+N *Vulcanococcus limneticus* sp. nov.  

-N *Vulcanococcus limneticus* sp. nov.

Fig. S3. Microphotography at epifluorescence microscopy of *Vulcanococcus limneticus* sp. nov. cultures in the two treatments with (+N) and without (-N) nitrogen. Glycogen granules are clearly visible in the N limited culture. (Zeiss Axioplan, 1250x, blue excitation). *Vulcanococcus limneticus* sp. nov. monoclonal culture was isolated from a volcanic freshwater mesotrophic lake in central Italy, Lake Albano. Dimension of cells: 0.97±0.21x 0.76±0.12 µm, Volume: 0.36±0.19 µm³.