

Gloria Maris	45 (6)	165-181	Antwerpen, januari 2007
--------------	--------	---------	-------------------------

Annotated list of columbellid species described by M.M. Schepman held in the malacological collection of the Zoölogisch Museum Amsterdam (Mollusca, Caenogastropoda, Columbelloidea)

Kevin MONSECOUR & David MONSECOUR

Schoonderbeukenweg 147, 3202 Rillaar, Belgium
monsecourbrothers@skynet.be

Abstract: The present paper documents the species of the family **Columbellidae** described by M.M. Schepman and deposited in the malacological collection of the Zoölogisch Museum Amsterdam, The Netherlands. Schepman described 7 species of **Columbellidae** (one later on assigned to the family **Turridae**), all collected during the Siboga Expedition in 1899-1900. We propose the following nomina nova: *Mitrella* (*Indomitrella*) *schepmani* for *Columbella* (*Atilia*) *conspersa* var *brevis* Schepman, 1911 and *Mitrella* *longissima* for *Columbella* (*Mitrella*) *elongata* Schepman, 1911. We also suggest the following new combinations for taxa treated herein: *Mitrella simplex* (Schepman, 1911) and *Mitrella* (*Indomitrella*) *undulata* (Schepman, 1911). *Mitrella* (*Sulcomitrella*) *kanamaruana* Kuroda, 1953 is removed from synonymy with *Mitrella* (*Sulcomitrella*) *circumstriata* (Schepman, 1911) and lectotypes are designated for 4 species.

Introduction: The family **Columbellidae** Swainson, 1840 has often been ignored by recent authors. The latest monograph was published by Kobelt (1895-97). Amongst recent systematic literature, only a few works emphasize columbellids. Consequently, many of the columbellid taxa described have fallen into oblivion.

For any future taxonomic treatment, the study of type specimens will be indispensable. A list of types of columbellids held in the ZMB (Monsecour & Köhler, 2006) showed the number of species that have been forgotten and 21 new combinations and 16 new synonyms had to be made (on a total of 71 species). Many of these species were only known from their description and had never been referred to again, apart from the lists by Pace (1902) and Wagner & Abbott (1978). These lists give a useful overview of the species of columbellids known at that time, but are not very accurate in synonymy and generic classification.

The ZMA houses types of about 30 taxa of columbellids, including recently described Caribbean species by De Jong & Coomans (1988) and Faber (2004), Arabian species described by authors like Smythe, Moolenbeek & Dance, Melvill & Standen, some species from other locations and types of 8 columbellid species described by Schepman and collected during the Siboga expedition, carried out in Indonesian waters in 1899-1900. The taxa described by Schepman are of particular interest since most of them have fallen into oblivion. Wagner and Abbott (1978) only listed two of the seven species described by Schepman and one other is recorded in recent literature. We therefore present an annotated list of the species described by Schepman with their current systematic position.

All the species (apart from one, which is a turrid) are assigned to the genus *Mitrella* Risso, 1826. DeMaintenon (1999) indicated that this genus may not be monophyletic. It might therefore be better to upgrade the subgenera to genus level, but as this is not the purpose of this study and the subgeneric classification of *Mitrella* is not at all complete we treat these species as belonging to *Mitrella* and still mention subgenera whenever available.

Acronyms and abbreviations

BM(NH) – Natural History Museum, London

RMNH – Nationaal Natuurhistorisch Museum, Leiden

ZMA – Zoölogisch Museum Amsterdam

ZMB – Museum für Naturkunde, Berlin

nom. nov. – nomen novum

Stat. – station number

A. Annotated alphabetical list of species group taxa

brevis

Columbella (Atilia) conspersa var. *brevis* Schepman, 1911: 334, pl. 20 fig. 9 (non
Columbella scripta var. *brevis* Di Monterosato, 1875)

Current systematic status: *Mitrella (Indomitrella) schepmani* **nom. nov.**

Type locality: Stat. 260, Indonesia, Kai Islands, Nuhu Jaan, 2.3 miles northwest from the northpoint, 90 m, sand, coral and shells.

