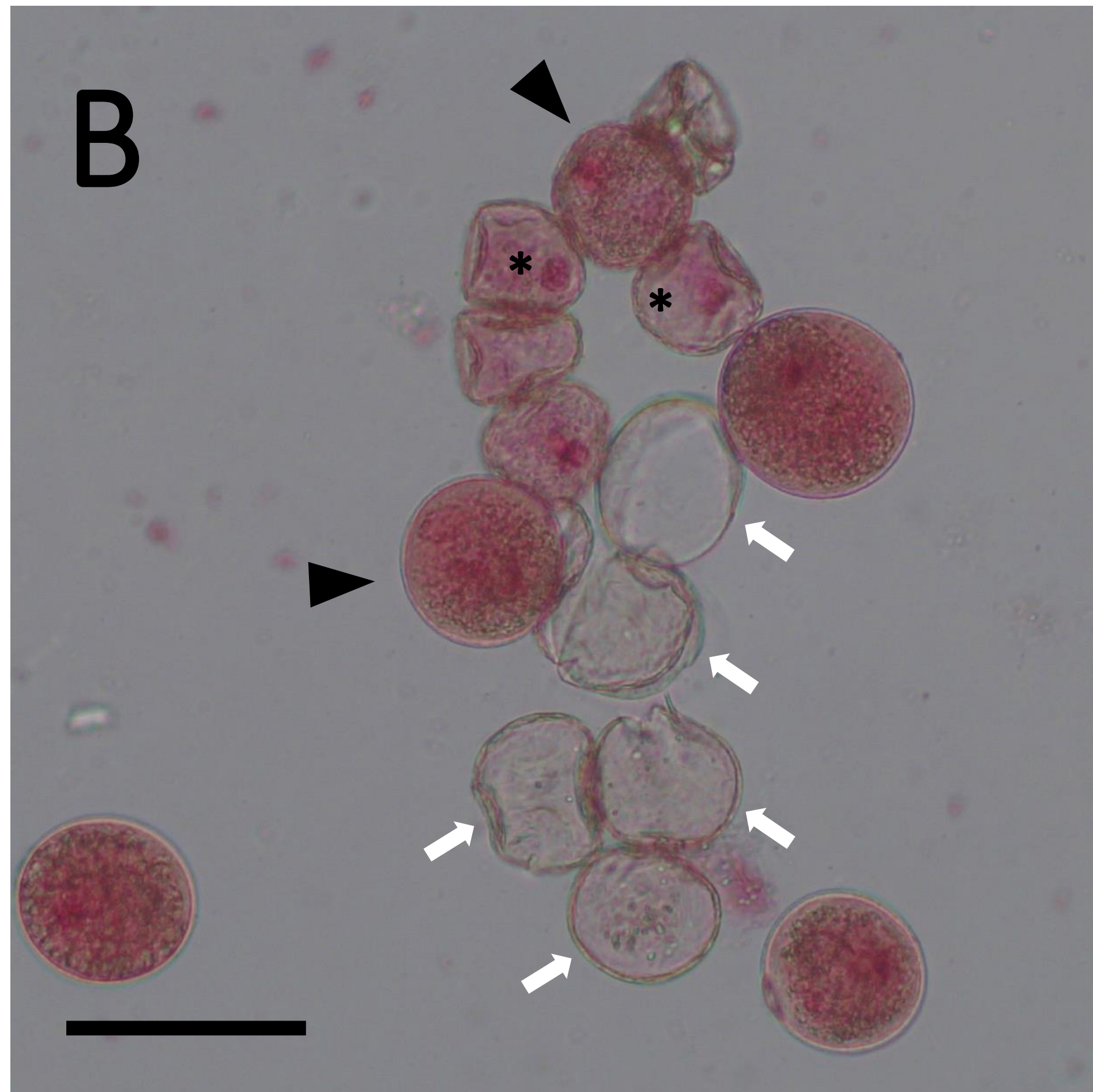
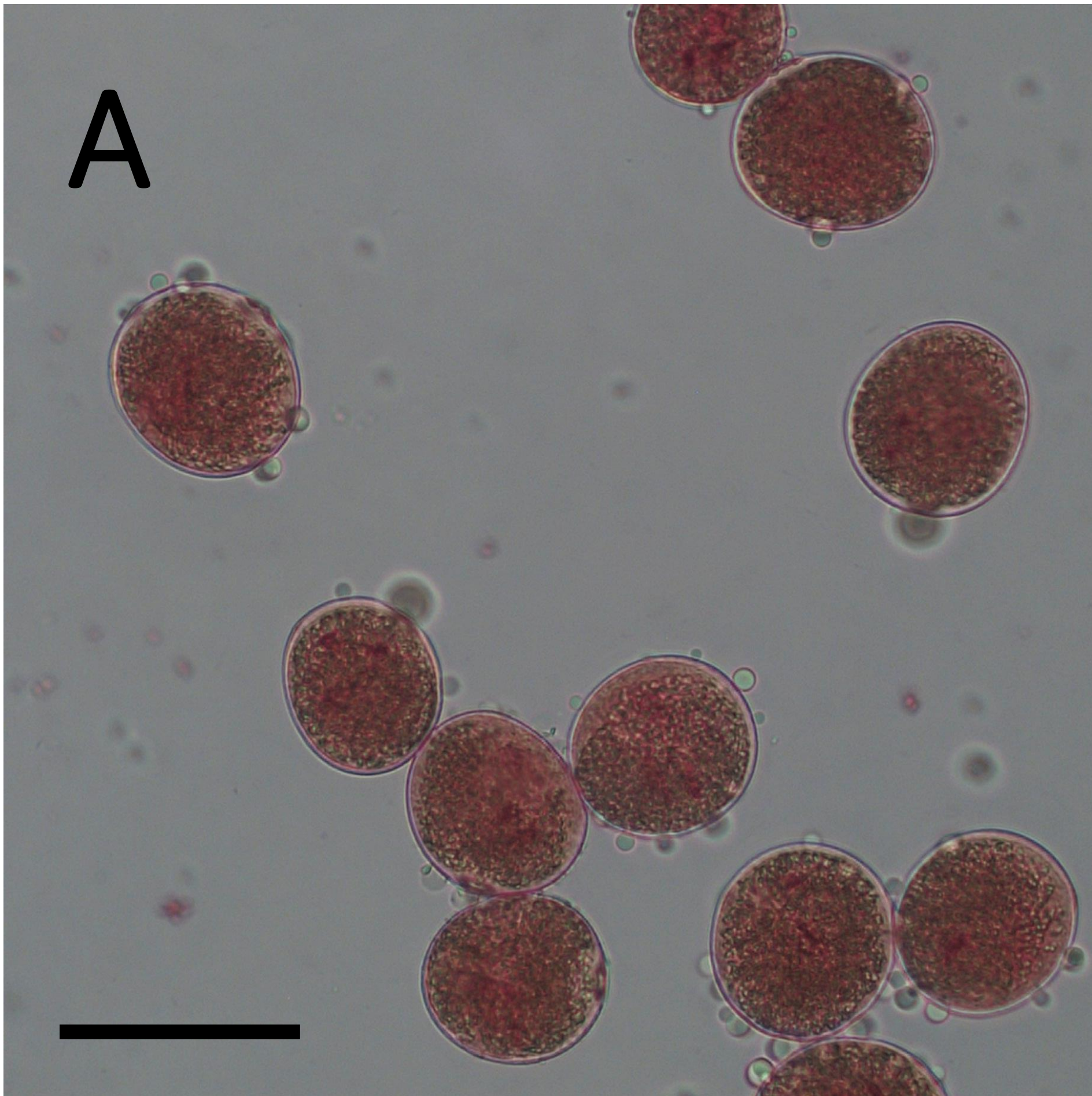


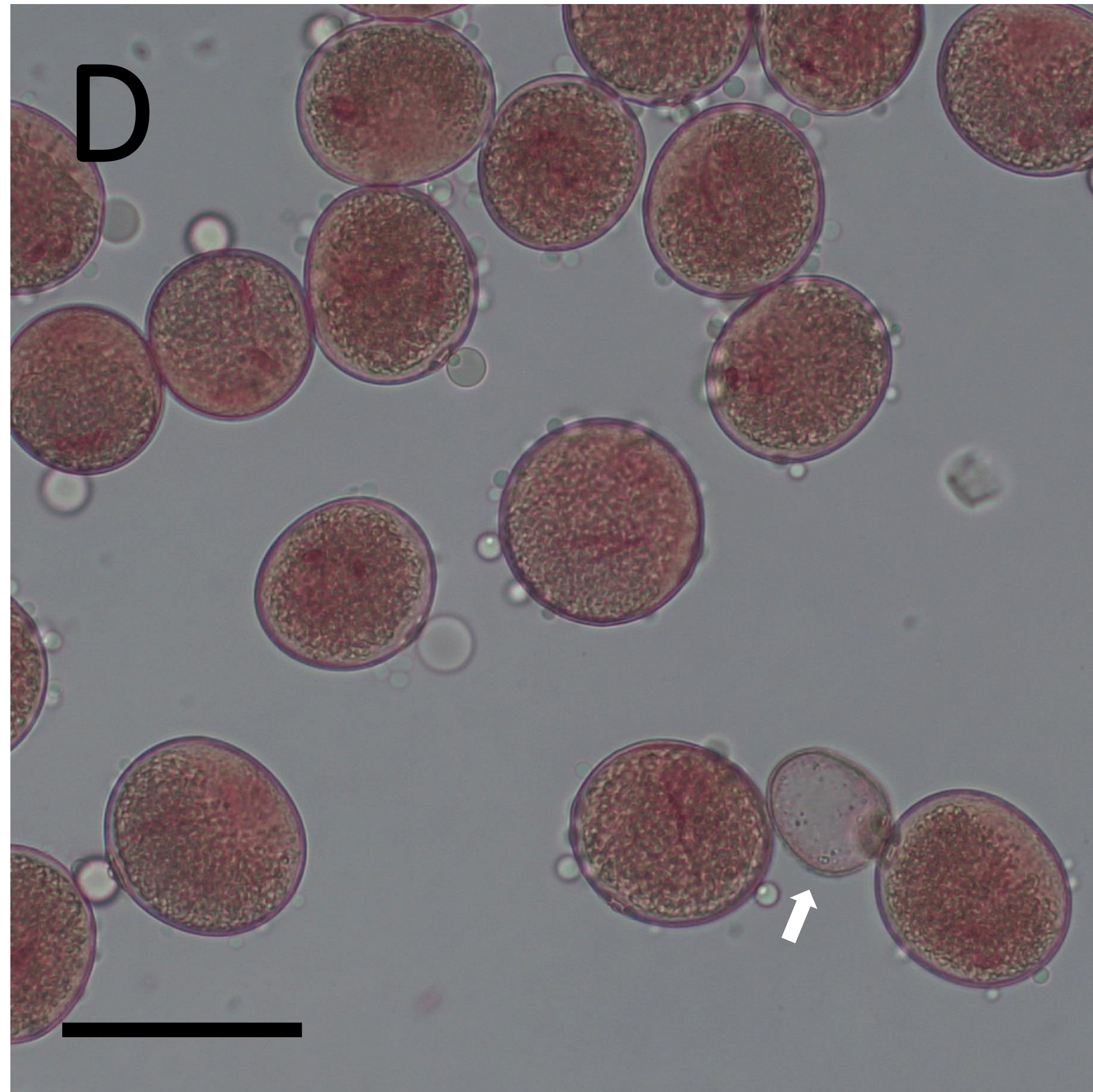
