Abstract
A floristic study of marine diatoms (planktonic and epilithic) in coastal waters Sesoko Isl., Okinawa Prefecture, was carried out. Diatoms were examined using light microscopy (LM) and scanning electron microscopy (SEM). A total of 65 taxa (at the species and variety level) were found. Dominant taxa in the samples were *Guinardia cylindrus* (Cleve) Hasle var. *cylindrus*, *Guinardia striata* (Stolterf.) Hasle, *Neocalyptella robusta* (G. Norman) Hern.-Becer. *et* Meave, *Proboscia alata* (Brightw.) Sundström var. *alata*, *Bleakeleya notata* (Grunow) Round and *Psammodiscus nitidus* (W. Greg.) Round *et* D.G.Mann were new occurrences in Japan.

Key index words
diatoms, marine diatoms, marine epilithic diatoms, marine plankton diatoms, Okinawa, Sesoko Island