Guido T. Poppe

PHILIPPINE MARINE MOLLUSKS

The Listing

THE LISTING OF PHILIPPINE MARINE MOLLUSKS

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INTRODUCTION

The publication of Philippine Marine Mollusks, Volumes 1 to 4 has been a revelation to the conchological community. Apart from being the delight of collectors, the PMM started a new way of layout and publishing - followed today by many authors.

Internet technology has allowed more than 50 experts worldwide to work on the collection that forms the base of the 4 PMM books. This expertise, together with modern means of identification has allowed a quality in determinations which is unique in books covering a geographical area.

Our Volume 1 was published only 9 years ago: in 2008. Since that time “a lot” has changed. Finally, after almost two decades, the digital world has been embraced by the scientific community, and a new generation of young scientists appeared, well acquainted with text processors, internet communication and digital photographic skills. Museums all over the planet start putting the holotypes online – a still ongoing process – which saves taxonomists from huge confusion and “guessing” about how animals look like. Initiatives as Biodiversity Heritage Library made accessible huge libraries to many thousands of biologists who, without that, were not able to publish properly. The process of all these technological revolutions is ongoing and improves taxonomy and nomenclature in a way which is unprecedented.

All this caused an acceleration in the nomenclatural field: both in quantity and in quality of expertise and fieldwork. The above changes are not without huge problematics. Many studies are carried out on the wide diversity of these problems and even books are written on the subject. Not the least is the violent movement of “paperwork” to digital work. The latter without proper storage capacities. Paper has proven until now to be one of the best media to preserve knowledge and this is the main reason we continue the publication of the PMM books, Visaya and other “paper-series” as such.

As a direct consequence of the above enumerated revolutions, there were constant modifications and additions to the nomenclature used in the 4 published PMM volumes. On top of that, each year dozens of new species from the Philippines are described. Species change from genus, families and are either lumped or separated, it is a never ending story which gradually leads to a more and more perfect view and understanding of the faunas as time goes.

We are still in the first decade of these ongoing changes: stabilization will step in and changes in classifications and names will start to slow down. We expect this to happen in a couple of decades from now.

WORMS and MOLLUSCABASE

In the meantime, a group of taxonomists created the database known generally as WORMS, which stands for "World Register of Marine Species", followed by a newborn homepage called MOLLUSCABASE. The job is done thanks to an initiative of the Flemish government in Belgium, and the headquarters are based in Oostende, Belgium. There is an international community of scientists that give strong support to the realization of these databases that are continuously growing and that are kept updated by a number of expert taxonomists and nomenclaturists.

It is the hope of all involved that these databases become "the standard" with as much stability in nomenclature as possible. The databases reflect the situation in the field and are "neutral". They only absorb published work as time goes. The work to be achieved is still enormous and the skilled people are few. For the obvious reason of the much wanted stability, we adapt the nomenclature in our books to the work in WORMS and MOLLUSCABASE.

There is a long series of reasons why the impediment in our domain is gigantic. But as time goes, we grow to a more comprehensive and uniform system of name-giving. Where we do not apply the WORMS view, we usually give a short text documenting the pro and contras, or we highlight the problems in the listing below.

THE PRACTICAL LISTING

In the present work, families are listed in alphabetical order. On this, we made the following exceptions: The former TURRIDAE are now an ensemble of 14 different families. As we know nobody who has a clear "mental view" of the families as yet, we group these families under names starting with "TURRIDAE – ". In this way, it will be easier for all to find back the species sought. Exceptions on this exception are the CONIDAE and TEREBRIDAE two families that remain on their alphabetical places.

The CORALLIOPHILIDAE are now definitely MURICIDAE. The Coralliophilinae as a subfamily are a nice ensemble that all understand. We do not want the genera of this subfamily mixed up with the other Muricid-genera. Therefore they are listed as MURICIDAE – CORALLIOPHILINAE, behind the MURICIDAE.

The same for the TRIDACNIDAE, which are now definitely a subfamily of the CARDIIDAE. They are listed as CARDIIDAE – TRIDACNINAE.

We followed advise of scientists and split our former ARCIDAE into ARCIDAE and NOETIIDAE.

There are many other changes on the family level, and a few hundred species moved between families. Philippe Bouchet was instrumental in this and guided us in these matters, often in such a perfect way as that the listing below is conform to the most modern view when it comes to family classifications. He is working at present at a new classification of the GASTROPODA, and we expect this work to be published quite soon.

For each species, the volume and plate number on which the mollusks have been figured is indicated. These references contain Philippine Marine Molluscs volumes 1 to 5.

Over 250 Philippine marine species have not yet been published in the five volumes. It most often

concerns shells that have been described recently and of which we have no material: in this case the types are in museums and the effort to get photos or to photograph this material should have delayed the publication of volume 5 too long. These shells are indicted in the listing below as "Not yet documented".

The FUTURE

There will be a follow up on the present volumes as the rhythm of publication of new Philippe material is ongoing constantly. The results of the French expeditions of Philippe Bouchet and collaborators undergo constant revisions and are a rich source of newly described species.

We will add in future publications all Philippine species that we can trace and that are described from 2017 on.

Apart from that material, we have a mass of new information provided by more than a dozen of experts on various groups. Some families we plan to re-figure completely in a not so distant future.

On the following families there are books and articles that have to be scrutinized in detail for possible additions and modifications: BIVALVIA, ANGARIIDAE, CANCELLARIIDAE, CAECIDAE, CASSIDAE, CORALLLIOPHILIDAE, COSTELLARIIDAE, DRILLIIDAE, EPITONIIDAE, LUCINIDAE, MURICIDAE, NASSARIIDAE, NERITIDAE, OSTREIDAE, PECTINIDAE, PHILINIDAE, POTAMIDIDAE, PYRAMIDELLIDAE, RANELLIDAE, SCAPHOPODA, TEREBRIDAE, TRIPHORIDAE and several TURRID FAMILIES.

Fishing shells for decoration, and as a by-product "for collector", is an activity that has virtually stopped in the Philippines. In the collectors world, the venue of internet communication destroyed market prices and they fell below the cost of fishing for many species, which rendered investments in this type of fishing not a bright idea.

Since 2010 the fishing gradually stopped and by now only a handful of fishermen are still occupied with "shells". Fortunately, collections worldwide contain thousands of shells waiting to be studied. Activities such as deep-water dredgings by scientists brought to the surface a quantity of unexplored material. Diving goes on, and underwater photography has become more accessible to the well-doing citizen. This resulted in an expLosion of hitherto "never seen before" fotos of undescribed nudibranches. All the above factors together are enough to fill several more volumes as time goes, and by the end we will get a fine idea of what kind of molluscan species populate the Philippine seas.

THE LISTING ONLINE: DOWNLOADS

Our initial idea was to publish The Listing in the Volume 5, but after suggestions of a few malacologists, we opted for a publication online. The Listing will be put for free consultation and free download under pdf form on the homepage of Conchology, Inc. and on the iBook store of Apple.

This will allow the user to download the pdf and eventually print it out for inclusion in the paper books. It will also allow us to update constantly The Listing and put new versions online. In this way all enjoy the latest changes. We start at version 1.00.

AUTHORSHIPS

As for the information in the paper version of the books, authors remain unchanged and they are listed below in their respective families. For each family we clearly indicate the author and in which volume he/she took care of which plate(s). Authorship for all volumes and/or plates without mentioned author are by Guido T. Poppe.

As it is impossible to contact all of them for each of the hundreds, even thousands of changes I take full responsibility and authorship for changes and/or remarks, excepts for the parts on which authors have been explicitly mentioned.

My personal view may differ consistently with the view expressed by some of the authors in the main volumes. This also has to be interpreted as an additional richness, not as a critique to the work done by these authors.

PRACTICAL USE

Below the listing of each family, changes are highlighted and detailed. Because The Listing is the perfect tool to re-arrange and re-determinate Indo-Pacific collections or part of these, we organized the changes as follows:

THE FAMILY
Highlights minor details on the families and changes and/or important publications on the subject since 2008.

NOT FOUND IN WORMS
Species (not yet) listed in WORMS or MOLLUSCABASE. This chapter will be outdated in the coming months/years and gradually disappear as new versions of the THE LISTING are put online.

MOVES BETWEEN FAMILIES
Highlights in more detail the changes.

CHANGE OF GENUS
Highlights in more detail the changes.

CHANGES AND REMARKS
Highlights all kinds of changes, from spelling errors to synonymies and the like.

THE CONTENT

For the ones not acquainted with the books, I want to point out which species have been included in the books and as a consequence in The Listing:

Only DESCRIBED species with a CERTAIN record from the Philippines are included. Some species can be seen in popular works on Philippine shells which in fact have not been named as yet: often even common Indo-Pacific species seen in popular books have sometimes not been described. These species are not included in the present work: we wait until they get a name. The literature and museum collections are extremely rich in material labeled “Philippines”: a vast part of this material contains shells from all over the Pacific and unless the provenance is very certain and well documented, such material has not been included. Checklists and “listings” without iconography are particularly useless as the meaning of the names provided is virtually “empty” today. A few exceptions have been made on the rule above: L. Brown provided a list of the Philippine species shown by Sowerby – probably collected by Cuming. We figured these figures from Sowerby for the family EPITONIIDAE.

THE NUMBERS

For the sake of satisfying curiosity of experts in biodiversity, you will be happy to learn that today, **August 2017** the marine Philippine Molluscan Fauna documented in the PMM volumes consists of

Marine molluscs belonging to **297** different families.
Different named and documented species: 5824.
Different "forma" and "subspecies" documented: 208.

Experts estimate the total fauna somewhere between 10000 and 12000 marine species. So, there is still a long way to go before we get a more or less complete overview of what exists in Philippine marine seas which cover a vast territory with tremendous bathymetries.

The material used to compile the five PMM volumes comes from a ridiculous small area of the Philippine seas. 99 % of the material comes from a few square kilometers well explored sea bottoms only, seldom deeper than 150 m.

Studies showed that below diving depths, 30 % of the material is new to science down to 200 m deep. When moving deeper, we see numbers as 70 % of the material that is unknown down to 600 m. Deeper we know only shells from a few rare dredge hauls either by the Albatros in the beginning of the 19th century or scarce expeditions by the MNHN, Paris. We there float in the Great Unknown.

AUTHORSHIPS IN THE PHILIPPINE MARINE MOLLUSKS

We here join a detailed list of authorships in the 4 volumes of Philippine Marine Mollusks.

Citations of these books should be as follow:
Example:

Geiger D. in Poppe, G. T.
2008 Philippine Marine Mollusks Volume I (Gastropoda Part I). – Hackenheim, Germany (ConchBooks).

2008 Philippine Marine Mollusks Volume I (Gastropoda Part I).

Alf , Axel – Architectonicidae, Turbinidae.
Anseeuw, Patrick – Pleurotomaridae.
Beu, Alan – Bursidae, Personidae, Ranellidae.
Bouchet, Philippe – Abyssochrysidae, Dialidae, Litiopidae, Pachychilidae, Scaliolidae, Skeneidae.
Brown, Lenny – Epitonidae.
Eichhorst, Tom – Neritidae.
Fehse, Dirk – Eratoidae, Ovulidae, Pediculariidae, Triviidae.
Geiger, Daniel L. – Anatomidae, Haliotidae, Scissurellidae.
Goto, Yoshihiro – Pleurotomaridae.
Govaert, Frederick – Geology of the Philippines.
Hollmann, Michael – Naticidae.
Kreipl, Kurt – Cassidae, Turbinidae, Xenophoridae.
Kronenberg, Gijs – Personidae, Rostellariidae, Seraphsidae, Strombidae.
Lozouet, Pierre – Batillariidae, Planaxidae, Potamididae.
McLean, James H. – Liotiidae.

Monsecour, Kevin – Angariidae.
Segers, Luc – Ranellidae.
Strong, Ellen – Abyssochrysidae, Atlantidae, Cerithiidae, Dialidae, Litiopidae, Pachychilidae, Plesiotrochidae.
Tagaro, Sheila P. – Calliostomatidae, Cerithiidae, Chilodontidae, Seguenziidae, Solariellidae, Stomatiidae, Trochidae.
Vandenberghe, Noel – Geology of the Philippines.
Vos, Chris – Tonnidae.
Waren, Anders – Eulimidae.

2008 Philippine Marine Mollusks Volume II (Gastropoda Part II).

Callomon, Paul – Fasciolariidae.
Cossignani, Tiziano – Cystiscidae, Marginellidae.
Fraussen, Koen – Buccinidae, Babyloniidae.
Houart, Roland – Muricidae.
Martin, Jean-Claude – Nassariidae, Costellariidae.
Monsecour, David – Colubrariidae.
Monsecour, Kevin – Columbellidae.
Olivera, Baldomero M. – Turridae.
Oliverio, Marco – Coralliophilinae.
Petuch, Ed – Olividae.
Raybaudi Massilia, Gabriella – Conidae.
Sargent, Dennis – Olividae.
Snyder, Martin – Fasciolariidae.
Sysoev, Alexander V. – Turrid Groups: Clathurellidae, Clavatulidae, Drilliidae, Turridae.
Tagaro, Sheila P. – Costellariidae, Mitridae.
Terryn, Yves – Terebridae.
Verhecken, Andre – Cancellariidae.

2010 Philippine Marine Mollusks Volume III (Gastropoda Part III & Bivalvia Part I).

Alf, Axel – Architectonicidae.
Bieler, Rudiger – Architectonidae.
Golding, Rosemary – Amphibolidae.
Groh, Klaus – Cuculaeidae, Ellobiidae, Onchidiidae, Siphonariidae, Trimusculidae.
Kleemann, Karl – Lithophaginae.
Poppe, Philippe – All Nudibranch Families, Cavoliniidae, Limacinidae.
Raines, Bret – Pectiniidae.
Tagaro, Sheila P. – Acteonidae, Aplustridae, Cyclichnidae, Haminoeidae, Pyramidellidae, Retusidae, Scaphandridae.
Willan, Richard C. – All Nudibranch Families, Acteonidae, Aplustridae, Bullinidae, Bullidae, Cavolinidae, Cyclichnidae, Haminoeidae, Juliidae, Limacinidae, Philinidae, Retusidae, Ringiculidae, Scaphandridae, Smaragdinellidae.

2011 Philippine Marine Mollusks Volume IV (Bivalva Part II).

Anseeuw, Bruno – Polyplacophora.
Coan, Gene – Veneridae, Ptericolinae.
De Prins, Roland – Cephalopoda.
Dijkstra, Henk H. – Propeamussiidae.

Haga, Takuma – Pholadidae, Teredinidae, Xylophagaidae.
Langleit, Annie – Tellinidae.
Lutzen, Jorgen – Galeommatidae.
Okutani, Takashi – Verticordiidae, Poromyidae, Cuspidariidae.
Sahlmann, Bernd – Scaphopoda.
Tagaro, Sheila P. – Carditidae, Psammobiidae, Lucinidae, Addendum 1.
Ter Poorten, Jan Johan – Cardiidae.
Von Cosel, Rudo – Solenidae, Pharidae.
Willan, Richard C. – Psammobiidae, Donacidae.

2017 Philippine Marine Mollusks Volume V (New records, completing the Volumes I to IV)

Cecalupo, Alberto – Cerithiopsidae.
Perugia, Ivan – Cerithiopsidae.
Tagaro, Sheila – Acteonidae, Aplustridae, Calliostomatidae, Carditidae, Cerithiidae, Chilodontidae, Costellariidae, Cylichnidae, Haminoeidae, Lucinidae, Mitridae, Psammobiidae, Pyramidellidae, Retusidae, Saphandridae, Seguenziidae, Solariellidae, Trochidae.

ACKNOWLEDGMENTS

Particular thanks go to Philippe Poppe who provided us with the unequalled means to do a megajob in a reasonable laps of time. To Jerlyn Sarino, who has spend days and days comparing our nomenclature species after species with the WORMS databases.

To Sheila Tagaro who spend months assisting me, looking up and double checking tens of thousands of bits of information. Thanks go to the following experts who provided inputs to the present listing: A. Alf, H. Dijkstra, W. Faber. K. Groh, F. Lorenz, J. J. ter Poorten, Y. Terryn, B. Van Der Bijl, R. Willan. These thanks are extended to dozens of persons that have send hundreds of emails with corrections, photos, articles and remarks on matters concerning the Philippine molluscan fauna.

We extend our gratitude to the curators and directorate of the Houston Museum of Natural Science, who now take care of the precious Philippine collections housed there: Tina Petway, Lisa Rebori, Joel Bartsch and their dedicated staff.

We especially thank Philippe Bouchet who took a considerable part of his important time to go in detail through the present manuscript, suggesting many hundreds of ameliorations, corrections, updates and referring us to useful literature.

THE LISTING

ABYSSOCHRYSIDAE Tomlin, 1927
Author: Vol. 1 – Philippe Bouchet & Ellen Strong.

Abyssochrysos melanioides Tomlin, 1927 ..... Vol. 1. Pl. 86.
Abyssochrysos melvilli (Schepman, 1909) ..... Vol. 1. Pl. 86.

CHANGES AND REMARKS

***Abyssochrysos melanioides* Tomlin, 1927**

Correct is *A. melanioides*, not *A. melanoides.*

ACANTHOCHITONIDAE Pilsbry, 1893
Author: Vol. 4 – Bruno Anseeuw.

Acanthochitona cf. *A. intermedia* (Nierstrasz, 1905) ..... Vol. 4. Pl. 1208.
Acanthochitona leopoldi (Leloup, 1933) ..... Vol. 4. Pl. 1208.
Craspedochiton laqueatus (G. B. Sowerby II, 1842) ..... Vol. 4. Pl. 1208.
Leptoplax cf. *L. coarctata* (G. B. Sowerby II, 1841) ..... Vol. 4. Pl. 1208.
Notoplax cf. *N. holosericea* (Nierstrasz, 1905) ..... Vol. 4. Pl. 1208.

CHANGE OF GENUS

***Leptoplax* cf. *L. coarctata* (G. B. Sowerby II, 1841)**. Was in the genus *Notoplax.*

ACLIDIDAE G.O. Sars, 1878
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Aclis cf. *A. loveniana* A. Adams, 1861 ..... Vol. 4. Pl. 1264., Add. 1.
Aclis maestratii Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1316.
Cyclonidea carina (Laseron, 1956) ..... Vol. 5. Pl. 1316.
Cyclonidea dondani Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1316.
Cyclonidea labiata (A. Adams, 1860) ..... Vol. 5. Pl. 1316.
Cyclonidea notabilis Poppe, 2008 ..... Vol. 4. Pl. 1264., Add. 1 & Vol. 5. Pl. 1316.

CHANGES AND REMARKS

***Aclis* cf. *A. loveniana* A. Adams, 1961**

The holotype can be viewed on the website of the Natural History Museum of London. Okutani (2000) also figured a specimen. The Philippine shells correspond to the Okutani figure but likely concern a different species when compared to the holotype. We therefore now place “cf.” for the Philippine shells.

ACTEOCINIDAE Dall, 1913

Acteocina decorata (Pilsbry, 1904) ..... Vol. 3. Pl. 761.
Acteocina exilis (Dunker, 1860) ..... Vol. 3. Pl. 762.
Acteocina gordonis (Yokoyama, 1927) ..... Vol. 3. Pl. 762.

THE FAMILY ACTEOCINIDAE

This family has been revived for Philippine species formerly placed in the genus *Tornatina* in RETUSIDAE. WORMS follows in this an article by Oskars T.R., Bouchet P. & Malaquias M.A. from 2015 on a new phylogeny of the CEPHALASPIDEA.

MOVES BETWEEN FAMILIES

All three *Acteocina* here listed above were in our Volume 3 in the family RETUSIDAE.

ACTEONIDAE d'Orbigny, 1843

Author: Vol. 3 – Richard Willan & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Acteon cebuanus Lan, 1985 ..... Vol. 3. Pl. 710.
Acteon dancei Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1317.
Acteon cf. *A. yamamurae* Habe, 1976 ..... Vol. 3. Pl. 712.
Acteon fabreanus (Crosse, 1874)..... Vol. 3. Pl. 710.
Acteon flammeus (Bruguière, 1789) ..... Vol. 3. Pl. 711.
Acteon ionfasciatus Valdés, 2008..... Vol. 3. Pl. 713.
Acteon kajiyamai Habe, 1976..... Vol. 3. Pl. 711.
Acteon kirai (Habe, 1949)..... Vol. 3. Pl. 711.
Acteon nakayamai Habe, 1952 ..... Vol. 3. Pl. 712.
Acteon teramachii Habe, 1950..... Vol. 3. Pl. 712.
Acteon valentina Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1317.
Acteon vangoethemi Poppe, Tagaro & Stahlschmidt, 2015..... Vol. 5. Pl. 1317.
Acteon virgatus (Reeve, 1842)..... Vol. 3. Pl. 712.
Japonactaeon longissimus Valdés, 2008 ..... Vol. 3. Pl. 713.
Japonactaeon secale (Gould, 1859) ..... Vol. 3. Pl. 712.
Japonactaeon sieboldii (Reeve, 1842)..... Vol. 4. Pl. 1264., Add. 1.
Japonactaeon suturalis (A. Adams, 1855) ..... Vol. 5. Pl. 1318.
Obrussena bracteata (Iredale, 1925) ..... Vol. 5. Pl. 1318.
Obrussena moeshimaensis Habe, 1952 ..... Vol. 3. Pl. 708.
Pupa affinis (A. Adams, 1855) ..... Vol. 3. Pl. 708.
Pupa alveola (Souverbie, 1863) ..... Vol. 3. Pl. 708.
Pupa nitidula (Lamarck, 1816)..... Vol. 3. Pl. 709.
Pupa sekii Habe, 1958 ..... Vol. 3. Pl. 709.
Pupa solidula (Linnaeus, 1758)..... Vol. 3. Pl. 709.
Pupa strigosa (Gould, 1859) ..... Vol. 3. Pl. 710.
Pupa sulcata (Gmelin, 1791)..... Vol. 3. Pl. 710.

