

Some of the New Zealand rissoids differ sharply from the investigated European species and it seems that the concept of the Rissoidae should be broadened. Three major groups in New Zealand could be given subfamily status. The true rissoids are sharply distinct from the genera related to *Rissoina* on one hand, and *Scrobs* and *Estea* on the other.

*Rissoa*, *Cingula*, *Alvania* and *Alvinia* form the basis for a fairly natural subfamily, the Rissoinae, predominant in the Northern Hemisphere. The anatomy of a number of European species has been described by Johansson (1939, 1948, 1949, 1956), and Fretter and Patil (1961) reviewed the morphology of the group. This subfamily is characterised by the possession of a crystalline style in the stomach, no oesophageal glands and a well-developed posterior pedal mucous gland, the tubules of which ramify into the head. Shell characters in certain genera closely parallel genera related to *Rissoina*. A subfamily, the Anabathroninae (as here recognised) is a sharply defined group which is chiefly tropical and southern in distribution. It includes genera belonging to Coan's Anabathroninae, Rissoinae and Cingulinae. The animals of three New Zealand species will be described elsewhere. They have many unique features including short, club-shaped cephalic tentacles, a crystalline style and oesophageal glands, and a coiled penis in the male. Fischer's Stenothyridae seems best regarded as a family near the Hydrobiidae as it is a freshwater group with a shell quite unlike the rissoids. It should include *Floridiscrobs* Pilsbry and McGinty. *Lironoba* and *Nobolira* are placed in a new subfamily, the Lironobinae, on the basis of radular characters.

The genera grouped around *Rissoina*, which is largely tropical and southern in distribution, are generally considered to belong to a distinct family. The basis of this assumption was the presence of a peg on the operculum, a feature now known to occur independently in several groups (Neritidae, Eatoniellidae, Cingulopsidae, Rastodenidae and *Barleeia*—see Ponder, 1965 a, c, and 1966). Species from genera in all these taxa except the Neritidae and the Rastodenidae were included within the Rissoinidae in the subfamily Barleeinae by Coan. The majority of the genera related to *Rissoina* do not, however, possess opercular pegs and the group, in my opinion, should be regarded as a subfamily within the Rissoidae, being distinguished chiefly on the external features of the animal and the stomach morphology. There is no posterior pedal mucous gland, which is a condition also found in very minute rissoids (e.g. *Setia inflata* Monterosato, in Fretter and Patil, 1961) and small forms such as *Scrobs* but in these cases it is probably related to their very small size. The snout in *Rissoina* is extensile and elongates to ingest relatively large fragments and foraminiferans. These are stored and slowly dissolved in the very large, yet simple stomach which has a short style sac and often no crystalline style. The oesophagus has no oesophageal glands, though, in *Rissoina chathamensis* at least, the anatomy of which will be described elsewhere, there are simple saccular expansions in the normal position for oesophageal glands. The anatomy of several species of *Rissoina* (s.l.) has recently been described (Marcus and Marcus, 1964, Kosuge, 1965a). Coan's subfamilies of the Rissoinidae included the Rissoininae, Phosinellinae, Zebininae and the Barleeinae. All but the latter group are separated on the basis of shell sculpture and appear to be unnatural. They are not, in my opinion, sufficiently distinct to warrant higher taxonomic separation.

*Barleeia* forms the basis for a fifth, small subfamily. Some details of the animal are given by Fretter and Patil (1961) and Fretter and Graham (1962). There is a posterior pedal mucous gland, but the tubules, as in the Anabathroninae, do not ramify into the haemocoel of the head. The operculum bears a peg which is of a different shape from that of *Rissoina*, though closely paralleled by a new neozelanic rissoinid genus (see p. 45). The style sac contains a crystalline style and there are no oesophageal glands. An anomalous assortment of genera were included in