PROPOSED REJECTION OF NINE SPECIFIC NAMES OF HOLOTHURIOIDEA (ECHINODERMATA). Z.N.(S.) 1587

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It is proposed that the names in the left-hand column below should be suppressed in order that the better-known names (of which they are, or could be, senior synonyms) on the right should not be invalidated.

(1) Holothuria guamensis Quoy & Microthele nobilis (Selenka), 1867 Gaimard, 1833

(2) Holothuria lucifuga Quoy & Holothuria moebii Ludwig, 1883 Gaimard, 1833

(3) Holothuria albifasciata Quoy & ?Holothuria coluber (Semper), 1868* Gaimard, 1833

(4) Holothuria lutea Quoy & Gaimard, ?Stichopus variegatus Semper, 1868*
1833

(5) Holothuria pentagona Quoy & Pentacta australis (Ludwig), 1875 Gaimard, 1833

(6) Fistularia fusca Quoy & Gaimard, Polycheira rufescens Brandt, 1835 1833

(7) Stichopus leucospilota Brandt, 1835
 (8) Thyone buccalis Stimpson, 1856
 Holothuria vagabunda Selenka, 1867
 Stolus sacellus Selenka, 1867

(9) Holothuria timama Lesson, 1830 Holothuria aculeata (Semper), 1868

The six specific names of Quoy & Gaimard were discussed by Cherbonnier (1952) who decided that *Holothuria albifasciata* and *lutea* were possibly synonymous with *Holothuria coluber* and *Stichopus variegatus* respectively while the four other species were definitely synonymous with those listed opposite. Similarly in 1951 Cherbonnier recognised *Holothuria timama* Lesson as synonymous with *H. aculeata* (Semper).

The two remaining names in the left-hand column, Stichopus leucospilota Brandt and Thyone buccalis were earlier recognised as conspecific with H. vagabunda and Stolus sacellus respectively but their priority has been deliberately ignored by most specialists in favour of the better known names. For instance Panning (1929–35) in his monograph on the genus Holothuria (sensu lato) used the six names in the right-hand column which came within the scope of his work, while Cherbonnier (1955) used H. vagabunda with leucospilota listed among the references and similarly used Microthele nobilis rather than guamensis. Heding too (1934 and 1940) used the name vagabunda.

1. Holothuria guamensis Quoy & Gaimard, 1833, p. 137.

The type-specimen seems to be lost.

Apart from simple repetitions of the original record, *H. guamensis* has only been mentioned by Lampert (1855), who notes only that the short description makes placing it impossible, Théel (1886), who notes that "it is a

^{*} The question marks signify that in the view of Cherbonnier (1952) these two names are only possibly synonyms of the two on the left.

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very dubious form, which needs re-examination", Panning (1929) in his monograph on *Holothuria* (in the wide sense) [which is still the definitive work], who lists guamensis among the unrecognisable species, and by Cherbonnier (1952), who reproduces Quoy and Gaimard's figure and their short description, which includes only two characters of taxonomic importance, the colour and the number of tentacles (26). Although the latter is four more than has been recorded for *Microthele nobilis* (Selenka), 1867. Cherbonnier believes that the distinctive colour pattern identifies guamensis with nobilis out of the four possible species which occur at the type locality, Guam.

Notwithstanding this statement, in 1955 Cherbonnier used the name Microthele nobilis as a heading with the reference to H. guamensis among those

listed below it.

The specific name nobilis (in combination with various generic names such as Mülleria, Actinopyga and Holothuria (Microthele)) was used for additional material by Semper (1868), Théel (1886), Fisher (1907), Panning (1929) and following authors, including Heding and H. L. Clark, but not Domantay.

In 1881 Ludwig had shown that Mülleria nobilis Selenka, 1867 is synonymous with Holothuria maculata Brandt, 1835 (not H. maculata Chamisso and Eysenhardt, 1821) and the name maculata was used by several authors between 1881 and 1929 (notably Lampert, Mitsukuri, Erwe, Bedford, and Pearson) as well as by Domantay since 1929 despite the fact that it is a junior homonym. 2, 3 and 4. Holothuria lucifuga, albifasciata and lutea Quoy & Gaimard, 1833, pp. 134, 132 and 140 respectively.

