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Phylogenetic and Morphological Investigation of a *Dunaliella* Strain Isolated from Yuncheng Salt Lake, China

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A *Dunaliella* strain was isolated from Yuncheng Salt Lake, Shanxi, China (111.05°E, 35.03°N). Morphological characteristics and molecular data were used to evaluate the relationship of this algal strain to other *Dunaliella* strains. Morphology of the isolated strain observed was close to *Dunaliella salina*. Phylogenetic trees were constructed from *rbcL*, *psaB*, ITS (ITS-1+5.8S rDNA+ITS-2) and 18S rDNA sequence data. Phylogenetic analysis of the four gene sequences revealed that the isolated *Dunaliella* strain is closely related to *D. salina* (Dunal) Teodoresco, *D. peircei* Nicolai et Baas-Becking, *D. tertiolecta* Butcher and more likely closer to *D. salina*. Combined morphological characteristics and phylogenetic analysis, the isolated *Dunaliella*—designated here as *D. sp* YC01—should be a *Dunaliella salina* strain.

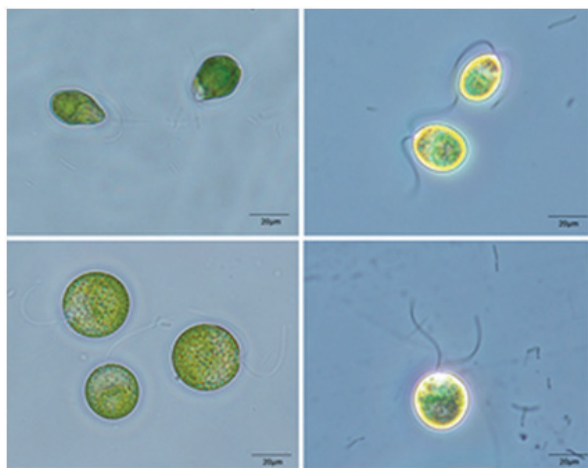


Fig. 1. Morphology of *Dunaliella* sp. YC01.

Key words: *Dunaliella*, Morphology, Phylogeny

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