CHANGE OF GENUS

The genus *Japonactaeon* Taki, 1956

We now use the genus name *Japonactaeon* Taki, 1956 with as type species (by OD) is *A. nipponensis* Yamakawa, 1911, which is a synonym of A. nipponensis. This genus hosts the thin-shelled glossy Acteonids. We misspelled *Japonactaeon* as *Japonacteon* in the volume 3.

The genus *Maxacteon* Rudman, 1971

This genus is occasionally used for some of the Philippine species. The genus was erected on non-conchological characteristics: mainly on the features of the animals, and is poorly understood. In the literature it is used "at random", especially for the New Zealand ACTEONIDAE. It is seldom a good idea to establish genera without clearly stating which

members of the family belong in the new genus. In WORMS (August 24, 2016):, the *Acteon flammeus* is placed in *Maxacteon*. WORMS places *Acteon kajiyamai* and *Acteon kirai* in *Punctacteon,* with the type species of that genus *Tornatella fabreanus* Crosse, 1874.

The genus *Punctacteon* Kuroda & Habe, 1961

The use of *Punctacteon* is "at random" throughout the family and as long as the generic position is not clarified we continue to use *Acteon.*

***Japonactaeon longissimus* Valdés, 2008** Was in the genus *Acteon*.
***Japonactaeon sieboldii* (Reeve, 1842)** Was in the genus *Acteon*.
***Japonactaeon suturalis* (A. Adams, 1855)**

We continue to use *Japonactaeon* for "*suturalis*", which is placed in *Pupa* in WORMS.

CHANGES AND REMARKS

***Japonactaeon sieboldii* (Reeve, 1842)**

There is a name change from "*siebaldii*" to "*sieboldii*". The spelling as for the syntype in Higo, Callomon & Goto (2001) was spelled "*siebaldii*", as in the major part of the literature we consulted. We follow here WORMS as the species is named after Philipp Franz Von Siebold.

Obrussena bracteata* & *Obrussena moeshimaensis

Following Valdès (2008), WORMS puts *Obrussena moeshimaensis* in synonymy with *O. bracteata*. This is not correct, as it concerns two different *Obrussena. O. moeshimaensis* was figured earlier by Okutani (2000) and Habe (1952). The *O. bracteata* has been figured by Valdès in Tropical Deep Sea Benthos of 2008. It concerns a young shell, but almost adult and easy to distinguish from the *O. moeshimaensis.* We maintain both species.

ACTINOCYCLIDAE O'Donoghue, 1929

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Hallaxa indecora (Bergh, 1905) ..... Vol. 3. Pl. 786.
Hallaxa fuscescens (Pease, 1871) ..... Vol. 3. Pl. 786.

AEGIRIDAE P. Fischer, 1883

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Aegires citrinus (Bergh, 1875)..... Vol. 3. Pl. 881.
Aegires gardineri (Eliot, 1906)..... Vol. 3. Pl. 879.
Aegires minor (Eliot, 1904) ..... Vol. 3. Pl. 880.
Aegires serenae (Gosliner & Behrens, 1997) ..... Vol. 3. Pl. 880.
Aegires villosus Farran, 1905..... Vol. 3. Pl. 881.

CHANGE OF GENUS

Moro & Ortea (2015) reestablished the genus *Notodoris*, and three Philippine species have moved to that genus.

Notodoris citrina Bergh, 1875 Was in the genus *Aegires*.
Notodoris minor Eliot, 1904 Was in the genus *Aegires.*
Notodoris serenae Gosliner & Behrens, 1997 Was in the genus Aegires.

AEOLIDIIDAE J. E. Gray, 1827

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Baeolidia moebii Bergh, 1888 ..... Vol. 3. Pl. 899.
Cerberilla affinis Bergh, 1888..... Vol. 3. Pl. 899.
Limenandra fusiformis (Baba, 1949)..... Vol. 3. Pl. 899.

CHANGES AND REMARKS

***Baeolidia moebii* Bergh, 1888**

Is the fomer *B. major* in Vol. 3. This synonymy was proposed by Carmona L., Pola M., Gosliner T.M. & Cervera J.L., 2014. (Pers. comm. R. C. Willan, 28 april 2015).

AGLAJIDAE Pilsbry, 1895 (1847)

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Chelidonura amoena Bergh, 1905 ..... Vol. 3. Pl. 753.
Chelidonura hirundinina (Quoy & Gaimard, 1833) ..... Vol. 3. Pl. 751.
Chelidonura inornata Baba, 1949 ..... Vol. 3. Pl. 752.
Chelidonura livida Yonow, 1994 ..... Vol. 3. Pl. 751.
Chelidonura pallida Risbec, 1951 ..... Vol. 3. Pl. 754.
Chelidonura punctata Eliot, 1903 ..... Vol. 3. Pl. 751.
Chelidonura sandrana Rudman, 1973 ..... Vol. 3. Pl. 752.
Chelidonura tsurugensis Baba & Abe, 1964 ..... Vol. 3. Pl. 752.
Chelidonura varians Eliot, 1903 ..... Vol. 3. Pl. 749.
Odontoglaja guamensis Rudman, 1978 ..... Vol. 3. Pl. 748.
Philinopsis speciosa Pease, 1860 ..... Vol. 3. Pl. 748.
Philinopsis gardineri (Eliot, 1903) ..... Vol. 3. Pl. 749.
Philinopsis pilsbryi (Eliot, 1900) ..... Vol. 3. Pl. 750.
Philinopsis reticulata (Eliot, 1903) ..... Vol. 3. Pl. 748.

CHANGES AND REMARKS

***Philinopsis speciosa* Pease, 186**

Is the fomer *P. cyanea* in Vol. 3. This change was proposed by Yonow N. (2012). (Pers. comm. R. Willan, 28 april 2015).

ALACUPPIDAE Oskars, Bouchet & Malaquias, 2015

Alacuppa supracancellata (Schepman, 1913) ..... Vol. 3. Pl. 759.

MOVES BETWEEN FAMILIES

The former ***Sabatia supracancellata* (Schepman, 1913)**, was in the family CYLICHNIDAE**.**

AMATHINIDAE Ponder, 1987

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Amathina imbricata G. B. Sowerby III, 1889 ..... Vol. 5. Pl. 1319.
Leucotina adamsi Kuroda & Habe, 1971 ..... Vol. 3. Pl. 740.
Leucotina digitalis (Dall & Bartsch, 1906) ..... Vol. 5. Pl. 1319.
Leucotina knopi Poppe & Tagaro, 2010 ..... Vol. 4. Pl. 1264., Add. 1.
Leucotina species ..... Vol. 3. Pl. 740.
Leucotina sagamiensis Kuroda & Habe, 1971 ..... Vol. 5. Pl. 1319.

CHANGES AND REMARKS

***Amathina imbricata* G. B. Sowerby III, 1889**

In WORMS accepted as incertae sedis imbricata in HIPPONICIDAE. The name "Amathina imbricata" is according to them not valid. The species has been described on one specimen from Mauritius, but at least two dozen have now been found on Mactan Island.

***Leucotina* species**

The shell shown in Vol. 3, Pl. 740, wrongly figured as *L. sagamiensis*. True *L. sagamiensis* is shown in Vol. 5.

***Leucotina sagamiensis* Kuroda & Habe, 1971**

Based on Valdés, 2008, WORMS places the *sagamiensis* in *Maxacteon* in ACTEONIDAE. But we think it is better to leave this species "as is" in *Leucotina*. The type of *L. sagamiensis* has been figured by Higo, Callomon & Goto (2001).

***Leucotina digitalis* (Dall & Bartsch, 1906)**

Based on Beu, 2004, WORMS places *Leucotina digitalis* in the synonymy of *Monotygma amoena* (A. Adams, 1853). The holotype of the latter has been well documented by an excellent photograph in Higo, Callomon & Goto (2001). We here follow the *L. digitalis* as figured by Hori & Tsuchida (1995) in Venus, a different species.

AMPHIBOLIDAE Gray, 1840

Author: Vol. 3 – Rosemary Golding.

Salinator cf. *S. sanchezi* (Quadras & Möllendorf, 1894) ..... Vol. 3. Pl. 910.

AMPULLINIDAE Cossmann, 1919

Cernina fluctuata (G. B. Sowerby I, 1825)..... Vol. 1. Pl. 186.

MOVES BETWEEN FAMILIES

***Cernina fluctuata* (G. B. Sowerby I, 1825)**

Has been moved from the NATICIDAE to AMPULLINIDAE. It is apparently the only survivor of this vast family of which all other members are known as fossils. *Cernina fluctuata* is endemic to Palawan and the Cuyo Islands. It is not found elsewhere in the Philippines.

ANATOMIDAE McLean, 1989

Author: Vol. 1 – Daniel Geiger.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Anatoma amydra Geiger & Marshall, 2012..... Not yet documented
Anatoma biconica Geiger, 2012 ..... Not yet documented
Anatoma breveprima Geiger, 2012..... Not yet documented.
Anatoma equatoria (Hedley, 1899) ..... Not yet documented.
Anatoma finlayi (Powell, 1937)..... Not yet documented.
Anatoma indonesica Bandel, 1998 ..... Vol. 5. Pl. 1319.
Anatoma japonica (A. Adams, 1862) ..... Vol. 4. Pl. 1264., Add. 1 & Vol. 5. Pl. 1320.
Anatoma maxima (Schepman, 1908)..... Vol. 5. Pl. 1319.
Anatoma munieri (P. Fischer, 1862)..... Vol. 1. Pl. 24 & Vol. 5. Pl. 1320.
Anatoma philippinica (Bandel, 1998)..... Not yet documented.
Anatoma porcellana Geiger, 2012..... Vol. 5. Pl. 1320.
Anatoma pseudoequatoria (Kay, 1979)..... Not yet documented.

Anatoma rapaensis Geiger, 2008..... Not yet documented.
Anatoma rhynchodentata Geiger, 2012 ..... Vol. 5. Pl. 1320.

THE FAMILIES ANATOMIDAE and SCISSURELLIDAE

Once in a while workers put both families together in one family: SCISSURELLIDAE. At present, both families are looked at as separate and Daniel L. Geiger made an impressive "Monograph of the Little Slit Shells" in 2012, in 2 thick Volumes. Since then, the former SCISSURELLIDAE are split into SCISSURELLIDAE, ANATOMIDAE, LAROCHEIDAE, DEPRESSIZONIDAE, SUTILIZONIDAE and TEMNOCINCLIDAE. In Vols. 5 & 6 we refigure the species of the above families and include the new findings since the publication of the former Volumes.

CHANGES AND REMARKS

***Anatoma japonica* (A. Adams, 1862)**

The correct name for our former *A. exquisita* (Schepman, 1908)

ANCILLARIIDAE Swainson, 1840

Author: Vol. 2 – Ed Petuch & Dennis Sargent.

Amalda concinna Ninomiya, 1990 ..... Vol. 5. Pl. 1501.
Amalda hilgendorfi (E. von Martens, 1897) ..... Vol. 2. Pl. 546.
Amalda sinensis (G. B. Sowerby II, 1859) ..... Vol. 2. Pl. 546.
Ancilla cylindrica (G. B. Sowerby II, 1859) ..... Vol. 2. Pl. 546.
Turrancilla apicalis (Ninomiya, 1988)..... Vol. 2. Pl. 546.

ANCOSTROCHEIRIDAE Pfeiffer, 1912

Ancisrocheirus lesueurii (d'Orbigny in Férussac & d'Orbigny, 1842)Not yet documented.

ANGARIIDAE Gray, 1857

Author: Vol. 1 – Kevin Monsecour.

Angaria aculeata (Reeve, 1843)..... Vol. 1. Pl. 59.
Angaria delphinus (Linnaeus, 1758) .....Vol. 1. Pl. 59 & 60 & Vol. 5 Pl. 1321.
Angaria delphinus forma *incisus* Reeve, 1843 ..... Vol. 5. Pl. 1321.
Angaria delphinus forma *laciniatus* (Lamarck, 1822) ..... Vol. 5. Pl. 1321.
Angaria formosa (Reeve, 1843).....Vol. 1. Pl. 59 & Vol. 5. Pl. 1322.
Angaria melanacantha (Reeve, 1842) ..... Vol. 1. Pl. 60.
Angaria nodosa (Reeve, 1843) ..... Vol. 1. Pl. 60.
Angaria poppei K. Monsecour & D. Monsecour, 1999..... Vol. 1. Pl. 61.
Angaria rubrovaria Günther, 2016..... Vol. 5. Pl. 1323.
Angaria scalospinosa Günther, 2016..... Vol. 5. Pl. 1324.
Angaria sphaerula (Kiener, 1838)..... Vol. 1. Pl. 62.
Angaria vicdani Kosuge, 1980 ..... Vol. 1. Pl. 63.

THE FAMILY ANGARIIDAE

Is better and better understood. However, we feel that more detailed work can still be done.

In volume 5 we refigure much of the family. Especially the *A. delphinus* forma *incisus* lives mixed up with typical shells down to Australia where this form/species (?) may grow particularly large and impressive. The "decollate" *delphinus*, not

described as far as we are aware of, definitely deserves a form name as we obtained 80 very similar looking shells over the last 13 years. The *A. delphinus* is popular food, collected at low tide in big quantities.
It is noteworthy that we obtained also 2 decollate *A. poppei*: they are much rarer and not often collected as this species is common only between 20 and 30 m deep on fine gravel bottoms.
Two species have been named recently: *A. rubrovaria* and *A. scalopsinosa*. In Siargao, a new form of *A. formosa* has been discovered, particularly rich in yellow, and therefore called "Gold form" by collectors.

ANOMIIDAE Rafinesque, 1815

Anomia chinensis Philippi, 1849 ..... Vol. 4. Pl. 1047.
Anomia cytaeum Gray, 1850..... Vol. 4. Pl. 1047.
Anomia scabra Reeve, 1859..... Vol. 4. Pl. 1047.
Anomia sol Reeve, 1859 ..... Vol. 4. Pl. 1047.
Enigmonia aenigmatica (Holten, 1802)..... Vol. 4. Pl. 1048.

CHANGES AND REMARKS

***Anomia achaeus* Gray, 1850**

Based on Huber (2010), In WORMS (April 22, 2015) we see that *A. scabra* and *A. sol* are both accepted as *A. achaeus* Gray, 1850.
In the classic literature the latter is most often recorded as an Indian Ocean species. *A. scabra* and *A. sol* are in our opinion different Indo-Pacific species, the *A. scabra* has rough brittle shells, while *A. sol* is common in the Philippines inside dead *Pinna*: the shells are flat, very round, exactly as the Reeve shell shown in the Iconica Vol. 11, but white, not pinkish. A matter that deserves more study.

ANULIDENTALIIDAE Chistikov, 1975

Anulidentalium bambusa Chistikov, 1975..... Vol. 4. Pl. 1201.

MOVES BETWEEN FAMILIES

The single species in this family was in the family GADILINIDAE in Vol. 4.

APLUSTRIDAE Gray, 1847

Author: Vol. 3 – Richard Willan & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Aplustrum amplustre (Linnaeus, 1758) ..... Vol. 3. Pl. 713.
Hydatina albocincta (van der Hoeven, 1839)..... Vol. 3. Pl. 714.
Hydatina fasciata (Bruguière, 1792) ..... Vol. 3. Pl. 714.
Hydatina physis (Linnaeus, 1758) ..... Vol. 3. Pl. 714.
Hydatina zonata (Lightfoot, 1786) ..... Vol. 3. Pl. 714.
Micromelo undatus (Bruguière, 1792)..... Vol. 3. Pl. 713.

CHANGES AND REMARKS

Micromelo undatus (Bruguière, 1792)

The correct spelling for the former "*Micromelo undata*".

APLYSIIDAE Lamarck, 1809
Author: Vol. 3 – Richard Willan & Philippe Poppe.

ARCHITECTONICIDAE Gray, 1850
Author: Vol. 3 – Rudiger Bieler & Axel Alf.

Pseudotorinia gemmulata (Thiele, 1925) ..... Vol. 3. Pl. 726.
Pseudotorinia numulus (Barnard, 1963)..... Vol. 3. Pl. 726.
Psilaxis oxytropis (A. Adams, 1855)..... Vol. 3. Pl. 721.
Psilaxis radiatus (Röding, 1798)..... Vol. 3. Pl. 721.
Solatisonax acutecarinata (Thiele, 1925)..... Vol. 3. Pl. 722.
Solatisonax supraradiata (Martens, 1904) ..... Vol. 5. Pl. 1325.

CHANGES AND REMARKS

***Ilaira evoluta* (Reeve, 1843)**

There is only little doubt that the species we called *Spirolaxis rotulacatharinea* is *Ilaira evoluta*.
Ilaira is not mentioned in Bieler and not in WORMS, and probably overlooked. In the major works on classification (Moore, Wenz) *Ilaira* Adams & Adams, 1854 is put in or near Turbinidae, not Architetonicidae. The "*evoluta*" from Reeve has been described based on material from Corregidor – likely from Cuming material: judging after the drawings we think that this is the same species as the Visayan shells although a check of the holotype is advised to be absolutely sure. There is one Philippine genus of landsnails which vaguely resembles the decollate condition of Ilaira: the genus Balambania. However, we know only one Balambania from Cebu, another species of the same genus from Siquijor. Both are extremely rare and have not been rediscovered since the original description. Both have very round whorls. So, chances that the Corregidor shells are washed out land snails are small. Most of the Cuming shells are shallow water and land and freshwater material. He got access sporadically to deep water material: *Conus gloriamaris* is a good example of that. Possibly he obtained shells from deep water shells in Corregidor. So, a check of the type should satisfy our curiosity here.

ARCIDAE Lamarck, 1809

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Acar congenita (E. A. Smith, 1885) ..... Vol. 3. Pl. 925.
Acar plicata (Dillwyn, 1817)..... Vol. 3. Pl. 925.
Anadara antiquata (Linnaeus, 1758)..... Vol. 3. Pl. 926.
Anadara broughtonii (Schrenck, 1867)..... Vol. 3. Pl. 926.
Anadara chalcanthum (Reeve, 1844) ..... Vol. 3. Pl. 926.
Anadara cornea (Reeve, 1844)..... Vol. 3. Pl. 926.
Anadara ferruginea (Reeve, 1844)..... Vol. 3. Pl. 927.
Anadara globosa (Reeve, 1844)..... Vol. 3. Pl. 927.
Anadara holoserica (Reeve, 1843) ..... Vol. 3. Pl. 927.
Anadara inaequivalvis (Bruguière, 1789) ..... Vol. 3. Pl. 928.
Anadara kikaizimana (Nomura & Zinbo, 1934)..... Vol. 3. Pl. 928.
Anadara oceanica (Lesson, 1831)..... Vol. 3. Pl. 928.
Anadara pilula (Reeve, 1843) ..... Vol. 3. Pl. 934.
Anadara rotundicostata (Reeve, 1843) ..... Vol. 3. Pl. 928.
Anadara secticostata (Reeve, 1844) ..... Vol. 3. Pl. 928.
Anadara trapezia (Deshayes, 1839) ..... Vol. 3. Pl. 929.
Anadara uropigimelana (Bory de Saint-Vincent, 1827) ..... Vol. 3. Pl. 929.
Anadara vellicata (Reeve, 1844)..... Vol. 3. Pl. 929.
Arca avellana Lamarck, 1819..... Vol. 3. Pl. 930.
Arca boucardi Jousseaume, 1894 ..... Vol. 3. Pl. 930.
Arca kauaia (Dall, Bartsch & Rehder, 1938) ..... Vol. 3. Pl. 930.
Arca kobeltiana Pilsby, 1904 ..... Vol. 3. Pl. 930.
Arca navicularis Bruguière, 1789..... Vol. 3. Pl. 930.
Arca ventricosa Lamarck, 1819..... Vol. 3. Pl. 931.

