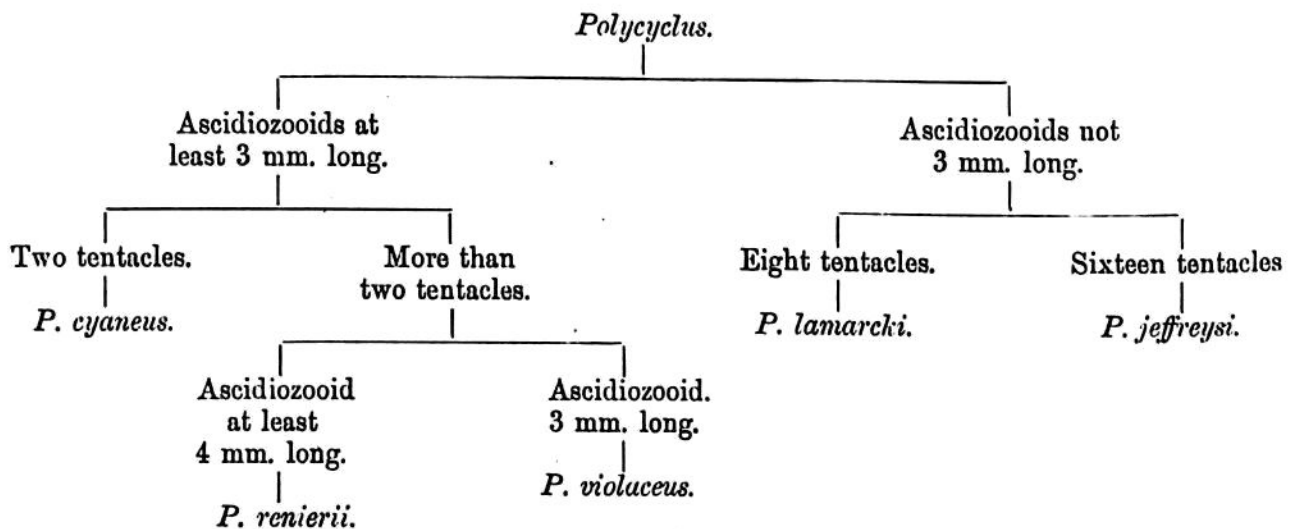


equal rank, and I think it is simpler to call them all genera. Consequently I return to Lamarck's view, and consider *Polycyclus* as a distinct genus. It is characterised by the proportions of the colony, the shape of the systems, and the position of the apertures and form of the body in the Ascidiozoid.

The colony, like that of *Sarcobotrylloides*, is thick, forming a large and usually lobed mass in place of a thin crust as in *Botryllus* and *Botrylloides*. The systems are stellate, with circular outlines as in *Botryllus*, and thus differ from those of *Botrylloides* and *Sarcobotrylloides*. The Ascidiozooids of *Polycyclus* have the ovoid form with distant apertures, which is found in *Botryllus*. The possession of two laterally placed tooth-like tentacles is also given by von Drasche as a character of the genus, but as I do not find that feature in the new species described below, which are in all other respects typical members of the genus—I leave out this characteristic. In one of the new species the tentacles are eight in number, in the other sixteen, and in neither do two predominate over the others, consequently the tentacles of the genus must be regarded as varying from two to sixteen.

A number of species have been described which may be referred to this genus, but in the cases of the older of these it is very uncertain how far they are distinct from one another. Some of them are very imperfectly known.

Lamarck described *Polycyclus renierii*, and this is probably not the species described by Savigny as *Botryllus polycyclus*. Della Valle suggests that the *Polycyclus elongatus* of Delle Chiaje is simply a variety of *Polycyclus renierii*, a species which he describes in detail. Grube also discusses *Polycyclus renierii* and a slightly different form which he regards as a variety. Two new species, *Polycyclus cyaneus* and *Polycyclus violaceus*, were described by von Drasche in 1883. Leaving out the uncertain forms, the genus may be divided as follows:—



The two new species were both obtained during the "Porcupine" expeditions, *Polycyclus lamarcki* in the Færøe Channel from a depth of 363 fathoms, and *Polycyclus jeffreysi* from Tangier Bay in the Mediterranean, in shallow water.