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THE PYRAMIDELLID-GENERA DESCRIBED BY THE MARQUIS
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Summary

An extensive study of the literature as well as of the type specimens, as far as still existing, has clarified the position and validity of the following eight genera of DE FOLIN. In particular:

- 1) *Oceanida* DE FOLIN, 1870, does not belong to the Pyramidellidae but, most probably, to the Eulimidae. *Spiroclimax scalaris* MÖRCH, 1875, may be the same as *Oceanida graduata* DE FOLIN, 1871, which in that case has priority.
- 2) *Salassia* DE FOLIN, 1870 (type-species *Salassia carinata* DE FOLIN, 1873) is a valid genus, whereas *Salassia* DE FOLIN sensu MONTEROSATO has been used for some species probably belonging to the Rissoidae.
- 3) *Ondina* DE FOLIN, 1870 (type-species *Ondina semiornata* DE FOLIN, 1872) is a valid genus too and must be used as a substitute for *Auriculina* GRAY, 1847, not *Auriculina* GRATELOUP, 1838.
- 4) *Elodia* DE FOLIN, 1870 (not valid because of preoccupation by *Elodia* DESVOIDY, 1863), has been substituted by *Elodiamea* DE FOLIN, 1886. *Elodiamea* is a junior synonym of *Parthenina* BDD, 1883, based on the same type species.
- 5) *Odetta* DE FOLIN, 1870 (type-species *Odetta sulcata* DE FOLIN, 1870) is a valid genus.
- 6) *Noemia* DE FOLIN, 1870 (not valid because of preoccupation by *Noemia* PASCO, 1857) has been substituted by *Noemiamea* DE FOLIN, 1886. *Noemiamea* DE FOLIN, 1886 (type-species *Noemia valida* DE FOLIN, 1872 = *Odostomia dolioliformis* JEFFREYS, 1848) is a valid genus and a senior synonym of *Oda* MONTEROSATO in CHASTER, 1901.
- 7) *Amoura* DE FOLIN, 1870 (not valid because of preoccupation by *Amoura* GRAY, 1847) is found to be identical with *Folinella* DALL & BARTSCH, 1904 (type-species *Rissoa excavata* PHILIPPI, 1836).
- 8) *Lia* DE FOLIN, 1873 (not valid because of preoccupation by *Lia* ESCHSCHOLTZ, 1829) has been substituted by *Liamorpha* PILSBRY, 1898. *Liamorpha* is regarded as a junior synonym of *Miralda* A. ADAMS, 1864.

The new name *Folinella ghisottii* is proposed for *Odostomia intermedia* BRUSINA, 1869, not DESHAYES, 1861.

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Riassunto

Un'approfondita ricerca bibliografica e, quando è stato possibile, l'esame e i confronti con i tipi, hanno chiarito la posizione sistematica e l'effettiva validità dei seguenti otto generi di DE FOLIN. In particolare:

- 1) *Oceanida* DE FOLIN, 1870: non è un Pyramidellidae ma, molto probabilmente, un Eulimidae. *Spiraclimax scalaris* MÖRCH, 1875 corrisponde forse a *Oceanida graduata* DE FOLIN, 1871 che, in questo caso, avrebbe priorità.
- 2) *Salassia* DE FOLIN, 1870 (specie-tipo *Salassia carinata* DE FOLIN, 1873): è genere valido, mentre *Salassia* DE FOLIN sensu MONTEROSATO fu impiegato per alcune specie appartenente probabilmente a Rissoidae.
- 3) *Ondina* DE FOLIN, 1870 (specie-tipo *Ondina semiornata* DE FOLIN, 1872): è genere valido e deve essere impiegato in sostituzione di *Auriculina* GRAY, 1847 (pre-occupato da *Auriculina* GRATELOUP, 1838).
- 4) *Elodia* DE FOLIN, 1870 (non valido perché pre-occupato da *Elodia* DESVOIDY, 1863): fu modificato in *Elodiamea* DE FOLIN, 1886. *Elodiamea* è però sinonimo più recente di *Parthenina* BDD, 1883, genere riferentesi alla stessa specie-tipo.
- 5) *Odetta* DE FOLIN, 1870 (specie-tipo *Odetta sulcata* DE FOLIN, 1870) è genere valido.
- 6) *Noemia* DE FOLIN, 1870: il genere non è valido perché pre-occupato da *Noemia* PASCO, 1857 e fu sostituito da *Noemiamea* DE FOLIN, 1886. *Noemiamea* DE FOLIN, 1886 (specie-tipo *Noemia valida* DE FOLIN, 1872 = *Odotomia dolioliformis* JEFFREYS, 1848) è genere valido e sinonimo più antico di *Oda* MONTEROSATO in CHASTER, 1901.
- 7) *Amoura* DE FOLIN, 1870 (non valido perché pre-occupato da *Amoura* GRAY, 1847) risulta identico con *Folinella* DALL & BARTSCH, 1904 (specie-tipo *Rissoa excavata* PHILIPPI, 1836).
- 8) *Lia* DE FOLIN, 1873: genere non valido perché pre-occupato da *Lia* ESCHSCHOLTZ, 1829 fu sostituito da *Liamorpha* PILSBRY, 1898. *Liamorpha* è però da considerarsi sinonimo più recente di *Miralda* A. ADAMS, 1864.