Barbatia cometa (Reeve, 1844) ..... Vol. 3. Pl. 925.
Barbatia decussata (G. B. Sowerby I, 1833)..... Vol. 3. Pl. 931.
Barbatia foliata (Forsskål in Niebuhr, 1775) ..... Vol. 3. Pl. 931.
Barbatia fusca (Bruguière, 1789)..... Vol. 3. Pl. 932.
Barbatia lacerata (Bruguière, 1789)..... Vol. 3. Pl. 932.
Barbatia perinesa Oliver & Chesney, 1994 ..... Vol. 4. Pl. 1265., Add. 1.
Barbatia stearnsi (Pilsbry, 1895)..... Vol. 3. Pl. 933.
Barbatia trapezina (Lamarck, 1819)..... Vol. 3. Pl. 931.
Bathyarca kyurokusimana (Nomura & Hatai, 1940)..... Vol. 3. Pl. 934.
Calloarca soyoae (Habe, 1958)..... Vol. 5. Pl. 1327.
Calloarca tenella (Reeve, 1844) ..... Vol. 3. Pl. 936 & Vol. 5. Pl. 1327 & 1499.
Deltaodon rubrotincta (Kuroda & Habe in Habe, 1958)..... Vol. 3. Pl. 934.
Hawaiarca cf. *H. alia* Dall, Bartsch & Rehder, 1938 ..... Vol. 3. Pl. 936.
Hawaiarca rectangula Dall, Bartsch & Rehder, 1938 ..... Vol. 3. Pl. 936.
Hawaiarca uwaensis (Yokoyama, 1928)..... Vol. 3. Pl. 936.
Hawaiarca yamamotoi (Sakurai & Habe in Habe, 1961)..... Vol. 3. Pl. 936.
Mesocibota bistrigata (Dunker, 1866)..... Vol. 3. Pl. 933.
Tegillarca cf. *T. addita* (Iredale, 1939) ..... Vol. 3. Pl. 934.
Tegillarca granosa (Linnaeus, 1758) ..... Vol. 3. Pl. 934 & Vol. 5. Pl. 1327.
Tegillarca nodifera (Martens, 1860) ..... Vol. 3. Pl. 934 & Vol. 5. Pl. 1327.
Trisidos semitorta (Lamarck, 1819) ..... Vol. 3. Pl. 935.
Trisidos tortuosa (Linnaeus, 1758)..... Vol. 3. Pl. 935.
Xenophorarca irregularis (Hayami & Kase, 1993)..... Vol. 3. Pl. 933.

MOVES BETWEEN FAMILIES

In the past we were suspicious about the splitting of ARCIDAE and NOETIIDAE. Recent molecular studies confirmed that it concerns two different species. A list of NOETIIDAE genera is given below that family. The studies were carried out by Combosch D.J. & Giribet G. (2016).
We refer to the NOETIIDAE for the species moved to that family and formerly shown in Volume 3 with 3 more species demonstrated in the present volume.

CHANGES AND REMARKS

In this family, WORMS mainly followed the Encyclopedic work of Huber (2010).

***Acar congenita* (E. A. Smith, 1885)**
The correct spelling for the former "*Acar congenitus*".

***Acar donaciformis* (Reeve, 1844)**
Is now a synonym *of Acar plicata* (Dillwyn, 1817). We follow this view, the only difference is the sharpness of the "keel" on the valves, a variable feature. The name *donaciformis* can be kept eventually as a form name for shells with a rounded keel.

***Acar plicata* (Dillwyn, 1817)**
The correct spelling for the former "*Acar plicatus*".

***Anadara chalcanthum* (Reeve, 1844)**
Is, according to WORMS, accepted as *A. gubernaculum*. We see however that these are different species: the types of both have been figured in Higo, Callomon & Goto (2001) and *A. gubernaculum* has a much more elongate shell. We maintain our *A. chalcanthum* as is.

***Anadara holoserica* (Reeve, 1844)**
Is, according to WORMS, accepted as *A. uropigimelana*. *A. holoserica*, as shown in PMM, corresponds to the type figure of Reeve and has a protruding umbo with a flat base below. The *uropigimelana* has a rounded base, as our shell shown in the book: we follow the general literature in this.

***Anadara secticostata* (Reeve, 1844)**
Is, according to WORMS, accepted as *A. tuberculosa*. The *A. secticostata* has been described by Reeve as with "unknown" locality. But shells corresponding to his figure have been shown by Bosch (1982), Lamprell & Healy (1998) and Huber (2010). The Huber shell does not resemble the drawing of Reeve and is a Caribbean species. We follow the

view of Lamprell & Healy (1998) who think this is an Indo-Pacific species. *A. tuberculosa* is a species from the west coast of America (see Robin (2011); Huber (2010) and Keen (1971). We continue to regard *A. secticostata* and *A. tuberculosa* as two different *Anadara*.

***Arca avellana* Lamarck, 1819**

Is now accepted as *A. patriarchalis*. Huber is the only one using *patriarchalis* for this species, an obscure Röding name. *Avellana* is widely accepted, we have 22 references in modern literature. We follow the latter.

***Arca kobeltiana* Pilsbry, 1904**

Is now accepted as *A. boucardi*. We do not agree and continue to distinguish both species, *kobeltiana* having a higher and bigger umbo as seen on plate 930.

***Barbatia decussata* Sowerby, 1833**

Is accepted as *B. trapezina*. We do not agree and follow the article of A. A. Garcia and Oliver on the species discrimination of *Barbatia* in Thailand. (2008).

***Barbatia divaricata* (G.B. Sowerby I, 1833)**

Is now placed in *Byssoarca* and accepted as *Acar plicata* (Dillwyn, 1817). Rechecking our determination, we based ourselves on a figure of Kay (1979) which shows a specimen (fig. E) similar to the Philippine shells. But in the wider context of the literature, we think WORMS is correct, and the two shells figured in PMM are likely an undescribed species.

***Barbatia fusca* (Bruguière, 1789)**

Is now accepted as *B. amygdalumtostum*. This is a change, likely introduced by Huber, which is senseless. Reeve defined very well and clear the *fusca* from Mindoro Island and Asian writers mainly followed this view (Hung Hu, (1995); Jarrett (2000); Okutani (2000); Oliver (1992); Zhongyan (2004); Bosch (1982); Sharabati – upper specimen only (1984)). There is an equal number of figures of *amygdalumtostum* in the literature, but less clear. We therefore follow the general modern view and continue to use "*fusca*".

***Barbatia lima* (Reeve, 1844)**

Is now accepted as *B. foliata*. It is highly uncertain that our shells, figured as *lima* correspond to the shell figured by Reeve as "*Arca lima*". Technically this is plausible. It is also plausible his shell is a young *B. foliata*. Study of the holotype may prove where is the truth. If the interior of the shell is white, then it is a *B. foliata* without doubt. We could not determinate properly the three shells shown in PMM – a small growth series – and think it is most likely an undescribed species. They should be quoted as "*Barbatia species*".

***Calloarca tenella* (Reeve, 1844)**

Our *Striarca sculptilis*, Plate 936, Fig. 9 is this species. We refigure the species in Volume 5 in NOETIIDAE.

***Deltaodon rubrotincta* (Kuroda & Habe in Habe, 1958)**

The correct spelling for the former "*Deltaodon rubrotinctus"*.

***Tegillarca granosa* (Linnaeus, 1758)**

In Vol. 3. Pl. 934: This is the shell figured as fig. 9. The Fig. 10 is *Tegillarca nodifera* (Martens, 1860).

***Tegillarca nodifera* (Martens, 1860)**

Vol. 3. Pl. 934: This is the shell figured *as T. granosa* (Linnaeus, 1758), fig. 10.

CHANGE OF GENUS

Acar cometa (Reeve, 1844)	Was in the genus *Acar*.
Anadara pilula (Reeve, 1843)	Was in the genus *Potiarca*.
Arcopsis sculptilis (Reeve, 1844)	Was in the genus *Striarca*.
Calloarca tenella (Reeve, 1844)	Was in the genus *Barbatia*.
Tegillarca cf. *T. addita* (Iredale, 1939)	Was in the genus *Potiarca*.
Xenophorarca irregularis (Hayami & Kase, 1993)	Was in the genus *Bentharca*.

ARGONAUTIDAE Cantraine, 1841

Author: Vol. 4 – Guido Poppe & Roland De Prins.

CHANGES AND REMARKS

We based our determination of the shells on conchological grounds. The *gondola* from Dillwyn, as refigured by Reeve (1861) and Sowerby (1866) are definitely in the sphere of the almost "normal" *A. hians*. They have nothing to do with what is understood today as *A. nodosus* by the public, which is a white shell from the *A. argo* group. Whether *gondola* or *boettgeri* are forms or species will depend on extensive studies in the future. For students: WORMS regards *A. argo* forma *cygnus* as *A. argo*, *A. hians* forma *boettgeri* is accepted as *A. hians* and *A. hians* forma *gondola* is accepted as *A. nodosus*.
Finn J.K. (2013), studied the taxonomy and biology of the Argonauta, with particular references to Australian material. He recognizes 4 species: *A. nodosus, A. hians, A. argo* and *A. nouryi.* Two of these have been recorded from the Philippines.

ARMINIDAE Iredale & O'Donoghue, 1923 (1841)

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Armina cf. *A. japonica* (Eliot, 1913) ..... Vol. 3. Pl. 886.
Armina semperi (Bergh, 1866) ..... Vol. 3. Pl. 886.
Dermatobranchus fortunatus (Bergh, 1888) ..... Vol. 3. Pl. 885.
Dermatobranchus ornatus (Bergh, 1874)..... Vol. 3. Pl. 885.
Dermatobranchus primus Baba, 1976..... Vol. 3. Pl. 885.
Dermatobranchus rubidus (Gould, 1852) ..... Vol. 3. Pl. 885.

CHANGES AND REMARKS

***Dermatobranchus rubidus* (Gould, 1852)**

The *Dermatobranchus rubidus* is the fomer *D. pulcherrimus* in Vol. 3. This synonymy was proposed by Gosliner & Fahey (2011) (pers. comm. R.C. Willan, 28 April 2015).

ASSIMINEIDAE H. Adams & A. Adams, 1856

Assiminea quadrasi Möllendorff, 1894 ..... Vol. 4. Pl. 1264.
Metassiminea philippinica (O. Boettger, 1887)..... Vol. 4. Pl. 1264.

CHANGES AND REMARKS

***Assiminea quadrasi* Möllendorff, 1894**

Gary Rosenberg places *Assiminea quadrasi* in *Omphalotropis*. The type species of *Omphalotropis* is *O. hieroglyphica* (Poitiez & Michaud, 1838) and this is a very elongate, almost turriculate shell. The *A. quadrasi* is much more close in texture as well as in shape to the European *A. grayani*, type species of *Assiminea*.

ATLANTIDAE Rang, 1829

Author: Vol. 1 – Ellen Strong.

Atlanta gaudichaudi Gray, 1850..... Vol. 1. Pl. 196.
Atlanta rosea Gray, 1850..... Vol. 1. Pl. 196.

BABAKINIDAE Roller, 1973

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Babakina indopacifica Gosliner, Gonzalez-Duarte & Cervera, 2007 ..... Vol. 3. Pl. 910.

CHANGES AND REMARKS

We do not agree with WORMS on the change of BABAKINIDAE to FACELINIDAE. During a review of the genus *Babakina* in 2007, Gosliner *et al.* said: "The phylogeny suggests that BABAKINIDAE should be maintained as a distinct taxon separated from FLABELLINIDAE and FACELINIDAE by several autapomorphies" and no publication has subsequently changed that opinion. (pers. comm. R.C. Willan, 28 April 2015). Bouchet Ph. confirmed also that he will restore BABAKINIDAE in an upcoming Revised Classification of the gastropoda. (pers. comm., 24 August 2016)

BABYLONIIDAE Kuroda, Habe & Oyama, 1971
Author: Vol. 2 – Koen Fraussen.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Babylonia ambulacrum (G. B. Sowerby I, 1825) ..... Vol. 2. Pl. 420.
Babylonia borneensis (G. B. Sowerby II, 1864)..... Vol. 2. Pl. 420.
Babylonia spirata (Linnaeus, 1758) ..... Vol. 4. Pl. 1265., Add. 1.

BATILLARIIDAE Thiele, 1929
Author: Vol. 1 – Pierre Lozouet.

Batillaria zonalis (Bruguière, 1792)..... Vol. 1. Pl. 88.

CHANGES AND REMARKS
***Batillaria zonalis* (Bruguière, 1792)**
The correct spelling for the former "*Batillaria zonale*".

BELOMITRIDAE Kantor, Puillandre, Rivasseau & Bouchet, 2012.
Belomitra leobrerorum Poppe & Tagaro, 2010..... Vol. 4. Pl. 1265., Add. 1.

BOLITAENIDAE Chun, 1911
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Japetella diaphana Hoyle, 1885..... Vol. 4. Pl. 1263.

MOVES BETWEEN FAMILIES
WORMS places BOLITAENIDAE as a subfamily (BOLETAENINAE) in AMPHITRETIDAE Hoyle, 1886. This has recently been confired by a molecular phylonegy: Strugnell & All. (2014).

BORNELLIDAE Bergh, 1874
Author: Vol. 3 – Richard Willan & Philippe Poppe.

Bornella anguilla Johnson, 1984..... Vol. 3. Pl. 889.
Bornella stellifera (A. Adams & Reeve [in A. Adams], 1848)..... Vol. 3. Pl. 889.

BRACHIOTEUTHIDAE Pfeffer, 1908

Brachioteuthis picta Chun, 1910 ..... Not yet documented.
Brachioteuthis riisei (Steenstrup, 1882) ..... Not yet documented.

BUCCINIDAE Rafinesque, 1815

Author: Vol. 2 – Koen Fraussen.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Caducifer decapitatus (Reeve, 1844) ..... Vol. 2. Pl. 320.
Caducifer truncatus (Hinds, 1844) ..... Vol. 2. Pl. 320.
Calagrassor bacciballus Fraussen & Stahlschmidt, 2016 ..... Not yet documented.
Calagrassor pidginoides Fraussen & Stahlschmidt, 2016..... Not yet documented.
Calagrassor poppei (Fraussen, 2001) ..... Vol. 2. Pl. 313.
Cantharus eximius Reeve, 1946 ..... Vol. 4. Pl. 1265., Add. 1.
Cantharus leucotaeniatus Kosuge, 1985 ..... Vol. 2. Pl. 320.
Cantharus melanostoma (G. B. Sowerby I, 1825) ..... Vol. 2. Pl. 320.
Clivipollia astricta (Reeve, 1846) ..... Vol. 2. Pl. 322 Fig. 1.
Clivipollia contracta (Reeve, 1846) ..... Vol. 2. Pl. 320.
Clivipollia fragaria (Wood, 1828)..... Vol. 5. Pl. 1330.
Clivipollia pulchra (Reeve, 1846) ..... Vol. 2. Pl. 320.
Crassicantharus noumeensis (Crosse, 1870)..... Vol. 5. Pl. 1329.
Eclectofusus dedonderi (Fraussen & Hadorn, 2001) ..... Vol. 2. Pl. 313.
Engina alveolata (Kiener, 1836) ..... Vol. 2. Pl. 320.
Engina armillata (Reeve, 1846) ..... Vol. 2. Pl. 320.
Engina chinoi Fraussen, 2009..... Vol. 5. Pl. 1328.
Engina bonasia (Martens, 1880) ..... Vol. 2. Pl. 320.
Engina concinna (Reeve, 1846)..... Vol. 2. Pl. 320.
Engina cronuchorda Fraussen & Chino, 2011 ..... Vol. 5. Pl. 1328.
Engina curtisiana (E. A. Smith, 1884) ..... Vol. 2. Pl. 321.
Engina frausseni Chino, 2015 ..... Vol. 5. Pl. 1328.
Engina fusiformis Pease, 1865 ..... Vol. 2. Pl. 321.
Engina species ..... Vol. 2. Pl. 321 Figs. 7-8-9.
Engina lineata (Reeve, 1846)..... Vol. 2. Pl. 321.
Engina mandarinoides Fraussen & Chino, 2011..... Vol. 2. Pl. 321 Fig. 2.
Engina mendicaria (Linnaeus, 1758) ..... Vol. 2. Pl. 320.
Engina menkeana (Dunker, 1860)..... Vol. 2. Pl. 321.
Engina notabilis Fraussen & Chino, 2011..... Vol. 5. Pl. 1328.
Engina obliquecostata (Reeve, 1846)..... Vol. 2. Pl. 321.
Engina phasinola (Duclos, 1840) ..... Vol. 2. Pl. 321.
Engina resta (Iredale, 1940) ..... Vol. 4. Pl. 1265., Add. 1.
Engina spica Melvill & Standen, 1895..... Vol. 2. Pl. 321 Figs. 3 & 4.
Engina zonalis (Lamarck, 1822)..... Vol. 2. Pl. 321.
Eosipho smithi (Schepman, 1911) ..... Vol. 5. Pl. 1330.
Euthria japonica (Shuto, 1978) ..... Vol. 2. Pl. 313.
Euthria lubrica (Dall, 1918)..... Vol. 5. Pl. 1329.
Euthria walleri (Ladd, 1976)..... Vol. 2. Pl. 313.
Falsilatirus suduirauti Bozzetti, 1995 ..... Vol. 2. Pl. 324.

Gaillea coriolis (Bouchet & Warén, 1986) ..... Not yet documented.
Manaria brevicaudata (Schepman, 1911)..... Not yet documented.
Manaria chinoi Fraussen, 2005 ..... Vol. 2. Pl. 313.
Manaria clandestina Bouchet & Warèn, 1986..... Vol. 5. Pl. 1330.
Manaria jonkeri (Koperberg, 1931) ..... Not yet documented.
Manaria kuroharai Azuma, 1960..... Not yet documented.
Pisania crenilabrum A. Adams, 1855 ..... Vol. 2. Pl. 322.
Pisania fasciculata (Reeve, 1846)..... Vol. 2. Pl. 322.
Pisania ignea (Gmelin, 1791)..... Vol. 2. Pl. 322.
Pisania jenningsi (Cernohorsky, 1966) ..... Vol. 2. Pl. 322.
Pisania sugimotoi (Habe, 1968) ..... Vol. 2. Pl. 322.
Pisania tritonoides (Reeve, 1846) ..... Vol. 2. Pl. 323.
Pollia egregia (Reeve, 1844)..... Vol. 2. Pl. 320.
Pollia fumosa (Dillwyn, 1817) ..... Vol. 2. Pl. 323.
Pollia undosa (Linnaeus, 1758)..... Vol. 2. Pl. 323.
Pollia sowerbyana vicdani (Kosuge, 1984)..... Vol. 2. Pl. 323.
Pollia subcostata (Krauss, 1848)..... Vol. 5. Pl. 1329.
Pollia wagneri (Anton, 1838)..... Vol. 2. Pl. 324.
Preangeria dentata (Schepman, 1911)..... Vol. 2. Pl. 313.
Prodotia billeheusti (Petit de la Saussaye, 1853) ..... Vol. 2. Pl. 324.
Prodotia gracilis (Reeve in da Costa, 1846) ..... Vol. 2. Pl. 324.
Prodotia iostoma (Gray, 1834)..... Vol. 2. Pl. 324.
Prodotia lannumi (Schwengel, 1950)..... Vol. 4. Pl. 1265., Add. 1.
Speccapollia recurva (Reeve, 1846)..... Vol. 2. Pl. 320.
Thermosipho desbruyeresi (Okutani & Ohta, 1993) ..... Not yet documented.

THE FAMILY BUCCINIDAE

The content of the Indo-Pacific BUCCINIDAE changed considerably following the 2016 article of Galindo, Puillandre, Utge, Lozouet & Bouchet on the phylogeny and systematics of the NASSARIIDAE. For details of the this important article we refer to the Bibliography. The same article also showed that the BUCCINIDAE are polyphyletic, and one group stands particularly apart: the future PISANIIDAE. In his upcoming revision on the classification of the gastropods, Ph. Bouchet will handle the PISANIIDAE indeed as a full family (pers. comm. 24 August 2016).

MOVES BETWEEN FAMILIES

The following genera have now been moved to NASSARIIDAE:
Antillophos
Phos
Nassaria
The following genera have now been moved to COLUBRARIIDAE:
Kanamarua
Metula
The following genus has now been moved to BELOMITRIDAE:
Belomitra – this is a new family: BELOMITRIDAE Kantor, Puillandre, Rivasseau & Bouchet, 2012. We know of only one Philippine species that moved to this family at present: *Belomitra leobrerorum* Poppe & Tagaro, 2010.

CHANGE OF GENUS

The genus *Calagrassor* Kantor, Puillandre, Fraussen, Fedosov & Bouchet, 2013

A new genus has been erected for a group of Buccinids formerly placed in *Eosipho*: *Calagrassor* Kantor, Puillandre, Fraussen, Fedosov & Bouchet, 2013. This genus now houses *aldermenensis* (Powell, 1971) – Type species; *poppei* (Fraussen, 2001); *tashiensis* (Lee & Lan, 2002) and *zephyrus* (Fraussen, Sellanes & Stahlschmidt, 2012). We apply this here.

***Clivipollia astricta* (Reeve, 1846)**

WORMS places "*astricta* Reeve, 1846" in the genus *Engina*, while in our book it was placed in *Enzinopsis*. According to WORMS, *Enzinopsis* is a synonym of *Clivipollia*. We also state and feel that the *astricta* from Reeve fits much more in *Clivipollia* than in *Engina* and apply this, although this has not yet been confirmed by other sources.

***Clivipollia contracta* (Reeve, 1846)**	Was in the genus *Engina.*
***Engina zonalis* (Lamarck, 1822)**	Was in the genus *Enginella.*
***Eclectofusus dedonderi* (Fraussen & Hadorn, 2001)**	Was in the genus *Pararetifusus.*
***Speccapollia recurva* (Reeve, 1846)**	Was in the genus *Clivipollia.*

CHANGES AND REMARKS

***Cantharus melanostoma* (G. B. Sowerby I, 1825)**

The correct spelling for the former "*Cantharus melanostomus"* .

***Engina histrio* (Reeve, 1846)**

Checking with WORMS also revealed another problem: the *Engina histrio* from PMM, on plate 321 figs. 7 to 9 are not that species. They are likely undescribed species, and possibly even different species from each other. The true "*Ricinula histrio* Reeve" is a synonym of the "*Purpura alveolata*" from Kiener, both placed in the genus *Engina* today. The figure of our *E. alveolata* on plate 320 fig. 1 is correct.

***Engina obliquecostata* (Reeve, 1846)**

The correct spelling for the former "*Engina obliquicostatus"*.

