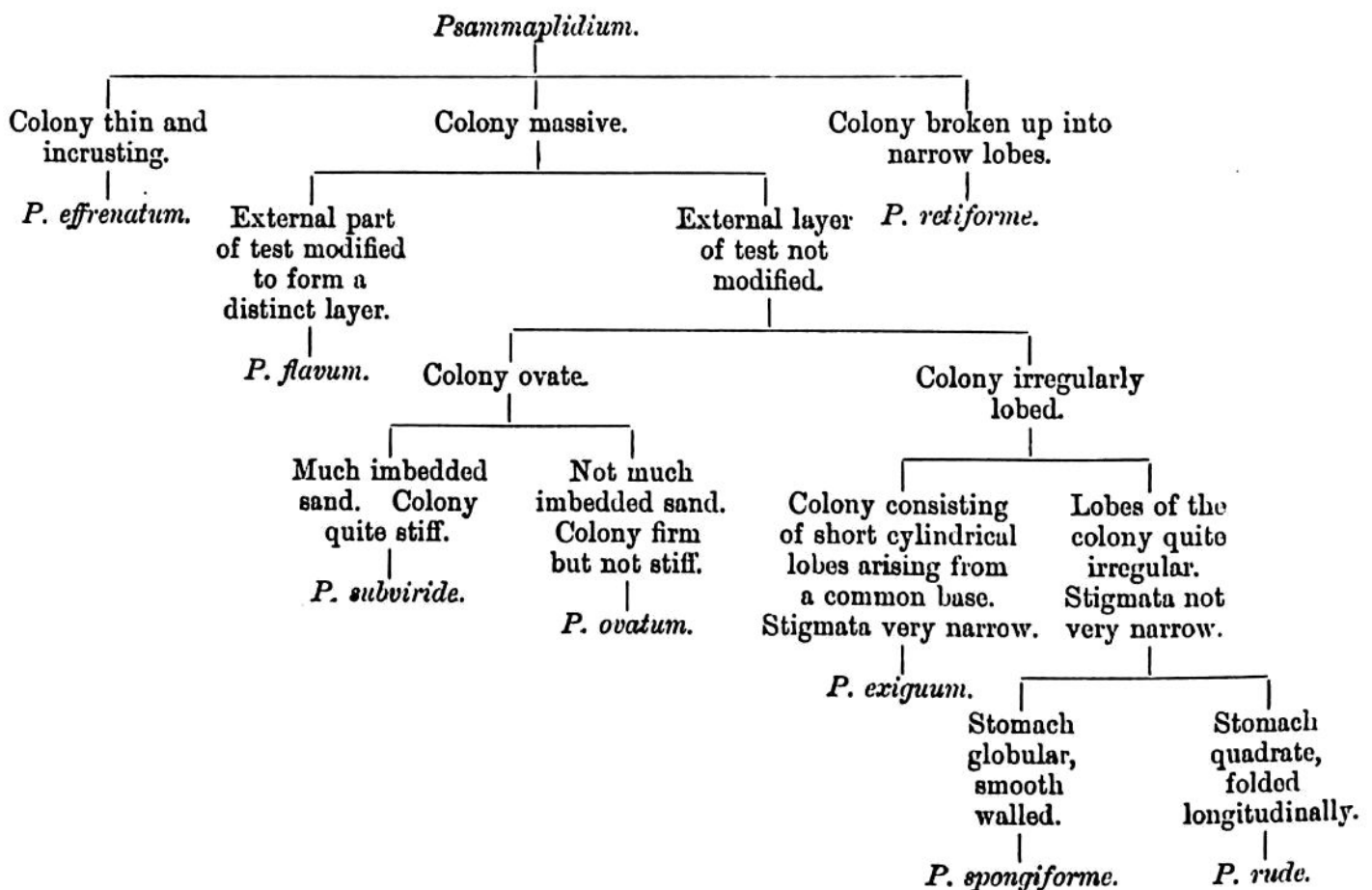


which are prolonged from the outer surface of the test in the case of most Molgulidæ and some Cynthiidæ amongst the Simple Ascidians, and in *Polyclinum sabulosum*, Giard, a member of the present family. In the description of the last named form, Giard<sup>1</sup> makes no mention of imbedded sand grains in the test, and consequently we may infer that the sand is merely adhering to the surface of the hair-like processes which he describes. I think it is probable that von Drasche's *Aplidium asperum* belongs to the present genus. He does not figure a section of the test, but from his description<sup>2</sup> it appears that there are many imbedded sand grains. It differs from all the Challenger species.

One result of the presence of imbedded sand in this genus is that the colony is rendered hard, brittle, and opaque. The Ascidiozooids are generally not visible externally, and are in some cases rather difficult to dissect out both on account of their small size and because of the surrounding sand grains.

The condition of the stomach varies in the genus; in some cases it is smooth (*Psammaplidium spongiforme*), in others it is folded longitudinally (*Psammaplidium incrustans*).

In external form also the species vary greatly, as is shown in the following synoptic table of the genus.<sup>3</sup>



<sup>1</sup> Recherches sur les Asc. Comp. ou Synascidies, *Archives d. Zool. expér.*, t. i. p. 643.

<sup>2</sup> Die Synascidien der Bucht von Rovigno, p. 26.

<sup>3</sup> To these eight species must be added a ninth, *Psammaplidium pyriformis* (see Appendix B. at the end of this Report). It is closely allied to *Psammaplidium subviride*, but differs from that species in its pyriform shape, its colour, and the condition of its mantle and branchial sac.