

*GLOSSODORIS* EHRENBERG, 1831, *HYPSELODORIS* STIMPSON, 1855 AND *CHROMODORIS* ALDER & HANCOCK, 1855 (GASTROPODA, OPISTHOBRANCHIA): PROPOSED CLARIFICATION AND CONSERVATION. Z.N.(S.)2432

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The purpose of the present application is to clarify and conserve certain genus-group names in the CHROMODORIDIDAE (Gastropoda, Opisthobranchia) by the suppression under the plenary powers of *Actinodoris* Ehrenberg, 1831 and *Pterodoris* Ehrenberg, 1831.

2. In 1831 Ehrenberg erected three new subgenera of *Doris* Linnaeus and distinguished them on gill morphology. Within these three subgenera he described five new species on the basis of shape and coloration as follows:

Subgenus *Glossodoris*, sign. f

*Doris xantholeuca*, sign. f

*Doris erythraea*, sign. f

Subgenus *Actinodoris*, sign. g

*Doris sponsa*, sign. g

Subgenus *Pterodoris*, sign. g

*Doris picturata*, sign. g

*Doris brachyphylla*, sign. g

No illustrations and no information on the internal anatomy were included and no investigation of the type material has been undertaken until recently (Rudman, 1983) to correctly identify these species, all from the Red Sea.

3. In 1847, p. 164, Gray designated *D. xantholeuca* as type species of *Glossodoris* and *D. picturata* as type species of *Pterodoris*. *D. sponsa* is the type species of *Actinodoris* by monotypy.

4. In 1855 Stimpson, pp. 388, 389, conditionally erected the genus *Hypselodoris* for *Goniodoris? obscura* Stimpson, 1855, p. 388, which became the type species of the genus by monotypy.

5. Also in 1855, Appendix, p. xvii, Alder & Hancock erected the genus *Chromodoris* with *Doris magnifica* Quoy & Gaimard, 1832, p. 270 as the type species by monotypy.

6. All these genera belong to one family, the CHROMODORIDIDAE, erected by Bergh, 1892, p. 1103, the most prolific worker on opisthobranch taxonomy in the late nineteenth and early twentieth century. Apart from a few aberrant species he considered all the species in the family to belong to one genus for which he used the name *Chromodoris* (Bergh, 1875, 1878). When he became aware of Ehrenberg's names he studied Ehrenberg's types (Bergh, 1877), but only externally, and rejected the names: 'I have shown that the genera *Glossodoris*, *Actinodoris*, and *Pterodoris*, established by Ehrenberg in 1831 should be dropped, being founded on non-essential and inconstant characters of

the branchial leaflets. . . The name given by Alder and Hancock (*Chromodoris*) must be conserved for this genus' (Bergh, 1879, p. 108). He repeated this sentiment later (1884, pp. 64–65). In all of his later work in which he described over 50 species of *Chromodoris* s.l. and recorded over 100 species, Bergh used the name *Chromodoris*.

7. Sir Charles Eliot, a contemporary of Bergh's, also used *Chromodoris* but felt that the contained species should perhaps be split into a number of genera (Eliot, 1904, pp. 382–386) but 'I have not done so out of deference to the high authority of Professor Bergh'.

8. O'Donoghue, 1924, pp. 553–554, discussed the history of the names and stated: 'Thus in spite of the common usage of the generic designation *Chromodoris*, there is no doubt that Ehrenberg's names have considerable priority. The question as to which name should be employed is easily settled, for while they were published at the same time, *Glossodoris* comes first in order, and the first species is given as *G. xantholeuca*, which Gray designated as type species. Bergh, in a paper where he re-examines Ehrenberg's types, states, in our opinion rightly, that *G. xantholeuca* is *D. pallida* Rüppell & Leuckart, and that all species of *Glossodoris* are congeneric. The genus then stands as *Glossodoris* with the type species *G. pallida* (Rüpp. et Leuckart)'. (O'Donoghue in this paper acted as first reviser under Article 24 as between Ehrenberg's three subgeneric names; but this is irrelevant in terms of today's taxonomy, as will emerge below.) If all these species are congeneric, then O'Donoghue is correct in taxonomic terms but his paper illustrates the causes of further confusion that followed. Although Bergh did examine the external features of the preserved specimen of *D. xantholeuca* there was no external character that he could use to equate that species with *D. pallida* of Rüppell & Leuckart, 1830 or 1831, p. 33, pl. 10, fig. 1.