Type material: lectotype – **present designation** - ZMA 3.11.067 (type locality; length: 7.34 mm; width: 3.35 mm); 1 paralectotype ZMA 3.11.064 (Stat. 47, Indonesia, Bay of Bima, Bima-anchorage, near south fort, 55 m, mud with patches of fine coralsand); 1 paralectotype ZMA 3.11.065 (Stat. 50, Indonesia, Flores, westcoast, Bay of Badjo, up to 40 m, mud, sand and shells); 2 paralectotypes ZMA 3.11.067 (Stat. 260, Indonesia, Kai Islands, Nuhu Jaan, 2.3 miles north 63° west from the northpoint, 90 m, sand, coral and shells); 1 paralectotype ZMA 3.11.068 (Stat. 285, E. Timor, off southeastcoast, anchorage, 34 m, on the limit between mud and coral); 1 paralectotype ZMA 3.11.069 (Stat. 286, E. Timor, off southeastcoast, 883 m, on mud, 8°50'.2S – 127°02'.2E); 1 paralectotype RMNH (Stat. 51; length 6.4 mm).

Diagnosis: Shell small for the genus (5.0 mm - 7.5 mm), fusiform. Teleoconch consisting of 5.5-6 convex whorls; protoconch multispiral of 3.5-4 whorls. The first teleoconch whorls with clearly visible axial ribs, becoming less visible on the third teleoconch whorl; further teleoconch whorls smooth. Suture straight, shallow. Body whorl about 60% of total shell length, adorned with 9-10 basal cords. Outer lip thickened, smooth outside, with 6 denticles on apertural side, the adapical one slightly bigger than the other 5. Columellar callus strongly developed with 6 denticles near the edge and 2-3 bumps with incisions in between further in the shell. Siphonal canal moderately long.

Shell colour off-white with a pattern of brown dots. Protoconch and first teleoconch whorl white. Aperture and columella white.

Remarks: Schepman (1911) studied 9 specimens from 6 different stations for the description of *Columbella (Atilia) conspersa* var. *brevis*. In the ZMA, there are 7 types from 5 of the stations mentioned by Schepman. We could not find a specimen completely matching the figure of Schepman and therefore designate the most intact specimen as lectotype.

Some authors (Wagner & Abbott (1978), Wilson (1994)) placed *brevis* in synonymy with *Mitrella (Indomitrella) puella* (Sowerby, 1844), most likely following Cernohorsky (1972) who synonymised *Mitrella (Indomitrella) conspersa* (Gaskoin, 1851) (and all its forms) with *M. (I.) puella*. After comparing the types of *Columbella puella* and *Columbella conspersa* (both BMNH), we have to conclude that these synonymisations are incorrect and that they represent three different species (see table 1).

Since the name *brevis* is preoccupied by *Columbella (Mitrella) scripta* var. *brevis* Di Monterosato, 1875, we hereby introduce *Mitrella (Indomitrella) schepmani* as a nomen novum.

Table 1: comparison between *Mitrella (Indomitrella) schepmani* nom. nov., *Mitrella (Indomitrella) puella* (Sowerby, 1844) and *Mitrella (Indomitrella) conspersa* (Gaskoin, 1851)

	<i>schepmani</i>	<i>puella</i>	<i>conspersa</i>
size	5-7.5 mm	11-16 mm	8 -14 mm
number of protoconch whorls	3.5 - 4	2.5 - 3	2.5
number of teleoconch whorls	5.5 - 6	7 - 7.5	6 - 6.5
sculpture on teleoconch whorls	first whorls with axial ribs (about 10 on first whorl)	axial ribs, close set, on all whorls or only on first teleoconch whorls	first two whorls with axial ribs (about 8 on first whorl), or completely smooth
columella	- callus strongly developed - 6 denticles near edge - 2-3 bumps with incisions in between	- callus strongly developed - 6 denticles near edge - 3 bumps with incisions in between	- callus strongly developed - 6 denticles near edge - bumps less prominent or absent
outer lip	thickened 6 denticles on apertural side	thickened 6 denticles on apertural side	thickened 7-8 denticles on apertural side
siphonal canal	moderately long	moderately long	shorter
shoulder	not shouldered	shouldered	slightly shouldered

Distribution: *Mitrella (Indomitrella) schepmani* nom. nov. is -apart from the type material- also known from the central Philippines and Papua New Guinea (collection K. Monsecour). As this species is often confused with *Mitrella (Indomitrella) puella*, it is very likely that it is more widespread in the Indo-Pacific.

circumstriata

Columbella (Mitrella) circumstriata Schepman, 1911: 332, pl. 20 fig. 6

Current systematic status: *Mitrella (Sulcomitrella) circumstriata* (Schepman, 1911)

Type locality: Stat. 105, Philippines, 6°8'N-121°19'E, Sulu-Archipelago, 275 m, coral bottom.

