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阿部信一郎・片野 修・南雲 保・田中次郎：木曾川の底生付着藻類群落の種組成に及ぼすアユの摂食の影響

Shin-ichiro Abe, Osamu Katano, Tamotsu Nagumo and Jiro Tanaka : Grazing effects of ayu, *Plecoglossus altivelis*, on the species composition of benthic algal communities in the Kiso River

#### Abstract

The grazing effects of a herbivorous fish, *Plecoglossus altivelis* (ayu), on the species composition of benthic algal communities were investigated in the Kiso River (Nagano prefecture). Algae were collected from the cobbles and boulders with and without grazing scars of ayu. *Achnanthydium convergens* predominated in the non-grazed algal communities, whereas *Homoeothrix janthina* in addition to *A. convergens* in the grazed algal communities. The biomass of *H. janthina* was greater in the grazed algal communities than in the non-grazed ones. There was no significant difference in the biomass of *A. convergens* between two kinds of communities. These results indicate that the grazing by ayu affects the algal species composition by increasing the biomass of *H. janthina*.

Key index words

*Achnanthydium convergens*, ayu, grazing, *Homoeothrix janthina*