9. Odhner, 1931, pp. 30–35, considered that there were two distinct radula types within the '*Chromodoris-Glossodoris*' genus group and proposed splitting the group into two genera. Based on two species available to him he decided that two genera could be established:

- (a) with hamate teeth, the innermost one denticulate on both margins, the others serrate on their external edge only;
- (b) with bicuspid teeth.

However, at that time, no information was available on the type of radula possessed by *Chromodoris magnifica* and *Glossodoris xantholeuca*, the type species of their respective genera. Eliot, 1904, pp. 385, 397, reported that a species he tentatively identified as *C. magnifica* (but which is quite different in colour) had bicuspid teeth. Odhner, on the basis of Eliot's tentative identification, placed the one of his two species with bicuspid teeth—*C. valenciennesi* (Cantraine, 1841)—in *Chromodoris*. He retained *Glossodoris* for *C. punctilucens* Bergh, 1890, in which the teeth are hamate and denticulate, simply on the basis that this second type of radular morphology needed a genus-group name.

10. In 1934 Pruvot-Fol examined the type of *Doris magnifica* and found that the teeth are hamate and denticulate. Both Pruvot-Fol and Odhner (1957, in admitting his 1931 error) considered that Eliot had misinterpreted a statement of Alder & Hancock (1864, p. 123) concerning the radula of *C. magnifica* and talk of 'the error of Eliot'. Here is perhaps an appropriate place to correct the record. Eliot made no error in describing the bifid radula of the species he tentatively identified as *C. magnifica*. We now know that the species he was describing was not *C. magnifica*—and he specifically stated that 'identification [with *C. magnifica*] is uncertain in the absence of information as to the radula of that species'. The error, then, was of Odhner, not Eliot, and Odhner's 'clarification' (1931) only confused the situation further.

11. Winckworth, 1946, considered that *Glossodoris* should be used for those species with hamate and denticulate teeth, with '*Actinodoris* and its exact synonym *Chromodoris* belonging to the same group'. He considered that *Pterodoris* could be used for forms with bicuspid teeth with *Hypselodoris* as a synonym. This decision was based on unfounded synonymies of Ehrenberg's species with other species of which the radular morphology was known. At that time, although the radular morphology of *Chromodoris magnifica* and *Hypselodoris obscura*, the type species of their respective genera, was known, that of all Ehrenberg's species was not.

12. During the same period Baba, 1949, considered all species with these two radular morphologies to be *Glossodoris* and Pruvot-Fol, 1951, in a work listing all described species of this group, placed them all in *Glossodoris*.

13. Odhner, 1957, pp. 250–253, recognised his earlier error and considered that *Chromodoris* should be used for all species with hamate and denticulate teeth and *Hypselodoris* for species with bicuspid teeth. He stated that: '*Glossodoris* Ehrenberg, 1831, should be abandoned as unsettled.' In a footnote to that paper Odhner reported that he had discovered the whereabouts of Ehrenberg's types and 'as soon as possible I shall report on this'. He did not report on the types before his death.

14. Since that time some workers have continued to use *Glossodoris* for both groups of species but most workers have followed Odhner in using *Chromodoris* for species with hamate and denticulate and *Hypselodoris* for species with bicuspid teeth. All major workers on the family since that date, including Bouchet, Bertsch, Edmunds, Kay & Young, Marcus & Marcus, Rudman and Thompson have followed this usage (see Appendix 2). It should be noted that the 100-year debate on Ehrenberg's names has been based totally on conjecture and supposition and a total lack of evidence concerning the identity and anatomy of Ehrenberg's species. It is also important to realise that the debate has mainly centred around the use of the names *Glossodoris*, *Chromodoris* and *Hypselodoris*. Apart from Winckworth, 1946, the names *Actinodoris* and *Pterodoris* have not been seriously considered (see Appendix

1). A summary of the usage of generic names as reviewed in paragraphs 1 to 14 is presented in Appendix 3.