Viene infine proposto il nuovo nome *Folinella ghisottii* in sostituzione di *Odotomia intermedia* BRUSINA, 1869, non DESHAYES, 1861.

In 1870 the marquis L. DE FOLIN published a little known paper entitled « D'une Méthode de Classification pour les Coquilles de la famille des Chemnitzidae ». In this paper (*) several new genera were established without naming any species at all to be included in them. According to the International Code of Zoological Nomenclature Art. 69, a, 11, (2) « the first subsequently published nominal species referred to such a genus (without nominal species included) is ipso facto the type-species, by subsequent monotypy ». The genera in question are *Oceanida*, *Salassia*, *Ondina*, *Elodia*, *Odetta* and *Noemia*. Besides these six genus-names DE FOLIN also introduced two others viz. *Lia* and *Amoura* together with the description of a new species.

These eight generic names, proposed for genera in the Pyramidellidae (or Chemnitzidae as DE FOLIN called them) will be dealt with in this note.

(*) A somewhat different but essentially similar version was published by de Folin in 1885. Surprisingly no reference to the first paper is made in this second one!

1. *Oceanida* DE FOLIN, 1870

First subsequently published species: *Oceanida graduata* DE FOLIN in *Les Fonds de la Mer* I: 264 (1871), pl. 24 fig. 6.

The syntypes of this species in the M.N.H.N. in Paris, which I could study thanks to the kind cooperation of Dr. Ph. Bouchet, turned out not to belong to the Pyramidellidae at all, because they do not show a heterostrophic embryonic shell. In fact these specimens (4, on two slides, see KISCH (1959: 107)) in my view belong to the Eulimidae and I should not at all be surprised if they should turn out to be identical with *Spiroclimax scalaris* MÖRCH, 1875. If this were proven to be true it would mean that *Oceanida* DE FOLIN, 1870 is a senior synonym for *Spiroclimax* MÖRCH, 1875 of which *Spiroclimax scalaris* is the type-species by monotypy (see MÖRCH (1875: 168)).

Note that the species *Oceanida graduata* DE FOLIN, 1871 is not at all identical with *Chrysallida limitum* (BRUSINA, 1876) as stated by NORDSIECK (1972: 91).

2. *Salassia* DE FOLIN, 1870

First subsequently published species: *Salassia dagueneti* DE FOLIN, FM II: 112 (1873), pl. III fig. 2 and *Salassia carinata* DE FOLIN, FM II: 168 (1873), pl. VI fig. 6. As both species were published in 1873 and both WINCKWORTH (1941: 150) and RHEDER (1946: 74) showed that the parts of the work containing the descriptions appeared concurrently, it seems to be impossible to make out which one of these two species was really published first. However, the date of writing of the chapter in which *S. dagueneti* was published is given as July, 1873, whereas the analogous date for *S. carinata* is stated as May, 1872. Besides, all authors on the classification of Pyramidellid genera have used the second species as type-species for this genus. I therefore conclude that *Salassia carinata* DE FOLIN, 1873 is to be considered as the type-species of *Salassia* DE FOLIN, 1870. As there are no specimens left in the DE FOLIN collection the genus can only be based on the description of the type-species and its figure. This may be of importance because in other cases it turned out that the description of the type-species did not fully correspond with the type-specimens and both were (sometimes) at variance with the description of the genus.