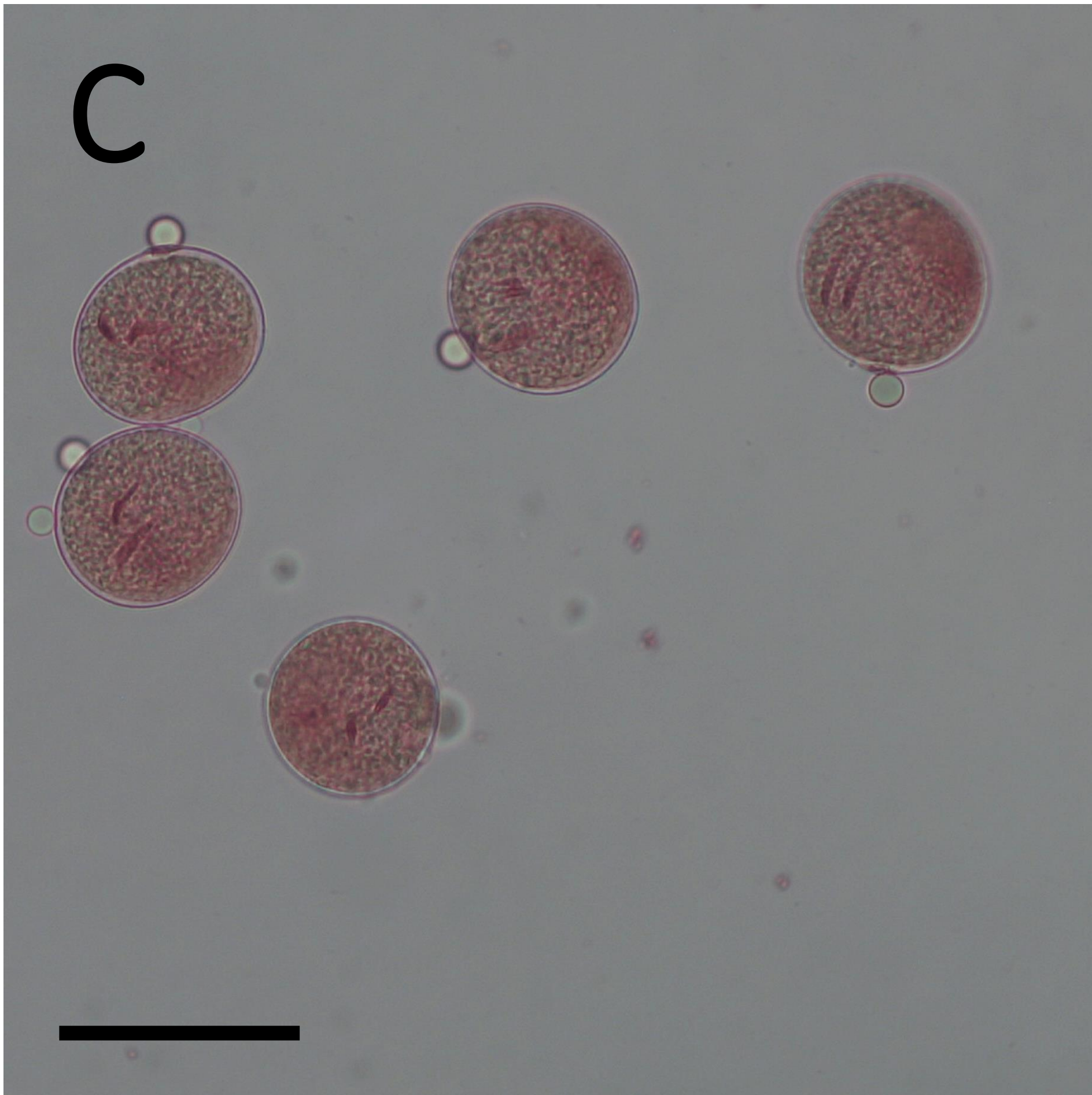
CONTROL

HEAT STRESS

Mv 17-09



Ellvis



**Supplementary figure 1.** Morphology of pollen grains after pollen shed from control (A, C) and heat-stressed (B, D) Mv 17-09 (A, B) and Ellvis (C, D) main spikes. Arrowhead, retarded pollen grains with low starch content; asterisk, cells containing a single nucleus; arrow, abortive pollen grains. Bars represent 50  $\mu$ m.