15. In preparing a revision of the CHROMODORIDIDAE I have obtained from the Zoological Museum, Berlin, Ehrenberg's types of *Glossodoris xantholeuca*, *Actinodoris sponsa* and *Pterodoris picturata*. The material is not suitable for detailed anatomical studies but radula mounts were made (Rudman, 1983) and the following conclusions reached:

- (a) *Glossodoris xantholeuca*, with hamate and denticulate teeth, is identical with *Doris pallida* Rüppell & Leuckart, 1830 or 1831, and this latter name is older. The radular teeth are hamate and denticulate but differ from those of *Chromodoris* in having numerous fine denticles rather than a few coarse ones, and in having a very narrow radular ribbon in which the number of teeth in a transverse row is approximately one-half the number of rows of teeth in the ribbon, whereas in a comparable species of *Chromodoris* the number of teeth in a row would be approximately twice the number of rows. From my studies of further specimens of *Glossodoris pallida* from East Africa and the Red Sea, this species belongs to a genus within the CHROMODORIDIDAE distinct from *Chromodoris* and *Hypselodoris*. Junior synonyms would include *Casella* H. & A. Adams, 1854 (type species *C. gouldi* H. & A. Adams, 1854), *Doriprismatica* d'Orbigny, 1839 (type species *Doris atromarginata* Cuvier, 1804) and *Chromolaichma* Bertsch, 1977 (type species *Casella sedna* Marcus & Marcus, 1967).
- (b) *Actinodoris sponsa* has hamate and denticulate teeth, typical of *Chromodoris*. It has traces of white and black lines on the dorsum of the holotype. It has usually been considered a synonym of *Doris quadricolor* Rüppell & Leuckart, 1830 or 1831, but the detailed radular morphology is quite different (Rudman, 1977, 1982). As I have discussed in those two papers, there are a number of distinct but similarly coloured species. From the original description and the radula, it is not possible to identify *A. sponsa* confidently with any known species.
- (c) *Pterodoris picturata* has bicuspid radular teeth typical of the genus *Hypselodoris*. It also has distinctive epithelial mantle glands posteriorly, another characteristic of the genus. It has been considered a synonym of *Doris infucata* Rüppell & Leuckart, 1830 or 1831, but as with the preceding species there is a group of similarly coloured species and the radula is not distinctive enough to identify the species positively. At this point Ehrenberg's other two species should be considered. No specimens of *Glossodoris erythraea* exist (Bergh,

1877) and *Pterodoris brachyphylla* cannot be recognised from the brief description.

16. If the Law of Priority is followed, then (a) *Glossodoris* Ehrenberg, 1831 (type species *G. xantholeuca* = *D. pallida* Rüppell & Leuckart, 1830 or 1831) is retained with *Casella*, *Doriprismatica* and *Chromolaichma* as junior synonyms. Although *Casella* has usually been used for this genus, its replacement by *Glossodoris* would not greatly upset modern usage because the genus is small and not often mentioned in the literature. Also the type species of *Casella*, *C. gouldi* (by monotypy), is based on a colour illustration and the species has never been found since. Many modern authors (e.g. Thompson, 1972; Bertsch, 1977) consider *Doris atromarginata* Cuvier to be the type species, but this cannot be so since it was not originally included in the genus. The conclusion appears in any case to be based on an unfounded decision of Bergh's (1888, p. 838) to synonymise the two names. The latter species is well known and differs considerably in colour and external form from the illustration of *C. gouldi*. *Casella*, then, is based on a type species of which we have no anatomical information and that has not been rediscovered since its original description. (b) *Actinodoris* Ehrenberg, 1831 (type species *A. sponsa*) would replace *Chromodoris* Alder & Hancock, 1855. This would greatly upset the usage of the last twenty years which has stabilised after forty years of confusion. It would also mean replacing a name in use for over 100 years and one on which the family name is based by one that has seldom been used and is based on a species which, although recognisable at the generic level, is unrecognisable at the specific level. (c) *Pterodoris* Ehrenberg, 1831 (type species *P. picturata*) would replace *Hypselodoris* Stimpson, 1855. As with the previous case, this would greatly upset present usage and again the name of a genus with a well known type species would be replaced by the name of a genus based on a type species that is unrecognisable at the specific level.