It should also be noted that *Salassia dagueneti* DE FOLIN, 1873 is a junior synonym of *Rissoa coriacea* MANZONI, 1868 for which species and the closely related *Rissoa tenuisculpta* WATSON, 1873 the genus name *Salassia* has been used by MONTEROSATO (1889: 35). The genus *Salassia* DE FOLIN sensu MONTEROSATO has always been doubtfully included in the *Rissoidae* and is in need of a new name, which in my view, however, should be based also on anatomical data and thus will not be proposed here.

3. *Ondina* DE FOLIN, 1870

First subsequently published species: *Ondina sulcata* DE FOLIN, FM I; 214 (1870), pl. 29, fig. 1 (s.n. *Odetta sulcata*).

Although both the description and the index bear the name *Ondina*, the figure on the plate bears the name *Odetta*.

Now according to DE FOLIN (1870: 200) the difference between both genera is the fact that *Ondina* is « sans dents ou plis à la columelle » and *Odetta* has a « coquille avec un ou plusieurs plis ou dents à la columelle ». The figure clearly shows a pronounced tooth on the columella and the description does not say anything on this point. The two type-specimens are identical and clearly show a tooth on the columella.

The next subsequently published species is *Ondina semiornata* DE FOLIN; FM II: 48 (1872), pl. 2 fig. 1. According to MONTEROSATO (1877: 39; 1878: 92) this is a synonym of *Odostomia obliqua* ALDER, 1844 and MONTEROSATO (1884: 96), FISCHER (1885: 788) and TRYON (1886: 320, 321) use the genus *Ondina* DE FOLIN, with type-species *O. obliqua* ALDER, 1844, as a junior synonym of *Auriculina* GRAY, 1847 non Grateloup, 1838. The type-specimen(s) of the species *Ondina semiornata* are unfortunately lost, but it is most probable that this species is identical with *Rissoa warreni* THOMPSON, 1845, a species frequently confused with the real *Od. obliqua* ALDER, 1844 (see eg. JEFFREYS, 1867: 143). In view of all this evidence and also in consideration of best stability in nomenclature I propose to consider *Ondina semiornata* DE FOLIN, 1872 = *Ondina warreni* (THOMPSON, 1845) as the type-species of the genus *Ondina* DE FOLIN, 1870 which thereby becomes the valid name for the genus *Auriculina* GRAY, 1847 non GRATELOUP, 1838. As I shall demonstrate in another paper the names *Menestho* MÖLLER, 1842 and *Evalea* ADAMS, 1860 can not be used for this group but are separate, different genera of Pyramidellidae.

It also follows that the name *Ondina sulcata* DE FOLIN is a lapsus and should have been *Odetta sulcata*.

4. *Elodia* DE FOLIN, 1870, non ROB.-DESVOIDY, 1863 = *Elodiamea* DE FOLIN, 1886.

As the generic name *Elodia* turned out to be preoccupied, DE FOLIN suggested the modification *Elodiamea* (in HOYLE: *Zool. Rec.* 22: 94 (1886)).

First subsequently published species: *Elodia hortensiae* DE NANSOUTY, FM II: 48 (1872), pl. 2 fig. 2.

Two samples of the type-species are present in the DE FOLIN-collection in Paris. The holotype (1 spm. from Hendaye) as well as all 6 other specimens (from Gijon and Cap Breton) clearly belong to the species *Chrysallida obtusa* (BROWN, 1827) = *Turbo interstinctus*

MONTAGU, 1803 non J. ADAMS, 1797 and clearly show 1 spiral rib on the underside of the whorls, although this is not mentioned in the description.

This fact makes *Elodiamea* DE FOLIN, 1886 a junior synonym of *Parthenina*, BDD, 1883, based on the same type-species (O.D.). It should be noted that FISCHER (1885: 788) and TRYON (1886: 321) both cite *Elodia hortensiae* as type-species.

