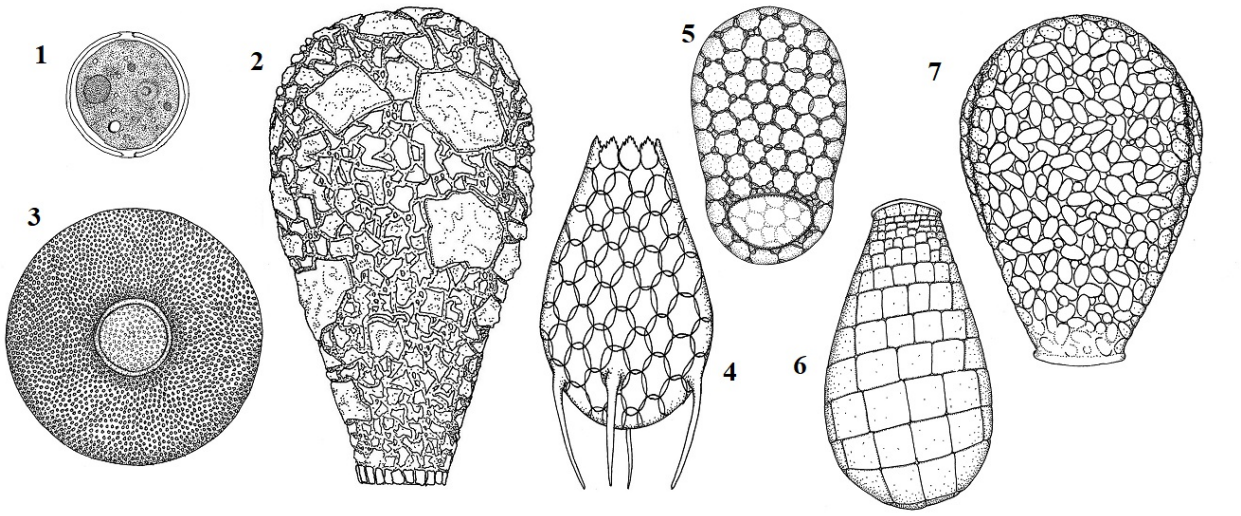

Freshwater Testate Amoeba. Miniature Wonders of nature. David G. Seamer.

While testate amoeba are an essential part of the hidden microscopic world, they are true survivors. There hard shells or tests come in a variety of sizes, shapes and colours. At only 3µm to 20µm, Diplophrys (1) is one of the smaller whereas Difflugia (2) has been recorded at 800µm. Shapes can vary from flat or domed disc like Arcella (3), to flask shape. They can be colourless, orange, brown, grey or green (due to the presence of symbiotic algae).

Some tests are mundane and functional, others can only be described as ornate and beautiful. Some, such as Difflugia, gather and attach mineral particles, such as tiny pieces of quartz fragments or diatom frustules, and position them on their test using an organic cement.

Others like Euglypha (4) create their own tiny plates which they arrange in a longitudinal overlapping pattern. These plate may be plane or adorned with various spines. Trinema (5) also produces plates but of two different sizes, large and small, where the smaller are arranged between the larger. Quadrulella also produced their own plates but these are square in shape.

There is another group of testate amoeba that devour these plate producers and attache their plates to their own tests. Nebela (6) is but one of these robbers and the predators plates can been

seen haphazardly arranged. Species of Lesquereusia do not produce plates but rods and may also have attached mineral particles.

These are but a small sample of the enormous variety of freshwater testate amoebas that live in ditches, ponds, lakes and rivers all over the world.

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