17. I therefore request the International Commission on Zoological Nomenclature:

- (1) to use its plenary powers to suppress the generic names (a) *Actinodoris* Ehrenberg, 1831 and (b) *Pterodoris* Ehrenberg, 1831, for the purposes of the Law of Priority but not for those of the Law of Homonymy;
- (2) to place the following names on the Official List of Generic Names in Zoology:
  - (a) *Glossodoris* Ehrenberg, 1831 (gender: feminine), type species, by subsequent designation by Gray, 1847, *Doris* (*Glossodoris*) *xantholeuca* Ehrenberg, 1831;
  - (b) *Chromodoris* Alder & Hancock, 1855 (gender: feminine), type species by monotypy, *Doris magnifica* Quoy & Gaimard, 1832;
  - (c) *Hypselodoris* Stimpson, 1855 (gender: feminine), type species, by monotypy, *Goniodoris? obscura* Stimpson, 1855;

- (3) to place the following names on the Official List of Specific Names in Zoology:
  - (a) *pallida* Rüppell & Leuckart, 1830 or 1831, as published in the binomen *Doris pallida* (the valid name at the time of this application of the type species of *Glossodoris* Ehrenberg, 1831);
  - (b) *magnifica* Quoy & Gaimard, 1832, as published in the binomen *Doris magnifica* (specific name of type species of *Chromodoris* Alder & Hancock, 1855);
  - (c) *obscura* Stimpson, 1855, as published in the binomen *Goniodoris? obscura* (specific name of type species of *Hypselodoris* Stimpson, 1855);
- (4) to place on the Official List of Family-Group Names in Zoology the name CHROMODORIDIDAE Bergh, 1892 (type genus *Chromodoris* Alder & Hancock, 1855);
- (5) to place the following names, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) *Actinodoris* Ehrenberg, 1831;
  - (b) *Pterodoris* Ehrenberg, 1831.

## Appendix 1

### Usage of names *Actinodoris* and *Pterodoris*

Apart from the discussions of Bergh (1877, 1879, 1884) and Winckworth (1946), already mentioned in the preceding submission, the names *Actinodoris* and *Pterodoris* have seldom been used in the literature. Listed below are all other primary uses of the names by early workers, mainly in uncritical generic compilations.

1. GRAY, J. E., 1847
  - (a) designates *D. xantholeuca* as type of *Glossodoris*
  - (b) designates *D. picturata* as type of *Pterodoris*
  - (c) lists *D. sponsa* as type of *Actinodoris*
2. ADAMS, H. & ADAMS, A., 1854
  - (a) The 'type of the genus *Actinodoris*' is given incorrectly as *Doris flammulata* Quoy & Gaimard, a species which belongs to the genus *Hexabranhus*. Fourteen species are listed in the genus including all those mentioned by Gray (1857) and including also *D. sponsa* but not as type species.
  - (b) *Glossodoris* is incorrectly typified as having a tuberculate mantle, leading to the error of Gray (1857) and *G. bertheloti* d'Orbigny, which is not a chromodorid, is given as a typical example. The seven species listed include *D. picturata* (the type of *Pterodoris*) and *D. xantholeuca* (the type of *Glossodoris*), but *Doris pallida* Rüppell & Leuckart (a senior synonym of *D. xantholeuca*) is listed in the separate genus *Doriprismatica*.

