

Freshwater Biological Association

FBA Translation (New Series) No. 165

Title: [Taxonomic description of Peridinium lomnickii i P. lomnickii
var. splendida and P. wierzejskii.]

Author(s) STARMACH K.

Reference: in: Flora Slodkowodna Polski. Tom 4. Cryptophyceae, Dinophyceae,
Raphidophyceae. PP326, 328, 329 & 330. Warsaw. Polska Akademia
Nauk, Inst.Bot.

Original language: Polish

Date of publication of original: 1974

Translator: G. Jaworski

Date of publication of translation: 1986

Number of pages of translation: 4

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been edited by the original authors.

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STARMACH K. 1974

[Taxonomic description of Peridinium lomnickii and P. lomnickii var. splendida.]

in: Flora Slodkowodna Polski. Tom 4. Cryptophyceae, Dinophyceae, Raphidophyceae. Starmach K. pp 326, 328 & 329. Warsaw. Polska Akademia Nauk, Inst. Bot.

Translator: G.H.M. Jaworski

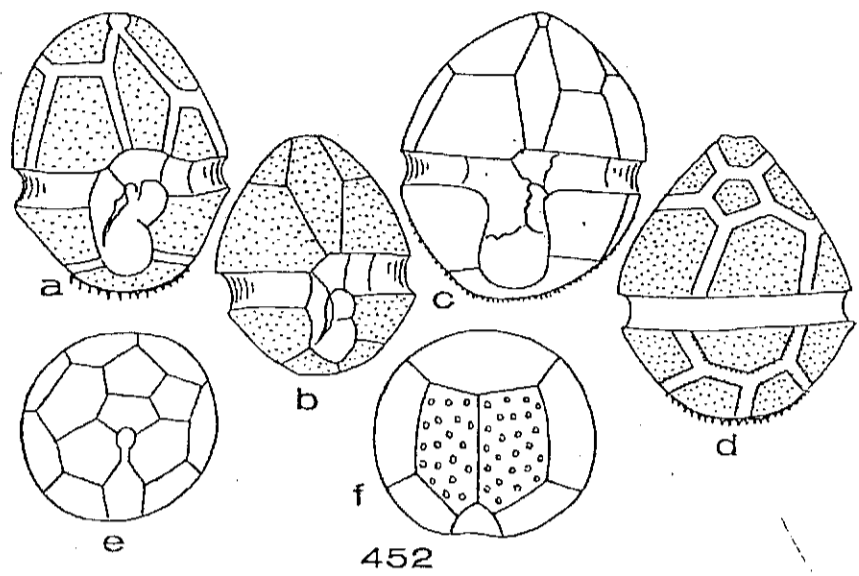
Peridinium lomnickii Woloszyńska 1916 (= P. lomnickii var. punctulatum Lindem 1924; Glenodinium lomnickii (Wolosz.) Lindemann 1928) fig. 452

The egg-shaped cells are slightly flattened dorsal-ventrally, with an opening at the apex. They are 25-40 μ m long and 22-35 μ m wide. The campanulate epivalve is distinctly larger than the hypovalve, which is rounded and sometimes indented at the rear. The wide circular sulcus is left-wise coiled. The ventral sulcus does not overlap the epivalve nor reach the posterior end of the hypovalve. The plates are covered with numerous warts and spines. The furrows are sometimes striated. Chromatophores are small and yellow brown; the nucleus is oval. Sometimes oil spots are visible within the cells. The cysts are egg-shaped with a thick wall and undulating surface.

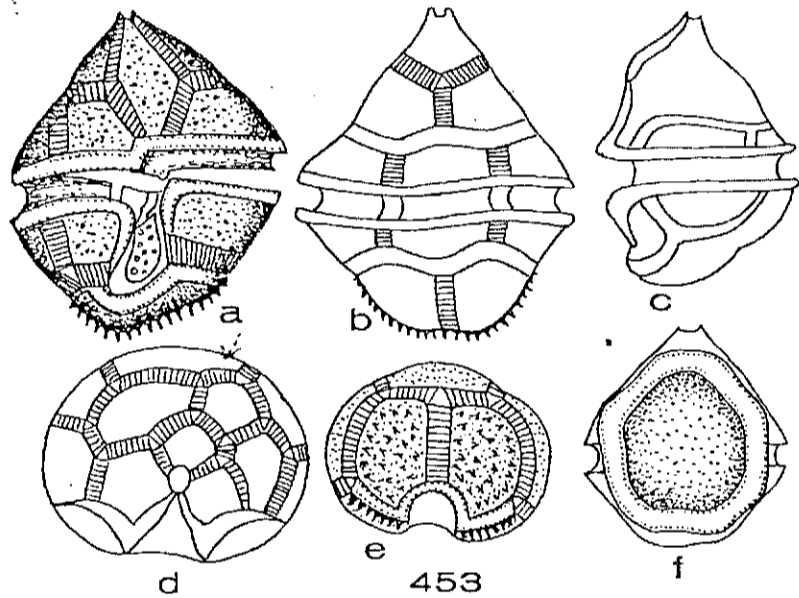
This species is found mainly during winter in small planktonic lakes in Poland, Holland, France and Central Europe.

Var. splendida Woloszyńska 1916 (= Glenodinium lomnickii var. splendida (Wolosz.) Lindemann 1928) fig. 453.

