

Searching for water stress proteins in terrestrial cyanobacteria, *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 genes that would play an important role in the desiccation stress response. Initially, to investigate expression changes of the proteins in *Nostoc* sp. HK-01 cells, proteins of the desiccated cells were analyzed by SDS-polyacrylamide gel electrophoresis. The cells were dried in a desiccator. In the course of desiccation of the cells, the expression level of some proteins was increased.

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