

A NOTE ON THE IDENTITY OF THE TASMANIAN LITTORINID MOLLUSCS

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ABSTRACT

The molluscan genus *Melarhapse* was investigated in relation to its two Tasmanian representatives and is discarded in favour of *Littorina*.

In the course of ecological investigations in Tasmania I have had much cause to examine the habit of the two species of littorinid which occur in Tasmania and it appeared to me that, although these two species are known as *Melarhapse unifasciata* (Gray) and *M. praetermissa* (May) respectively, the habitat occupied by them was very similar to that usually occupied by the genus *Littorina*. This prompted me to investigate the genus *Melarhapse*.

The genus *Littorina* was introduced by Ferrusac (*Tabl. Syst. des Moll.* 1822, p. 34) who designated *L. obtusata*, now known as *L. littoralis* (L.) as the genotype. The genus was immediately adopted and has been almost universally used ever since.

Melarhapse was established by Menke (*Synops. meth. Moll.* 1828, p. 23) and he designated *M. neritoides* (L.) as the genotype. Thus, the genus *Littorina* is divisible into two groups of species, namely those with a reduced spire and the great majority with a high spire.

Iredale (1912), in adopting the genus *Melarhapse* states "the type of *Littorina* is quite unlike the Austro-Neozelandic shells known under that name and the name to be used for those shells is *Melarhapse*". He did not contrast the two genotypes or compare the Australian species with either genotype. The genus has been followed in Australia since 1912, there being only two Tasmanian species.

Iredale is undoubtedly correct in stating that *L. littoralis* is unlike any of the Austro-Neozelandic shells known under that name. It is equally unlike any of the European or American shells also known under the name of *Littorina*, being a shell of atypical littorinid form without the spire usually so characteristic of that family.

However it is very significant that the genus *Melarhapse* was never followed in Europe. Even as early as 1835, Quoy and Gaimard were using the genus *Littorina* for shells which Iredale would consider to be assignable to *Melarhapse*, e.g., *L. diemenensis*, i.e., shells with a high spire. The list of British marine mollusca (Conchological Society, 1902) does not include *Melarhapse* but assigns the species *obtusata* to the genus *Littorina* and the Marine Biological Association (1931) follows this example. Moore (1937) uses *Littorina* for another high spire species *L. littorea* (L.). Other modern workers use *Littorina* exclusively and Simroth (in Bronn's *Klassen und Ordnungen des Tierreichs*) and Thiele (in Kükenthal's *Handbuch der Zoologie*) do not include *Melarhapse* as a valid genus in the family *Littorinidae*.

Turning to the two Tasmanian species *M. unifasciata* and *M. praetermissa* we find that they are of the high spire type, i.e., resemble *L. neritoides* of Europe. I have examined the radulae of several specimens of *M. unifasciata* and find them closely to resemble that of *L. littoralis* and the Tasmanian shells fit into the genus *Littorina*. In view of these facts and also on account of *Melarhapse* being discarded by overseas workers I propose to adopt *Littorina* as the generic name of the two Tasmanian shells hitherto known as *Melarhapse*, thus following the usually accepted interpretation of the genus *Littorina*.

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