Cryptogamic nomenclatural notes. 9

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Abstract. The name *Vaucheria compacta* var. *dulcis* is based on 1974 Latin diagnosis and validated here by the type indication in connection with new records of the alga from the Gulf of Finland. The holotype is a specimen identified by J. Simons and stored in the Leiden herbarium of the Naturalis Biodiversity Center (L). The Baltic Sea specimens match the diagnosis in the key feature, the morphology of antheridia.
Keywords: *Vaucheria compacta* var. *dulcis*, yellow-green algae, Gulf of Finland.

Номенклатурные заметки по водорослям, грибам, лишайникам и мохообразным. 9

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Резюме. Название *Vaucheria compacta* var. *dulcis* основано на латинском диагнозе 1974 г. и валидизировано здесь указанием типа в связи с недавними новыми находками этой водоросли в Финском заливе. Голотипом выбран образец, определенный автором названия и хранящийся в Лейденском гербарии (L). Экземпляры из Балтийского моря соответствуют диагнозу по ключевому признаку – морфологии антеридиев.
Ключевые слова: *Vaucheria compacta* var. *dulcis*, желтозеленые водоросли, Финский залив.

Algae — Водоросли

Validation of *Vaucheria compacta* var. *dulcis* (Vaucheriaceae, Xanthophyceae) and its new records in the Gulf of Finland (Baltic Sea). V. S. Vishnyakov, T. V. Izik, S. N. Shadrina. — Валидизация *Vaucheria compacta* var. *dulcis* (Vaucheriaceae, Xanthophyceae) и его новые находки в Финском заливе (Балтийское море). В. С. Вишняков, Т. В. Ицык, С. Н. Шадрина.

The name "*V. compacta* var. *dulcis* J. Simons" was introduced with a Latin diagnosis prepared on the basis of collections made from the estuaries of the Rhine, Meuse, and Scheldt rivers, as well as from the Zuid-Flevoland polder and a brook in late 1960s, without a reference to any particular specimen or collection as a type (Simons, 1974). Under the rules of the International Code of Nomenclature for algae, fungi, and plants (ICN, Turland *et al.*, 2025) this name was therefore not validly published (Article 40.1). It is validated here by the type indication and providing reference to previously published diagnosis in accordance with ICN Article 33.1. The type specimen presents one of those from Zuid-Flevoland, identified by J. Simons himself and stored in the Leiden herbarium (L) of the Naturalis Biodiversity Center (Bijmoer *et al.*, 2025).

Vaucheria compacta var. dulcis J. Simons, var. nov. — *V. compacta* var. *dulcis* J. Simons 1974, Acta Bot. Neerl., 23(5–6): 624, figs 7b, d, e, 8a–e, *nom. inval.* (*diagn. Lat., sine typo*).

Holotype (indicated here by V. S. Vishnyakov): "Hab. Nederland, Zuid Flevoland, pas drooggevallen polder, *Senecio congestus* aspect. 20 VIII 1968. Fixatie uit cultuur. J. Simons" L 4114898 (photo!).

New records: St. Petersburg, Sestroretsk, the Gulf of Finland, sandy beach in Dubki park, 60.09685°N, 29.94071°E, *Vishnyakov*, 7 X 2017, specimens V-81, V-169, and V-432 in the *Vaucheria* collection of the Laboratory for Algology IBIW RAS; *ibid.*, the nature reserve "Southern Coast of the Neva Bay", the Gulf of Finland, sandy beach, in shallow water, water temperature 18.2 °C, salinity 1953 ppm, conductivity 2087 μS·cm^{-1}, 59.93088°N, 29.70476°E, *Shadrina*, det. *Izik*, *Vishnyakov*, 21 IX 2025, LE A0007938; Leningrad Region, Kingisepp District, the Gulf of Finland, Luga Bay, Logi, 59.83118°N, 28.49755°E, water edge, salinity ~ 4000 ppm, *Sharov*, det. *Vishnyakov*, 17 VII

