

## Tolerance of heavy ions in a terrestrial cyanobacterium, *Nostoc* sp. HK-01

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A terrestrial cyanobacterium, *Nostoc* sp. HK-01, is a candidate species for the Tanpopo Project because of several tolerances to severe Space environments. Heavy ions are especially severe environmental elements and can cause DNA and other serious damages to living organisms. We showed the tolerance to heavy ions in *Nostoc* sp. HK-01.

A dried colony of HK-01 was exposed to heavy ions ( He and Ar) in HIMAC. Survival abilities were investigated by FDA cell staining and a growth method. We will present the results on HK-01 as a candidate organism for the Tanpopo Project.

Keywords: Cyanobacteria, Heavy ions tolerance, *Nostoc* sp. HK-01