All three were referred to the genus Stichopus by Brandt (1835) followed by Selenka (1867), Semper (1868), Lampert (1885), Théel (1886) and Panning (1929), none of whom added any new records. However, H. L. Clark (1922) in his revision of Stichopus noted that lucifugus is unidentifiable but might represent the same species as Holothuria pulchella Selenka, that albifasciatus is simply unidentifiable and that luteus is unidentifiable but is more likely to be

synonymous with Stichopus variegatus than with S. horrens.

Cherbonnier (1952) found that the type of lucifuga still exists in the Paris Museum and is conspecific with Holothuria moebii Ludwig, 1883, which name has been widely used for additional material (either as a species or as a subspecies of H. lubrica) notably by Lampert, Théel, Mitsukuri, Ohshima, Panning and Chang. The types of H. albifasciata and lutea are lost. Concerning albifasciata, Cherbonnier notes that it is possibly synonymous with Halodeima coluber (Semper), 1868, while lutea he says is possibly a synonym of Stichopus variegatus Semper, 1868. Both H. coluber and S. variegatus have been recorded a number of times in the literature, notably by H. L. Clark and Panning.

5. Holothuria pentagona Quoy & Gaimard, 1833, p. 135.

Since its inception the name pentagona has been mentioned by Brandt (1835), who placed it in the genus Stichopus and by Semper (1868), who considered it to be a synonym of Colochirus tuberculosus (Quoy & Gaimard), 1833, p. 131. Semper was followed by Lampert (1885), Théel (1886) and other workers, though, H. L. Clark (1922) commented simply that pentagona is a Pentacta (of which he considered Colochirus is a synonym).

Cherbonnier (1952) re-examined the type specimen and declared that it is

conspecific with Colochirus australis Ludwig, 1875 (of which the type-locality

was similarly Sydney, N.S.W.).

The name Colochirus australis was referred by Ludwig himself (1887) to the synonymy of the South African species Actinia doliolum Pallas, 1766. The following authors including Erwe (1913), Ekman (1918) and Cotton and Godfrey (1942) used the name Colochirus doliolum (Pallas) for the Australian species but H. L. Clark (1932) recognised australis as distinct. Again in his monographs on the Echinoderms of Australia (1938 and 1946) H. L. Clark used the name Pentacta australis (Ludwig). This was followed by Panning (1949), though maintaining the old generic name Colochirus, and by Hickman (1962) who uses Pentacta australis.

Except for the original reference (with that of Brandt) and Cherbonnier's redescription, the name *pentagona* has never been used.

Since this common south Australian species has already undergone one change of name it is undesirable to subject it to another.

6. Fistularia fusca Quoy & Gaimard, 1833, p. 126.

The name fusca was referred to by Brandt (1835) who transferred it to Chiridota, followed by Dujardin & Hupé (1862), Selenka (1867), who transferred it to Synapta followed by Semper (1868), Lampert (1885) and Théel (1886), while H. L. Clark (1907) noted that it might belong to Euapta (or to Opheodesoma, Polyplectana, Synapta or Synaptula).

By none of these workers was any additional material ascribed to fusca.

Cherbonnier (1952) redescribed the type-specimen of fusca and found it to be conspecific with Polycheira rufescens Brandt, 1835. Since 1881, when Ludwig re-examined Brandt's type of rufescens and stated that Chiridota variabilis Semper, 1868 is a synonym of it, the name rufescens has been widely used for additional material of the species, notably by H. L. Clark, Ohshima and Heding.

7. Stichopus (Gymnochirota) leucospilota Brandt, 1835, p. 251.

The name leucospilota has been mentioned by Selenka (1867) under the generic name Stichopus and by Semper (1868) as ?Stichopus leucospilota. Ludwig (1881) re-examined the type-specimen and declared that it is conspecific with Holothuria vagabunda Selenka, 1867. Notwithstanding this, Ludwig himself persisted in using the name vagabunda (1882, 1883, 1888, etc.) and Lampert (1885) stated that although he was well aware that the use of vagabunda offended against the prior rights of leucospilota, the excellent name vagabunda has become so well established that its rival leucospilota could not drive it out. Consequently the name vagabunda continued to be used, notably by Théel, Sluiter, Koehler and Vaney, Pearson, Fisher, Erwe and Ekman until H. L. Clark (1920) re-stated that leucospilota "must unquestionably take" priority and used it instead of vagabunda; this he did again in 1921, 1922, 1932, 1938 and 1946. H. L. Clark's usage was followed by Deichmann, by several Australian workers not specialists on echinoderms, by Utinomi (1959), Tortonese (1955), and by Cherbonnier in a single paper of 1955.

