

**New combinations in *Vesiculostroma* (fossil *Chroococcales*, *Cyanophyceae*) and proposal of *Vesiculostromataceae* *nom. nov.***Umakant B. Deshmukh¹ & Eduardo A. Molinari-Novoa²

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The fossil cyanobacterial genus *Vesicularia* Vologdin (1962) was established for vesicular colonial microfossils occurring in Proterozoic stromatolitic deposits of Siberia. The genus is typified by *Vesicularia nidifica* Vologdin and placed within the family *Vesiculariaceae* Vologdin (Vologdin 1962). Additional taxa, including *V. coalita* Vologdin and *V. dispersa* Vologdin, were described in the same work, whereas Vologdin & Titorenko (1966) later added *V. granulosa* Vologdin & Titorenko and *V. magna* Vologdin & Titorenko from the Cis-Baikal region.

Because *Vesicularia* Vologdin is a later illegitimate homonym (ICN Art. 53.1; Turland & al. 2025) of the rejected algal name *Vesicularia* P. Micheli ex Targioni Tozzetti (1826: 71) and the conserved bryophyte name *Vesicularia* (Müller Hallensis) Müller Hallensis (*Hypnaceae*, *Bryopsida*), Zijlstra & Silva (2011) replaced it with *Vesiculostroma* Zijlstra & P.C.Silva and proposed the combination *Vesiculostroma nidificum* (Vologdin) Zijlstra & P.C.Silva for its type. However, the other species of *Vesicularia* were not transferred to *Vesiculostroma*.

Additionally, because the family name *Vesiculariaceae* Vologdin is based upon an illegitimate name, it is itself illegitimate (Art. 18.3) and requires replacement. The new family name and combinations are given below.

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

Replaced synonym: *Vesiculariaceae* Vologdin, *Drevneyshiye vodorosli SSSR*: 227, 1962, *nom. illeg.*

Type genus: *Vesiculostroma* Zijlstra & P.C.Silva, *Taxon* 60: 906, 2011.

Registration: <http://phycobank.org/107352>

Vesiculostroma coalitum (Vologdin) U.B.Deshmukh & Molinari, *comb. nov.*

Basionym: *Vesicularia coalita* Vologdin, *Drevneyshiye vodorosli SSSR*: 228, 1962.

Registration: <http://phycobank.org/107353>

Vesiculostroma dispersum (Vologdin) U.B.Deshmukh & Molinari, *comb. nov.*

Basionym: *Vesicularia dispersa* Vologdin, *Drevneyshiye vodorosli SSSR*: 229, 1962.

Registration: <http://phycobank.org/107354>

Vesiculostroma granulolum (Vologdin & Titorenko) U.B.Deshmukh & Molinari, *comb. nov.*

Basionym: *Vesicularia granulosa* Vologdin & Titorenko, *Doklady Akademii Nauk SSSR* 166: 1436, 1966.

Registration: <http://phycobank.org/107355>

Vesiculostroma magnum (Vologdin & Titorenko) U.B.Deshmukh & Molinari, *comb. nov.*

Basionym: *Vesicularia magna* Vologdin & Titorenko, *Doklady Akademii Nauk SSSR* 166: 1437, 1966.



Registration: <http://phycobank.org/107356>

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