

Dry heat tolerance of a terrestrial cyanobacterium, *Nostoc* sp. HK-01

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Terrestrial cyanobacteria have played an important role in carbon and nitrogen circulation on the earth since ancient times. Terrestrial cyanobacteria have a dry heat tolerance from 60 to over 100°C, but the detailed function of the tolerance has not yet been determined. Dry heat tolerance is important for terrestrial cyanobacteria to survive on land. A terrestrial cyanobacterium, *Nostoc* sp. HK-01 has a dry heat tolerance up to 100°C for 10 h. We elucidated that akinete (dormant cell) is the cell type which has a tolerance to dry heat in *Nostoc* sp. HK-01. Some active substances may exist in the akinete. Here, we will show a candidate active substance related to dry heat tolerance in *Nostoc* sp. HK-01.

Keywords: Akinete, Dry heat tolerance, *Nostoc* sp. HK-01, Terrestrial cyanobacteria