

Genus PHENACOHELIX Suter, 1892

Phenacohelix Suter, *Trans. N.Z. Inst.* 24, 1891 (1892). Type *P. ponsonbyi* (Suter):

Man. N.Z. Moll. p. 663, 1913: *Fruticicola*, Hutton, 1884; not of Held.

Animal elongate, the foot narrow, projecting behind the shell; mantle sub-central, rather anterior, included; eye peduncles long, rather clavate; tentacles moderate. Caudal gland present.

Jaw arcuate, with numerous flat plaits indenting the concave margin.

Radula with the central tooth small, without side cusps; laterals largely bicuspid, with inner cusps much larger.

Shell depressed, narrowly umbilicated, the spire slightly convex or conoidal, periphery broadly rounded; post-nuclear whorls finely ribbed, the protoconch distinctly microscopically spirally striate or smooth except for dense microscopic pitting; aperture lunate; lip simple.

DISTRIBUTION. New Zealand.

REMARKS. The genus *Rhytidopsis*, Ancey 1882, from New Caledonia, seems to be nearly allied, perhaps identical, but it is not known whether the animal has a caudal gland or not. The dentition seems to be similar.

Sub-genus *Phenacohelix*. Type *Phenacohelix ponsonbyi* (Suter).

The sub-genus is characterized by a protoconch showing distinct spiral striations, and a radula in which the ectocone of the first lateral tooth is markedly pointed. It includes the following species:

Phenacohelix (*Phenacohelix*) *ponsonbyi* (Suter)

Phenacohelix (*Phenacohelix*) *pilula* (Reeve)

Phenacohelix (*Phenacohelix*) *subantarctica* Suter

Sub-genus *Neophenacohelix* n. sub-gen. Type *Phenacohelix giveni* n.sp.

The sub-genus is characterised by a protoconch which is smooth except for dense microscopic pitting, and a radula in which the first lateral tooth lacks an ectoconal point. It includes the following species:

Phenacohelix (*Neophenacohelix*) *giveni* n.sp.

Phenacohelix (*Neophenacohelix*) *tholoides* (Suter)

Phenacohelix (*Neophenacohelix*) *perplexa* (Murdoch)

Phenacohelix (*Neophenacohelix*) *stokesi* (Smith)

In revising the genus it has been necessary to resolve a number of complexes. The *P. ponsonbyi* complex is considered first. *P. ponsonbyi* is retained as the species better covered by Suter in his description from the five syntypes which involve two species, the other being described as a new species *P. giveni*. The *P. pilula* complex is then studied, and the species *P. chordata* (Pfeiffer) and *P. leptalea* (Suter) are sunk as synonyms of *P. pilula*. Studies of the radula of *Allodiscus tholoides* (Suter) confirm that this species belongs rather to the genus *Phenacohelix* with which it shares similar habits. The *P. perplexa* (Murdoch) complex is shown to involve two main areas each with apparent variations in form. A neotype is selected from Suter's cotypes, the type having been destroyed by fire many years ago. *P. stokesi* (Smith) is also shown to occur in two forms, one from the North Island and the other from the South Island. The systematic position of the two Subantarctic species, *P. subantarctica*, from Campbell Island, and an un-named species from the Auckland Islands, is discussed.

I. THE *P. ponsonbyi* COMPLEX

Suter's material of *P. ponsonbyi* comprised a tube of five syntypes taken at the Mt. Wellington larva fields, near Auckland, an area now devoid of forest. Two distinct species were represented, there being three specimens of *P. ponsonbyi* and two of a new species *P. giveni*. *P. ponsonbyi* is redescribed and the lectotype and syntypes indicated, this being that species which most closely conforms to Suter's original description. The two specimens of the other species *P. giveni* become