Cryptogamic nomenclatural notes. 6

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Abstract. The new combination at the rank of species, *Gogorevia heterovalva*, is published for the diatom variety *Achnanthes exigua* var. *heterovalva*.

Keywords: *Achnanthes*, *Achnanthidium*, Bacillariophyta, *Gogorevia*, diatoms, new combination, new status.

Номенклатурные заметки по водорослям, грибам, лишайникам и мохообразным. 6

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Резюме. Обнародована новая комбинация в ранге вида *Gogorevia heterovalva* для разновидности диатомовой водоросли *Achnanthes exigua* var. *heterovalva*.

Ключевые слова: *Achnanthes*, *Achnanthidium*, Bacillariophyta, *Gogorevia*, диатомовые водоросли, новая комбинация, новый статус.

Algae — Водоросли

Transfer of *Achnanthes exigua* var. *heterovalva* to the genus *Gogorevia* (Bacillariophyta). N. D. Tseplik, D. A. Chudaev. — Перенос *Achnanthes exigua* var. *heterovalva* в род *Gogorevia* (Bacillariophyta). Н. Д. Цеплик, Д. А. Чудаев.

The species *Achnanthes exigua* Grunow [≡ *Achnanthidium exiguum* (Grunow) Czarn.] was originally described by Kützing (1844) as *Stauroneis exilis* Kütz. from Trinidad and Tobago, however, the specific epithet *exilis* was already occupied when Grunow (Cleve, Grunow, 1880) transferred this species to *Achnanthes* Bory.

Achnanthes exigua var. *heterovalva* Krasske was described by Krasske (1923) from the walls of a freshwater aquarium. The main diagnostic feature separating it from the type variety was the difference in the striae density between raphe valve (RV) and rapheless valve (RLV). The original material of the variety was re-investigated by

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Lange-Bertalot *et al.* (1996) and a lectotype of its name was designated (for LM images of the type specimen see Lange-Bertalot *et al.*, 1996: Taf. 5, Fig. 1). The variety together with the species was placed in the genus *Achnanthidium* Kütz. by Czarnecki (1994) as *Achnanthidium exiguum* var. *heterovalvum* (Krasske) Czarn. with no analysis, probably just based on the wide concept of the genus suggested by Round *et al.* (1990).

The type material of *Achnanthes exigua* was recently thoroughly investigated by Taylor *et al.* (2014), and showed no pronounced difference in the striae density between RV and RLV, in contrast to var. *heterovalva*. Thus, we consider the latter deserving the status of a species rather than a variety.

A group of species around *Achnanthes exigua* was recently placed in a new genus *Gogorevia* Kulikovskiy et al. (Kulikovskiy *et al.*, 2020) based on the integrative morphological and molecular approach. The genus forms a sister clade to *Lemnicola* Round et Basson within a larger clade of monoraphid diatoms assigned to the family Achnanthidiaceae D. G. Mann. The following combination of characters is diagnostic for *Gogorevia*: external distal raphe endings deflected in opposite directions, presence of a stauros, uniseriate striae and protracted valve ends. The morphology of *Achnanthes exigua* var. *heterovalva* was illustrated by LM and SEM images, e. g., by Chudaev and Gololobova (2016: Pl. 134–135 under the name *Lemnicola exigua* (Grunow) Kulikovskiy et al.). It is evident from these images and LM images of the lectotype that the taxon is a member of *Gogorevia*. Summarizing all the facts mentioned above, we propose that *Achnanthes exigua* var. *heterovalva* should be transferred to the genus *Gogorevia* at the rank of species.

Gogorevia heterovalva (Krasske) Tseplik et Chudaev, comb. et stat. nov.

Basionym: *Achnanthes exigua* Grunow var. *heterovalva* Krasske, 1923, Bot. Archiv, 3(4): 193, Fig. 9a–b.

≡ *Achnanthidium exiguum* (Grunow) Czarn. var. *heterovalvum* (Krasske) Czarn., 1994, Mem. Calif. Acad. Sci., 17, 2: 157.

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