***Enginella spica* (Melvill & Standen, 1895)**

The shell figured as *Enginella spica* (Melvill & Standen, 1895) on plate 321 fig. 2 has been described as *E. mandarinoides* Fraussen & Chino, 2011. *Engina spica* Melvill & Standen, 1895 is now the correct name for our former *E. mactanensis* Cernohorsky, 1985. The latter name is now a plain synonym.

***Pisania crenilabrum* A. Adams, 1855**

Is accepted as *P. fasciculata* (Reeve, 1846) but we do not agree with that and follow the original idea of Fraussen in PMM.

***Pollia egregia* (Reeve, 1844)**

We do not agree with WORMS (25 April 2015) that *Cantharus egregia* (Reeve, 1844) should be placed in *Engina*. This species is almost a sister species of the European *Pollia dorbignyi* (Payraudeau, 1826). We therefore move "*egregia*" to the genus *Pollia*.

***Pollia sowerbyana vicdani* (Kosuge, 1984)**

Pollia vicdani (Kosuge, 1984) is now a subspecies of *Pollia sowerbyana* (Melvill & Standen, 1903). The *P. sowerbyana* is from the Horn of Africa, recorded from Eastern Arabia and the Gulf of Oman in recent literature. The shells are slightly broader than the eastern "*vicdani*". Wether this is a subspecies or clinal variant has to be proven with dredgings in the Indian Ocean – there were done virtually none.

***Prodotia billeheusti* (Petit de la Saussaye, 1853)**

Is accepted as *P. iostoma* (Gray, 1834), we do not agree and continue to use the opinion of Fraussen.

BULLIDAE Gray, 1827

Author: Vol. 3 – Richard Willan.

BULLINIDAE Gray, 1850

Author: Vol. 3 – Richard Willan.

BURSIDAE Thiele, 1925

Author: Vol. 1 – Alan Beu.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

CHANGES AND REMARKS

***Bufonaria cavitensis* (Reeve, 1844)**

We now look at this taxon as a valid species, no longer as a subspecies of *B. crumena.*

***Bursa affinis* (Broderip, 1833)**

We do not agree with WORMS that *Bursa affinis* is accepted as *B. granularis.* This species is well defined in the Visayas, and lives together with *B. granularis* without intermediates.

***Bursa angioyorum* Parth, 1990**

Bursa angioyorum Parth, 1990 is easy to distinguish from *B. lamarckii* and we continue to consider both different species, as well defined by Parth. Moreover, the *B. lamarckii* is a shallow water species while *B. angioyorum* is from rather deep – continental shelf - bottoms. The basic color of the shells is constantly different and also the shape and lengtht of the spines.

Molecular data show that this is correct. (Ph. Bouchet, pers. comm. 24 August 2016).

***Bursa muehlhaeusseri* Parth, 1990**

Bursa muehlhaeusseri Parth, 1990 is easy to distinguish from *B. lamarckii* and we continue to consider both different species, as well defined by Parth.

***Bursa rhodostoma* (G. B. Sowerby II, 1835)**

We agree with WORMS that *Bursa rhodostoma* has no subspecies.

CAECIDAE Gray, 1850

The family CAECIDAE in the South-West Pacific have been revised by Pizzini, Raines & Vannozzi in 2013.
Their results and recent re-discoveries join 32 species to the Philippine malacological diversity. The article is very well done, but the iconographic part is poor, with many species only shown with SEM photographs. We expect much more changes in the family when further studies with extensive photographic material are carried out.

CALIPHYLLIDAE Tiberi, 1881
Author: Vol. 3 – Richard Willan & Philippe Poppe.

Cyerce elegans Bergh, 1870 ..... Vol. 3. Pl. 780.
Cyerce nigra Bergh, 1871 ..... Vol. 3. Pl. 780.
Polybranchia orientalis (Kelaart, 1858) ..... Vol. 3. Pl. 779.

CALLIODENTALIIDAE Chistikov, 1975
Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Calliodentalium crocinum (Dall, 1907) ..... Vol. 4. Pl. 1200.
Calliodentalium balanoides (Plate, 1908) ..... Vol. 4. Pl. 1200.
Calliodentalium semitracheatum (Boissevain, 1906) ..... Vol. 4. Pl. 1200.

CALLIOSTOMATIDAE Thiele, 1924 (1847)
Author: Vol. 1 – Guido Poppe & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

Calliostoma aculeatum aliguayense Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 53
Calliostoma anseeuwi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 53.
Calliostoma basulense Poppe, Tagaro & Vilvens, 2014 ..... Vol. 5. Pl. 1337.
Calliostoma chinoi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 53.
Calliostoma connyae Poppe, Tagaro & Vilvens, 2014 ..... Vol. 5. Pl. 1337.
Calliostoma dedonderi Vilvens, 2000 ..... Vol. 1. Pl. 53.
Calliostoma emmanueli Vilvens, 2000 ..... Vol. 1. Pl. 53.
Calliostoma escondidum Poppe, Tagaro & Vilvens, 2014 ..... Vol. 5. Pl. 1337.
Calliostoma fragum (Philippi, 1848) ..... Vol. 1. Pl. 53.
Calliostoma guphili Poppe, 2004 ..... Vol. 1. Pl. 54.
Calliostoma haliarchus (Melvill, 1889) ..... Vol. 1. Pl. 54.
Calliostoma iris (Kuroda & Habe, 1961) ..... Vol. 1. Pl. 54.
Calliostoma jackelynae Bozzetti, 1997 ..... Vol. 5. Pl. 1338.
Calliostoma mariae Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 54.
Calliostoma multispinosus Schepman, 1908 ..... Vol. 5. Pl. 1338.
Calliostoma paucicostatum Kosuge, 1984 ..... Vol. 1. Pl. 54.
Calliostoma philippei Poppe, 2004 ..... Vol. 1. Pl. 54.
Calliostoma poppei Vilvens, 2000 ..... Vol. 1. Pl. 54.
Calliostoma punctocostatum (A. Adams, 1853) ..... Vol. 5. Pl. 1338.
Calliostoma rubropunctatus (A. Adams, 1853) ..... Vol. 5. Pl. 1338.
Calliostoma sakashitai (Sakurai, 1994) ..... Vol. 1. Pl. 54.

Calliostoma shinayaka (Habe, 1961)..... Vol. 5. Pl. 1339.
Calliostoma scobinatum (A. Adams in Reeve, 1863) ..... Vol. 1. Pl. 55.
Calliostoma simplex Schepman, 1908..... Vol. 5. Pl. 1339.
Calliostoma stephanephorum (Watson, 1886) ..... Vol. 4. Pl. 1267., Add. 1.
Calliostoma suduirauti Bozzetti, 1997 ..... Vol. 1. Pl. 55.
Calliostoma swinneni Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 55.
Calliostoma takujii Kosuge, 1986 ..... Vol. 1. Pl. 55.
Calliostoma ticaonicum (A. Adams, 1851) ..... Vol. 1. Pl. 55 & 562.
Calliostoma trotini Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 56.
Calliostoma vicdani Kosuge, 1984..... Vol. 1. Pl. 56.
Calliostoma vilvensi Poppe, 2004..... Vol. 1. Pl. 56.
Calliostoma xylocinnamomum Vilvens, 2005 ..... Vol. 4. Pl. 1267., Add. 1.

CHANGE OF GENUS

We look at the use of the genera in *Calliostoma* in WORMS with a very suspicious eye: the work is not even half done, as the "genus" *Calliostoma* should be devided in dozens of genera, which in fact are very well defined conchologically. At present several of the genera have been made at random without a genral overview of the family and with randomly chosen characteristics which have little to do with a good conchological approach. We therefore maintain *Calliostoma* for *multispinosus* (in WORMS in *Bathyfautor*); for *punctocostatum* (in WORMS in *Astele*); for *rubropunctatum* (in WORMS in *Laetifautor*).

CHANGES AND REMARKS

***Calliostoma aculeatum aliguayense* Poppe, Tagaro & Dekker, 2006**
The correct spelling is *"aliguense"*. WORMS places the species in "*Tristichotrochus*".
Calliostoma basulense Poppe, Tagaro & Vilvens, 2014
The correct spelling for the former "*Calliostoma basulensis*".
Calliostoma escondidum Poppe, Tagaro & Vilvens, 2014
The correct spelling for the former "*Calliostoma escondida*".
Calliostoma multispinosus (Schepman, 1908)
The correct spelling for the former "*Calliostoma multispinosum*".
Calliostoma punctocostatum (A. Adams, 1853)
The correct spelling for the former "*punctocostatus*".
Calliostoma rubropunctatum (A. Adams, 1853)
The correct spelling for the former "*rubropunctatus*".
***Calliostoma stephanephorum* (Watson, 1886)**
Is the older name for the shell figured as *C. toshiharui*. See Vol. 4, Plate 1267.
***Calliostoma xylocinnamomum* Vilvens, 2005**
We are now convinced that this is the correct name for the shell figured as *C. quadricolor* on Vol. 4, Plate 1267 The type of *C. quadricolor* is a white juvenile *Calliostoma* from Indonesia.

CALLIOTROPIDAE Hickman & McLean, 1990

Calliotropis bicarinata (Schepman, 1908)..... Vol. 5. Pl. 1339.
Calliotropis boucheti Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 28.
Calliotropis calcarata (Schepman, 1908) ..... Vol. 1. Pl. 28.
Calliotropis cf. *delli* B. A. Marshall, 1979 ..... Vol. 1. Pl. 28.
Calliotropis francocacii Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 28.
Calliotropis galea (Habe, 1953) ..... Vol. 1. Pl. 28.
Calliotropis gemmulosa (A. Adams, 1860)..... Vol. 1. Pl. 28.
Calliotropis malapascuensis Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 29.
Calliotropis minorusaitoi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 29.
Calliotropis philippei Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 29.
Calliotropis sagarinoi Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 29.

Calliotropis stanyi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 29.
Calliotropis vilvensi Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 30.
Calliotropis virginiae Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 30.
Calliotropis wilsi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 30.
Calliotropis yukikoae Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 30.
Ginebis argenteonitens (Lischke, 1872)..... Vol. 1. Pl. 31.
Lischkeia undosa Kuroda & Kawamura, 1956..... Vol. 1. Pl. 33.
Tibatrochus husaensis Nomura, 1940 ..... Vol. 1. Pl. 36.
Tibatrochus incertus (Schepman, 1908)..... Vol. 1. Pl. 36.
Spinicalliotropis spinosa (Poppe, Tagaro & Dekker, 2006)..... Vol. 1. Pl. 29.

MOVES BETWEEN FAMILIES

The family CALLIOTROPIDAE was formerly part of the CHILODONTIDAE. For the genera that moved from CHILODONTIDAE to CALLIOTROPIDAE, see in the remarks below in the family CHILODONTIDAE.

CHANGE OF GENUS

The former subgenus *Spinicalliotropis* Poppe, Tagaro & Dekker is now a genus.

CALLOCHITONIDAE Plate, 1901

Author: Vol. 4 – Bruno Anseeuw.

Callochiton cf. *C. subsulcatus* Kaas & Van Belle, 1985..... Vol. 4. Pl. 1205 & 1209.

CALYPTRAEIDAE Lamarck, 1809

Calyptraea pellucida (Reeve, 1859)..... Vol. 1. Pl. 98.
Desmaulus extinctorium (Lamarck, 1822) ..... Vol. 5. Pl. 1339.

CHANGE OF GENUS

***Desmaulus extinctorium* (Lamarck, 1822)** Was in the genus *Crucibulum*.

CANCELLARIIDAE Forbes & Hanley, 1851

Author: Vol. 2 – André Verhecken.

Admetula atopodonta (Petit & Harasewych, 1986)..... Vol. 5. Pl. 1340.
Admetula garrardi Petit, 1974..... Vol. 5. Pl. 1340.
Brocchinia fischeri (A. Adams, 1860)..... Vol. 5. Pl. 1340.
Cancellicula aethiopica (Thiele, 1925) ..... Not yet documented.
Fusiaphera dampierensis (Garrard, 1975)..... Vol. 5. Pl. 1340.
Fusiaphera macrospira (A. Adams & Reeve, 1850)..... Vol. 2. Pl. 703.
Fusiaphera tosaensis Habe, 1961 ..... Vol. 2. Pl. 703.
Merica aqualica (Petit & Harasewych, 1986)..... Vol. 2. Pl. 704 & Vol. 5. Pl. 1340.
Merica boucheti (Petit & Harasewych, 1986) ..... Vol. 2. Pl. 704.
Merica ektyphos Petit & Harasewych, 2000..... Vol. 2. Pl. 704.
Merica gigantea (Lee & Lan, 2002)..... Vol. 5.
Merica purpuriformis (Kiener, 1841)..... Not yet documented.

Merica asperella (Lamarck, 1822) ..... Vol. 2. Pl. 704.
Merica deynzeri Petit & Harasewych, 2000 ..... Vol. 5. Pl. 1340.
Merica elegans (G. B. Sowerby I, 1822) ..... Vol. 2. Pl. 704.
Merica gigantea (Lee & Lan, 2002) ..... Vol. 2. Pl. 704 & Vol. 5. Pl. 1341.
Merica oblonga (G. B. Sowerby I, 1825) ..... Vol. 2. Pl. 704.
Microsveltia haswelli (Garrard, 1975) ..... Not yet documented.
Microsveltia karubar Verhecken, 1997 ..... Not yet documented.
Microsveltia humaboni Verhecken, 2011 ..... Not yet documented.
Microsveltia machaira Verhecken, 2011 ..... Not yet documented.
Microsveltia tupasi Verhecken, 2011 ..... Not yet documented.
Nipponaphera habei Petit, 1972 ..... Vol. 2. Pl. 705.
Nipponaphera iwaotakii Habe, 1961 ..... Vol. 2. Pl. 705.
Nipponaphera nodosivaricosa (Petuch, 1979) ..... Vol. 2. Pl. 705.
Nipponaphera suduirauti (Verhecken, 1999) ..... Vol. 2. Pl. 705.
Nipponaphera teramachii (Habe, 1961) ..... Vol. 2. Pl. 705.
Plesiotriton vivus Habe & Okutani, 1981 ..... Vol. 2. Pl. 703.
Plesiotriton silinoensis Verhecken, 2011 ..... Vol. 5. Pl. 1341.
Scalptia aliguayensis Verhecken, 2008 ..... Vol. 2. Pl. 706.
Scalptia contabulata (G. B. Sowerby I, 1832) ..... Vol. 2. Pl. 706.
Scalptia crenifera (G. B. Sowerby I, 1832) ..... Vol. 2. Pl. 705.
Scalptia crispatoides Verhecken, 2008 ..... Vol. 2. Pl. 706.
Scalptia crossei (Semper, 1861) ..... Vol. 2. Pl. 706.
Scalptia mercadoi Old, 1968 ..... Vol. 2. Pl. 706.
Scalptia nassa (Gmelin, 1791) ..... Vol. 2. Pl. 706.
Scalptia obliquata (Lamarck, 1822) ..... Vol. 2. Pl. 706.
Scalptia textilis (Kiener, 1841) ..... Vol. 2. Pl. 707.
Scalptia vangoethemi Verhecken, 1995 ..... Vol. 2. Pl. 707.
Scalptia verreauxii (Kiener, 1841) ..... Vol. 2. Pl. 704.
Sydaphera christiana Verhecken, 2008 ..... Vol. 2. Pl. 704.
Trigonostoma bicolor (Hinds, 1843) ..... Vol. 2. Pl. 705.
Trigonostoma scalare (Gmelin, 1791) ..... Vol. 2. Pl. 707.
Trigonostoma thysthlon Petit & Harasewych, 1987 ..... Vol. 2. Pl. 707.
Tritonoharpa antiquata (Hinds in Reeve, 1844) ..... Vol. 2. Pl. 703.
Tritonoharpa beui Verhecken, 1997 ..... Vol. 5. Pl. 1341.
Tritonoharpa brunnea Beu & Maxwell, 1987 ..... Vol. 5. Pl. 1341.
Tritonoharpa pseudangasi Beu & Maxwell, 1987 ..... Vol. 2. Pl. 703.
Zeadmete sikatunai Verhecken, 2011 ..... Vol. 5. Pl. 1341.
Zeadmete apoensis Verhecken, 2011 ..... Not yet documented.

THE FAMILY CANCELLARIIDAE

In 2011, A. Verhecken published extensively on this family, especially on the results of the Panglao expedition. This paper is a nice addition to the treatment of this family, by the same author as the chapter in Volume 2 of Philippine Marine Mollusks. We figure part of the new records for the country in this volume, part in the next volume.

CHANGE OF GENUS

***Merica ektyphos* Petit & Harasewych, 2000**	Was in the genus *Cancellaria*.
***Merica gigantea* (Lee & Lan, 2002)**	Was in the genus *Sydaphera*.
***Trigonostoma bicolor* (Hinds, 1843)**	Was in the genus *Scalptia*.

CHANGES AND REMARKS

***Fusiaphera macrospira* (A. Adams & Reeve, 1850)**

Based on Bouchet & Petit (2008) *Fusiaphera macrospiratoides* is in synonymy with *F. macrospira*. Both the holotypes have been figured by Higo, Callomon & Goto (2001). The *macrospiratoides* is bigger (28 mm, versus 23 mm for the *F. macrospira*) and has much more color pattern with a pale band mid-whorl. Otherwise, differences are indeed minimal and we adopt this view. So, the shell figured on Pl. 703 in Vol. 2 should be renamed *F. macrospira*. The holotype of *F. macrospira* is white and has slight differences with our very colored shell. Further study and a revision of the group is advised.

***Fusiaphera dampierensis* Garrard, 1975**

We keep *Fusiaphera dampierensis* Garrard, 1975 as a valid species, after we got one shell at 400 m deep in front of Punta Engano. This does not look as a *F. macrospira*. We agree with earlier experts on this matter, such as Hemmen (2007) and Petit & Harasewych (1990).

***Fusiaphera tosaensis* Habe, 1961**

In the same genus, we do not agree with WORMS, based on Bouchet & Petit (2008) that *F. tosaensis* is accepted *as F. macrospira*. These are two very different species. The lectotype of *F. macrospira* has been figured by Higo, Callomon & Goto in 2001. It is a white shell with a hardly elevated tiny sculpture. The spire is high and slender. The Holotype of *F. tosaensis* has been shown by the same authors. It is also a whitish shell, but much more cream colored than *F. macrospira*. It is slightly smaller with a very rough and elevated sculpture. The spire is much smaller.

***Nipponaphera nodosivaricosa* (Petuch, 1979)**

The date changes from 1997 into 1979.

CAPULIDAE Fleming, 1822

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

NOT FOUND IN WORMS

Turritropis turrita (Habe, 1962)

MOVES BETWEEN FAMILIES

Capulus bicarinata* and *C. tricarinata

The taxonomic and nomenclatural adventures of some of the capulids are interesting. In 1987 Ponder placed some of the species in the family AMATHINIDAE. We maintain two of the AMATHIIDAE of authors (*bicarinata* and *tricarinata*) in the family CAPULIDAE, as their shape and life-style are identical to classic Capulids.

***Malluvium otohimeae* (Habe, 1946)**

Is now in the family HIPPONICIDAE, was in CAPULIDAE in the genus *Capulus*.

CHANGE OF GENUS

***Hyalorisia tosaensis* Otuka, 1939** Was in the genus *Capulus*.
***Trichotropis flavida* (Hinds, 1843)**
We maintain *Trichotropis flavida* in *Trichotropis*, not in *Separatista*.
***Trichotropis turrita* Dall, 1927** Was in the genus *Turritropis*.

CHANGES AND REMARKS

***Capulus danieli* (Crosse, 1858)**
Based on Beu (2004) *Capulus dilatatus, C. kawamurai* and *C. spondylicola* are all regarded as synonyms of *C. danieli* (Crosse, 1858), an impossible affair when checking the modern literature – which – we must say, does not always figure the holotype. In this case of major doubts, we maintain all these species.

***Separatista helicoides* (Gmelin, 1791)**
Zelippistes eccentricus versus *Separatista helicoides* continues the permanent dance between validity or not. We now follow WORMS, based on Beu (2010) and the opinion of several conchologists that contacted us on this matter and change into *Separatista helicoides* as the valid name. We refer to WORMS for the long list of synonyms of this species. We here mention the best known one apart from *Z. eccentricus*: *Trichotropis blainvilleanus* Petit de la Saussaye, 1851.

CARDIIDAE Lamarck, 1809

Author: Vol. 4 – Jan Johan Ter Poorten.

THE FAMILY CARDIIDAE

The CARDIIDAE appeared first in Volume 4 in 2011, from the hands of J.J. ter Poorten – only 5 years ago, which explains that there are few changes only. Experts may be happy with the 2009 publication of ter Poorten in Vita Malacologica on the CARDIIDAE of the Panglao Marine Biodiversity Project and the 2005 Panglao Deep –Sea Cruise. The same author reviewed the genus *Nemocardium* in Basteria in 2013 and described the long overlooked *Fragum vanuatense* in 2015.

CHANGE OF GENUS

***Discors multipunctatum* (G. B. Sowerby I in Broderip & G. B. Sowerby I, 1833)**

The former *"Laevicardium" multipunctatum* now found a proper place in the genus *Discors*.

CHANGES AND REMARKS

"*Corculum* Röding, 1798"

In March 2013, Markus Huber described a new species of *Corculum, C. lorenzi* in Conchylia.
He also refers to species he now considers as valid, and presented as such in his new book on bivalves earlier. Jan Johan ter Poorten acknowledged that molecular research did not demonstrate sufficient "distance" to accept specific level. We therefore treat these "species" here are mere forms.

