## Paramacrobiotus tonollii



FAMILY: Macrobiotidae

TAXONOMIC COMMENTS: Transferred from Macrobiotus by Guidetti et al. 2009. Part of the P. areolatus complex with 3 rows of macroplacoids and no microplacoid.

SPECIES COMMENTS: Terrestrial. Reported widely in US.

ID COMMENTS: Length up to 620 & micro; m, colorless (white in reflected light), eyes present. The cuticle is smooth, but presents dorsally numerous small " pearls", clearly visible only with immersion objective, or with use of phase contrast. The buccal tube is very wide (as much as 12 µm diameter) and has peribuccal lamellae; pharynx oval, containing apophyses and 3 macroplacoids, of which the first and the third are about of equal length (11-12 & micro;m) and the second shorter (about 6 & micro; m) and almost in contact with the first; microplacoid in general absent, but sometimes present, however extremely small and visible with difficulty. Doubleclaws hufelandi type (a Y), with accessory points on the principal branch and small smooth lunules. The eggs are characteristic and permit then an immediate recognition of the species; they belong to the "stellate" type, without tiling, but their conical ornamentations (projections), with enlarged bases, possess a rather complex system of ribbing, which we have tried to reproduce in Fig. 549, a, c. In optical section the appendices are not very numerous (from 8 to 10) and that gives the eggs a very elegant appearance, that brings to mind the &ldguo; alpine star&rdguo; (Leontopodium alpinum). From the base of all projections, to about the middle, run 6 ribs, of which -- with respect to the level of observation -- two are lateral, two anterior, and two posterior; there are then two ribs shorter and more slender (which sometimes meet at acute angles) in the central zone of each projection, from the base as far as about one quarter, or one third of its height; it is probable that of these small ribs there may be two pair, one anterior and one posterior in optical plane. It is therefore very difficult -- even with the use of phase contrast -- to determine the exact course of the ribs; however Fig. 549, a, c, gives one design rather near to the truth and, when these eggs are viewed even a single time, it is not possible to confuse them with those of other species. Each individual projection, observed with high magnification, shows a complex reticular design (Fig. 549, c), whose mesh has larger size toward the distal end of the projections (height about 32-35 µm), is 120-140 µm. -Ramazzotti & Maucci 1983

DISTRIBUTION: Please refer to the dot map.

HABITAT: Tree lichen and moss. Found less commonly in all other habitat types.

OBSERVATION METHODS: DIC and PC.