Type material: lectotype – **present designation** - ZMA 3.11.056 (type locality; length: 11.41 mm; width: 4.73 mm); 5 paralectotypes ZMA 3.11.057 (type locality); 1 paralectotype ZMA 3.11.058 (Stat. 139, Indonesia, West of Halmahera, 397 m, mud, stones and coral, 0°11'S – 127°25'E); 1 paralectotype RMNH (type locality; length: 9.7 mm).

Diagnosis: Shell of moderate size for the genus (10 mm – 12 mm), fusiform. Teleoconch consisting of 4.5-5 slightly convex whorls; protoconch multispiral, consisting of 3.5-4 smooth whorls; transition to teleoconch not clearly visible. First teleoconch whorls with one or two very fine incised spiral lines on the upper part of the whorl. On further teleoconch whorls these lines lose strength and are not clearly visible. Suture straight, shallow. Body whorl with 12-15 basal cords. Outer lip slightly thickened, with the basal cords on the outside and 6-7 denticles on the apertural side. Columellar callus well-developed with 4 denticles. Siphonal canal short.

Shell colour off-white. Protoconch white. Aperture and columella white to off-white.

Remarks: *Mitrella (Sulcomitrella) kanamaruana* Kuroda, 1953 is a taxon sometimes placed in synonymy with *M. circumstriata* (like in Okutani, 2000), but after comparison we conclude that *Mitrella kanamaruana* is a valid species, closely related to *M. circumstriata*. It is therefore removed from synonymy with *M. circumstriata*. *M. kanamaruana* is more elongate, has clearly visible incised spiral lines and has one teleoconch whorl more than *M. circumstriata*. *M. kanamaruana* also has a very clear colour pattern of thin axial brown lines all over the teleoconch, whereas *M. circumstriata* is off-white.

The specimen designated as lectotype is the one that most closely corresponds to the figure in Schepman (1911: pl. 20 fig. 6a).

Distribution: *Mitrella* (*Sulcomitrella*) *circumstriata* is known from the Philippines and Indonesia (collection K. Monsecour and type material ZMA). Data from Japan and the East China Sea (like in Okutani, 2000) have to be confirmed as these are probably data for *M. kanamaruana*.

elongata

Columbella (*Mitrella*) *elongata* Schepman, 1911: 333, pl. 20 fig. 7 (non *Columbella rustica* var. *elongata* Philippi, 1836)

Current systematic status: *Mitrella longissima* **nom. nov.**

Type locality: Stat. 162, Indonesia, between Loslos and Broken-islands, West coast of Salawatti, 18 m, coarse and fine sand with clay and shells.

Type material: Holotype ZMA 3.11.059 (length: 10.57 mm; width: 3.43 mm)

Diagnosis: Shell of moderate size for the genus (9 mm - 11 mm), fusiform, very elongate. Teleoconch consisting of about 8 whorls; protoconch multispiral, consisting of 2.5-3 whorls; transition to teleoconch not clearly visible. Teleoconch whorls all completely smooth. Suture straight, shallow. Body whorl about 50% of total shell length, with 11-13 basal cords. Outer lip not thickened, smooth outside, without denticles on the apertural side. Columellar callus hardly noticeable or absent. No columellar denticles.

Shell colour off-white to bright orange, upper whorls and protoconch lighter coloured with a pattern of very fine, brown, wavy lines, which are not clearly visible in all specimens. Aperture and columella in the same colour.

Remarks: As the name *elongata* is preoccupied by *Columbella rustica* var. *elongata* Philippi, 1836, we introduce *Mitrella longissima* as a nomen novum. Pace (1902) also mentioned *elongata* Lamarck without stating a year of publication and further comments. We were not able to trace a *Columbella elongata* described by Lamarck, as this would then be the senior name and not the one Philippi introduced.

