

## Nomenclatural notes on dinoflagellates from the Black Sea

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Під час підготовки списку динофлагелатів Чорного моря деякі сучасні назви були визнані незаконними або недійсними, або потребують уточнення. Тут пропонуються номенклатурні зміни відповідно до Мадридського кодексу (ICN, Turland & al., 2025).

During the preparation of a list of dinoflagellates from the Black Sea, some current names were found to be illegitimate or invalid or require clarification. Nomenclatural changes are proposed here in accordance with the Madrid Code (ICN, Turland & al. 2025).

***Dinophysis abei*** Guiry & Bryantseva, *nom. nov.*

Replaced synonym: *Phalacroma rudgei* G.Murray & Whitting *Transactions of the Linnean Society of London, Botany, Series 2, 5: 331, pl. 31: fig. 6, 1899.*

Replaced designation: “*Dinophysis rudgei*” T.H.Abé (1967: 59), *nom. inval.*

Synonym: *Prodinophysis rudgei* (G.Murray & Whitting) Balech (1944: 429, adnot.).

Registration: <http://phycobank.org/107263>

Etymology: Named for Tohru Hidemiti Abé (1899–1971), of Niigata University, Japan.

Notes: Abé (1967: 59) did not provide a full and direct reference to the place of publication of the supposed basionym *Phalacroma rudgei* G.Murray & Whitting, 1899. However, if validated, “*Dinophysis rudgei* (G.Murray & Whitting) T.H.Abé”, *nom. inval.* would be a later homonym of the heterotypic *Dinophysis rudgei* G.Murray & Whitting (1899: 331, pl. 31: fig. 9), and thus the taxon requires a new name within *Dinophysis*.

*Dinophysis sphaeroidea* (J.Schiller) Balech, 1967

Note: While *Dinophysis sphaeroidea* (J.Schiller) Balech may appear to be a later homonym of “*Dinophysis sphaeroidea*” Hensen (1911: 165), the Hensen name is an invalid designation (name only) that has not since been validated as far as we can establish.

***Gonyaulax gracilis*** Schiller ex Guiry & Bryantseva, *sp. nov.*

Description: Very small cells. The epicone and hypocone are rounded, with an apical pore. The cingulum is central. The groove extends far onto the epicone, and on the hypocone it reaches the antapex. The cingulum and groove are wide, with a slight depression. Chloroplasts are present.

Dimensions: 11-18 µm long, 7-13 µm wide. [Direct translation from the Russian of Krakhmalny (2021b: 132)].

Type: Schiller (1935: fig. 325 a, b)

Type locality: The above description applied to Black Sea populations.

Registration: <http://phycobank.org/107264>

Note: Schiller (1935: 310) did not provide a description, just including the name under “*Unsichere Arten*” [Unsafe species] with no indication of a type locality. As the designation was published after 1 January 1908, it was not validated by the Schiller’s (1935: fig. 325 a, b) illustration (Art. Art. 38.8).

“*Triplos furca* var. *berghii* (Lemmermann) F.Gómez”, 2013

Note: *Ceratium furca* var. *berghii* Lemmermann (1899: 348) was described for Bergh's (1881: pl. 13: fig. 20, "Varietäten von *Ceratium furca*", included in the plate description without a name). Krakhmalny (2011a: 271) introduced the name "*Neoceratium furca* var. *berghii*" giving the basionym as "*Ceratium furca* var. *berghii* Jörg. 1911. Int. Rev. Ges. Hydro-biol. Hydrogr. **4** (suppl.): 17, figs. 23 a-b". This is not a valid name as there is not a full and direct reference to the place of publication of the basionym. Jörgensen (1911: 17) employed the name "*Ceratium furca* subsp.  $\alpha$  *Berghii*", and cited "(Lemm. l. c.)" thus validating the combination *Ceratium furca* subsp. *berghii* (Lemmerman) Jörgensen. Gómez (2021: 350) stated that "*C. furca* var. *berghii* is *P[eridinium] eugrammum* [Ehrenberg]" apparently suggesting that *Tripus furca* var. *berghii* (Lemmermann) F.Gómez should be considered a synonym of *Tripus eugrammus* (Ehrenberg) F.Gómez (2021: 367), although *Tripus furca* var. *berghii* (Lemmermann) F.Gómez is not included in synonymy by Gómez (2021: 367), and is currently an invalid designation (Art. 36.3) as Gómez (2013: 9) simultaneously proposed "*Tripus berghii*" and "*Tripus fusus* var. *berghii*".

***Tripus hexacanthus* var. *contortus*** (Lemmermann) Guiry & Bryantseva, *comb. nov.*

Basionym: *Ceratium hexacanthum* var. *contortum* Lemmermann *Abhandlungen herausgegeben vom Naturwissenschaftlichen zu Bremen* 16: 347, pl. II [2]: figs. 20, 21, 1899.

Type: Atlantic, Gathering 'Barber II (Atlantik)', leg. A. Barber at 3°N, 27°W; illustrated in Lemmermann (1899: pl. II [2]: figs. 20, 21).

Registration: <http://phycobank.org/107268>

Note: "*Tripus hexacanthus* var. *contortus*", proposed by Gómez (2013: 10) based upon *Ceratium hexacanthum* var. *contortum* Lemmermann [1899: 347, pl. II [2]: figs. 20, 21] is invalid as "*Tripus hexacanthus* f. *contortus*", "*Tripus hexacanthus* var. *contortus*" and "*Tripus reticulatus* f. *contortus*" were simultaneously proposed by him, all of which are also invalid (Art. 36.3). The name *Tripus hexacanthus* var. *contortus* was not included by Gómez (2021).

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