Diatom 10:9-11 (英文)

渡辺仁治・浅井一視:pH1.1~2.0の無機酸性水域に出現した環境開拓種としての *Pinnularia acoricola* Hustedt var. *acoricola* 

Toshiharu Watanabe and Kazumi Asai : *Pinnularia acoricola* Hustedt var. *acoricola* as an environmental frontier species occurred in inorganic acid waters with  $1.1 \sim 2.0$  in pH value

## Abstract

*Pinnularia acoricola* Hustedt was found in Java by F. Hustedt (1934). After that, this taxon has been widely recorded from Africa by some researchers. In our research, this taxon occurred abundantly in 33 sites having extremely acid water environment with  $1.1 \sim 3.9$  in pH value. Especially in 9 sites of which pH values were below 2.0, relative abundance of this taxon in each diatom assemblage reached over 90 percent.

From above mentioned facts, it seems to suggest that this taxon has a special characteristic being able to extremely increase and form a community balanced with extremely severe environment.

The authors wish to propose to call "environmental frontier species" and "environmental frontier community" for such the species and community survived on near the ends of environmental gradient.

Key index words

acid waters, environmental frontier species, environmental frontier community, *Pinnularia acoricola* Hustedt var. *acolicola*.

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