The classification of this species in the genus *Mitrella* is evident, but it fits none of the subgenera known in this genus. We therefore leave the subgeneric placement of this

species open for further study. *Mitrella boucheti* Drivas & Jay, 1990 is a closely related species.

Distribution: Known from Indonesia (type locality). Further material known from the central Philippines (Cebu, Mactan Island area; collection K. Monsecour).

minor

Columbella (Mitrella) albina form *minor* Schepman, 1911: 331, not figured (non *Columbella minor* Scacchi, 1836)

Current systematic status: *Mitrella (Graphicomassa) albina* (Kiener, 1841).

Type locality: Stat. 282. Between Nusa Besi and NE-point of Timor. 27-54 m, sand, coral and *Lithothamnion*.

Type material: Holotype ZMA 3.11.101 (length: 8.5 mm; width: 3.8 mm)

Diagnosis: Shell of moderate to large size for the genus (8 mm - 20 mm), fusiform. Teleoconch consisting of 6-7 shouldered whorls; protoconch multispiral of 3-3.5 whorls, decollate in most specimens. Teleoconch whorls with clearly visible axial ribs on the first 1.5-2 teleoconch whorls, becoming less visible on the third teleoconch whorl; further teleoconch whorls smooth. Suture straight, shallow. Body whorl about 65% of total shell length, adorned with 10-14 basal cords; most specimens with nodules just below the suture of the body whorl. Outer lip heavily thickened, smooth outside, with 7-9 denticles on apertural side. Columella with a strongly developed raised callus, with 6-8 close-set denticles. Siphonal canal short.

Shell colour mostly off-white, with various patterns of brown, black, orange or sometimes even pink. The lower part on the body whorl mostly with a brown or black band. Protoconch white. Aperture and columella purple near the edge, white inside; or completely white.

Remarks: Schepman only had 2 specimens of *M. albina* and made a very short note about his new taxon *minor*: "The specimen from Stat. 282 is very small, having only a

length of 8.5 mm and may be indicated as forma *minor*, both specimens belong to the form with nodules at the back of last whorl, ...". Judging from this text, it seems that Schepman was aware that his taxon *minor* was just a form without taxonomical value. It should still be treated as such.

Distribution: Known from almost the entire Indo-Pacific. From the East African coast eastwards to the islands of Polynesia.

nodosa

Columbella (Atilia) conspersa var. *nodosa* Schepman, 1911: 334-335, pl. 20 fig. 10

Current systematic status: *Mitrella (Indomitrella) conspersa* (Gaskoin, 1851)

Type locality: Stat. 144, Indonesia, North of Salomakiëe (Damar) Island, 45 m, coral bottom and *Lithothamnion*.

Type material: Holotype ZMA 3.11.070 (length: 10.10 mm; width: 4.20 mm).

Diagnosis: Shell of moderate size for the genus (8 mm-14 mm), fusiform. Teleoconch consisting of 6-6.5 slightly shouldered whorls; protoconch multispiral of 2.5-3 whorls. Teleoconch whorls smooth or with clearly visible axial ribs on the first two teleoconch whorls, becoming less visible on the third teleoconch whorl; further teleoconch whorls smooth. Suture straight, shallow. Body whorl about 60% of total shell length, adorned with 9-11 basal cords, some specimens with nodules just below the suture of the body whorl. Outer lip heavily thickened, smooth outside, with 7-8 denticles on apertural side. Columellar callus strongly developed with 6 denticles near the edge and with weakly developed (or absent) bumps with incisions further in the shell. Siphonal canal short.

Shell colour light brown with a pattern of irregular white flecks and with two white bands, one just below and one just above the suture, the latter continuing at midwhorl on the body whorl. Protoconch white. Aperture and columella pink to purple on the edge, white inside; or completely white.

Remarks: Schepman's description of this taxon is very short and a comparison is only made with the other variety he introduced (*brevis*), which is in fact now a valid species (see above). The distinguishing features he lists (subconcave upper part of back of last whorl, which bears 4 rather broad, white nodules below the suture, partly descending as blunt ribs, ending in a partly developed keel on that back) are features which fit within the variety of *Mitrella* (*Indomitrella*) *conspersa*. The taxon *nodosa* should therefore be treated as a varietal name, without any taxonomic value.

