

***Eoridingia*, a replacement name for the illegitimate fossil cyanobacterial genus *Sphaerina* Riding & Soja (1993) (*Cyanobacteriophyta incertae sedis*)**

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Maljavkina (1949: 72) established the fossil spore genus *Sphaerina* for dispersed trilete spores mainly attributed to *Osmundaceae* and occasionally to *Marattiaceae*, *Azolla*-type water ferns, and *Selaginella*. The genus was defined by rounded to subtriangular spores with trilete marks and spinose ornamentation. Its type species, *Sphaerina spinellata* Maljavkina (1949: 120), was later designated by Delcourt & Sprumont (1959: 37).

Riding & Soja (1993: 726) later introduced, with a description in English, the fossil cyanobacterial genus *Sphaerina* for Silurian calcareous microfossils from the Alexander Terrane of Alaska. Their type species, *Sphaerina congregata* Riding & Soja, was described separately, as clusters of spherical calcareous bodies preserved in carbonate thin sections. According to Art. 53.1 of the *International Code of Nomenclature for algae, fungi and plants* (Turland & al. 2025), the generic name *Sphaerina* Riding & Soja (1993) is illegitimate because it is a later homonym of *Sphaerina* Maljavkina (1949). Consequently, a replacement name is proposed below, and the sole species is combined under it.

***Eoridingia*** U.B.Deshmukh & Molinari, *nom. nov.*

Replaced synonym: *Sphaerina* Riding & Soja, *Journal of Paleontology* 67: 726, 1993, *non Sphaerina* Maljavkina, *Trudy Vsesoyuznogo Neftianogo Nauchno-Issledovatel'skogo Geologorazvedochnogo Instituta, Novaya Seriya* 33: 72, 1949.

Eymology: After Robert Riding (b. 1944), in recognition of his contributions to the study of calcareous algae and one of the original authors of the genus, prefixed with the Greek ἠώς, “dawn, morning”, referring to the Early Cambrian age of the type species.

Type: *Eoridingia congregata* (Riding & Soja) U.B.Deshmukh & Molinari.

Registration: <http://phycobank.org/107391>

***Eoridingia congregata*** (Riding & Soja) U.B.Deshmukh & Molinari, *comb. nov.*

Basionym: *Sphaerina congregata* Riding & Soja, *Journal of Paleontology* 67: 726, fig. 15.3–5, 1993.

Holotype: United States, Alaska, Prince of Wales–Hyder Census Area, Heceta Island (USNM 465172, fig. 15.4–5 in Riding & Soja 1993).

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Delcourt A. & Sprumont G. (1959). Spores, grains de pollen, Hystrichosphères et Péridiniens dans le Wealdien de Féron-Glageon. *Annales de la Société Géologique du Nord* 79(1): 29–64, plates 3–7.

Maljavkina, V.S. (1949). Opredelitel' spor i pyl'tsy. Yura–mel [Keys to spores and pollen. Jurassic–Cretaceous]. *Trudy Vsesoyuznogo Neftyanogo Nauchno-Issledovatel'skogo*



- Geologorazvedochnogo Instituta. Novaya Seriya* 33: 1–138, i–xvi, 5 figures, 1 table, 51+4 plates.
- Riding, R. & Soja, C.M. (1993). Silurian calcareous algae, cyanobacteria, and microproblematica from the Alexander Terrane, Alaska. *Journal of Paleontology* 67(5): 710–728, 17 figures, 5 tables.
- Turland, N.J., Wiersema, J.H., Barrie, F.R., Gandhi, K.N., Gravenyck, J., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Klopper, R.R., Knapp, S., Kusber, W.-H., Li, D.-Z., May, T.W., Monro, A.M., Prado, J., Price, M.J., Smith, G.F. & Zamora Señoret, J.C. editors (2025). *International code of nomenclature for algae, fungi, and plants (2025 Edition Madrid Code)* Regnum Vegetabile Volume 162. pp. [i]–xlvii, 1–303. Chicago & London: The University of Chicago Press.