

## **New sequence data of Nassulidae species (Ciliophora:Nassophorea:Nassulida) from Korea**

**S.Y. Kim<sup>1</sup>, J.H. Kim<sup>2</sup>, and J-H. Jung<sup>3</sup>, H.G. Jeong<sup>1</sup>, J.H. Choi<sup>1</sup>**

*1. National Marine Biodiversity Institute of Korea, Seocheon-gun, Korea*

*2. Natural Science Research Institute Gangneung-Wonju National University, Korea*

*3. Department of Biology, Gangneung-Wonju National University, Korea*

A free-living marine nassulid species was collected from tidal flat, Chuja Island, Korea in July 2017. Single cell PCR was performed, and the SSU, 5.8S, ITS1, ITS2 and partial of LSU rDNA are newly obtained. Based on their SSU rDNA, phylogenetic was analyzed. Live observation and protargol impregnation were used. Morphology and molecular data of Korean population were compared with related taxa of Nassulidae. Morphological data shows the possibility of this present species as a new species candidate because the number of pharyngeal rods, the straight pharyngeal tube and the habitat were different to the closely related species. The similarity of SSU rDNA is 98% with *Nassulides labiatus*. And the phylogenetic position of this is placed within the monophyletic clade of the family Nassulidae. Also, updated sequences data of the species will be help to understand of highly divergent group in Nassophorea. This work was supported by the National Marine Biodiversity Institute Research Program (2018M01200). Also, this work was supported in part by the Marine Biotechnology Program (20170431) funded by the Ministry of Oceans and Fisheries, Korea.