M. (I.) conspersa is a very common species with -apart from a large geographic distribution- a large bathymetrical range (from the tidal zone up to a depth of 200 m). Specimens from deeper water are a bit different, showing no axial ribs on the first teleoconch whorls, no nodules on the body whorl, and a not so bright colour pattern with the aperture often white.

Distribution: Known from almost the entire Indo-Pacific. From the East African coast eastwards to the islands of Polynesia.

perplexa

Columbella (*Conidea*) *perplexa* Schepman, 1911: 337-338, pl. 20 fig. 12

Current systematic status: *Mitromorpha fischeri* (Hervier, 1899) [Turridae]

Type locality: Stat. 144, Indonesia, North of Salomakiëe (Damar) Island, 45 m, coral bottom and *Lithothamnion*.

Type material: 2 syntypes ZMA 3.11.073 (length: 8.48 mm; width: 3.67 mm) – 074 (length: 7.49 mm; width: 3.40 mm) (both type locality).

Remarks: Schepman only briefly discussed the placement of this taxon as he had serious doubts on the placement in the genus *Columbella*. He already indicated that many of the characteristics of *Mitromorpha* were applicable to *Columbella perplexa*. Van Benthem Jutting (1940) placed this taxon in synonymy with *Mitromorpha fischeri*. The name "*perplexa*" was not mentioned by Mifsud (2001).

simplex

Columbella (Mitrella) simplex Schepman, 1911: 333-334, pl. 20 fig. 8

Current systematic status: *Mitrella simplex* (Schepman, 1911) **comb. nov.**

Type locality: Stat. 45, 7°24' S – 118°15'.2 E, Indonesia, Flores Sea, 794 m, fine grey mud.

Type material: lectotype – **present designation** - ZMA 3.11.060 (type locality; length: 9.8 mm; width: 4.2 mm); 1 paralectotype ZMA 3.11.061 (type locality); 1 paralectotype ZMA 3.11.062 (Stat. 88, 0°34'.6 N – 119°8'.5 E, Indonesia, Strait of Makassar, 1301 m, fine, grey mud); 1 paralectotype ZMA 3.11.063 (Stat. 178, 2°40' S – 128°37'.5 E, Indonesia, Ceram Sea, 835 m, blue mud); 1 paralectotype RMNH (Stat. 88; length 10.5 mm).

Diagnosis: Shell of moderate size for the genus (9.5 mm - 13 mm), fusiform, semi-transparent. Teleoconch consisting of about 4.75-5 whorls; protoconch paucispiral, consisting of 1.5-1.75 whorls; transition to teleoconch not clearly visible. Teleoconch whorls smooth, apart from the upper ones, which show very fine axial ribs. Suture straight, shallow. Body whorl about 65% of total shell length, with 8-9 very weak basal cords. Outer lip not thickened, smooth outside, without denticles on the apertural side. Columellar callus present, without columellar denticles.

Shell colour off-white, protoconch white. Aperture and columella white.

Remarks: This species comes from very deep water and is not known to us from other material than the types. The specimen designated as lectotype is the one figured by Schepman on plate 20 fig. 8b.

Distribution: Only known from the 3 stations the type specimens were found at.

undulata

Columbella (Atilia) undulata Schepman, 1911: 335-336, pl. 20 fig. 11

Current systematic status: *Mitrella (Indomitrella) undulata* (Schepman, 1911) **comb. nov.**

Type locality: Stat. 47, Indonesia, Bay of Bima, near South fort, 55 m, mud with patches of fine coralsand.

Type material: Lectotype - **present designation** - ZMA 3.11.071 (type locality; length: 12.96 mm; width: 4.56 mm); 3 paralectotypes ZMA 3.11.072 (Stat. 105, 6°8' N - 121°19' E, Philippines, Sulu-Archipelago, 275 m, coralbottom); 1 paralectotype RMNH (Stat.105; length 13.1 mm).

Diagnosis: Shell of moderate size for the genus (8 mm-14 mm), fusiform. Teleoconch consisting of 6.75-7 slightly shouldered whorls; protoconch paucispiral of 1.75-2 whorls. Teleoconch whorls with clearly visible axial ribs on the first 1.5-2 teleoconch whorls; further teleoconch whorls smooth. Suture straight, shallow. Body whorl about 56% of total shell length, with about 11 basal cords, 2-4 spiral cords and small nodules just below the suture of the body whorl. Outer lip thickened, smooth outside, without denticles on apertural side. Columellar callus clearly present, without denticles. Siphonal canal moderately short.