3. GRAY, J. E., 1857
  - (a) under *Glossodoris*, he lists three species with tuberculate mantles, none of which are chromodorids.
  - (b) under *Actinodoris*, he lists eleven species, none of which are chromodorids, and which today would be placed in a number of genera including *Hexabranhus*, *Discodoris*, *Platyodoris* and *Dendrodoris*.
4. ANGAS, G. F., 1864
  - (a) Uses the genus *Actinodoris* for a new species *Actinodoris australis*, which is most probably a species of *Dendrodoris*. No explanation of the use of the name *Actinodoris* is given.
5. ABRAHAM, P. S., 1877
  - (a) The genus *Chromodoris* is listed with *Doriprismatica*, d'Orbigny; *Goniodoris*, Gray (in part); *Goniobranhus* Pease and *Hemidoris* Stimpson as synonyms. Ehrenberg's *D. xantholeuca* and *D. erythraea* are considered to belong to *Chromodoris* and *D. brachyphylla*, *D. picturata* and *D. sponsa* as tentatively belonging to that genus. Ehrenberg's generic names *Glossodoris*, *Actinodoris* and *Pterodoris* are ignored although the three type species are listed under *Chromodoris*.
6. TRYON, G. W., 1883
  - (a) *Chromodoris* is listed (p. 370) with Abraham's (1877) generic synonyms, but Ehrenberg's names are ignored.
7. THIELE, J., 1931
  - (a) *Glossodoris* is listed with *Actinodoris*, *Pterodoris*, *Chromodoris* and *Goniobranhus* as synonyms.

## Appendix 2

### Usage of names *Chromodoris*, *Hypselodoris*, *Glossodoris*, *Casella*

As an indication of modern usage of the names under consideration the opisthobranch literature of the last twenty years (1962–1982) was searched. In 85 papers by 35 authors in which species belonging to the Chromodorididae were included:

*Chromodoris* was used in 59 papers,  
*Hypselodoris* was used in 54 papers,  
*Glossodoris* was used in 14 papers,  
*Casella* was used in 12 papers.

(a) All uses of *Chromodoris* and *Hypselodoris* followed Odhner's (1957) definition of the two genera and in the usage this submission hopes to stabilise.

(b) 13 usages of *Glossodoris*, followed Pruvot-Fol (1951) and Baba (1949), in using it as a broad generic concept including both *Chromodoris* and *Hypselodoris*. This usage was restricted to two authors from Japan and China and three authors from the Atlantic and Mediterranean coasts of Europe.

(c) One use of *Glossodoris* is inconsistent with any usage (Abbott, 1974). *Glossodoris* is considered a senior synonym of *Chromodoris*, and *Hypselodoris* to be a subgenus. The type of *Glossodoris* is incorrectly identified as *Doris gracilis* Rapp, 1827.

(d) In all but one case, *Casella* is used in conjunction with one species, *Casella atromarginata* (Cuvier, 1804).

## Appendix 3

Usage of generic names as outlined in paragraphs 1–14

Ehrenberg, 1831	<i>Glossodoris</i>	<i>Actinodoris</i>	<i>Pterodoris</i>
H. & A. Adams, 1854	<i>Casella</i>	—	—
Stimpson, 1855	—	—	<i>Hypselodoris</i>
Alder & Hancock, 1855	—	<i>Chromodoris</i>	—
Bergh (many papers) <sup>1</sup>	<i>Casella</i>	—————	<i>Chromodoris</i> —————
O'Donoghue, 1924 <sup>2</sup>	—	—————	<i>Glossodoris</i> —————
Odhner, 1931 <sup>3</sup>	—	<i>Glossodoris?</i>	<i>Chromodoris</i>
Winckworth, 1946 <sup>4</sup>	—	<i>Glossodoris</i>	<i>Pterodoris</i>
Baba, 1949 <sup>5</sup>	<i>Casella</i>	—————	<i>Glossodoris</i> —————
Pruvot-Fol, 1951 <sup>5</sup>	—	—————	<i>Glossodoris</i> —————
Odhner, 1957 <sup>6</sup>	—	<i>Chromodoris</i>	<i>Hypselodoris</i>
This proposal	<i>Glossodoris</i>	<i>Chromodoris</i>	<i>Hypselodoris</i>

- Notes: 1. *Chromodoris* = *Glossodoris*, *Pterodoris*, *Actinodoris*, *Hypselodoris*.  
 2. *Glossodoris* = *Pterodoris*, *Actinodoris*, *Chromodoris*.  
 3. Odhner incorrectly assumed that the *Hypselodoris* radula morphology was typical of *Chromodoris* and that hamate and denticulate radular morphology was typical of *Glossodoris*. Although the species he had available was by chance a true *Glossodoris* his 1957 'correction' showed that his placement of it in *Glossodoris* was a guess.  
 4. *Glossodoris* = *Actinodoris*, *Chromodoris*. *Pterodoris* = *Hypselodoris*.  
 5. *Glossodoris* = *Actinodoris*, *Chromodoris*, *Pterodoris*, *Hypselodoris*.  
 6. Reversed his earlier decision and considered *Glossodoris* should not be used until understood anatomically. The names as used by Odhner (1957) have been accepted usage by most subsequent authors (Appendix 2).