***Frigidocardium kiranum* Sakurai & Habe, 1966**

The proper spelling for the former "*Frigidocardium kirana*".

***Fulvia nienkeae* ter Poorten, 2012**

The new species *Fulvia nienkeae* ter Poorten, 2012 has been figured earlier in Vol. 4 as *Fulvia* aff. *F. australis.*

***Lunulicardia hemicardium* (Linnaeus, 1758)**

The proper spelling for the former " "*Lunulicardia hemicardia"*.

CARDILIIDAE P. Fischer, 1887

CARDITIDAE Férussac, 1822

Author: Vol. 4 – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

CHANGE OF GENUS

***Megacardita nodulosa* (Lamarck, 1819)** Was in the genus *Cardita*.

CHANGES AND REMARKS

***Cardites canaliculatus* (Reeve, 1843)**

Based on Huber (2010), the *Cardites cardioides* and *C. canaliculatus*, both from Reeve in the same year are synonyms. We agree with that and the correct name becomes *C. canaliculatus.*

CASSIDAE Latreille, 1825

Author: Vol. 1 – Kurt Kreipl.

THE FAMILY CASSIDAE

On the genus *Casmaria* H. Adams & A. Adams, 1853

As time went and dives and exploration went on, we got our own ideas as to a more correct definition on the species level. The genus *Casmaria* H. Adams & A. Adams, 1853 was also well monographed by Buijse J., Dekker H. and Verbinnen G. in the may 2013 number of Acta conchyliorum, volume 14. We adapted their new name of *C. cernica* (G. B. Sowerby III, 1888) for the former *C. nipponensis* Abbott, 1968 and accepted *C. kayae* Buijse, Dekker & Verbinnen, 2013 as a new species.
In 2016 appeared one more monograph: "CASSIDAE. An Amazing Family of Seashells". This excellent work with an extensive iconography was from the hand of 5 European passionate expert collectors: G. Verbinnen, L. Segers, F. Swinnen, K. Kreipl and D. Monsecour. Together their material is at least to be called "impressive", and for three decades they gathered about all what became available from fishermen, dealers and all kind of other sources. We did not study their publication as yet, but the result will be absorbed in the Volume 6.

NOT FOUND IN WORMS

Semicassis diuturna (Schubert & Wagner, 1829)

***Casmaria cernica* (G. B. Sowerby III, 1888)**
The new name for the former *C. nipponensis*.

***Casmaria erinaceus* (Linnaeus, 1758)**
The spelling of *C. erinacea* changes in *C. erinaceus*. We split this taxon into two species and look at *C. vibex* as a valid species and no longer a form of *C. erinaceus.*

***Casmaria ponderosa* (Gmelin, 1791)**
We now consider *C. ponderosa* and *C. turgida* both as valid species.
WORMS considers "form *nodulosa*" a synonym of *C. ponderosa*, but we continue to use the name as a form name.

***Echinophoria kurodai* (Abbott, 1968)**
We do not agree with Kreipl (1997) that *Echinophoria kurodai* is a synonym of *E. wyvillei,* and keep it as a separate species.

***Phalium bandatum* (Perry, 1811)**
Phalium bandatum becomes a species without subspecies.

***Semicassis booleyi* (G. B. Sowerby, 1900)**
We consider *Semicassis booleyi* as a valid species and keep this species in *Semicassis*, not *Phalium*. The reason we keep *S. booleyi* as a valid species is because we repeatedly dived this species at depths around 20 meters during nighttime, together with specimens of *S. bisulcata*: there are no intermediates between these two species and they live literally on the same square meters, in the same areas, in the Visayas.

***Semicassis japonica* (Reeve, 1848)**
Semicassis japonica is accepted as *S. bisulcata* in WORMS but we keep this as a valid species.

CATAEGIDAE McLean & Quinn, 1987

Cataegis leucogranulatus (Fu & Sun, 2006)..... Vol. 5. Pl. 1350.

CAVOLINIIDAE Gray, 1850 (1815)

Author: Vol. 3 – Richard Willan & Philippe Poppe.

THE FAMILY CAVOLINIIDAE

The former CAVOLINIIDAE from the Philippines are now in 4 different families: CAVOLINIIDAE, CLIIDAE, CRESEIDAE and CUVIERINIDAE. The modern CAVOLINIIDAE only contain the recent genera *Cavolinia, Diacavolinia, Diacria* and *Vaginella*.

CERITHIIDAE Fleming, 1822

Author: Vol. 1 – Ellen Strong & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Cerithium nodulosum Bruguière, 1792 ..... Vol. 1. Pl. 90.
Cerithium ophioderma (Habe, 1968) ..... Vol. 1. Pl. 93.
Cerithium pacificum Houbrick, 1992 ..... Vol. 1. Pl. 90.
Cerithium punctatum Bruguière, 1792 ..... Vol. 1. Pl. 89.
Cerithium rostratum A. Adams in G. B. Sowerby II, 1855 ..... Vol. 1. Pl. 91.
Cerithium salebrosum Sowerby II, 1855 ..... Vol. 1. Pl. 91.
Cerithium scobiniforme Houbrick, 1992 ..... Vol. 1. Pl. 90.
Cerithium stigmosum Gould, 1861 ..... Vol. 1. Pl. 91.
Cerithium tenellum G. B. Sowerby II, 1855 ..... Vol. 1. Pl. 90.
Cerithium tenuifilosum G. B. Sowerby II, 1866 ..... Vol. 1. Pl. 91.
Cerithium traillii G. B. Sowerby II, 1855 ..... Vol. 1. Pl. 92.
Cerithium zonatum (Wood, 1828) ..... Vol. 1. Pl. 92 & Vol. 4. Pl. 1268., Add. 1.
Clypeomorus batillariaeformis Habe & Kosuge, 1966 ..... Vol. 1. Pl. 91.
Clypeomorus bifasciata (G. B. Sowerby II, 1855) ..... Vol. 1. Pl. 91.
Clypeomorus irrorata (Gould, 1849) ..... Vol. 5. Pl. 1351.
Clypeomorus pellucida (Hombron & Jacquinot, 1852) ..... Vol. 1. Pl. 91.
Clypeomorus purpurastoma Houbrick, 1985 ..... Vol. 1. Pl. 91.
Colina macrostoma (Hinds, 1844) ..... Vol. 1. Pl. 92.
Pictorium impedens (Hedley, 1899) ..... Vol. 5. Pl. 1351.
Pictorium koperbergi (Schepman, 1907) ..... Vol. 1. Pl. 91.
Pictorium versicolor (Strong & Bouchet, 2013) ..... Vol. 1. Pl. 91.
Pseudovertagus aluco (Linnaeus, 1758) ..... Vol. 1. Pl. 92.
Pseudovertagus nobilis (Reeve, 1855) ..... Vol. 1. Pl. 92.
Rhinoclavis articulata (A. Adams & Reeve, 1850) ..... Vol. 1. Pl. 92.
Rhinoclavis aspera (Linnaeus, 1758) ..... Vol. 1. Pl. 92.
Rhinoclavis fasciata (Bruguière, 1792) ..... Vol. 1. Pl. 93.
Rhinoclavis kochi (Philippi, 1848) ..... Vol. 1. Pl. 93.
Rhinoclavis longicaudata (A. Adams & Reeve, 1850) ..... Vol. 5. Pl. 1351.
Rhinoclavis pilsbryi (Kuroda & Habe, 1961) ..... Vol. 5. Pl. 1351.
Rhinoclavis sinensis (Gmelin, 1791) ..... Vol. 1. Pl. 92.
Rhinoclavis sordidula (Gould, 1849) ..... Vol. 1. Pl. 93.
Rhinoclavis taniae Cecalupo, 2008 ..... Vol. 1. Pl. 93 & Vol. 5. Pl. 1351.
Rhinoclavis vertagus (Linnaeus, 1767) ..... Vol. 1. Pl. 93.
Royella sinon (Bayle, 1880) ..... Vol. 1. Pl. 93.

MOVES BETWEEN FAMILIES

The genus *Ataxocerithium* Tate, 1894 is now in the family NEWTONIELLIDAE.

CHANGE OF GENUS

***Cacozeliana variegata* (Henn & Brazier, 1894)** Was in the genus *Bittium*.
***Cerithidium diplax* (Watson, 1886)** Was in the genus *Bittium*.
***Pictorium koperbergi* (Schepman, 1907)** Was in the genus *Cerithium*.

CHANGES AND REMARKS

***Cerithium balteatum* Philippi, 1848**

We specify two form names, which regularly turn up in nature, in the *Cerithium balteatum*.
C. balteatum forma *coronatum* G. B. Sowerby II, 1855, corresponds to Plate 89 fig. 6.
C. balteatum forma *nigrobalteatum* E. A. Smith, 1884, corresponds to Plate 89 fig. 10.

***Cerithium kreukelorum* van Gemert, 2012**

Cerithium kreukelorum van Gemert, 2012 is now the correct name for the shell figured as *Cerithium madreporicola*

Jousseaume, 1930.

***Cerithium tenuifilosum* G.B. Sowerby II, 1866.**

WORMS accepts *Cerithium tenuifilosum* as *C. tenellum* G. B. Sowerby II, 1855. We do not follow this opinion as the shells we figure as *C. tenellum* correspond perfectly to the Sowerby shell (figured 1866 by a drawing) and the shell called as such in Cernohorsky (1972). We have however our doubts as the *C. tenuifilosum* shown in the Compendium of Abbott & Dance (1982) and the *C. tenuifilosum* sensu Thach (2012) is definitely not that species.

***Cerithium zonatum* (Wood, 1828)**

Cerithium lemniscatum, as figured in Volume 4 are indeed better determinated as *C. zonatum*, as shown earlier in Volume 1, plate 92. WORMS accepts *lemniscatum* as *C. zonatum*. In the modern literature, the *C. zonatum* is very well present, with more than 35 photographs, but only a few of these show what we eventually can call the "form" *lemniscatum*, which are the white shells with well defined very broad black or dark brown bands. Apart from PMM, only Sowerby (1855), Cecalupo (2004), Tryon (1887) and Kiener show the *lemniscatum*. All of these, except Cecalupo demonstrate the highly contrasted black and white shells.

***Pictorium versicolor* (Strong & Bouchet, 2013)**

We figured this beautiful *Pictorium* wrongly as *Cerithium koperbergi* Schepman, 1907 in Vol. 1, Pl. 91, figs. 7 & 8.

Rhinoclavis longicaudata & taniae

In 2008 Cecalupo could distinguish a new species in the Philippine shells of what was then called "*R. longicaudata"*. It has been named *R. taniae*. The *taniae* in the Philippines is slightly more common than *longicaudata* and is definitely a valid species. The *R. longicaudata* in Vol. 1 is in fact a dark colored *R. taniae.* Apart from the shorter and more curved siphonal canal, the subsutral spiral rib which is more swollen are all good distinguishing characteristics of *R. taniae*. The real *R. longicaudata* will be figured with other *R. taniae* in an upcoming work.

***Rhinoclavis pilsbryi* (Kuroda & Habe, 1961)**

WORMS accepts this species as *Rhinoclavis articulata* (A. Adams & Reeve, 1850), a lumper view which we think has been suggested first by Houbrick (1978). The species is definitely valid and a paratype has been shown in color by Higo, Callomon & Goto (2001).

CERITHIOPSIDAE H. Adams & A. Adams, 1853

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Synthopsis robbai Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1372.
Synthopsis sartorei Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1372.
Synthopsis sebastianoi Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1373.
Synthopsis serenae Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1373.
Synthopsis silviae Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1373.
Synthopsis spectabilis Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1373.
Synthopsis tenuicolorata Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1373.
Synthopsis tumida Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1373.
Synthopsis turgida Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1373.
Synthopsis turritellata Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1373.
Tubercliopsis conica Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1374.
Tubercliopsis lorenzoi Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1374.
Tubercliopsis maxi Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1374.
Tubercliopsis minor Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1374.
Tubercliopsis miranda Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1374 & 1375.
Tubercliopsis philippinensis Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1375.
Tubercliopsis sebyi Cecalupo & Perugia, 2012 ..... Vol. 5. Pl. 1375.
Tubercliopsis violacea Cecalupo & Perugia, 2012..... Vol. 5. Pl. 1375.

THE FAMILY CERITHIOPSIDAE

The CERITHIOPSIDAE and NEWTONIELLIDAE of the Indo-Pacific have been seriously studied and described by Cecalupo and Perugia. A first Volume, dated 2011, but which appeared in 2012, handles these families for the central Philippines. Of the 175 species documented, 171 were new.
In 2013, the same authors came up with a second book: "The CERITHIOPSIDAE of Espiritu Santo – Vanuatu. This was mainly the result of the material from the Santo 2006 expedition. In this work, 147 species, of which 91 were new to science, were documented. 54 species from Santo were already earlier discovered in the Philippines.
2014 saw the publication of two more studies: The CERITHIOPSIDAE and NEWTONIELLIDAE from French Polynesa, published in Novapex and the CERITHIOPSIDAE of South Madagascar, published in the Bolletino Malacologico.
Earlier this year, in 2016, these prolific authors produced an extensive monograph on the CERITHIOPSIDAE and NEWTONIELLIDAE from New Caledonia, published in Visaya. This work documents 171 species, of which 76 were new to science and it expanded considerably the range of 92 already known species.

This major taxonomic and nomenclatural achievement of Cecalupo & Perugio was almost exclusively based on material from the expeditions of the MNHN in the respective areas.
The present list adds some more of the Santo shells (re)discovered in the Philippines.
The authors and the MNHN, Paris, were so kind to let us re-document many of the types in Volume 5. The total number of the Philippine well determinated CERITHIOPSIDAE is not less than 179 species at present. Discoveries slowly continue to be made.

CHANGE OF GENUS

***Granulopsis thelcterium* (Tomlin, 1929)**	Was in the genus *Callisteuma*.
***Horologica semipicta* (Gould, 1861)**	Was in the genus *Joculator*.
***Seila morishimai* (Habe, 1970)**	Was in the genus *Notoseila*.

CHANGES AND REMARKS

***Clathropsis poppearum* Cecalupo & Perugia, 2012**
Is the correct name for the species earlier figured as *Cerithiopsis fosterae* in Vol 4 on plate 1268.
***Joculator arduinii* Cecalupo & Perugia, 2012**
The species figured as *Joculator albocinctum* on plate 312 in Vol. 1. Is now called *Joculator arduinii.*
***Seila exquisita* Cecalupo & Perugia, 2012**
The species figured as *Paraseila heronensis* on plate 312 in Vol. 1. Is now called S*eila exquisita*.

CETOCONCHIDAE Ridewood, 1903

Cetoconcha boucheti Poutiers & Bernard, 1995 ..... Vol. 4. Pl. 1058.
Cetoconcha exigua Poutiers & Bernard, 1995..... Vol. 4. Pl. 1058.
Cetoconcha tenuissima Okutani, 1966 ..... Vol. 4. Pl. 1058.

THE FAMILY CETOCONCHIDAE

Part of this family has now moved to CETOCONCHIDAE, a revived family created in 1903 by Ridewood. This is now one out of two families forming the superfamily POROMYOIDEA Dall, 1886, the other family being the POROMYIDAE. The CETOCONCHIDAE contains only one genus: *Cetoconcha* and the former *Cribrosoconcha* and *Silenia* are now synonyms of this genus too.

CHANGE OF GENUS

Cetoconcha tenuissima Okutani, 1966 — From the former genus *Poromya*.

CHAMIDAE Lamarck, 1809

Amphichama argentata (Kuroda & Habe, 1958)..... Vol. 4. Pl. 1075.
Amphichama scutulina (Poutiers, 1981)..... Vol. 4. Pl. 1075.
Chama ambigua Lischke, 1870 ..... Vol. 4. Pl. 1080.
Chama asperella Lamarck, 1819..... Vol. 4. Pl. 1075.
Chama brassica Reeve, 1847 ..... Vol. 4. Pl. 1079.
Chama cerinorhodon Hamada & Matsukuma, 2005..... Vol. 5. Pl. 1376.
Chama cerion Matsukuma, Paulay & Hamada, 2003 ..... Vol. 4. Pl. 1075.
Chama croceata Lamarck, 1819..... Vol. 4. Pl. 1077.
Chama dunkeri Lischke, 1870..... Vol. 4. Pl. 1077.
Chama fibula Reeve, 1846 ..... Vol. 4. Pl. 1076.
Chama fragum Reeve, 1847 ..... Vol. 4. Pl. 1076.
Chama hendersoni Dall, Bartsch & Rehder, 1938 ..... Vol. 5. Pl. 1376.
Chama iostoma Conrad, 1837 ..... Vol. 4. Pl. 1080.
Chama lazarus Linnaeus, 1758 ..... Vol. 4. Pl. 1078.
Chama limbula Lamarck, 1819 ..... Vol. 4. Pl. 1079.
Chama pacifica Broderip, 1835..... Vol. 5. Pl. 1376.
Chama oomedusae Matsukuma, 1996..... Vol. 4. Pl. 1076.
Chama plinthota Cox, 1927..... Vol. 4. Pl. 1081.
Chama pulchella Reeve, 1846..... Vol. 4. Pl. 1081.
Eopseuma phyllotrapezium Matsukuma, 1996..... Vol. 4. Pl. 1081.

CHANGE OF GENUS

***Chama pulchella* Reeve, 1846** — Was in the genus *Pseudochama.*

CHANGES AND REMARKS

***Chama croceata* Lamarck, 1819**

Chama dunkeri forma *imbricata* is now, according to WORMS, which follows in this Huber (2010) a valid species called *Chama croceata* Lamarck, 1819. The living shell on page 164 in Volume 4 is also this species.

***Chama fragum* Reeve, 1847**

Chama fragum Reeve, 1847 is a nomen dubium according to Huber (2010), but the 29.5 mm holotype from Reeve has been documented and figured by Higo, Callomon & Goto (2001) and corresponds to the shells we figure from the Philippines.

***Chama hendersoni* Dall, Bartsch & Rehder, 1938**

Huber (2010) puts *Chama hendersoni* in the synonymy *of C. asperella*. The types of *C. hendersoni*, well figured in Dall, Bartsch & Rehder (1938) are very small and quadrangular in shape, not round as most *C. asperella* are. It is an

"unpolished" decision to bluntly put the *hendersoni* in synonymy with *asperella*. The present piece, from quite deep and also quadrangular in shape and small, fits much more the description of *C. hendersoni* than the round and larger *C. asperella.*

***Chama iostoma* Conrad, 1837**

We continue to consider *C. iostoma* as a valid species from the shallows, well documented, with much blue inside and most often found on mud in mangroves. The *C. limbula* lives slightly deeper and is most often strongly attached to rocks. The spines are in most shells well developed and present. *C. limbula* is also much larger.

***Chama oomedusae* Matsukuma, 1996**

The correct spelling for the former *"comedusae".*

***Chama plinthota* Cox, 1927**

As long as we could not study the types, we consider *C. plinthota* as a valid species, and not a synonym of *C. croceata.*

Chama reflexa* versus *C. pacifica

We agree that *C. reflexa* is a synonym of *C. pacifica.* This concerns the shell figured on Vol. 4. Pl. 1077, as *C. reflexa.*

***Eopseuma phyllotrapezium* Matsukuma, 1996**

Is the correct spelling for the former *"Eopseuma phyllotrapezia".*

CHTENOPTERYGIDAE Grimpe, 1922

Chtenopteryx siculus (Vérany, 1851) ..... Not yet documented.

CHILODONTIDAE Wenz, 1938

Author: Vol. 1 – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

MOVES BETWEEN FAMILIES

CHILODONTIDAE, CALLIOTROPIDAE and CATAEGIDAE

The CHILODONTIDAE have now been split into CHILODONTIDAE, CALLIOTROPIDAE and CATAEGIDAE.
The CHILODONTIDAE recent genera that moved to CALLIOTROPIDAE are:

Bathybembix
Calliotropis
Cidarina
Convexia
Echinogurges
Ginebis
Lischkeia
Putzeysia
Spinicalliotropis
Tibatrochus

The CHILODONTIDAE genus that moved to CATAEGIDAE is:

Cataegis

The *Euchelus* from Volume I have moved from TROCHIDAE to CHILODONTIDAE.

CHANGE OF GENUS

***Ascetostoma ringens* (Schepman, 1908)**	Was in the genus *Herpetopoma*.
***Clypeostoma elongatum* (Vilvens, 2001)**	Was in the genus *Agathodonta.*
***Clypeostoma nortoni* (McLean, 1984)**	Was in the genus *Agathodonta.*

CHANGES AND REMARKS

***Euchelus quadricarinatus* (Holten, 1802).**

WORMS looks at this species as a synonym of *E. asper* (Gmelin, 1791). The *E. asper* in the literature have nothing to do with what is commonly called E. quadricarinatus. We therefore maintain that name.

***Herpetopoma eboreum* Vilvens & Heros, 2003**

Is, according to Herbert (2012) a synonym of the Omanese species *H. xeniolum* (Melvill, 1918). We do not agree. The holotype of *H. xeniolum* is online, and has only 4 spiral ridges on the body whorl, with different granules than the *H. eboreum* which has 5 spiral ridges and which is definitely a different species. Herbert (2012) figured 4 *Herpetopoma* look-alikes on his figure 37. We think the two left specimens with 4 spiral ridges are NOT the *eboreum*. But we agree that the two right shells are "possibly" *H. eboreum*. In this case, the *H. waiwailevensis* Ladd, 1982 should be the valid name. However, in the two right shells the number of plicae inside the aperture look very different. A new study of all this type material with big elargements is highly needed. It is even possible that what we figured as *H. eboreum* from the Philippines is a different species when closely compared to the New Caledonian *eboreum* as described by Vilvens & Heros. We leave things "as is" for the moment. It is clear that we here deal with a complex group of "look alike" deep water species.

