

CLASSIFICATION OF THE RHIZOPODA, R. HERTWIG, 1879.

Cellular organisms which move and nourish themselves by means of changeable extensions of their protoplasmic bodies (pseudopodia).

I. MONERA.

Rhizopoda without nucleus; of indefinite changeable form.

1. *Gymnomonera*—Monera without skeleton.
2. *Lepomonera*—Monera with skeleton.

II. AMŒBINA.

Rhizopoda with one nucleus or more than one; of indefinite changeable form; either without skeleton or with an irregular skeleton.

1. *Gymnamœbæ*—Amœbæ without skeleton.
2. *Lepamœbæ*—Amœbæ with skeleton.

III. THALAMOPHORA.

Rhizopoda with one nucleus or more than one, and a chitinous monaxial shell which is usually calcareous externally, and always possesses one or two openings for the passage of the pseudopodia.

1. *Monothalamia*—Shell single-chambered, not calcareous.
 - (a) *Amphistomata*, shell open at both ends.
 - (b) *Monostomata*, shell open at one (oral) extremity, closed at the opposite end.
2. *Polythalamia*—Shell calcareous, with an opening at the oral extremity; generally consisting of many chambers, which are arranged one after the other in a straight or a (spiral or irregular) curved row.
 - (a) *Imperforata*, shell-wall solid.
 - (b) *Perforata* seu *Foraminifera*, shell-wall perforated with numerous small pore-canals.

IV. HELIOZOA.

Rhizopoda of globular form, with one nucleus or more; with radiating pseudopodia, pointed and thread-like, issuing from every part of the surface.

1. *Aphrothoraca* seu *Actinophryidæ*—Heliozoa without skeleton.
2. *Chalarothoraca* seu *Acanthocystidæ*—Heliozoa with a skeleton which is formed of distinct pieces.
3. *Desmothoraca* seu *Clathrulinidæ*—Heliozoa with a clathrate or net-like ball.

V. RADIOLARIA.

Rhizopoda of rounded shape, with one nucleus or more, which united with a part of the sarcode, and enclosed by a membrane, forms the central capsule; with a gelatinous envelope, and with radiating, pointed, thread-like pseudopodia issuing from the surface.

1. *Thalassicollidæ*.
2. *Sphærozoidæ*.
3. *Tripylidæ*.
4. *Peripylidæ*.
5. *Monopylidæ*.
6. *Acanthometridæ*.

Note.—The following additional or alternative arrangements are proposed by Professor Hertwig for sections III. and IV.—V.