

The effect of temperature on the composition of lipid biomarkers produced by *Chrysolita lamellosa*

Hideto Nakamura^{1*}, Ken Sawada¹, Hiroya Araie², Iwane Suzuki², Yoshihiro Shiraiwa²

¹Faculty of Science, Hokkaido University, ²Graduate School of Life and Environmental Science, University of Tsukuba, ³CREST, Japan Science and Technology Agency (JST)

Long chain alkenones are synthesized by several species of Haptophyte, and used for quantitative paleo-sea surface temperature reconstructions. Alkenones have also been found in many lakes around the world, although their origin is not clear. Recent phylogenetic study suggested that typical lake alkenones with high content of tetra-unsaturated compounds are possibly produced by *Chrysolita lamellosa*, *Isochrysis galbana* or their intimately-associated species. However, only two investigations hitherto reported the lipid composition for *C. lamellosa* as a function of culture temperature. Intraspecific variation in the physiological response are noted by culture experiments of *Emiliana huxleyi* strains (Conte et al., 1998), which is less understood in coastal/limnic species including *C. lamellosa*. Here, we report $U^{K'}_{37}$ and U^K_{37} values for a *C. lamellosa* strain which no alkenone composition ever studied.

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