

Genus 7. *Phascolion*, Théel (Selenka and de Man).

The animals of this genus live in tubes or in shells of Molluscs. The longitudinal musculature is continuous and not divided up into distinct bands. The tentacles are small and finger-like, and are arranged in a circle round about the mouth. There is only a single, fixed segmental organ. The intestine has only a few coils, or it may be none at all, but there are always some large loops which are attached by the so-called fixing muscles. The hooks of the proboscis often fall off at an early stage. The proboscis has either one or two retractor muscles. The posterior half of the body frequently with attaching papillæ (Haftpapillen). They are found in all seas, but especially in the colder waters.

It seems extremely probable that the species of the genus *Phascolion* do not form a compact, closely related group, but that they have developed independently from various true *Phascolosomata*. One marked characteristic of the species of *Phascolion* is the disappearance of one of the two segmental organs. Noteworthy also is the shortening of the intestine, associated with the assumption of the looped instead of the spirally coiled form. Now since all the species of *Phascolion* live in Mollusc tubes, the change of habitat must have reacted on the anatomical structure; it may, for instance, have to do with the degeneration of one of the segmental organs, and it may be that the burden of the shell has brought about the early attachment of the intestine by means of the fixing muscles. The fact that in many species of *Phascolosoma*, which inhabit Mollusc shells or tubes, one of the segmental organs is often absent but the coiled intestine apparently not shortened, shows us how such a degeneration as that of the species of *Phascolion* has arisen. In the latter, as we have mentioned, the spirally coiled intestine is unwound into loose loops, and there are transitional states between the two conditions.

If the supposition be correct that the species of the genus *Phascolion* are connected with those of the genus *Phascolosoma* by diverse lines of origin, the genus *Phascolion* should be resolvable into several, since the system ought to be the expression of phylogenetic relationship or genetic history. But since it is not possible to recognise these genetic relationships, far less prove them, I therefore retain for the present the single genus *Phascolion*.

14. *Phascolion squamatum*, Koren and Danielssen (Pl. IV. figs. 18-19).

*Phascolosoma squamatum*, Koren and Danielssen, Fauna littoralis norvegiæ, Heft iii. pp. 130, 131, Tab. xiii. fig. 11, Tab. xiv. figs. 14, 15.

*Phascolosoma squamatum*, Selenka and de Man, Die Sipunculiden, &c. (*loc. cit.*), p. 40.

The body is four times as long as it is broad. The proboscis is two and a half times as long as the body. The skin is studded all over with large, flat, more or less protrusive scales. On the proboscis are fine papillæ, arranged in separate rows and at a distance from one another, but somewhat more closely set near the tentacles. The tentacles are