

## Cryptogamic nomenclatural notes. 7

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**Abstract.** The name *Mallomonas silvicola* (Chrysophyceae) is validated by means of indicating its type. A new description and microphotographs are presented. The species is recorded for the first time for the flora of Russia.

**Keywords:** *Mallomonas silvicola*, Chrysophyceae, validation, Russia.

Номенклатурные заметки по водорослям, грибам, лишайникам  
и мохообразным. 7

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**Резюме.** Валидизировано название золотистой водоросли *Mallomonas silvicola*. Указан го-  
лотип названия, приведено новое описание и микрофотографии. Вид впервые приводится для  
флоры России.

**Ключевые слова:** *Mallomonas silvicola*, Chrysophyceae, валидизация, Россия.

ALGAE — ВОДОРОСЛИ

**Validation of the name *Mallomonas silvicola* (Chrysophyceae), a new species for the flora of Russia.** S. N. Shadrina, R. M. Gogorev, V. A. Stepanova. — Валидизация названия *Mallomonas silvicola* (Chrysophyceae), нового вида для флоры России. С. Н. Шадрина, Р. М. Гогорев, В. А. Степанова.

When published *Mallomonas pumilio* K. Harris et D. E. Bradley var. *silvicola* K. Harris et D. E. Bradley, the authors did not indicate its type or even type locality (Harris, Bradley, 1960). Neither was it indicated by Asmund *et al.* (1982), who emended the description of the taxon. Thus, the name was not validly published (Turland *et al.*, 2018: Art. 40). This fact was mentioned in the AlgaeBase (Guiry, Guiry, 2023) by Guiry and Salvador in nomenclatural notes to “*M. pumilio* var. *silvicola*” and “*M. silvicola* (K. Harris et D. E. Bradley) Němcová”, respectively. The latter pointed out that “Fig. 55 cited as page of publication of basionym; *Mallomonas pumilio* var. *silvicola* Harris et Bradley perhaps not validly published (multiple localities cited); authorship possibly attributable solely to Y. Němcová”. Actually, Němcová (Němcová *et al.*, 2013), when raising the rank of the taxon to the species, indicated its type, namely

Fig. 55 from the protologue, using the term “lectotype”, contrary to the Art. 40.6 of the International Code of Nomenclature for algae, fungi, and plants (Turland *et al.*, 2018). Therefore, the name still has not been validly published.

We accept this name at the rank of species, and are validating it by indicating its holotype and providing a new description and illustrations. The holotype cited below is the first record of the species for the flora of Russia.

***Mallomonas silvicola*** Němcová ex Shadrina et Gogorev, sp. nov. (Fig. 1)

— *Mallomonas pumilio* var. *silvicola* K. Harris et D. E. Bradley, 1960, J. Gen. Microbiol., 22: 770, Figs. 33–36, Pl. 7, Figs. 55, 59, 61, 62, nom. inval. — *Mallomonas silvicola* (K. Harris et D. E. Bradley) Němcová in Němcová *et al.*, 2013, Beih. Nova Hedwigia, 142: 38, Figs. 8A–K, nom. inval.

Cells 10–28 × 7–15 µm. Collar scales 3–6 × 1.7–2 µm, forward-pointing, triangular elongate and asymmetric with a small dome and distinct peak on it. Body scales 3–6 × 1.7–3.5 µm; domeless rhomboidal with reticulation from longitudinal irregularly arranged ribs forming the meshes, each enclosing various number of pores, usually 3–4. Cysts 10–19 µm in diam., vary in shape from nearly spherical to ellipsoidal.

Holotype: Fig. 1B, SEM stub from the specimen LE AW000003 deposited in the algae collection of Komarov Botanical Institute (LE).

Type locality: Russia, St. Petersburg, Kurortny district, Komarovo, 60°10'53.1"N 29°45'53.8"E, in a small temporary water body on the coast of the Gulf of Finland, 19 V 2022, *Stepanova*; det. *Shadrina, E. S. Gusev*, the algae collection of the Komarov Botanical Institute (LE AW000003).

Our specimens differ from the ones described in literature in the following: the cell size has a narrower range, 17.8–22.2 × 11.1–13.9 µm, than in Harris, Bradley (1960); the body scales are smaller (3–5 × 1.7–2.0 µm against 4.5–6.0 × 2.5–3.5 µm in Asmund *et al.*, 1982), the cyst size has a wider range (e.g., against 13–17 µm in Harris, Bradley, 1960). The other morphological characters correspond to the values given in earlier descriptions.