Otherwise the recent holothurian specialists have all kept to the name vagabunda, notably Panning, Heding and Cherbonnier in other papers up to the present day.

8. Thyone buccalis Stimpson, 1856.

The type-locality of buccalis is Port Jackson, N.S.W.

Since its inception, the name buccalis has been used by Semper (1868), for additional Australian material, Lampert (1885), who quoted the earlier records only, Théel (1886), who described some of Semper's specimens, Bell (1884) and H. L. Clark (1921), who referred to it additional Australian material. However, Théel's comment that buccalis may possibly be proved to be identical with Thyone sacella (Selenka), 1867, was repeated by H. L. Clark (1938), who in 1946 gave Stolus sacellus as a synonym. This was followed by Domantay (1962), although Panning (1949) had referred buccalis to a new genus Pseudothyone leaving Stolus sacellus as a distinct species.

Stolus sacellus Selenka, 1867, is the type-species of the genus Stolus and its

type locality is Zanzibar.

The name has been used by Semper (1868), von Marenzeller (1882), Lampert (1885), Théel (1886), Studer (1889), Sluiter (1895), Pearson (1902), Vaney (1905), Mitsukuri (1912), Erwe (1913), H. L. Clark (1932), Panning (1949) and Cherbonnier (1955), most of them for additional material.

Cherbonnier (MS) agrees that *buccalis* and *sacellus* are synonymous (despite Panning's inclusion of them in different genera) but prefers the latter name despite its lack of priority, because it has been used so much more than *buccalis* by holothurian specialists.

9. Holothuria timama Lesson, 1830, p. 118.

Since its inception, the name timama has been used by Jaeger (1833) who referred it to the genus Psolus followed by Dujardin and Hupé (1862), but Semper (1868) put it (with a query) in the synonymy of Holothuria marmorata Jaeger, 1833, as did Lampert (1885), though giving it the heading of Holothuria timama. Théel (1886) lists it among the "incompletely known" species needing re-examination; this was repeated by Panning (1929) who spelled the name timana.

Finally Cherbonnier (1951) redescribed Lesson's type-specimen (also under the name timana) and declared that it is conspecific with Holothuria aculeata Semper, 1868, which name has been used by Lampert (1885), Théel (1886), Hérouard (1893), Lampert (1896), Pearson (1913) and Panning (1934) though without adding any additional records.

The International Commission on Zoological Nomenclature is therefore asked to preserve the accustomed terminology of the above holothurian species

by taking the following action:

(1) use its plenary powers to suppress the following specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) guamensis Quoy & Gaimard, 1833, as published in the binomen Holothuria guamensis;

(b) lucifuga Quoy & Gaimard, 1833, as published in the binomen Holothuria lucifuga;

(c) albifasciata Quoy & Gaimard, 1833, as published in the binomen Holothuria albifasciata;

(d) lutea Quoy & Gaimard, 1833, as published in the binomen Holothuria lutea;

- (e) pentagona Quoy & Gaimard, 1833, as published in the binomen Holothuria pentagona;
- (f) fusca Quoy & Gaimard, 1833, as published in the binomen Fistularia fusca;
- (g) timama Lesson, 1830, as published in the binomen Holothuria timama;
- (h) leucospilota Brandt, 1835, as published in the binomen Stichopus leucospilota;
- (i) buccalis Stimpson, 1856, as published in the binomen Thyone buccalis;
- (2) place the specific names suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.
- (3) place the following specific names on the Official List of Specific Names in Zoology:
 - (a) nobilis Selenka, 1867, as published in the binomen Mülleria nobilis;
 - (b) moebii Ludwig, 1883, as published in the binomen Holothuria moebii;
 - (c) coluber Semper, 1868, as published in the binomen Holothuria coluber;
 - (d) variegatus Semper, 1868, as published in the binomen Stichopus variegatus;
 - (e) australis Ludwig, 1875, as published in the binomen Colochirus australis;
 - (f) rufescens Brandt, 1835, as published in the binomen Polycheira rufescens;
 - (g) aculeata Semper, 1868, as published in the binomen Holothuria aculeata;
 - (h) vagabunda Selenka, 1867, as published in the binomen Holothuria vagabunda;
 - (i) sacellus Selenka, 1867, as published in the binomen Stolus sacellus.

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