Cells are 5-sided, strongly flattened dorsal-ventrally, 30-50 μ m long and 28-40 μ m wide. The epivalve is larger than the hypovalve, while the right-hand side of the cell is more stretched than the left. The plates are densely covered with spines. On both sides of the rhombic plate there are two serrated horns. The wide furrows are striated cross-wise. The chromatophores are dark brown. The cysts are irregular oval, surrounded by thick walls. The variety is found in the spring plankton of small lakes in the Lwow region of Poland and throughout Western Europe. According to Holl this species is an oxygen lover, being found in acidic, humic waters, pH 4-6, containing large amounts of iron.



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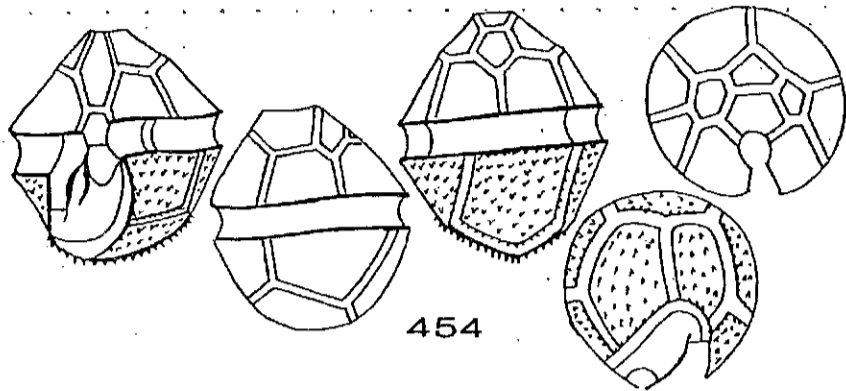
453

Rys. 452, 453. 452 — *Peridinium Lomnickii*: a, b, c — strona brzuszna, d — strona grzbietowa, e — epiwalwa, f — hypowalwa (według Wołoszyńskiej), 453 — *P. Lomnickii* var. *splendida*: a — strona brzuszna, b — strona grzbietowa, c — widok z boku, d — epiwalwa, e — hypowalwa, f — cysta (według Lindemanna)

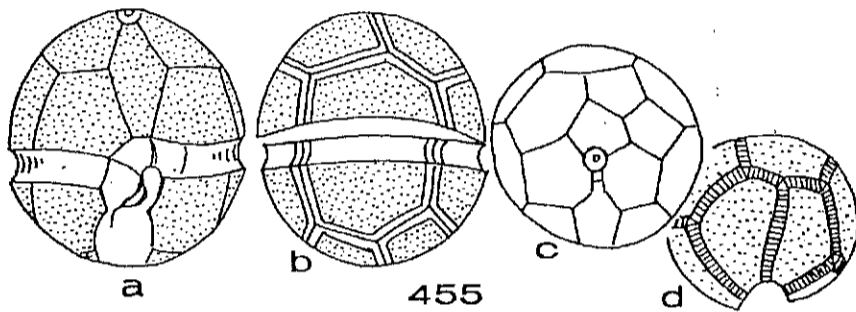
Peridinium Wierzejskii Wołoszyńska 1916 (= Glenodinium Lomnickii var. Wierzejskii
(Wołosz.) Lindemann 1928) (fig. 455)

Cells are spherical and not flattened dorsal ventrally, 20-30-35 μ wide with an apical opening. The orbital sulcus is coiled leftwise. The ventral sulcus overlaps the epivalve very insignificantly, extending slightly into the rear and does not completely reach the end of the hypovalve. The right antapical plate is smaller than the left. Plates are densely covered with minute warts. The furrows are often wide, sometimes with transverse striations. A round nucleus is positioned centrally.

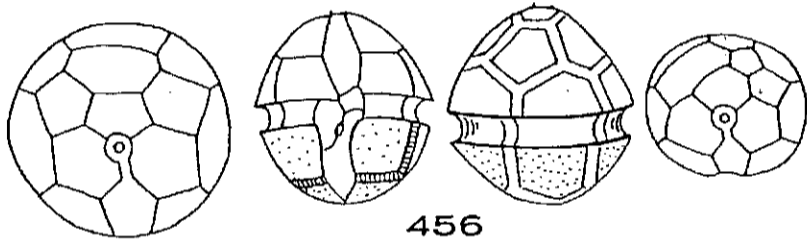
Found in the plankton of Lake Smreczynski in the Tatra Mts., Poland.



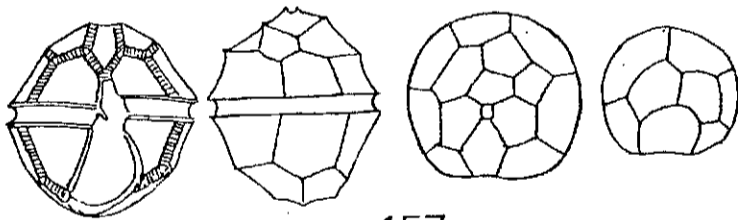
454



455



456



457

Rys. 454—457. 454 — *Peridinium Godlewskii* (według Wołoszyńskiej), 455 — *P. Wierzejskii* (według Wołoszyńskiej), 456 — *P. Wierzejskii* f. *carpaticum* (według Wołoszyńskiej), 457 — *P. keyense* (według Nygaard)

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Notice

Please note that these translations were produced to assist the scientific staff of the FBA (Freshwater Biological Association) in their research. These translations were done by scientific staff with relevant language skills and not by professional translators.