

Gene expression analysis of *Nostoc* sp. HK-01 in drought stress

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A strain of the terrestrial cyanobacterium *Nostoc* sp. HK-01 could be used for bio-chemical circulation in a closed ecosystem including space. Furthermore, its high tolerance to water-deficit environments has ability of usefulness as a food. In this study, genes of *Nostoc* sp. HK-01 induced by drought stress were explored.

Nostoc sp. HK-01 cells were dehydrated slowly. Proteins or RNAs were extracted from dehydrated or wet HK-01 cells. Extracted proteins are applied to SDS-polyacrylamide gel electrophoresis. In comparison with the wet cell proteins, significant abundance changes of some proteins in the dehydrated cells were detected. In addition, many genes increased level of expression in dehydrated cells were detected by RNA-sequencing.

References:

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Keywords: cyanobacteria, drought tolerance