

## Relationship between cell layer of *Nostoc* sp. HK-01 and tolerance against UV radiation

\*Reiko Ajioka<sup>1</sup>, Midori Ong<sup>1</sup>, Shunta Kimura<sup>1</sup>, Hiroshi Katoh<sup>2</sup>, Kaori Tomita-Yokotani<sup>1</sup>

1. University of Tsukuba, 2. University of Mie

We have already reported that dry colonies of a cyanobacteria, *Nostoc* sp. HK-01, have several tolerances to the elements of space environments. Cyanobacteria have the ability to produce, extra-cellular substances, which can protect against UV radiation. There are possibilities that inner cellular substance have the same abilities. We investigated the correlation between protective abilities against UV radiation in outer and inner cellular substances and the cell layer. We will show the relationship between the thickness of the cell layer and the tolerance against UV radiation in *Nostoc* sp. HK-01.