DALL and BARTSCH (1904: 9) cite *Elodia elegans* DE FOLIN, FM II: 175 (1873), pl. 7 fig. 1 as the type species. This species, the holotype of which is still present in Paris, see KISCH (1959: 91, 110), is different in so far that the protoconch is helicoid, with the protoconch-axis at right angle to the shell axis instead of intorted as is the case in *Parthenina* BDD, 1883. There are also 8 - 9 teeth on the inside of the outer lip mentioned in the text and perfectly visible in the holotype.

Later on both DALL and BARTSCH (1909: 13, 18) and COSSMANN (1921: 264) use the new name *Odostomia* (*Elodiamea*) *gisna* DALL and BARTSCH, 1909 = *Elodia elegans* DE FOLIN, 1873 non *Odostomia* (*Evalea*) *elegans* A. ADAMS, 1860 for this same species.

Neither of the names *Elodia* and *Elodiamea* can be considered synonymous with *Odostomella* BDD, 1883 as suggested by THIELE (1929: 232) and WENZ (1940: 844).

Note that the study of the type-specimens of *Elodia hortensiae* show convincingly that this species is not a form of *Chrysallida* (*Odostomella*) *doliolum* (PHILIPPI, 1844) as suggested by NORDSIECK (1972: 90).

5. *Odetta* DE FOLIN, 1870

First subsequently published species: *Odetta sulcata* DE FOLIN, FM I: pl. 29 fig. 1 (1870). As a result of the discussion on *Ondina* it follows that the species *Odetta sulcata*, described as *Ondina sulcata* DE FOLIN 1870 (lapsus in generic name) is to be considered as the type-species of the genus *Odetta*.

DALL and BARTSCH (1904: 12), COSSMANN (1921: 269), THIELE (1929: 234) and WENZ (1940: 853) all cite *Odetta elegans* DE FOLIN, FM II: 167 (1873), pl. 6 fig. 4 as the type-species of this genus, either under its own name or under the new name *Odostomia* (*Odetta*) *callipyrga* DALL and BARTSCH, 1904 = *Odetta elegans* DE FOLIN, 1873 non *Odostomia* (*Evalea*) *elegans* A. ADAMS, 1860.

Specimens of *Odetta elegans* are not present in the de Folin-collection, but judging from the figure it does seem to be congeneric with *Odetta sulcata*, and so the different choice of type-species is of not much consequence. Note that the type-species *Odetta sulcata* shows pronounced spiral ribs with smooth grooves between them, a helicoid protoconch and a small but evident tooth on the columella.

6. *Noemia* DE FOLIN, 1870 non PASCO, 1857 = *Noemiamea* DE FOLIN, 1886.

As the name *Noemia* turned out to be preoccupied. DE FOLIN himself suggested the replacement-name *Noemiamea* (in HOYLE, *Zool. Rec.* 22: 94 (1886)). The genus-name *Oda* MONTEROSATO in CHASTER, 1901 proposed as a replacement-name for *Noemia* DE FOLIN, 1870, preoccupied, is thus a mere synonym of *Noemiamea* DE FOLIN, 1886.

First subsequently published species: *Noemia valida* DE FOLIN, FM II: 63 (1872), pl. 2 fig. 6. MONTEROSATO (1884: 85) considers this species to be synonymous with the well-known *Odostomia dolioliformis* JEFFREYS, 1848 and considers it the type-species of the genus *Noemia*. DE FOLIN himself apparently also agreed with the idea that his own *Noemia valida* was identical with *Od. dolioliformis* as is apparent from the label of the type-lot. (see KISCH (1959: 112)).

Most authors have used the species-name *Od. dolioliformis* JEFFREYS, 1848 for the type-species of either *Noemia* or *Noemiamea*. The designation of *Noemia augusta* DE FOLIN, FM II: 165 (1873), pl. 6 fig. 1 as type-species of the genus *Noemia* by BARTSCH (1953: 60) is incorrect. This last species is very nearly related to the type-species of the genus *Chrysallida* CARPENTER, 1856 viz. *Chrysallida torrita* (DALL and BARTSCH, 1909) = *Chrysallida communis* ADAMS sensu CARPENTER, 1856 non *Chemnitzia communis* C.B. ADAMS, 1852.

7. *Amoura* DE FOLIN, 1873 non GRAY, 1847 = *Folinella* DALL and BARTSCH, 1904.

