

Supplemental Fig. S1: A: Mature sporangium of chytrid strain Chy-Kol2008 on *Planktothrix* sp. NIVA-CYA98. The picture also shows decomposing *Planktothrix* sp. biomass that has been released from lysed host filaments. B: Mature sporangium and empty sporangia of chytrid strain Chy-Lys2009 on *Planktothrix* sp. NIVA-CYA634. C: Different stages of infection of *Planktothrix* sp. NIVA-CYA98 by chytrid Chy-Kol2008: 1 – free swimming zoospores, 2 – encysted zoospores, 3 – mature sporangia. The picture also shows fragmented host filaments. D: Infected *Planktothrix* sp. NIVA-CYA98 filaments with multiple Chy-Kol2008 sporangia. For size evaluation: *Planktothrix* sp. filaments have a diameter of 5-6µm (NIVA-CYA98) or 7-9µm (NIVA-CYA 634).