

## INTRODUCTION.

---

The present Report, unfortunately, does not fill up all the many deficiencies in histological detail left in my former Monograph on the genus *Myzostoma*. This is owing partly to the fact that the material at my disposal was not in a very first-rate condition for minute anatomical research, and partly to the small number of specimens of many of the species—sometimes only one or two—which, of course, prevented me from using them for histological investigation. Although this Report is on the whole chiefly systematic, it will, I hope, be found to further our knowledge of the group in the following respects:—

1. It shows that the Myzostomida do not form such a uniform group as was formerly thought, either in structure or in mode of life.
2. The numerous new species render more intelligible the structure and arrangement of the various organs of the body, which is of assistance in fixing the boundaries of species.
3. Several of the new species throw considerable light upon the affinities of the group.

In order to render this Report more complete, I shall give, in the description of species, a short account of all the species already known, but not contained in the collections that I have in my hands at present.

The following is a brief account of the structure of *Myzostoma*, as far as it is known at present.

The body (fig. 1) is a circular disk, provided along the margin with ten pairs of digitiform processes. On the ventral side, arranged in two semicircles, are five pairs of non-articulate foot-stumps (parapodia), in the intervals between which, and nearer the margin, are four pairs of suckers; at the end of each of the parapodia is a bent pointed hook supported by a straight rod, which in order to guide the hook is furnished at its extremity with a bent end-plate (manubrium) and several smaller hooks. The whole apparatus is capable of extension and retraction by means of a complicated system of muscles radiating outwards from a central ventrally placed muscular mass. Close to the anterior end of the ventral surface is the mouth, and close to the posterior end is the aperture of the cloaca. The alimentary canal consists of a muscular pharynx, which can be extruded through the mouth, of an œsophagus separated by a valve from the stomach, which is itself separated by a circular fold from the terminal portion of the canal—the rectum; from the stomach a number of branched radiating cæca take their origin. Beneath the stomach is the large