

P-015 Molecular phylogenetic studies of the thermophilic cyanobacterium, *Mastigocladus laminosus* in Japan and Myanmar

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Molecular phylogenetic studies were carried out on a hot spring cyanobacterium, *Mastigocladus laminosus* in Japan and Myanmar from the viewpoint of phylogeny and biogeography. *M. laminosus* is a cosmopolitan, thermophilic stigonematalean cyanobacterium. In this study, phylogenetic analysis was used to characterize twelve strains of *M. laminosus* isolated from hot springs in Japan and Myanmar. The molecular analysis based on *nirA* sequences was performed in order to understand the genetic diversity among them. All strains shared common morphological characteristics of *M. laminosus*, however, phylogenetic result revealed three lineages: Lineage I, Lineage II and Lineage III. Lineage I includes reference strains from Yellowstone National Park; Lineage II and Lineage III are strains collected from Japan and Myanmar, respectively. Therefore, our observation could be reported that strains from three different locations show as three lineages which depend on geographical distribution.