

## Two-dimensional spatial distribution of bacteria and temperature in microbial mats at Nakafusa hot spring, Central Honshu, Japan

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The purposes of this study are (1) to describe the two-dimensional distribution of bacteria, and (2) to describe the temperature structure of microbial mat.

A field study was conducted at Nakafusa hot spring August 8, 1998. The habitation structure of Cyanobacteria and Chloroflexus in this microbial mat was investigated. First, the relationship between the mixing ratio of bacteria and the indices of color were compared. Second, by establishing the relationship between the color indices and temperature, the relationship between the mixing ratio of bacteria and temperature was obtained.

As a result, we found that the higher temperature corresponds to the higher Chloroflexus ratio to Cyanobacteria.