***Hybochelus cancellatus* (Krauss, 1848)**

According to Herbert (2012), *H. fossulatus* and *H. cancellatus* are both the same species, *H. cancellatus* being the valid name for that species. The type figure of the *Trochus fossulatus* in the Journal de Conchyliologie shows a higher spired shell when compared to typical Philippine *H. cancellatus*. However, we can agree with WORMS: the *fossulatus* we figured in figure 9 being possibly a dead collected shell with faded sculpture. There should be further studies comparing New Caledonian "*cancellatus – fossulatus*" with the Philippine *cancellatus*, as to establish clearly the possible synonymy

of both species.

***Perrinia angulifera (*A. Adams, 1853)**

According to Herbert (2012), *Perrinia plicifera* (Schepman, 1908) is a synonym of *P. angulifera (*A. Adams, 1853), a much older name. Regarding the big variation in this shell, which we obtain sporadically from different localities, and checking with the holotype of *P. angulifera*, shown earlier by Kaicher, this is correct. The holotype of *P. plicifera* is a young shell, very broad in shape. We found this type of shell repeatedly in the Philippines, but there are many intermediates with the slender and less sculptured *P. angulifera.*

***Perrinia squamicarinata* (Schepman, 1908)**

The correct *spelling for the former* "*Perrinia squamocarinata*"

CHIROTEUTHIDAE Gray, 1849

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Chiroteuthis picteti Joubin, 1894..... Vol. 4. Pl. 1261.
Chiroteuthis veranii (Férussac, 1835) ..... Not yet documented.
Grimalditeuthis bonplandi (Vérany, 1839) ..... Not yet documented.

CHANGES AND REMARKS

Chiroteuthis picteti is now the correct name for the species we figured as *C. imperator.*

CHITONIDAE Rafinesque, 1815

Author: Vol. 4 – Bruno Anseeuw.

Acanthopleura gemmata (Blainville, 1825)..... Vol. 4. Pl. 1206 & 1211.
Acanthopleura spinosa (Bruguière, 1792)..... Vol. 4. Pl. 1206 & 1211.
Chiton cf. *speciosus* Nierstrasz, 1905..... Vol. 4. Pl. 1207.
Chiton densiliratus Carpenter in Pilsbry, 1893 ..... Vol. 4. Pl. 1206 & 1212.
Chiton hululensis (E. A. Smith, 1903)..... Vol. 4. Pl. 1207.
Chiton komaianus Is. & Iw. Taki, 1929..... Vol. 4. Pl. 1207.
Chiton pulcherrimus G. B. Sowerby II, 1842..... Vol. 4. Pl. 1207.
Lucilina cf. *L. floccata* (Sowerby, 1842)..... Vol. 4. Pl. 1207.
Lucilina lamellosa (Quoy & Gaimard, 1835)..... Vol. 4. Pl. 1207 & 1211.
Squamopleura miles (Carpenter in Pilsbry, 1893)..... Vol. 4. Pl. 1206.

CHANGE OF GENUS

The genera *Rhyssoplax* and *Tegulaplax*

Are now subgenera of the genus *Chiton.*

CHANGES AND REMARKS

***Chiton komaianus* Is. & Iw. Taki, 1929**

The correct spelling for the former "*Chiton komaiana"*.

***Chiton pulcherrimus* G. B. Sowerby II, 1842**

The correct spelling for the former "*Chiton pulcherrima"*.

CHROMODORIDIDAE Bergh, 1891

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Hypselodoris bollandi Gosliner & R. F. Johnson, 1999 ..... Vol. 3. Pl. 809.
Hypselodoris bullockii (Collingwood, 1881) ..... Vol. 3. Pl. 813.
Hypselodoris emma Rudman, 1977 ..... Vol. 3. Pl. 814.
Hypselodoris iacula Gosliner & R. F. Johnson, 1999 ..... Vol. 3. Pl. 812.
Hypselodoris infucata (Rüppell & Leuckart, 1830) ..... Vol. 3. Pl. 808.
Hypselodoris krakatoa Gosliner & R. F. Johnson, 1999 ..... Vol. 3. Pl. 812.
Hypselodoris maculosa (Pease, 1871) ..... Vol. 3. Pl. 811.
Hypselodoris maritima (Baba, 1949) ..... Vol. 3. Pl. 815.
Hypselodoris pulchella (Rüppell & Leuckart, 1830) ..... Vol. 3. Pl. 817.
Hypselodoris purpureomaculosa Hamatani, 1995 ..... Vol. 3. Pl. 810.
Hypselodoris reidi Gosliner & R. F. Johnson, 1999 ..... Vol. 3. Pl. 814.
Hypselodoris tryoni (Garrett, 1873) ..... Vol. 3. Pl. 816.
Hypselodoris whitei (A. Adams & Reeve, 1850) ..... Vol. 3. Pl. 814.
Hypselodoris zephyra Gosliner & R. F. Johnson, 1999 ..... Vol. 3. Pl. 815.
Mexichromis mariei (Crosse, 1872) ..... Vol. 3. Pl. 807.
Mexichromis multituberculata (Baba, 1953) ..... Vol. 3. Pl. 807.
Mexichromis pusilla (Bergh, 1874) ..... Vol. 3. Pl. 819.
Mexichromis similaris (Rudman, 1986) ..... Vol. 3. Pl. 819.
Mexichromis trilineata (A. Adams & Reeve, 1850) ..... Vol. 3. Pl. 818.
Miamira alleni (Gosliner, 1996) ..... Vol. 3. Pl. 788.
Miamira magnifica Eliot, 1904 ..... Vol. 3. Pl. 787.
Miamira miamirana (Bergh, 1875) ..... Vol. 3. Pl. 787.
Miamira moloch (Rudman, 1988) ..... Vol. 3. Pl. 787.
Miamira sinuata (van Hasselt, 1824) ..... Vol. 3. Pl. 788.
Noumea alboannulata Rudman, 1986 ..... Vol. 3. Pl. 819.
Noumea laboutei Rudman, 1986 ..... Vol. 3. Pl. 820.
Noumea norba Er. Marcus & Ev. Marcus, 1970 ..... Vol. 3. Pl. 819.
Thorunna australis (Risbec, 1928) ..... Vol. 3. Pl. 821.
Thorunna daniellae (Kay & Young, 1969) ..... Vol. 3. Pl. 822.
Thorunna florens (Baba, 1949) ..... Vol. 3. Pl. 821.
Thorunna furtiva Bergh, 1878 ..... Vol. 3. Pl. 821.
Thorunna halourga R. F. Johnson & Gosliner, 2001 ..... Vol. 3. Pl. 822.
Thorunna punicea (Rudman, 1995) ..... Vol. 3. Pl. 822.

CHANGE OF GENUS

Several of the ***Ceratosoma*** are now in the genus ***Miamira***: it concerns the species *alleni*, *magnifica*, *miamirana*, *moloch* and *sinuata.*

Many of the members of the genus ***Chromodorus*** are now in the genus ***Goniobranchus***: it concerns the species *albopuntatus, aureopurpureus,* cf. *G. roboi, coi, collingwoodi, decorus, fidelis, geometricus, hintuanensis, kuniei, leopardus, preciosus, rubrocornutus, rufomaculatus, tinctorius, tumuliferus, verrieri.*

The genus ***Durvilledoris*** is now called ***Mexichromis***.

The genus ***Risbecia*** are now ***Hypselodoris***.

The genus ***Pectenodoris*** are now ***Mexichromis***.

Ardeadoris cruenta **(Rudman, 1986)** Was in the genus *Glossodoris.*
Ardeadoris electra **(Rudman, 1990)** Was in the genus *Glossodoris.*
Diversidoris crocea **(Rudman, 1986)** Was in the genus *Noumea.*
Diversidoris flava **(Eliot, 1904)** Was in the genus *Noumea.*
Doriprismatica atromarginata **(Cuvier, 1804)** Was in the genus *Glossodoris.*

CHANGES AND REMARKS

Chromodoris striatella **Bergh, 1877**

Is the new name for the former *Chromodoris lineolata* Bergh, 1874.

***Goniobranchus tinctorius* (Rüppell & Leuckart, 1830)**

Is the new name for the former *Chromodoris reticulata* (Pease, 1866).

***Hypselodoris emma* Rudman, 1977**

Correct spelling is "*emma*", not "*emmae*".

CLAVAGELLIDAE d'Orbigny, 1844

Dianadema cf. *D. japonica* (Habe, 1981)..... Vol. 4. Pl. 1054.

THE FAMILY CLAVAGELLIDAE

Has been split into CLAVAGELLIDAE and PENICILLIDAE.

CLAVAGELLIDAE contains the genera

Bryopa
Dacosta
Dianadema
Stirpulina
The genus *Clavagella* proper is limited to fossil species.

PENICILLIDAE contains the genera

Brechites
Foegia
Humphreyia
Kendrickiana
Nipponoclava
Verpa – the former genus *Penicillus* is now a synonym of *Verpa*.

MOVES BETWEEN FAMILIES

Brechites philippinensis is now in PENICILLIDAE.

CHANGE OF GENUS

***Dianadema* cf. *D. japonica* (Habe, 1981)** Was in the genus *Clavagella.*

CLIIDAE Jeffreys, 1869

Clio pyramidata Linnaeus, 1767 ..... Vol. 3. Pl. 768.

THE FAMILY CLIIDAE

The family CLIIDAE Jeffreys, 1869 contains the genera *Clio* and *Praehyalocyclis*. Until recently, these genera were usually placed in the family CAVOLINIIDAE.

COCCULINIDAE Dall, 1882

Coccopigya punctoradiata (Kuroda & Habe, 1949) ..... Vol. 5. Pl. 1378.
Cocculina alveolata Schepman, 1908 ..... Vol. 5. Pl. 1377.
Cocculina cingulata Schepman, 1908 ..... Vol. 5. Pl. 1377.
Cocculina nipponica Kuroda & Habe, 1949 ..... Vol. 5. Pl. 1377.
Cocculina oblonga Schepman, 1908 ..... Vol. 5. Pl. 1378.
Cocculina ovata Schepman, 1908 ..... Vol. 5. Pl. 1378.
Cocculina subcompressa Schepman, 1908..... Vol. 5. Pl. 1378.
Cocculina subquadrata Schepman, 1908..... Vol. 5. Pl. 1378.

CHANGES AND REMARKS

***Cocculina nipponica* Kuroda & Habe, 1949 *& Cocculina subcompressa* Schepman, 1908**

Higo & All (2001) has put *Cocculina nipponica* in synonymy of the *C. subcompressa*. We think these are two different species, the Schepman species being twice more flat than the *C. nipponica* for shells of the same size. The general shape is also slightly different. But we did not study as yet the holotype of *C. nipponica* which we did not find a figure of in our library at present.

COLLONIIDAE Cossmann, 1917

THE FAMILY COLLONIIDAE

The COLLONIIDAE from Taiwan and the Philippines have been revised – in part – by Huang, Fu & Poppe in 2016.

CHANGES AND REMARKS

***Collonista granulosa* (Pease, 1868)**

Leptothyra inepta (Gould, 1861) the species figured as such on Vol. 1. Pl. 71 figs. 5. is now called *Collonista granulosa*. This is a change because McLean send the photo of the lectotype of *C. granulosa* for the study by Huang, Fu & Poppe in early 2016. It exactly matches the shells we figured as *L. inepta* in the Volume 1.

***Collonista picta* (Pease, 1868)**

This is the correct name for the *Leptothyra nanina* shown in Figs. 2 & 3.

***Collonista thachi* Huang, Fu & Poppe, 2016**

The new name for the former *Homalopoma rubricincta* (Mighels, 1845) in our book. The *rubricincta* is now placed in *Collonista* and is a Hawaiian species. This is the species shown as Fig. 1. in Vol. 1.

***Homalopoma laevigatum* (G.B. Sowerby, 1914)**

Our figure 4 is not that species, but the *H. imberculi* Huang, Fu & Poppe, 2016. *H. laevigatum* has not yet been collected in the Philippines. It lives in Taiwan and the East China Sea.

COLUBRARIIDAE Dall, 1904
Author: Vol. 2 – David Monsecour.

Colubraria albometulaformis Dekkers, 2007 ..... Vol. 2. Pl. 326.
Colubraria brinkae Parth, 1992 ..... Vol. 2. Pl. 326.
Colubraria ceylonensis (G. B. Sowerby I, 1833) ..... Vol. 2. Pl. 325.
Colubraria cumingi (Dohrn, 1861) ..... Vol. 2. Pl. 326.
Colubraria muricata (Lightfoot, 1786) ..... Vol. 2. Pl. 326.
Colubraria nitidula (Sowerby I, 1833) ..... Vol. 2. Pl. 325.
Colubraria sowerbyi (Reeve, 1844) ..... Vol. 2. Pl. 326.
Colubraria suduirauti Parth, 1999 ..... Vol. 2. Pl. 325.
Colubraria tenera (Gray, 1839) ..... Vol. 2. Pl. 326.
Colubraria tortuosa (Reeve, 1844) ..... Vol. 2. Pl. 325.
Kanamarua hyatinthus Shikama, 1973 ..... Vol. 2. Pl. 313.
Kanamarua magnifica Fraussen & Chino, 2012 ..... Vol. 2. Pl. 313.
Metula angioyorum Parth, 1992 ..... Vol. 5. Pl. 1388.
Metula inflata (Houbrick, 1984) ..... Vol. 2. Pl. 313.
Metula metula (Hinds, 1844) ..... Vol. 2. Pl. 313.
Metula metulina (Kuroda & Habe in Kuroda, Habe & Oyama, 1971) .....
..... Vol. 2. Pl. 313 &Vol. 5. Pl. 1388.
Metula parthi Bondarev, 1997 ..... Vol. 5. Pl. 1388.
Metula santoensis Ladd, 1976 ..... Vol. 4. Pl. 1265., Add. 1.

CHANGES AND REMARKS

***Colubraria cumingi* (Dohrn, 1861)**
The correct spelling is with only one "i" at the end of "*cumingi*".

***Colubraria sowerbyi* (Reeve, 1844)**
Is the correct spelling for the former "*Colubraria souverbii*".

***Kanamarua magnifica* Fraussen & Chino, 2012**
The new name for the shell figured as cf. *Kanamarua tazimai* Kuroda, 1951

***Metula metula* (Hinds, 1844)**
Is the correct name for *Metula mitrella* (Adams & Reeve, 1850). Not to confuse with *C. metulina* (Kuroda & Habe, 1971), a different species.

***Metula santoensis* Ladd, 1976**
We think "*Colubaria tumida*" Ma & Zhang, 2000 is a synonym of the fossil *M. santoensis*. The name can eventually be used as a subspecies name for recent shells.

COLUMBELLIDAE Swainson, 1840
Author: Vol. 2 – Kevin Monsecour.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Aesopus clausiliformis (Kiener, 1834) ..... Vol. 2. Pl. 333.
Aesopus cumingii (Reeve, 1859) ..... Vol. 2. Pl. 333.
Anachis vermiculucostata K. & D. Monsecour, 2009 ..... Vol. 4. Pl. 1268., Add. 1.
Ascalista polita (G. Nevill & H. Nevill, 1875) ..... Vol. 2. Pl. 327.
Euplica borealis (Pilsbry, 1904) ..... Vol. 2. Pl. 327.
Euplica brunnidentata de Maintenon, 2008 ..... Vol. 2. Pl. 327.
Euplica deshayesii (Crosse, 1859) ..... Vol. 2. Pl. 327.
Euplica ionida (Duclos, 1840) ..... Vol. 2. Pl. 327.

Zafra troglodytes (Souverbie in Souverbie & Montrouzier, 1866) ..... Vol. 2. Pl. 334.
Zafra vercoi (Thiele, 1930)..... Vol. 2. Pl. 334.
Zafrona isomella (Duclos, 1840)..... Vol. 2. Pl. 334.

CHANGE OF GENUS

Graphicomassa albina (Kiener, 1841)	Was in the genus *Mitrella.*
Graphicomassa ligula (Duclos, 1840)	Was in the genus *Mitrella.*
Indomitrella conspersa (Gaskoin, 1852)	Was in the genus *Mitrella.*
Mitrella haziersensis (Drivas & Jay, 1990)	Was in the genus *Indomitrella.*
Seminella comistea (Melvill, 1906)	Was in the genus *Zafra.*
Sulcomitrella kanamaruana (Kuroda, 1953)	Was in the genus *Mitrella.*
Sulcomitrella mondonta (Habe, 1958)	Was in the genus *Mitrella.*

CHANGES AND REMARKS

***Aesopus cumingii* (Reeve, 1859)**
The correct author is (Reeve, 1859) and not (Duclos in Chenu, 1846).

***Indomitrella conspersa* (Gaskoin, 1852)**
The date of description changes from 1851 to 1852.

***Mitrella chinoi* K. Monsecour & Dekkers, 2013**
This is the name now used for our former *M. circumstriata* (Schepman, 1911) – at present in *Sulcomitrella*. In Vol. 2. Pl. 328. Monsecour & Dekkers published on this subject in Gloria Maris Vol. 52-3-4 (2013). We do not fully agree with them as yet, as their *M. circumstriata* does not correspond very well to the Schepman figure. We also think that their *M. chinoi* may contain two different species. According to Monsecour & Dekkers, our *Mitrella albofulvata* from Vol. 4. Pl. 269., Add. 1. is also *M. chinoi.*

***Pardalopsis* cf. *P. testudinaria* (Link, 1807)**
Pardalinops japonica Reeve, 1858 is, according to WORMS, accepted as *P. testudinaria* (Link, 1807). This is an extremely variable species. The shell we figured is somewhat problematic as it has exactly the shape of the type of "*Columbella japonica* Reeve", but not the coloration. This type has been figured by Higo, Callomon & Goto (2001), and there it is visible that we deal with a finely patterned form of what we think is indeed *P. testudinaria.* Awaiting further mateiral of the form we figured, it is best to determinate the shell of figure 9 at present as *Pardalinops testudinaria* cf.

***Pyreneola melvilli* (Hedley, 1899)**
The correct author is (Hedley, 1899*)* – there was a confusion with *Mitrella melvilli* (Kundsen, 1956).

CONDYLOCARDIIDAE Bernard, 1896

Crassacuna praecalva (Hedley, 1909)..... Vol. 4. Pl. 1054.
Crassacuna pusilla (H. Lynge, 1909)..... Vol. 5. Pl. 1389.

CONIDAE Fleming, 1822

Author: Vol. 2 – Gabriella Raybaudi Massilia.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Conus achatinus Gmelin, 1791..... Vol. 2. Pl. 582.
Conus acutangulus Lamarck, 1810 ..... Vol. 2. Pl. 648.
Conus acutangulus forma *gemmulatus* G. B. Sowerby II, 1870 ..... Vol. 2. Pl. 648.
Conus aegrotus Reeve, 1843 ..... Vol. 2. Pl. 596.
Conus alabaster Reeve, 1849..... Vol. 4. Pl. 1270., Add. 1.
Conus albicans G. B. Sowerby II, 1857 ..... Vol. 2. Pl. 595 & 596.
Conus alexandrei (Limpalaër & Monnier, 2012)..... Vol. 2. Pl. 640.
Conus ammiralis ammiralis Linnaeus, 1758..... Vol. 2. Pl. 624.

THE FAMILY CONIDAE

In 2009 J.K. Tucker & M. J. Tenorio published a book titled "Systematic Classification of Recent and Fossil Conoidean *Conus*. In this work, the Conidae were split up into genera, based on "scientific" information. The result is already a big step forwards but still a classification where the "gut" feeling tells any experienced conchologist that there are still major gaps in the results.
As nothing better was written down until then, we think it is the best existing classification at present.
In September 2014 appeared another paper from the hand of N. Puillandre, T.F. Duda, C. Meyer, B.M. Olivera and P.

Bouchet. The title "One, four or 100 genera ? A new classification of cone shells" tells us once more another story. This article also goes against any "conchological" thinking, as many connoisseurs will tell you in seconds that the vast Conidae family contains several dozen good genera.
An better solution could have been the establishment of 4 subfamilies (the genera of the latter article), with the application of the genera as proposed by Tucker & Tenorio.
So, the subject is still in full "movement". In the meantime, until a satisfactory and durable classification is made we continue to apply the name "Conus" for all members of the family.

We still continue the use of the many "forms" existing in Conidae. Most of these are well established and they have their use in communication between all students and/or collectors of Conidae.

***Conus albicans* G. B. Sowerby II, 1857**
Is accepted in WORMS as *C. furvus* Reeve, 1843
The name "*Conus furvus*" is at present used as a common denomination for a genus – or subgenus - of look-alike species. We maintain *C. albicans* as a good species, the same for some other species of the sphere of *C. furvus.*

***Conus alexandrei* (Limpalaër & Monnier, 2012)**
Is a new name for the shells figured as *C. proximus* forma *cebuensis* Wils, 1990. We agree that this is a valid species indeed.

***Conus andremenezi* Olivera & Biggs, 2010**
Is the new species for what is called in PMM on plate 648 *C. praecellens* forma *bicolor,* figs. 6, 7 & 9 and figured in Visaya 2(2) on p. 90 as *C. praecellens* A. Adams, 1855. We agree that this is a valid species indeed.