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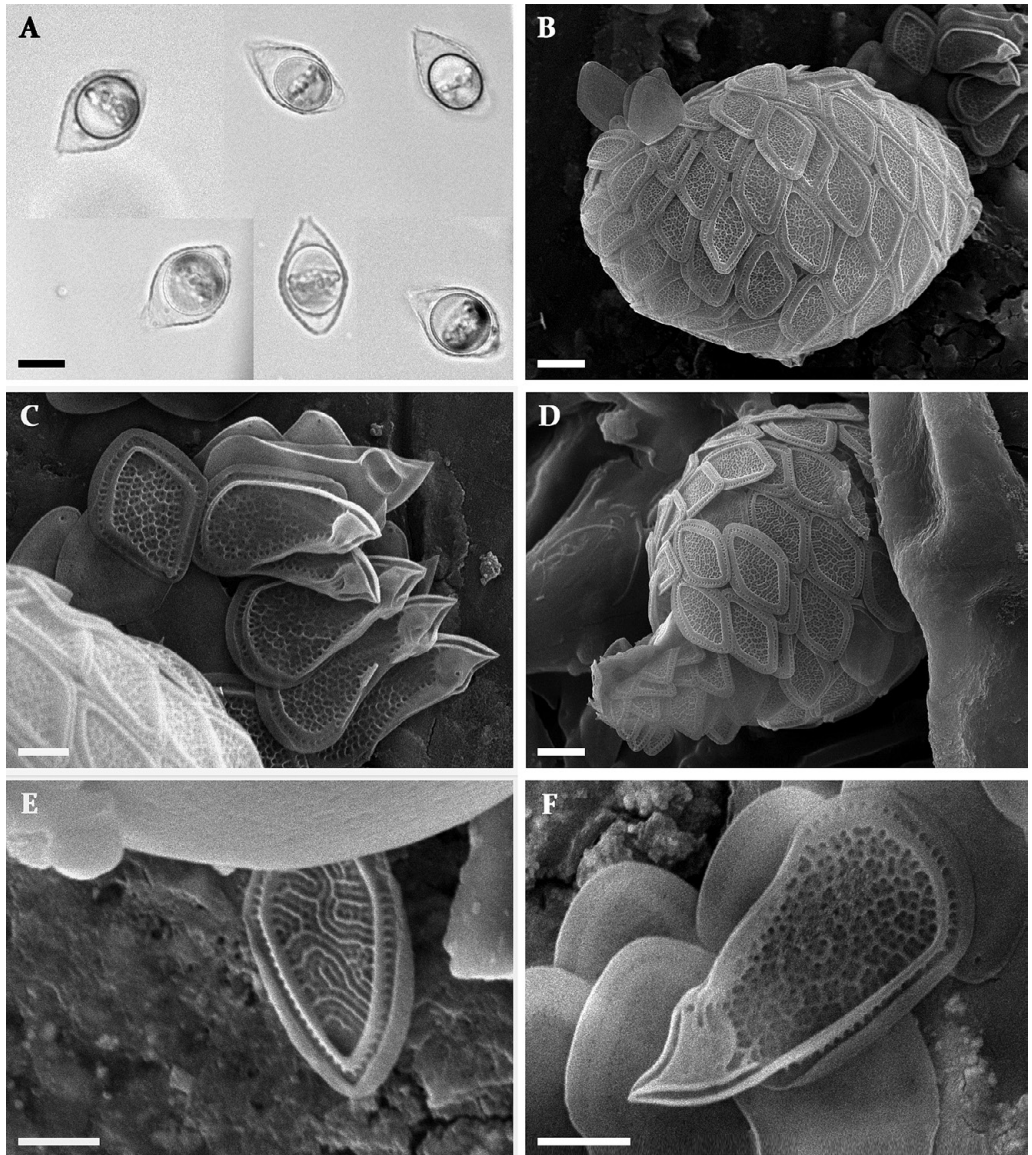


Fig. 1. *Mallomonas silvicola* (LE AW000003).

A, B, D – cells where cyst development has started, C – a group of collar and body scales,

E – body scale, F – collar scale. A – LM, B–F – SEM.

Scale bars: A – 10  $\mu$ m; B, C – 2  $\mu$ m; D–F – 1  $\mu$ m.

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