

No. 121

Prepared from strain Ak1138 (voucher specimens: TNS-AL-62138 in TNS). This culture strain was prepared from a sediment sample from Yamato-ga cave, Miyako Island, Okinawa Pref., Japan. Coll. A. Tuji, 14/xi/2013.

*Gomphosphenia ryukyuensis* Tuji et Ohtsuka sp. nov.

(Fig. 1-18)

Valves clavate with broadly rounded head pole and slightly rostrate foot pole (Figs 1-11). Central region of valve tumid (Figs 12, 16), length 15-22 $\mu$ m, width 4.7-6.7 $\mu$ m. Apical porefields, septa and pseudosepta absent. Striae slightly radiant in central part of valve, becoming convergent towards both head and foot pole, 16-19 in 10 $\mu$ m (Figs 1-13, 18). Raphe straight, filiform, with straight external terminal fissures (Figs 15-18). Four open bands (Figs 13-14).

Similar to *Gomphosphenia grovei* (M.Schmidt) Lange-Bert., distinguished from it by the rounded head pole and slightly rostrate foot pole; similar to *Gomphonema punctatum* Hust., but distinguished from it by the valve outline and size.

Holotype: slide TNS-AL-62138s in TNS.

Isotype: raw material TNS-AL-62138m in TNS; no. 121 in *Algae Aquae Dulcis Japonicae Exsiccatae*. Fasc. 7. 2016.

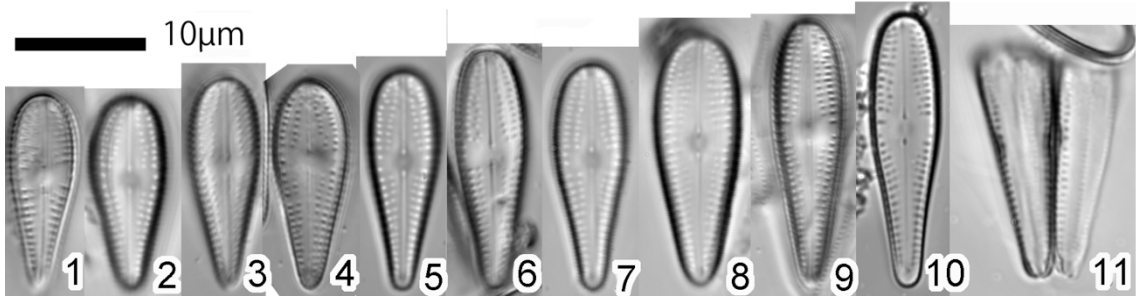
Type locality: Yamato-ga cave, Miyako Island, Okinawa Pref. Japan.

Etymology: Ryukyu is an old name for Okinawa Island.

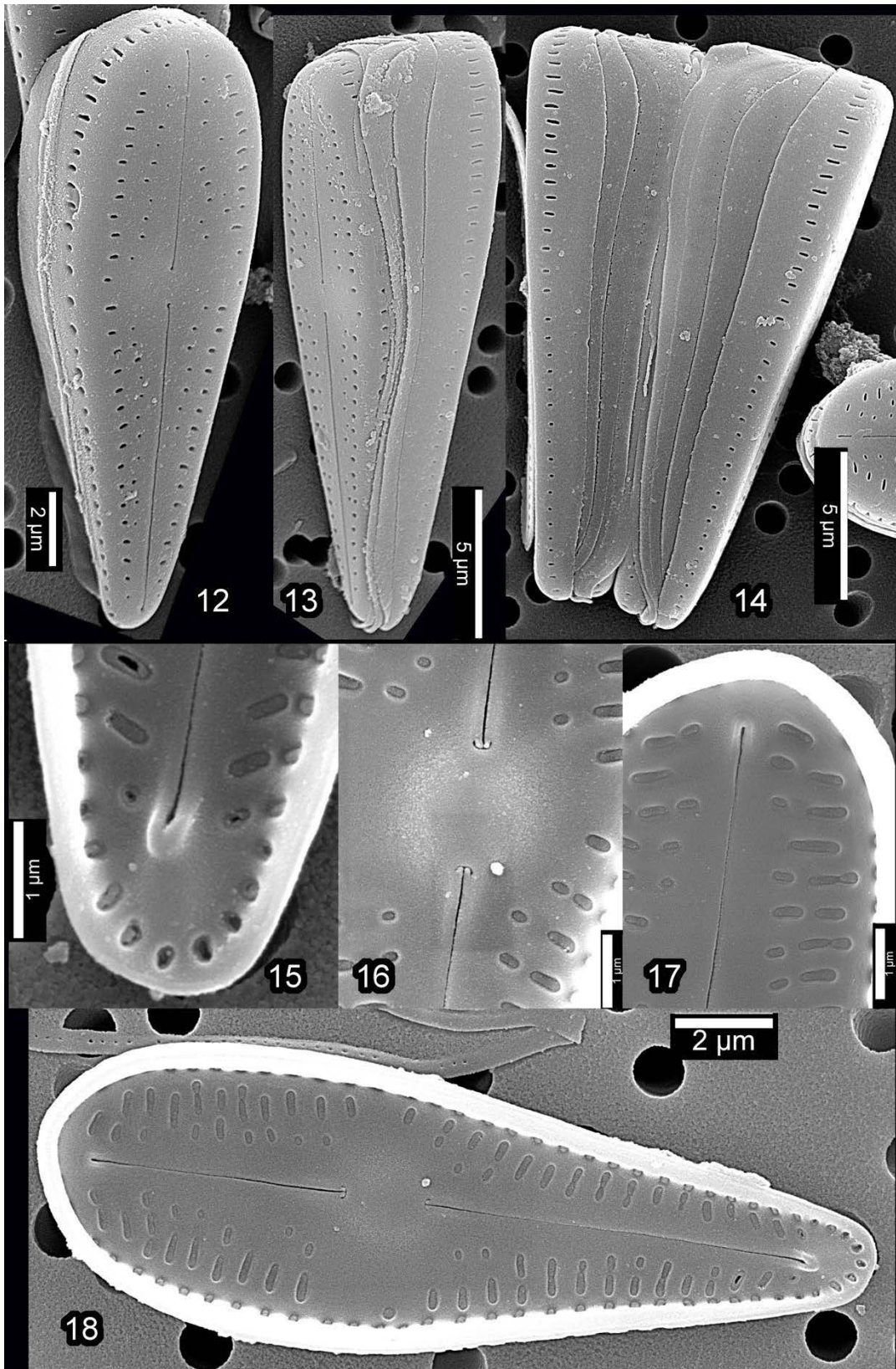
Synonym: *Gomphonema grovei* var. *lingulatum* sensu Nakai 1987, p. 192. *pl. 2, f. 30-32*.

*Gomphonema grovei* var. *lingulatum* reported by Nakai (1987) from Okinawa Main Island, should be a synonym of this newly described taxon. Although its valves are much longer (28-34  $\mu$ m) than the types, they are considered in an earlier stage of a size reduction sequence.

(Tuji, A. & Ohtsuka, T.)



Figs 1-11. *Gomphosphenia ryukyuensis* Tuji sp. nov. (LM).



Figs 12-18. *Gomphosphenia ryukyuensis* Tuji sp. nov. (SEM).