

Proteins involved in desiccation tolerance of *Nostoc* sp. HK-01

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Nostoc sp. HK-01 is one of terrestrial cyanobacterium having a tolerance to desiccation stress and it has several ability, photosynthesis, nitrogen fixation and usefulness as a food, it is thought that it can be used for bio-chemical circulation in a closed ecosystem, including space.

In this study, we searched for the proteins that play an important role in the desiccation stress response. A study on desiccation tolerance predicted at the time of introduction to a closed bio-ecosystem is necessary. To investigate expression changes of the proteins in *Nostoc* sp. HK-01 cells, the proteins were analyzed by SDS-polyacrylamide gel electrophoresis. In the course of desiccation, an increased level of expression of a certain was detected.

Keywords: cyanobacteria, *Nostoc* sp., desiccation tolerance, stress protein