

LADOGELLA

Golub & Volkova in Volkova & Golub 1985 p. 95
emend Di Milia, Ribecai & Tongiorgi 1989 p. 15-16

Genus *Ladogella* Golub & Volkova 1985 emend.

Type species - *Ladogella rotundiformis* Golub & Volkova 1985 (by original designation).

Emended diagnosis - Vesicle subelliptical to sub-polygonal in outline, more or less constricted in the middle. Both poles bearing homomorphic first order processes. One pole (antapical) also provided with second order processes, which are surrounded by first order ones. First order processes simple, variable in shape, number and length, hollow and freely communicating with vesicle cavity. Second order processes hair-like, ornamented with verrucae, spines and transversal brick-like spines; the latter sometimes extended in form of trabeculae connecting adjacent processes.

Vesicle wall smooth to granulated; equatorial part of the vesicle smooth or ornamented with faint, parallel striae. First order processes more or less granulated.

Excystment structure in form of a longitudinal split.

Remarks - Golub & Volkova (in Volkova & Golub, 1985, pag. 95) propose the monospecific genus *Ladogella* to accommodate forms which are variable in outline and are provided with processes of two different kinds. According to Golub & Volkova the first order processes are evenly distributed on the vesicle surface. But specimens of the type species *Ladogella rotundiformis* depicted by Golub & Volkova (in Volkova & Golub, 1984, pl. 1, fig. 11; and Volkova & Golub, 1985, pl. 8, figs. 1-3) clearly show a bipolar distribution of the first order processes, which are located at the opposite poles of the vesicle, while the small equatorial area is devoided of processes. The specimens from Öland we refer to the genus *Ladogella* Golub & Volkova 1985 show the above described process distribution.

Under the optical microscope, the second ord-

er processes of the *Ladogella* specimens from Öland apparently show the same features described by Golub & Volkova (1985) seemingly forming a «filamentose structure» consisting of non anastomosed hairs. But SEM observation reveals that second order processes of the same specimens are sometimes linked by trabeculae. This feature is clearly recognizable both in the specimens referred to *Ladogella rotundiformis* and in other specimens we attribute to further, first described here, species of the same genus.

Discussion - The emended genus *Ladogella* differs from the close genus *Barakella* Cramer & Diez 1977 (Late Arenigian from Cis-Saharan Morocco) in having a greater number of second order processes which are longer and linked by trabeculae instead of anastomosed. Furthermore, the genus *Ladogella* differs from *Barakella* in having the equatorial part of the vesicle smooth or ornamented with faint striae instead of evident longitudinal diacrodian folds. Generally, the size of both first order processes and vesicle of the genus *Ladogella* are smaller than ones observed in *Barakella*.

The genus *Ladogella* differs also from the genus *Arbusculidium* Deunff 1968 (from the Tremadoc of Morocco), always in having on the antapical pole first order processes surrounding the second order processes which sometimes link each other. On the contrary on the antapical pole of the genus *Arbusculidium* are present only first order processes ramifying, distally or proximally, to form a well developed net.

LADOGELLA

Golub and Volkova in
Volkova and Golub 1985

p. 95

Род *Ladogella* Golub et. Volkova, gen. nov.

Название рода от Ладожского озера.

Типовой вид — *Ladogella rotundiformis* sp. nov.; верхний кембрий, зоны *Leptoplastus* и *Peltura*; Ленинградская обл., р. Ижора.

Диагноз. Оболочка в очертании округлая, округло-прямоугольная, неправильно округло-многоугольная. Стенка сравнительно толстая, поверхность ее гладкая или шагреневая. Снабжена выростами двух типов. Выросты первого типа расположены более или менее равномерно по поверхности оболочки. Они простые неразветвленные с ширококоническим полым основанием, переходящим в тонкий среднего размера сплошной шпик. Верхушка последнего заострена или может быть слегка расширена. Поверхность шпика гладкая, зернистая или покрыта крохотными шпиками. Выросты второго типа сгруппированы в виде небольшого пучка (структуры) на антапикальном полюсе (антапикальным принимается полюс со структурой [11, 12]) и представляют собой пучок тонких воловидных выростов, основания которых утолщены в виде зерна или бугорка.

Видовой состав. Типовой вид.

Сравнение. От близкого рода *Barakella* Cramer et Diez, 1977 отличается более равномерным расположением выростов по всей поверхности оболочки и характером структуры, состоящей из неанастомозирующих волосков.

translation



Ladogella GOLUB & VOLKOVA in VOLKOVA & GOLUB (1985), p. 95.

The vesicle is rounded, rounded-rectangular or irregular rounded multi-angular in outline. The wall is relatively thick. The wall surface is smooth or shagreen and bears processes of two types. Processes of the first type are distributed more or less evenly on the vesicle surface. They are simple, non-branching with conical hollow basis, which later transforms into a thin solid spine of a middle size. The top of the last is sharpened and can be slightly widened. The spine surface is smooth, granulated or covered with small spines. Processes of the second type are grouped in a small bunch on antapical pole (for the antapical is taken a pole with structure) and is a bunch of thin hairy-like processes, with basis thickened in a shape of grain or small hillock.

translation in Strickland et al. 2005 p. 110