***Conus arenatus* forma *granulosa* Lamarck, 1822**
We join this form name for the granulate shells: Vol. 2. Pl. 575, figs. 1, 3 & 4.

***Conus aristophanes* G. B. Sowerby II, 1857**
We now consider this as a valid species. The shell figured on Pl. 553 nr. 7 as *C. coronatus* forma *aristophanes* is possibly a young *C. aristophanes.*

***Conus balabacensis* Filmer, 2012**
Figured earlier as *C. andamanensis* E. A. Smith, 1879. Now described as a valid species and we agree with that.

Conus bandanus & Conus cuyoensis
The splitting between *C. bandanus* and *C. marmoreus* Linneaus, 1758 is clear. However, some problems, especially within the *C. bandanus*-complex remain: especially when one approaches Palawan, Sabah and the Sulu Sea Islands. The classic *C. bandanus vidua* Reeve, 1843 is easy to distinguish, and so is the form *mozoii* Melvin & Melvin, 1980. On plate 548: the *Conus bandanus vidua* fig. 1 is defInitely *Conus cuyoensis,* the locality "Palawan" is in error. Most of the fishermen returning from Palawan to Olango Island make a stop in the Cuyo Islands and much of the Cuyo material arrives mixed up and is sold as "Palawan", from where this mistake. In 2012 Lorenz & Barbier described *Conus vidua cuyoensis* from a small area in the Cuyo Islands. These shells are well documented today. In the context of the approach of G. Raybaudi, we should handle these *cuyoensis* as a subspecies of *C. bandanus*, *C. vidua* in her opinion being a subspecies *of C. bandanus*. We prefer however to consider *C. cuyoens*is Lorenz & Barbier, 2012 as a valid species, as the taxon is well defined, and easy to distinguish from other members of the *marmoreus-bandanus* group. *Conus cuyoensis* is now known to appear in three different forms, living together: (1) black shells, (2) orange shells – which in fact are the same phenomenon as occurs in the Puerto Princesa region with the *Conus vidua* – and (3)pure white shells with a purple-blue siphonal canal only. We document all these in the Volume 5.
Next to classic "*cuyoensis*", the Cuyo Islands are home to a small number of "*vidua*-like" *Conus* that escaped until now appropriate studies. We expect more descriptions and studies on the subject in the future.

Conus beatrix Tenorio, Poppe & Tagaro, 2007
This is a valid species, not a subspecies of *C. gratacapii* Pilsbry, 1904. The holotype of *C. gratacapii* has been figured by Higo & All. and is a very different species. Correct authors for *C. beatrix* are Tenorio, Poppe & Tagaro, 2007.

Conus betulinus Linnaeus, 1758
Was pretty poorly documented when it comes to the already named forms. The variation within the species is gigantic, the relationship to other species unclear, as some of the forms look intermediate with *C. figulinus* and even *C. suratensis.* We here go a little further in the documentation of the variation in the species, and document some of the Dautzenberg forms, mainly made by that author based on material from Indonesia.
Conus betulinus forma *alternans* Dautzenberg, 1937
With rows of very small "pointillé" spots between the rows of bigger spots.
Conus betulinus forma *immaculata* Dautzenberg, 1906

No spots, all unicolored, orange-yellow all over. Differes from the *rufoluteus* by the absence of "reversed" – pale bands visible in the base coloration.

Conus betulinus forma *paucimaculata* Dautzenberg, 1937
Few spots, often quite round in shape.

Conus betulinus forma *plurizonata* Dautzenberg, 1937
Compact design with about 30 lines, not interrupted.

Conus betulinus forma *rufoluteus* Bozzetti & Ferrario, 2005
This form has no pattern, but the spiral lines are a little visible as "reversed", very pale, within the base coloration. Described by Bozzetti & Ferrario in 2005 from Madagascar. A few have been found in the Philippines

Conus betulinus forma *tabulata* Dautzenberg, 1937
With quadrangular black spots, arranged on white bands and with equal distances between each other. Gives mosaic aspect.

Conus betulinus forma *transversaria* Dautzenberg, 1934
Black spots, elongate in shape and spaced, leaving much of the surface visible.
In 1937 Dautzenberg also described the form *C. betulinus* forma *scripta*: this form has a few spots only, equal in number as in the paucimaculata, but elongate in the axial sense of the shell. We did not see any shells of this form in the Philippines – as yet.

Some of the above forms mix, as several "*alternans*" also belong to the "*plurizonata*". Some of the forms are ultra rare, and one we never got in the Philippines: the *scripta*. Several of the forms are rarissime: From the *rufoluteus* we have seen only 3 Philippine shells in the past, despite the fact we viewed tens of thousands of *Conus* from the Philippines.

***Conus boeticus*-complex**

Filmer reviewed extensively this complex in Visaya 2(6) of 2010.
He concluded the following (but we here join the later named *C. dedonderi*)
Conus axelrodi – Philippines
Conus boeticus – Philippines, Japan, Guam, Marshall Islands, Indonesia, New Caledonia, Vanuatu, Papua New Guinea, Fiji, American Samoa, Solom Islands, Vietnam, Malaysia, Mozambique.
Conus dedonderi - Philippines
Conus empressae - Philippines
Conus meleus – Australia, Philippines
Conus montillai – Philippines
Conus nitidus (Reeve, non Dillwyn) – Philippines
Conus pauperculus – Japan
Conus rivularius – Indonesia, New Guinea
Conus ruppellii – Papua New Guinea, Philippines

We follow now Filmer on this subject of shells placed by some in the genus "*Rolaniconus*". His studies are deepgoing and very well documented. WORMS continues to place some of the Filmer "species" as forms of "*Conus boeticus*".

Vol. 2, plate 552: change texts as follows:

Conus ruppellii Reeve, 1848
1., 2., 3. & 4. Are all this species, now valid.

Conus boeticus Reeve, 1844
5., 6., 7. & 8. Are now all *Conus boeticus*, previously *Conus nitidus*.
9. is now also in the variation of *Conus boeticus*, and is not the form *rivularis* (which is now a valid species).

Conus rivularius Reeve, 1849
10. & 11. Are this species, no longer *Conus boeticus*. Remark the spelling of "*rivularis*" changed to "*rivularius*".

Conus montillai Röckel, 1985
12. Correct in the book.

Vol. 2, plate 567, change texts as follows:
All is correct except fig. 3. Which is now *Rolaniconus dedonderi* (R. Goethals & D. Monsecour, 2013).
In the Volume 5 we further document the *Conus dedonderi* and *Conus meleus*, now a valid species, which we used to handle as a form of *Conus boeticus*, but which was not figured in the previous volumes. *Conus empressae* was shown in the addendum of Volume 4 on plate 1270, and so is the case of *Conus pauperculus*, on plate 1272.

***Conus buxeus* Röding, 1798**

The shells shown on plate 581:
Conus buxeus Röding, 1798
Conus buxeus forma *loroisii* Kiener, 1845.
"*C. buxeus*" is the newly revived name for the relatively common mud dweller *C. figulinus* Linnaeus, 1758. We follow in this WORMS, who follows in this the opinion of Tucker & Tenorio (2013).
As for Plate 581, we think *Conus loroisii* Kiener, 1845 is a form of *C. buxeus*, without spiral lines, not a subspecies. While most "*loroisii*" are from the Indian peninsula, sometimes this form is also found in the Philippines. The 'typical' *C. buxeus* looks like figure 2 on plate 581,while all others can be called *C. buxeus* forma *insignis*. But to keep things easy, we rather do not use the name *insignis* any longer and consider all "striped" *C. buxeus* as belonging to *buxeus* s.s.

***Conus carinatus* Swainson, 1822 – *Conus vezzaroi* (T. Cossignani, 2016)**

In the meantime, the true *Conus carinatus,* as figured by Swainson, has been rediscovered and promptly named as *Pioconus quasimagus* Bozzetti, 2016. The shells figured in our Volume II as *Conus carinatus* are an ensemble of different magus forms, one is possibly a true *carinatus*, but with wrong locality. Bozzetti described the *Pionoconus quasimagus* from Pilas Island, on the west coast of Basilan Island, but the majority of a large quantity of material obtained at irregular intervals by Conchology, Inc., comes from the southern tip of the Zamboanga Peninsula, from fishermen living about 25 km north of the northern outskirts of Zamboanga city. It is not imposible the species lives also on Pilas Island as clearly these fishermen gather materials from not only the Zamboanga Peninsula, but also from Zambonga Island (not to confuse with Zamboanga), Pilas Island and Basilan Island. Another example from a *Conus* found as well on Zambonga Island as near Zamboanga city is the *Conus glorioceanus*. There is no doubt that the type figure of Swainson depicts a sample of the Zamboanga material. However, he did not know where his specimen came from and writes "It is doubtless an inhabitant of the Asiatic ocean". Likely Swainson noticed the relationship with other members of the magus group. As an artist Swainson could match the perfect brown as seen in some pieces of the in fact very variable true *Conus carinatus*.
Shortly after the description of *C. carinatus*, Tiziano Cossignani described the *Conus vezzaroi*, said to come from Aliguay Island. The type locality is in error as there are no such *Conus* on tiny Aliguay Island. The material was clearly mixed up with Zamboanga material by middlemen from Mactan Island.
The *Conus vezzaroi*, which we agree to be a valid species, lives in the same area as *Conus carinatus*. Virtually all shells we know from this species came mixed up with *Conus carinatus*, often uncleaned and still with rotting animal remains. The two species have been mixed up also in the literature: Sowerby figured a *C. vezzaroi* as *Conus carinatus* in 1866, his drawing being copied by Tryon (1884) in the Manual. And Kiener (1845) figured as *Conus carinatus* the long slender type (true *carinatus*) and the short type (*Conus vezzaroi*). True *carinatus* was a rare species until recently, but RKK figure as *Conus magus* forma *carinatus* what we believe to be a real *carinatus* in their figure 15.
The brown shells with a different shape and a lighter shell found in quantity in collections worldwide as "*Conus carinatus*" are another species from the magus complex, likely coming from Palawan. They were distributed for decades to collectors from a big quantity collected in the beginning of the 20th century and purchased by two famous Manila dealers who sold these at cheap prices in the early decades after WWII.

***Conus cebuensis* Wils, 1990**

This is now the correct name for the shells figured as *C. proximus* in Vol. 2. Pl. 640.

***Conus ceylanensis* Hwass in Bruguière, 1792**

This is a problem, as WORMS accepts the name *ceylanensis* as *Conus musicus* Hwass in Bruguière, 1792. This is very correct indeed, as an examination of the type figures excludes any mistakes there. We remain however with the shells figured as *C. ceylanensis* by G. Raybaudi: these are definitely not *C. musicus*. Likely an undescribed species, close to the complex of *Conus sponsalis*. More work for the many conologists. In the meantime we suggest collectors and students to use the name "cf. *musicus*" for these mystery pieces.

***Conus cordigera* G. B. Sowerby II, 1866**

See Vol. 2. Pl. 630. Correct is "*cordigera*" not "*cordiger*".
The correct name for this species may be *C. nobilis* Linnaeus, 1758.
The prime conchological difference with *C. nobilis* as understood by RKK is the absence of a serrated microsculpture around the upper whorls. This is a not so convincing argument when one observes this microsculpture under the microscope. The Philippine "*cordigera*" is in my opinion a northern population of the *C. nobilis*, *C. nobilis skinneri* is the Balinese subspecies, *victor* the Flores subspecies, there are more subspecies that have been described and there are certainly still many undocumented. The form *bitleri* is also a subspecies, but the correct locality has not been rediscovered - as yet.

***Conus coriolisi* Röckel, Richard & Moolenbeek, 1995**

Shown in Vol. 2. & Vol. 5.
This species, described by Röckel, Richard & Moolenbeek, is uncommon only in deep water in the Visayas. It has been wrongly determinated as the well known *C. orbignyi* Audouin, 1831. The shells shown on plate 641 figs. 6 & 7 belong to this species.

***Conus crocatus crocatus* Lamarck, 1810**

Shown in Vol. 2. Pl. 653 & Vol. 5.

C. crocatus has populations in Thailand: the so-called *C. thailandis*. Also in New Caledonia: there called *C. lamberti* Souverbie, 1877.
They have slightly different shells and can be regarded as subspecies of *C. crocatus.* Molecular research can prove these "subspecies" to be species.
In the Visayas we find also the slender form of this species, described earlier as *C. magister.* Figs 3 and 5 belong to this form.
In 2015 fishermen from Olango collected several dozen very large *C. crocatus* near Zamboanga (Mindanao). These shells were most often in poor condition and many have been repaired and found a place in collections worldwide. They were described as a separate subspecies: Darioconus crocatus pseudomagister Allary & Cossignani, 2016. Apart from the size nothing differentiates these C. crocatus from the typical ones found in the central Visayas and we consider the name a synonym.

***Conus darkini* Röckel, Korn & Richard, 1993**

On plate 616 we figured one real *Conus darkini* and a number of smaller shells, which belong to another species now under description by Tenorio. In 2008, Moolenbeek, Röckel & Bouchet, 2008 described a very small species from Fiji as *Conus cakoabaui*. For some time we wrongly applied this name for this former "small darkini" from the Philippines.

***Conus distans* forma *waterhouseae* Brazier, 1896**

This is the correct form name for the young *C. distans* forma *chinoi* Shikama, 1970.

***Conus dolium* forma *petergabrieli* Lorenz, 2006**

Figured in Vol. 2. Pl. 594.
We agree with the opinion of Filmer and Raybaudi on this matter and continue to use the name *petergabrieli* as a form name. WORMS looks to *petergabrieli* as a valid species.

***Conus* cf. *filamentosus* Reeve, 1849**

Figured on plate Vol. 2. Pl. 594.
WORMS accepts this species as *C. spectrum* Linnaeus, 1758.
We here deal with a small nomenclatural problem which should have been solved almost two centuries ago. The holotype of *C. filamentosus* has been perfectly figured in color in Visaya 3(2) of 2011, and also the drawing from The Conch. Icon. This is a juvenile *Conus* which has nothing to do with the *spectrum* complex at all. Filmer is not clear in his opinion: he ends his remarks and conclusions with "It is therefore in the author's opinion a synonym (sub-adult form) of *C. conspersus*"; but then he makes a plate and presents the *C. filamentosus* as a valid species.
While waiting for an adequate re-description of *Conus filamentosus*, we suggest to use the name *C.* cf. *filamentosus* for this valid species, different from *C. dolium, C. spectrum* or *C. conspersus*.

***Conus furvus*-complex**

This species-complex is now placed in the genus *Calibanus*. Our understanding of the complex is poor and will likely remain as such: a thourough study should take decades for several scientists. A major problem are inaccurate labels. Almost none of the material in collections is properly labeled with biotopes, depths, accurate localities and the like. So, only groups of dedicated collectors working the Philippines for years may provide the proper material needed. The existing many thousands of shells in collections are most often labeled "Philippines", occasionally more detailed with the name of the Island, and seldom with the depth and/or information on the type of bottom. We never collected quantities of Conus furvus-complex members in the Philippines ourselves. Most often we gathered single individual shells in the Visayas, alive, sometimes intertidal, but also as deep as 25 meters while diving. But these are the exceptions and they do not allow a deep-going study of the complex. Fishermen occasionally find huge populations: the species is then eaten and the shells were often sold in Cebu for the "wholesale market" of decoration shells. Occasionally sets of these big quantities got into the collectors market, and these are the ones that were described throughout about 150 years of shell collecting in the Philippines.

So, despite the complications, parts of the mosaic are found once in a while. The situation which seems us opportune today is as follows:

Conus aegrotus Reeve, 1843 – a valid species, endemic from the Cuyo Islands
This is the species G. Raybaudi calls *C. furvus* forma *neobuxeus* on plate 596, figs. 9 & 10.
Conus albicans G.B. Sowerby II, 1857 – a valid species, pl. 596, fig. 2.
Conus furvus Reeve, 1843 – valid species, see Pl. 596 fig. 3.
Conus furvus forma *albus* G.B. Sowerby III, 1887 – a completely cream or white form, triangular shape
Shown in Volume 5.
Conus furvus forma *granifer* Reeve, 1849– a completely white form
Conus furvus forma *neobuxeus* da Motta, 1991 – chocolate brown form.
Conus furvus forma *polygrammus* Reeve, 1843 – purplish brown, fine pattern
We figure this form in Volume 5.
Conus nivalis da Motta, 1985 – a white form, slender. Most likely a valid species;

Conus turritinus da Motta, 1985 – slender, different texture than the furvus, from white to cream, most often lemon yellow. These are the shells figured in Vol 2. Pl. 595 as the numbers 1., 5 and 7. Most likely a valid species.

***Conus gattegnoi* Poppe & Tagaro, 2017**

The *Yeddoconus* in RKK are a big mess and this gave rise to undescribed species and hundreds of wrongly identified *Conus* from the Philippines and the China Sea in collections worldwide. G. Raybaudi Massilia did not escape that fate. A study of several hundred deep water *Conus* of the Mactan channel revealed three different species, two of these have been figured in books since decades, with wrong names. They were described by Poppe & Tagaro in Visaya in 2017 only. *Conus gattegnoi* is one of these and can be seen in Vol. 2, plate 647, figs. 4., 7 and 9.

***Conus geeraertsi* Poppe & Tagaro, 2017**

The *Yeddoconus* in RKK are a big mess and this gave rise to undescribed species and hundreds of wrongly identified *Conus* from the Philippines and the China Sea in collections worldwide. G. Raybaudi Massilia did not escape that fate. A study of several hundred deep water *Conus* of the Mactan channel revealed three different species, two of these have been figured in books since decades, with wrong names. They were described by Poppe & Tagaro in Visaya in 2017 only. *Conus geeraertsi* is one of these and can be seen in Vol. 2, plate 647, figs. 1., 8 and 10.

***Conus geographus* Linnaeus, 1758**

In the text read "there is NO antidote".

***Conus gilvus* Reeve, 1849**

These are also the shells figured as *C.* cf. *C. hyaena* Hwass in Bruguière, 1792.

***Conus glorioceanus* Poppe & Tagaro, 2009**

This very "local" species is now known from several dozen well documented specimens.
For several years the locality was restricted: found only in the region from Redondo, Zamboanga, up to 25 km north of Zamboanga city. Virtually all shells from that region came from lobster raps and only a few were collected alive. Since 2016 a new population has been discovered on Zambonga Island. Divers could collect in the vicinity of that island several hundred specimens, and that population shows a larger variation in pattern when compared to the shells from the Zamboanga Peninsula.

***Conus hirasei* (Kuroda, 1956)**

The correct author is Kuroda, not Kira. Date is correct.

***Conus imperialis imperialis* forma *pseudimperialis* Moolenbeek, Zandbergen & Bouchet, 2008**

This form was described as a new species from the Marquesas, but we feel it is rather an uncommon variant of classic *C. imperialis*. I'll wait to see the types before deciding on the validity of *C. pseudimperialis* as a valid Marquesian species. Zandbergen does not share this view and he is possibly right. He points out that: The first postnuclear whorls of *C. imperialis* are flat dome-shaped, with a strong raised protoconch (as in plate 1272), whereas they are stepped and high in *C. pseudimperialis*. Probably the elevated spire of the specimen of plate 1272 is due to an injury to the animal. *C. imperialis* has a much stronger nodulation.

***Conus insculptus* Kiener, 1847**

This elegant species lives here and there on fine mud bottoms, from 20 m on, but we dived most between 26 and 35 m. The *C. insculptus* lives and thrives by hunting in a very dark ambiance: the extremely fine mud forms big clouds by the slightest water movement, and the shells are particularly light in construction so that the animals do not sink in the bottom. Even at these low depths we used strong lights to dive: where the *insculptus* lives visibility is most often less than one meter.
The shell figured on plate 641 figs. 5 belongs to the very dark Albuera Population.
This species is absolutely valid and has nothing to do with *C. orbignyi* Audouin, 1831.

***Conus ione* Fulton, 1938**

The shell on Plate 609, nr. 6 is not this species, but *C. sieboldii* Reeve, 1848 .

***Conus judaeus* Bergh, 1895**

Up till now a cryptic species: see See Duda, Kohn and Matheny, 2009.
Once detected, easy to distinguish from *C. ebraeus* Linnaeus, 1758. The shell figured on plate 554 nr. 13 is this species.
The author of *C. judaeus* is Bergh, 1895. One of the authors of the "rediscovery", Prof. Duda, told me that both species are in fact impossible to distinguish from each other… so, I may be wrong with my opinion.

***Conus kinoshitai*-complex**, a group of deep-water *Conus* placed by some in the genus *Asprella* at present.

G. Raybaudii presented the following classification:

Conus bruuni tamikoae Shikama, 1973
In WORMS accepted as *C. kinoshitai* (Kuroda, 1956)
Conus kinoshitai (Kuroda, 1956)
Conus kinoshitai forma *calliginosus* Shikama, 1979
Conus kinoshitai forma *tamikoana* Shikama, 1979

We do not agree with this classification, as there is a wild confusion here.

