

(2) as a subgenus or section of the wider *Aplidium*, and corresponding to the present genus. Giard considered this group of species as characterised by the six-lobed branchial aperture and the short post-abdomen. The first of these characters, however, is shared by nearly all of the Polyclinidæ, and characters derived from the post-abdomen are somewhat unreliable on account of the share which that part of the body takes in gemmation in the Polyclinidæ and its consequent changes in size.

Von Drasche apparently felt this objection, for while he retained Giard's subgenus, he added another character to its diagnosis, viz., that the atrial aperture is placed on the dorsal edge far behind the branchial, and has either no atrial languet or only a very small one. He figures a new species (*Aplidium asperum*, von Drasche) in which this feature is well seen, and seems to regard this amended definition of *Aplidium* as perfectly satisfactory. I am afraid, however, that it is little better than it was before. In the first place the type species of the genus *Amaroucium* (a genus which is most closely allied to *Aplidium*) has the atrial aperture placed far back on the dorsal edge; it is, however, provided with a large languet. And, secondly, the exact position of the atrial aperture varies considerably, not only in the different species of *Aplidium*, but even in the different Ascidiozooids of one colony, and in some cases it is found in an intermediate position which might either be described as dorsal or anterior.

In the Table on p. 152, von Drasche's characteristic has been made use of in distinguishing *Aplidium*, as I believe that it is somewhat more reliable than the length of the post-abdomen, but in any particular case where it failed to indicate the genus, then, on account of the six-lobed branchial aperture, the longitudinally folded stomach and the sessile post-abdomen, *Aplidium* would be thrown (see Table, p. 152) along with *Amaroucium* and *Sigillina*. The extremely long and attenuated post-abdomen of the latter genus, and its distinctly six-lobed atrial aperture, would sufficiently distinguish it from *Aplidium*, and consequently the only risk of confusion would be with *Amaroucium*. After a careful consideration of all the known species of both genera I find that there is no single reliable character which will separate the two groups in all their species. Consequently in such a case it would be necessary to make use of a combination of characters, of which the following are the most important:—

*Aplidium.*

Colony not pedunculated, Ascidiozooids not very long, atrial aperture placed dorsally and usually with no atrial languet, post-abdomen shorter than thorax and abdomen.

*Amaroucium.*

Colony often pedunculated or elongated vertically, Ascidiozooids long, atrial aperture anterior or slightly dorsal, provided with a large atrial languet, post-abdomen usually long.