Diatoms in sediments from Lake Aoki, Nagano Pref. (Central Japan) were investigated. Epilithic and benthic diatoms were abundant in the samples but planktonic were rare. The check-list of 242 taxa includes 117 forms which were newly recorded in Lake Aoki. Taxonomically or distributionally noticeable taxa were illustrated.

Key index words

*Diadesmis gallica* var. *undulata*, Lake Aoki, recent diatoms, taxonomy.