



Supplementary Fig. S4. Near infrared (NIR) and corresponding Y(II) images (false colored) of fragmented *Zygnema* S (A), *Zygnema* E-A (B), *Klebsormidium cernulatum* (C) and *Klebsormidium nitens* (D) filaments (controls). The colour bar at the top indicates the relative Y(II) as a percentage. (A) detached cells, convexly expanded terminal walls with cell wall fragments (arrowheads). (B) detached cells, cell wall fragment (arrowhead). (C) detached cells, terminal cells with similar Y(II) as adjacent cells, remnants of cross wall (arrowheads). (D) 2-3 celled fragments (white circles) and terminal cells (arrowheads) showing similar Y(II) as cells in longer filaments.