Shell colour white to off-white. Protoconch cream-coloured. Aperture and columella white.

Remarks: The type series consisted of 5 specimens. One syntype of Stat. 105 was later donated to the RMNH. The specimen designated as lectotype is the one figured by Schepman on plate 20 fig. 11a.

Distribution: Only known from the two stations the type specimens were found at.

B. List of species according to their current systematic treatment

[valid taxa in bold]

Columbellidae*Mitrella* Risso, 1826*Graphicomassa* Iredale, 1929*minor* Schepman, 1911 (= *albina* (Kiener, 1841))*Indomitrella* Oostingh, 1952*brevis* Schepman, 1911 (= *schepmani* **nom. nov.**)*nodosa* Schepman, 1911 (= *conspersa* (Gaskoin, 1851))*schepmani* **nom. nov.** for *Columbella (Atilia) conspersa* var.*brevis* Schepman, 1911 (non Di Monterosato, 1875)*undulata* (Schepman, 1911) **comb. nov.***Sulcomitrella* Habe, 1958*circumstriata* (Schepman, 1911)**incertae sedis** (no subgeneric taxa available)*elongata* Schepman, 1911 (= *longissima* **nom. nov.**)*longissima* **nom. nov.** for *Columbella elongata* Schepman, 1911

(non Philippi, 1836)

simplex (Schepman, 1911) **comb. nov.****Turridae***Mitromorpha* Carpenter, 1865*perplexa* Schepman, 1911 (= *fischeri* (Hervier, 1899))

Acknowledgements: We would like to thank Robert G. Moolenbeek for giving access to the types in the ZMA and for perusing the manuscript. J. Goud (RMNH) allowed us to study the Siboga samples under their care. An unknown referee gave valuable suggestions concerning the manuscript.

Literature

- Cernohorsky, W.O.**, 1972. *Marine shells of the Pacific 2*. Pacific Publications, Sydney.
- De Jong, K.M. & Coomans, H.E.**, 1988. *Marine Gastropods from Curaçao, Aruba and Bonaire*. E.J. Brill, Leiden. 261 p.
- DeMaintenon, M. J.** 1999., Phylogenetic analysis of the Columbelloidea (Mollusca: Neogastropoda) and the evolution of herbivory from carnivory. *Invertebrate Biology*, 118: 258-288.
- Drivas, J. & Jay, M.**, 1990. The Columbelloidea of Réunion Island (Mollusca: Gastropoda). *Annals of the Natal Museum*, 31: 163-200.
- Faber, M.J.**, 2004. Marine gastropods from the ABC Islands and other localities. 3. The family Columbelloidea (Gastropoda: Buccinoidea), with description of five new species. *Miscellanea Malacologica*, 1(2): 21-43.
- Kobelt, W.**, 1895-1897. *Die Familie der Columbelloiden*. In Küster, H.C. & Kobelt, W. (eds). *Systematisches Conchylien-Cabinet von Martini und Chemnitz*, 3 (1): 1-344.
- Kuroda, T.**, 1953. New genera and species of the Japanese Gastropoda. *Venus*, 17(4): 179-185.
- Mifsud, C.**, 2001. *The genus Mitromorpha Carpenter, 1865 (Neogastropoda: Turridae) and its sub-genera with notes on the European Species*. Sunland Printers, Cospicua, Malta. 32 p.
- Monsecour, K. & Köhler, F.**, 2006. Annotated list of columbellid types held in the Malacological Collection of the Museum für Naturkunde, Berlin (Mollusca, Caenogastropoda, Columbelloidea). *Mitteilungen des Museums für Naturkunde Berlin Zoologische Reihe*, 82 (2006) 2: 282-306.
- Okutani, T.**, 2000. *Marine Mollusks in Japan*. Tokai University Press, Tokyo. 1173 p.
- Pace, S.**, 1902. Contributions to the study of the Columbelloidea No. 1. *Proceedings of the Malacological Society of London* 5: 36-154.
- Schepman, M.M.**, 1911. The Prosobranchia of the Siboga Expedition Part 4 Rachiglossa. *Siboga-Expedition Monographie*, XLIX1d: 247-363.
- Van Benthem Jutting, T.**, 1940. Identity of *Columbella fischeri* Hervier and *Columbella perplexa* Schepman. *Journal of Conchology*, 21: 191.
- Wagner, R.J.L. & Abbott, R.T.**, 1978. Family Columbelloidea Swainson, 1840. p. 15-501 to 15-522 in *Wagner and Abbott's Standard Catalog of Shells*, 3rd edition. American Malacologists: Greenville, Delaware.
- Wilson, B.**, 1994. *Australian marine shells Vol II*. Odyssey Publishing, Kallaroo, WA. 370 p.