## REFERENCES

- ABBOTT, R. T. 1974. *American seashells*. New York, Van Nostrand Reinhold.  
 ABRAHAM, P. S. 1877. A revision of the anthobranchiate nudibranchiate Mollusca, with descriptions of forty-one hitherto undescribed species. *Proc. zool. Soc. London* for 1877, pp. 196–267.  
 ADAMS, H. & ADAMS, A. 1854. *The genera of the recent Mollusca*, vol. 2, part XVII, pp. 29–60. London, Van Voorst.  
 ALDER, J. & HANCOCK, A. 1855. *Monograph of the British nudibranchiate Mollusca*, Appendix. London, Ray Society.  
 — & — 1864. Notice of a collection of nudibranch Mollusca made in India by Walter Elliot, Esq. *Trans. zool. Soc. London*, vol. 5, pp. 113–147.  
 ANGAS, G. F. 1864. Description d'espèces nouvelles ... mollusques nudibranches des environs de Port Jackson (Nouvelles-Galles du Sud). *J. Conchyliol.*, (3) vol. 12, pp. 43–70.  
 BABA, K. 1949. *Opisthobranchia of Sagami Bay*. Tokyo, Iwanami Shoten.

- BERGH, R. 1875. Neue Nacktschnecken der Südsee, 3. *J. Mus. Godeffroy*, vol. 3 (8), pp. 72–78.
- 1877. Kritische Untersuchung der Ehrenberg'schen Doriden. *Jahrb. deutsch. malakozool. Gesellschaft*, vol. 4, pp. 45–76.
- 1878. Neue Nacktschnecken der Südsee, 4. *J. Mus. Godeffroy*, vol. 5(14), pp. 1–3.
- 1879. On the nudibranchiate gasteropod Mollusca of the north Pacific Ocean, with special reference to those of Alaska, part 1. *Proc. Acad. nat. Sci. Philadelphia* for 1879, pp. 108–109.
- 1884. Report on the Nudibranchiata. *Challenger Reports (Zool.)*, vol. 10 (26), pp. 64–72.
- 1889. Malacologische Untersuchungen, in *Reisen im Archipel der Philipinen von Dr C. Semper*, Sect. 2, vol. 3(16), p. 838.
- 1892. Malacologische Untersuchungen, in *Reisen im Archipel der Philipinen von Dr C. Semper*, Sect. 2, vol. 3(18), p. 1103.
- BERTSCH, H. 1977. The Chromodoridinae nudibranchs from the Pacific coast of America, part 1. *Veliger*, vol. 20, p. 113.
- EHRENBERG, C. G. 1831. *Symbolae physicae seu icones et descriptiones animalium evertibratorum sepositis insectis quae ex itinere per Africam borealem et Asiam occidentalem*. Decas 1, Mollusca.
- ELIOT, C. N. E. 1904. On some nudibranchs from East Africa and Zanzibar, part 3. *Proc. zool. Soc. London*, vol. 1 for 1904, pp. 382–386.
- GRAY, J. E. 1847. A list of the genera of Recent Mollusca, their synonyma and types. *Proc. zool. Soc. London* for 1847, pp. 164–168.
- 1857. *Guide to the systematic distribution of Mollusca in the British Museum*, Part 1, pp. 208–212. London, Taylor & Francis.
- ODHNER, N. H. 1931. Beiträge zur malakozoologie der Kanarischen Inseln. *Arkiv för Zoologi*, vol. 23, pp. 1–116.
- 1957. *Chromodoris* contra *Glossodoris*, a systematic nomenclatorial controversy. *Proc. malacol. Soc. London*, vol. 32, pp. 250–253.
- O'DONOGHUE, C. H. 1924. Report on Opisthobranchia from Abrolhos Is., Western Australia, with description of a new parasitic copepod. *J. linn. Soc. London*, vol. 35, pp. 553–554.
- ORBIGNY, A. D' 1839. Mollusques, échinodermes, foraminifères et polypiers, recueillies aux Iles Canaries par MM. Webb et Berthelot et décrits par Alcide d'Orbigny. *Hist. nat. Iles Canaries*, vol. 2, part 2, Mollusca 5, pp. 39–40.
- PRUVOT-FOL, A. 1934. Les opisthobranches de Quoy & Gaimard. *Arch. Mus. Hist. nat. Lyon*, vol. 11(6), pp. 13–89.
- 1951. Révision du genre *Glossodoris* Ehrenberg. *J. Conchyliol.*, vol. 91, pp. 76–164.
- QUOY, J. R. C. & GAIMARD, J. C. 1832. in *Voyage de l'Astrolabe*, Zool., vol. 2, Mollusques, p. 270.
- RUDMAN, W. B. 1977. Chromodorid opisthobranch Mollusca from East Africa and the tropical West Pacific. *Zool. J. linn. Soc. London*, vol. 61, pp. 351–397.
- 1982. The Chromodorididae (Opisthobranchia, Mollusca) of the Indo West Pacific: *Chromodoris quadricolor*, *C. lineolata* and *Hypselodoris nigrolineata* colour groups. *Zool. J. linn. Soc. London*, vol. 76, pp. 183–241.
- 1983. The Chromodorididae (Opisthobranchia, Mollusca) of the Indo West Pacific: a revision of the genera. *Zool. J. linn. Soc. London*. (In press).

