

delicacy, of coarser finger-like processes, or of rounded lobes. They often branch and assume a more or less root-like appearance, whence Dujardin gave the class the name of Rhizopods.

As previously intimated, the simplest kinds of Rhizopods are unprovided with hard parts, or even a membranous investment, and they present to the outside medium in which they live nothing but the naked mass of protoplasm of which they consist. By far the greater number of the class are protected and supported by some kind of skeleton of hard material, consisting of spicules or a trellis-work of silex, or a shell of chitinous membrane, of limestone, or of the former material. Mostly the hard part is intrinsic, or pertains to the inherent structure of the animal, but frequently is also more or less extrinsic. In the latter instances, the shell usually consists of siliceous particles, commonly hyaline quartz sand, diatom cases, and sponge spicules.

Besides some general differences in the character of the soft parts, the sustaining skeleton, or protective shell, of the Rhizopods, exhibits a great variety in form, construction, and arrangement of structure; frequently is highly intricate and often remarkable for beauty of apparent design.

On the general differences observed in the soft body-mass and its pseudopods, and on the absence or presence of hard parts with their form and constitution, the ordinal and other subdivisions of the Rhizopods are founded. It however appears from the researches, especially of British authorities, such as Carpenter, Williamson, Wallich, Brady, Parker, and Jones, that the members of the class are infinitely variable, and that indeed no absolute distinctions of species and genera exist, such as appear more definitely to characterize the higher forms of animal life. My own investigations rather confirm this view, and, under the circumstances, we can only regard the more conspicuous and prevailing forms as so many nominal species, in likeness with the species of higher organic forms, more or less intimately related, and by intermediate forms or varieties merging into one another.

As is the case with all other groups of organic beings, few authorities agree in the classification of the Rhizopods; and it is for convenience rather than from studied opinion that I have adopted the following ordinal arrangement