Plate 1:**1-2: *Mitrella (Indomitrella) schepmani* nom.nov.**

Lectotype of *Columbella (Atilia) conspersa* var. *brevis* Schepman, 1911, 7.34 x 3.35 mm, ZMA 3.11.067, Stat. 260, Indonesia, Kai Islands, Nuhu Jaan, 2.3 miles northwest from the northpoint, 90 m, sand, coral and shells.

3-4, 7-8: *Mitrella (Indomitrella) conspersa* (Gaskoin, 1851)

3-4: Holotype of *Columbella (Atilia) conspersa* var. *nodosa* Schepman, 1911, 10.10 x 4.20 mm, ZMA 3.11.070, Stat. 144, Indonesia, North of Salomakiëe (Damar) Island, 45 m, coral bottom and *Lithothamnion*.

7-8: Probable syntype of *Columbella conspersa* Gaskoin, 1851, 12.3 x 5.5 mm, BM(NH), 1,972,038 (no data mentioned).

5-6: *Mitrella (Indomitrella) puella* (Sowerby, 1844)

Syntype of *Columbella puella* Sowerby, 1844, 13.5 x 5.5 mm, BM(NH) 1,982,118, Philippines, Burias.

9-10: *Mitrella longissima* nom.nov.

Holotype of *Columbella (Mitrella) elongata* Schepman, 1911, 10.57 x 3.43 mm, ZMA 3.11.059, Stat. 162, Indonesia, between Loslos and Broken-islands, West coast of Salawatti, 18 m, coarse and fine sand with clay and shells.

11: *Mitrella (Garphicomassa) albina* Kiener, 1841

Holotype of *Columbella (Mitrella) albina* form minor Schepman, 1911, 8.5 x 3.8 mm, ZMA 3.11.101, Stat. 282, Between Nusa Besi and NE-point of Timor. 27-54 m, sand, coral and *Lithothamnion*.



Plate 2:**12-13: *Mitrella (Sulcomitrella) circumstriata* (Schepman, 1911)**

Lectotype of *Columbella (Mitrella) circumstriata* Schepman, 1911, 11.41 x 4.73 mm, ZMA 3.11.056, Stat. 105, Philippines, 6°8' N-121°19' E, Sulu-Archipelago, 275 m, Coral bottom.

14-15: *Mitrella (Sulcomitrella) kanamaruana* Kuroda, 1953

13.1 x 5.3 mm, collection K. Monsecour, East China Sea, trawled at a depth of about 170 m, on sand.

16-17: *Mitromorpha fischeri* (Hervier, 1899) [Turridae]

Syntype of *Columbella (Conidea) perplexa* Schepman, 1911, 7.49 x 3.40 mm, ZMA 3.11.074, Stat 144, Indonesia, North of Salomakiëe (Damar) Island, 45 m, coral bottom and *Lithothamnion*.

18-19: *Mitrella simplex* (Schepman, 1911)

Lectotype of *Columbella (Mitrella) simplex* Schepman, 1911, 9.8 x 4.2 mm, ZMA 3.11.060, stat. 45, 7°24' S – 118°15',2 E, Indonesia, Flores Sea, 794 m, fine grey mud.

20-21: *Mitrella (Indomitrella) undulata* (Schepman, 1911)

Lectotype of *Columbella (Atilia) undulata* Schepman, 1911, 12.96 x 4.56 mm, ZMA 3.11.071, Stat. 047, Indonesia, Bay of Bima, near South fort, 55 m, mud with patches of fine coralsand.