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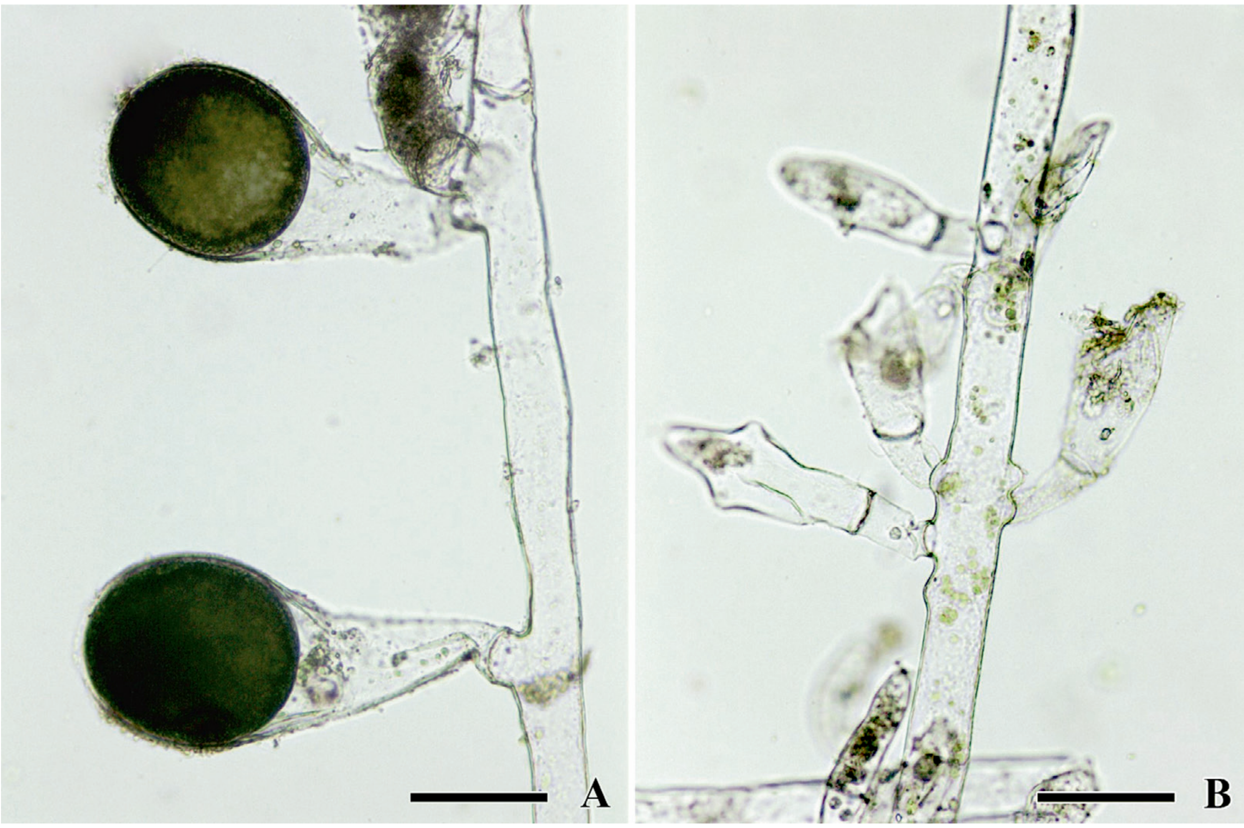

Fig. 1. *Vaucheria compacta* var. *dulcis* from the Gulf of Finland.
A – oogonia, B – antheridia (alive specimens preserved as V-81). Scale bars: 100 μm.

2019, the *Vaucheria* collection of the Laboratory for Algology IBIW RAS V-598 (female plants and sterile filaments with a lot of aplanospores).

Vaucheria compacta var. *dulcis* is known from freshwater and oligohaline, mostly tidal habitats in Europe (Simons, 1974), North America (Schneider *et al.*, 1996, 1999), and West Asia – Caucasus (Vishnyakov, 2025). It differs from the type variety in having antheridia that are rarely clustered and possess no more than two lateral pores. The stability of antheridial morphology under varying salinity conditions in experimental cultures supports its recognition as a separate taxon (Schneider *et al.*, 1996). *V. compacta* var. *koksoakensis* Blum et Wilce, a variety known from a few localities in North America, differs from the both ones by its extremely elongated oogonia (Blum, Wilce, 1958; Schneider *et al.*, 1993). Although the taxonomy of this intraspecific complex is currently supported solely by morphological observations, the consistent morphological distinctions should not be overlooked until molecular evidence becomes available.

The studied specimens from the Gulf of Finland (Fig. 1) show antheridia typical of the variety: 130–180 μm long, mostly single or rarely in clusters of 2(3), fusiform to conical, usually flexed on the longitudinal axis, and bearing 0–2 lateral pores appearing on short papillae. The occurrence of this "freshwater" variety in the Gulf of Finland is readily explained by the nearly freshwater and oligohaline conditions in this part of the Baltic Sea, strongly influenced by the Neva River flow.

In Russia, *V. compacta* (Collins) Collins *ex* Taylor has also been reported from the Vistula Lagoon, Kaliningrad Region, without indication of variety (Volodina, Gerb, 2023). The closest known localities belong to the Daugava River mouth in Latvia (as *V. sphaerospora* var. *dioica* Rosenvinge, Kumsare, 1967). *Vaucheria compacta* var. *dulcis* is therefore first recorded for Russia.

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