

**Figure S1.** Images of *Dolichospermum circinale* akinete. (a, b) an up-light microscope ( $\times 400$ ) image and (c, d) a scanning electron microscope ( $\times 2,500$ ) image. (a) Akinete formed in the laboratory. Small projections are present at both sides of anode. (b) Akinete in natural freshwater. (c) Akinete before germination. The germination cast-off line was notable in the upper part. (d) Akinete shell after germination. A small picture inside (d) shows germination status after 1 day of incubation.