- RÜPPELL, E. & LEUCKART, F. S. 1830 or 1831. Neue wirbellose Thiere des rothen Meeres, in Rüppell, E., *Atlas zu der Reise im nördlichen Afrika*, p. 33, pl. 10, fig. 1.
- STIMPSON, W. 1855. Descriptions of some new marine invertebrates. *Proc. Acad. nat. Sci. Philadelphia*, vol. 7 (10), pp. 388–389.
- THIELE, J. 1931. *Handbuch der systematischen Weichtierkunde*, p. 431. Jena, Fischer.
- TRYON, G. W. 1883. *Structural and systematic conchology*, vol. 2, p. 370. Philadelphia, Tryon.
- THOMPSON, T. E. 1972. Chromodorid nudibranchs from eastern Australia (Gastropoda, Opisthobranchia). *J. Zool.*, vol. 166, pp. 391–409.
- WINCKWORTH, R. 1946. Synonyms of *Glossodoris*. *Proc. malacol. Soc. London*, vol. 26, pp. 153–154.

### Comments on the above Application

Dr Rudman's application is supported by Dr Malcolm Edmunds (*Preston Polytechnic, Preston, U.K.*), Dr Hans Bertsch (*Instituto de Investigaciones Oceanologicas, Universidad Autonoma de Baja California, Mexico*), Dr P. Bouchet (*Muséum National d'Histoire Naturelle, Paris, France*), Dr Eveline Marcus (*Department of Zoology, University of São Paulo, Brazil*), Dr M. C. Miller (*Department of Zoology, University of Auckland, New Zealand*) and Dr Bernard E. Picton (*Ulster Museum, Belfast, U.K.*). Dr Edmunds fears that the replacement of *Casella* by *Glossodoris* following the Law of Priority could cause some confusion, but favours Dr Rudman's proposal because the type species of *Casella* remains unknown and would require redesignation. Dr Marcus looks forward to the removal of the confusion of over 100 years. All are in favour of the suppression of *Actinodoris* and *Pterodoris*.

R.V.M.



Rudman, W B. 1983. "Glossodoris Ehrenberg, 1831, Hypselodoris Stimpson, 1855 and Chromodoris Alder & Handock, 1855 (Gastropoda, Opisthobranchia): proposed clarification and conservation. Z. N. (S.) 2432." *The Bulletin of zoological nomenclature* 40, 211–220.

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