This genus was not separately described but a new species was described as *Amoura anguliferens* DE FOLIN, FM II: 205 (1873), pl. 9 fig. 1, which species should thus be considered as the type-species of the genus *Folinella* DALL and BARTSCH, 1904 nom. nov. pro *Amoura* DE FOLIN, 1873 non GRAY, 1847.

The type-specimen, which is still present in the DE FOLIN-collection in Paris, shows that this species is congeneric with *Rissoa excavata* PHILIPPI, 1836. As this species, *R. excavata*, is one of the two species on which MONTEROSATO (1884:85) based his genus *Funicularia* and as this species is designated as its type-species by DALL and BARTSCH (1909: 172) it follows that the genus *Ividella* DALL and BARTSCH, 1907 nom. nov. pro *Funicularia* MONTEROSATO, 1884 non LAMARCK, 1816 should take the same type-species and not *Odostomia navisa* DALL and BARTSCH, 1907 as cited by nearly all authors such as COSSMANN (1921: 260), THIELE (1929: 233), WENZ (1940: 847), NORDSIECK (1972: 98) as well as DALL and BARTSCH themselves (1909: 172). From the foregoing discussion it will be clear that I consider *Folinella* DALL and BARTSCH, 1904 to be a senior synonym of *Ividella* DALL and BARTSCH, 1909 and the species *Rissoa excavata* PHILIPPI, 1836 should thus be called *Folinella excavata* (PHILIPPI,

1836). The congeneric *Odostomia intermedia* BRUSINA, 1869 non DESHAYES, 1861 should also be placed in the genus *Folinella*. The genus *Miralda* A. ADAMS, 1864 with type-species *Parthenia diadema* A. ADAMS, 1860 is quite different as shown by DALL and BARTSCH (1909: 176) and should not be used for the species cited here from the Mediterranean.

Contrary to the indications by MONTEROSATO (1884: 85) and PIANI (1980: 163) the recent *O. intermedia* BRUS. is different from the fossil *Rissoa canaliculata* PHILIPPI, 1844. Compared with the recent shell, of which I have now seen about 50 specimens, the fossil shell is much broader, the mouth is 50% of the total height (instead of 37%), the last whorl is 72% (instead of 63%) and the sculpture as described by PHILIPPI is quite different from the real sculpture of the recent shell, which is in need of a new name because of preoccupation by DESHAYES, 1861. I therefore propose the new name *Folinella ghisottii* for *Odostomia intermedia* BRUSINA, 1869 non DESH. 1861.

It should also be noted that there exists a *Turbo canaliculatus* J. ADAMS, 1797 which is a doubtful species but certainly belongs to *Chrysallida* and as such is very closely related to *Rissoa canaliculata* PHILIPPI.

8. *Lia* DE FOLIN, 1873 non ESCHSCHOLTZ, 1829 nec MOERCH, 1852 = *Liamorpha* PILSBRY, 1898

This genus was not separately described but a new species was described as *Lia decorata* DE FOLIN, FM II: 171 (1873), pl. 6 fig. 8, which species is to be considered as the type-species of the genus *Liamorpha* PILSBRY, 1898, proposed because of preoccupation of the name *Lia* by ESCHSCHOLTZ, MOERCH and others.

The type-specimen(s) have to be considered as lost (see KISCH (1959: 112)). According to DALL and BARTSCH (1909: 176) the genus *Lia* is synonymous with *Miralda* A. ADAMS, 1864 (vide supra). Judging from descriptions and figures only, these authors may very well be right and so I tentatively also suggest to consider *Liamorpha* PILSBRY, 1898 to be a junior synonym of *Miralda* A. ADAMS. The genus *Ividia* DALL and BARTSCH, 1904 with type-species *Parthenia armata* CARPENTER, 1856 is also synonymous with *Miralda* A. ADAMS, 1864 according to DALL and BARTSCH (1909: 176).

My sincere thanks are due to Dr. Ph. Bouchet whose kind cooperation enabled me to study parts of the DE FOLIN collection in the Museum National d'Histoire Naturelle (MNHN) in Paris.

For the dates of publication of the different parts of the very rare work « Les fonds de la mer » one should consult the papers by Winckworth (1941) and Rheder (1946). In the text the frequent references to this work are abbreviated as FM.

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