***Conus bruuni* Powell, 1958**
This species was described from off Raoul Island in the Kermadecs, far offshore New Zealand. The depth is given between 75 to 85 m. The holotype is small, has a very high spire, a broad shoulder and is orange patterned on a very light pinkish background.
Since dredgings started in New Caledonian waters, a fairly good number of *Conus* have seen the light that are at present also called *Conus bruuni*. These are only slightly different from the holotype *of Conus bruuni*: most are slightly more slender, almost all are less orange, and almost all have a higher spire. The subspecific status may be excellent for these New Caledonian *Conus* which also live much deeper: many come from the 200-400 m deep zone.
***Conus calliginosus* Shikama, 1979**
The very bad photograph of the holotype shows a very convex *C. kinoshitai*, slightly young. The shell indeed measures only only 51.3 mm and the pattern is not very developed. Filmer declares the name a nomen nudum, but many collectors use the name to indicate *C. kinoshitai* with a reduced fleck pattern.
***Conus kinoshitai* Kuroda, 1956**
Described from Japan, Kii, Wakayama Prefecture, and fished about 180 meters deep.
This species is common from Japan south to the Philippines, in waters between 100 and 250 meters. *Conus kinoshitai* differs from *C. bruuni* by a much bigger size, a usually more purplish shell, and the pattern is never red. The spire is not so high. It differs from *Conus tamikoae* by the much higher spire, less angular shoulder and bigger size. The whorls in *Conus kinoshitai* are more convex than the very flat whorls in *C. tamikoae.*
***Conus tamikoae* Shikama, 1973**
This species was described from the Senkaku Islands, which belong to Japan, but which are in fact very close to the north of Taiwan, and not so far from the Philippines.
There is a resemblance with the Kermadec *C. bruuni*, but the shells are remarkably larger, the body whorl is bigger, the spire much flatter and the pattern is very different: the shells have usually dark flecks on a big variation of background colorations.
***Conus tamikoana* Shikama, 1979**
WORMS declares this is an unjustified emendation of *Conus tamikoae* Shikama, 1973.
Filmer writes that the name *tamikoana* – spelt as such on a plate showing "*tamikoae*" - was intended by Shikama to be the first name for tamikoae, however, the technically "*tamikoae*" appaeared first.
From all the above we conclude it is better not to use that name.

CONCLUSION
We look at this complex of look-alike species, which live ioccasionally in different areas distant by thousands and thousands of open ocean as follows:
Conus bruuni is a valid species, known from the Kermadec Islands and New Caledonia.
The New Caledonian populations deserve at least a subspecific name and are possibly a separate species to be described. The base color of the shells is most often soft purple-pinish, but orange and yellow shells also exist.
Conus kinoshitai is a valid species, living from Japan south to the Philipines. The China Sea seems to be the center of the range. So, the species is also found along Chinese and Vietnames coasts. The base color of *Conus kinoshitai* is most often pastel purple, occasionally strong blueish (especially when fresh), but it varies from blue to purple to orange and bright orange.
Shells can be strongly patterned or have almost no pattern. For the poorly patterned samples, collectors often applied the name *C. kinoshitai* form *calliginosus*, we continue to do so.
Conus tamikoae is a valid species. It lives mainly in the same areas as the *Conus kinoshitai* but it occurs slightly deeper. While *C. kinoshitai* occurs most often in 150-200 meters, the *C. tamikoae*, is most often caught around 300-350 meters. Shells are notoriously differently shaped from *C. kinoshitai* and have different details in pattern also, although the variation of the base color goes from blueish, purple to orange and yellow, exactly as in *C. bruuni* and *C. kinoshitai*. This variation shows an evident link between the species which undoubtedly belong to the same genus. The name "*tamikoana"* is a misspelling of *tamikoae* and not available for use.

Changes in Volume II for plate 558
1., 2. Are now *Conus tamikoae* Shikama, 1973
3., 4., 6., 7., Are now *Conus kinoshitai* (Kuroda, 1856)
The number 7 is the yellow form.
5., 9. Are now *Conus kinoshitai* forma *calliginosus* Shikama, 1979

***Conus kostini* Filmer, Monteiro, Lorenz & Verdasca, 2012**

Figured as *C. tisii* T. C. Lan, 1978 on plate 560, figures 1a and 1b. The description of this absolutely valid species was long overdue, and a glance on plate 560 will convince even the most reluctant lumper. Since the description, the species has also been recorded from the China Sea. This is a rare *Conus*, although there are a few more *C. kostini* in collections than *C. tisii.*

***Conus lapulapui* da Motta & Martin, 1982**

This is a rare species, described in the Carfel Shell News. The description poses a problem as this species was described from between Malapascua and Bantayan Island "and northward". We dived extensively this area and there are no truly deep areas in this northern Cebuano region, where members of this group of *Conus* are supposed to live. Most of the depths do not exceed even 40 meters. The holotype shows a very strong spiral sculpture of rounded spirals, and we got from fishermen and suppliers 4 shells resembling this holotype. We figure one of these in Volume 5.

***Conus leobottonii* Lorenz, 2006**

Figured innVol. 2. Pl. 584.

We agree with WORMS that *Conus leobottonii* is a valid species and not a subspecies of *Conus fulmen*, which is the opinion of G. Rabybaudi.

***Conus lictor* Boivin, 1864**

WORMS has put this species in synonymy of *C. striatellus* Link, 1807. While the pattern alone distinguishes the *lictor* at once from all other species in the (sub?)genus *Vituliconus*. Conchology, Inc. handled more than 70 *C. lictor* over a period of 14 years, and in the meantime, all local fishermen from the Olango area know very well the "*lictor*" as a species today and none of them confuses the taxon with any other species.

***Conus limpalaeri* (Tenorio & Monnier, 2016)**

This species was confused with and taken into the variation of the *Conus darkini* at the time of Vol. 2. It concerns the smaller type of the former darkini, olive colored, not black or dark brown: the shells on plate 616, nr. 2, 3 and 5.

***Conus litoglyphus* forma *lacinulatus* Kiener, 1850**

The date of *C. litoglyphus* s.s. is 1792, not 1972, a classic typing mistake.

Some collectors pointed out problems with the name *lacinulatus* and the repeat of the species name "*litoglyphus*" which indicates indeed that there is another subspecies. Raybaudi may have had her reasons for that. However, after double checking in the literature, I agree on the name "*lacinulatus*" for shells with well marked white spots and a granulation near the siphonal canal. The Kiener shell is broad shaped and possibly comes from Australia. Okutani figures also a *lacinulatus* form for the Japanese *C. lithoglyphus*. This is a typical Indian Ocean species which is usually quite rough and heavy. The Pacific shells seem more fine and thin and are possibly a subspecies (in this case "*lacinulatus*"). Pending further studies we prefer to call all the shells in the PMM book as *C. lithoglyphus* forma *lacinulatus.*

***Conus litteratus* forma *grueneri* Reeve, 1844**

This may even be a valid species, but best should be molecular research to prove it. The shells are smaller, more colorful than classic *C. litteratus* and the pattern consists of blotches that are horizontal in shape, while classic *C. litteratus* has most often vertical blotches and a much larger size. The shells on plate 568 all belong to this form except 4, 5, 6 and 7.

***Conus lividus* Hwass in Bruguière, 1792**

On plate 551, all are correct, but nr. 4 is a *C. muriculatus* G. B. Sowerby I, 1833.

***Conus magnificus* Reeve, 1843**

Correct author is Reeve, 1843 (not Hwass in Bruguière, 1792)

***Conus magus*-complex**

We continue to follow the arrangement and splitting in a few taxa as established by Gabriella Raybaudi. The problem of this complex which consists of several dozen species is immense. In nature, the species is quite uncommon, despite the huge numbers that have been collected by thousands of fishermen in the Philippines: shells are often sold as food. Many hundreds of Islands have their own populations/species or subspecies of the magus-complex. The bathymetry is also considerable: sometimes found in mangroves, but also dived at 30 meters deep and some forms definitely live much deeper than that. In Palawan the complex splits in a multitude of small species. Palawan is now a protected area and the because of collecting restrictions there is little hope we can ever study these. It should take several life-times for a single researcher to visit and analyse all the data. Groups of scientists may work decades to unraffle the problem. So, we do what we can by illustrating hundreds and hundreds of pieces and by questioning the suppliers on the locality data which in this case are more important than others.

***Conus mcbridei* Lorenz, 2005**

The shell in Volume 2 has been dead collected, from where the brown siphonal canal.

We now got fresh live collected material, figured in Volume 5. In two different areas, Malapascua Island and the southern tip of Sogod Bay, populations dwelling around at 20 meters deep have been observed. (JP. Barbier, personal communication).

***Conus miniexcelsus* Olivera & Biggs, 2010**

This is the species previously called in PMM - on plate 648 **-** *C. subaequalis* G. B. Sowerby II, 1870 .

***Conus moolenbeeki* Filmer, 2011**

A valid and newly described species.

***Conus moreleti* Crosse, 1858**

The *C. rattus* Hwass in Bruguière, 1792 nr. 9 is also this species (Plate 608).

***Conus mulderi* Fulton, 1936**

Filmer (2011) found out that the correct name for the shells we figured alive and dead on plate 592 as *C. collisus* Reeve, 1849 *are C. mulderi.* Apparently this is a very local species, only living in great numbers along a few kilometers of the western Negros coast.

***Conus musicus* forma *mighelsi* Kiener, 1847**

We continue to use the name "*mighelsi*" for the red patterned shells of that species.

***Conus nereis* Petuch, 1979**

The group of *Conus* where *C. nereis* belongs to are a big mess in RKK, and this gave rise to undescribed species and hundreds of wrongly identified *Conus* from the Philippines and the China Sea in collections worldwide. G. Raybaudi Massilia did not escape that fate and she considered C. nereis as a subspecies of the Japanese C. wakayamaensis (Kuroda, 1956). A study of several hundred deep water *Conus* of the Mactan channel revealed three different new species, two of these have been figured in books since decades, with wrong names. They were described by Poppe & Tagaro in Visaya in 2017 only. During this studies we concluded that endemism in these deep water *Conus* is far more important than generally accepted. The problematics around *C. nereis* are discussed in Poppe & Tagaro, 2017 and the species is now considered as endemic to the Philippines and quite variable. Shells figured in RKK which we think belong to *C. nereis* are: Plate 646, figs. 5, 10 & 11. Plate 647, figs. 2, 3, 5, 6 and 11.

***Conus nisus* Sowerby II, 1858**

Not recognized by Tucker & Tenorio (2013), or WORMS, but we continue to follow the excellent work of Filmer (2011) on this species. Not to confuse with *C. nisus* Dillwyn, 1817 or *C. nisus* Kiener, 1846.

***Conus omaria* forma *viperinus* Lauer, 1986**

WORMS does not accept this name, but we continue the use for the yellow form of *C. omaria.*

***Conus orbignyi-orbignyi* Audouin, 1831**

This species is rare in the Philippines and lives deep. The shells Figured on plate 641 are not this species: figs. 5 are *C. insculptus* Kiener, 1847, Figs. 6 and 7 are *C. coriolisi* Röckel, Richard & Moolenbeek, 1995.

***Conus otohimeae* forma *rogmartini* da Motta, 1982**

We continue the use of forma *rogmartini* as this species is either granulate or not: with few (or no ?) intermediates. Form *rogmartini* is the granulate form.

***Conus patonganus* da Motta, 1982**

Called *Conus convolutes* forma *patonganus* da Motta, 1982 on plate 655.
The types of *C. convolutes* G.B. Sowerby II, 1858 and *C. patonganus* da Motta, 1982 are completely different shells. The shells figured on plate 655 nr. 3a and 3b are real *patonganus* sensu da Motta. The number 4 on plate 655 is definitely a strange form of *C. omaria.*
WORMS does not accept *C. patonganus*: they claim these are *C. omaria*. But our experience is that huge populations live and thrive throughout the Philippines: they are definitely different from the much more slender *C. omaria.*
WORMS does not accept *C. convolutes*: they claim this is a *Conus omaria*. The holotype of *convolutes*, from Madagascar, has nothing in common with a *Conus omaria* and is definitely a good species, not yet rediscovered.
We here deal with two relict cases of super-lumping of the post WWII years.

***Conus pergrandis* forma *fletcheri* Petuch & Mendenhall, 1972**

We continue the use of forma *fletcheri,* as this is a well established name to distinguish the heavily ribbed young *C. pergrandis* from the smooth adults.

***Conus pertusus* forma *amabilis* Lamarck, 1810**

We continue the use of forma *amabilis* for the heavily ribbed forms of *Conus pertusus*, as often found in the central Visayas.

***Conus pertusus* forma *festivus* Dillwyn, 1817**

We continue the use of forma *festivus* for the young *C. pertusus* that are yellow or partially yellow in color.

***Conus planorbis* forma *vitulinus* Hwass in Bruguière, 1792**

We continue the use of forma *vitulinus* for the "variants" of Con*us planorbis* as figured in the Volume 2: merely dark brown with white bands. Some authors do still not agree and continue to look at *C. vitulinus* as a valid species, which is not impossible.

***Conus praecellens* forma *sowerbyi* G. B. Sowerby II, 1857**

We now use the form name *sowerbyi* for the shell figured on plate 648 nr. 8.

***Conus pulicarius* forma *fustigatus* Hwass in Bruguière, 1792**

We continue the use of the name *fustigatus* for the shells that have rather line patterns than dots.
Populations are well defined of this group of pulicarius, and there are few or no intermediates

with classic shells. To investigate further.

***Conus quercinus* forma *albonerosus* (Garrard, 1966)**

We continue the use of forma *albonerosus,* for extra large *C. quercinus*-like specimens that also do not have the line pattern usually seen on *quercinus*. Their base color is less yellowish or orange, rather a pale yellowish cream color. The forma *albonerosus* lives also deeper, but as the typical *quercinus*, shells like the fine mud. It is well possible that this turns out to be a valid species when molecular studies are carried out.

***Conus rattus* Hwass in Bruguière, 1792**

On plate 608: the nr. 9 is *C. moreleti,* all others are *C. rattus.*

***Conus samiae* da Motta, 1982**

Accepted as *C. sulcatus* Hwass in Bruguière, 1792 in WORMS. This funny synonymy finds its roots in Röckel, Korn & Kohn (1995), a work notorious for the "anti-da Motta names". Which was a blunder as in our humble opinion, da Motta was very knowledgable on Indo-Pacific *Conus* and got good field experience. He got first hand access to most of the Thai and Philippine material. In RKK the *samiae* was placed as a form of *C. sulcatus*. In fact it is a deep water *Conus*, locally abundant – exactly as *C. rolani* – in waters of 150 meters and deeper. It is not impossible it is sympatric with *C. sulcatus*: *C. rolani* is. We could not check this out personally as yet.

***Conus samiae forma habui* Lan, 2002**

We now agree that the *C. habui* corresponds to young shells of *C. samiae* da Motta, 1982.

***Conus sazanka* Shikama, 1970**

The form name "*kurzi*" is no longer valid: the holotype of C. *kurzi*, shown in The Veliger, is uniform in coloration, and not patterned, as most experts in Europe thought. Philippine *sazanka* most often differ from their northern relatives by a thinner and finer shell which is occasionally well patterned as shown in our Volume 2. These colored forms definitely deserve a forma name.

***Conus sieboldii* Reeve, 1848**

The shell figured on Plate 609, nr. 6 is also this species, not *C. ione* Fulton, 1938.

***Conus stramineus* Lamarck, 1810**

The figured shells are *C. nisus*. Real *Conus stramineus* are a seldom seen Indonesian species.

***Conus striatellus* forma *lineatus* Hwass in Bruguière, 1792**

We continue to use the form name *lineatus* for the special *striatellus* with a white background and a diffused brown pattern with multiple fine lines.

***Conus suduirauti* Raybaudi Massilia, 2004**

The correct date is 2004, not 2000.

***Conus sugimotonis* forma *vicdani* Lan, 1978**

WORMS does not accept *Conus vicdani* Lan, 1978, and puts it in the synonymy of *Conus sugimotonis.* This is correct. The type of *Conus vicdani* is a spotted *C. sugimotonis*. Indeed, this species occasionally shows small black dots on the body whorl. So, we use the name as a form name for the spotted *sugimotonis*. The holotype of *Conus sugimotonis* is a dirty dead collected shell with much traces of periostracum, but there are no signs of any pattern. It has been figured in color by Okutani (2000).

***Conus sulcatus sulcatus* Hwass in Bruguière, 1792**

We follow G. Raybaudi in the delimitations of this taxon, but on the plate 638 the numbers of the figures have been reversed: nr. 6 is *C. sulcatus brettinghami* (smooth slender shells), nr. 8 is *Conus sulcatus sulcatus* (slender, granulate spiral sculpture). The forma *bocki* is correct.

***Conus tagaroae* (Limpalaër & Monnier, 2013)**

Was figured on plate 655 as *C. telatus* forma *rugosus*. Now a valid species.
Zandbergen correctly observed that our figure Plate 655 nr. 10 is not a *C. telatus* forma *rugosus* (now *tagaroae*). Indeed, this species was later described as *Cylindrus scottjordani* Poppe, Monnier & Tagaro, 2012.

***Conus tessulatus* forma *suturatus* Reeve, 1844**

This is the form without blotches. Usually this "species" comes from Australia, but I noticed in samples from there that the young shells often have the blotch pattern of classic *C. tessulatus* inside the aperture. So, this is merely a form, more common in the southern waters than elsewhere. The shell on Plate 580 fig. nr. 3 belongs to this form.

***Conus thalassiarchus* G. B. Sowerby I, 1834**

We follow the arrangement with subspecies as done in Volume 2. The Wils names are technically not valid, and nobody replaced these or did an adequate job on this species, which is getting better known every decade. In some areas such as the Cuyo Islands, very local variants appear. Much more research on *thalassiarchus* is desirable.

***Conus tmetus* forma *pilkeyi* Petuch, 1974**

This taxon is accepted in WORMS as *C. ochroleucus tmetus* Tomlin, 1937. The *tmetus* proper is a large slender shell, different from the variant *pilkeyi*.

***Conus vexillum vexillum* Gmelin, 1791**

We follow G. Raybaudi on this species, which as a subspecies in the Indian ocean. We continue to use the forma name "*sulphuratus*" to indicate the young stage of the *C. vexillum*.

***Conus viola* forma *blatteus* Shikama, 1979**

We use the form name "*blatteus*" for the strongly patterned *viola*.

***Conus voluminalis* and subspecies**

Some conchologists suggested us that *C. voluminalis, C. macarae* and *C. filicinctus* may be the same species: I double checked and re-examined this topic. *C. voluminalis* is an Indian-Ocean species, described from the "Malacca Conus" by Reeve. The shell in RKK, plate 30, fig. 2 corresponds best to this type of shell and comes from Thailand, which produces sporadically such shells.

The type of *C. macarae* has no indication of the type locality but the shell fits in the variation of the Masbate population of *C. macarae* (exactly as the shell in PMM, plate 618 nr. 9). *C. filicinctus* has a known range very restricted between Zamboanga and Indonesia. The distances between the Indian Ocean populations, the Masbate, Negros and the Sulu Sea populations are huge, and we either deal with three separate species or three subspecies of the same species. We take this conservative view for the moment and adapt the subspecies view. So, the shells figured in our works should now be named

Conus voluminalis macarae (the Masbate-Negros populations)

Conus voluminalis filicinctus (the Sulu Sea material)

The *C. voluminalis* s.s. is from Thailand.

***Conus zandbergeni* Filmer & Moolenbeek, 2010**

This is the species figured in Vol. 2 as *C.* cf. *giorossi* Bozzetti, 2005. (Plate 593) In the new description (Filmer, 2010) the author points out that the Bozzetti species "However, *C. giorossii* Bozzetti, 2005 differs significantly by its much lighter weight (average 1.38 versus 4.75 grams), its more elongate shape and different colour pattern of fine brown markings".

CORBULIDAE Lamarck, 1818

Corbula densesculpta Thiele & Jaeckel, 1931 ..... Vol. 4. Pl. 1188.
Corbula fortisulcata E. A. Smith, 1879..... Vol. 4. Pl. 1189.
Corbula hydropica (Iredale, 1930)..... Vol. 4. Pl. 1190.
Corbula ovalina Lamarck, 1818..... Vol. 5. Pl. 1411.
Corbula pallida Hinds, 1843 ..... Vol. 5. Pl. 1411.
Corbula rotalis Hinds, 1843 ..... Vol. 4. Pl. 1190.
Corbula scaphoides Hinds, 1843..... Vol. 4. Pl. 1190 & Vol. 5. Pl. 1411.
Corbula sinensis Bernard, Cai & Morton, 1993..... Vol. 4. Pl. 1189.
Corbula solidula Hinds, 1843..... Vol. 5. Pl. 1411.
Corbula subquadrata Melvill & Standen, 1907 ..... Vol. 5. Pl. 1411.
Corbula taitensis Lamarck, 1818..... Vol. 4. Pl. 1189.
Corbula venusta Gould, 1861..... Vol. 4. Pl. 1190.
Potamocorbula fasciata (Reeve, 1843) ..... Vol. 4. Pl. 1188.

COSTELLARIIDAE MacDonald, 1860

Author: Vol. 2 – Guido Poppe, Sheila Tagaro & Jean-Claude Martin.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Pusia voncoseli Poppe, Tagaro & Salisbury, 2009 .....
..... Vol. 4. Pl. 1274., Add. 1.
Thala jaculanda (Gould, 1860) ..... Vol. 2. Pl. 459.
Thala evelynae Rosenberg & Salisbury, 2014..... Vol. 5. Pl. 1412.
Thala mirifica (Reeve, 1845)..... Vol. 2. Pl. 459.
Thala recurva (Reeve, 1845) ..... Vol. 4. Pl. 1274., Add. 1.

CHANGES AND REMARKS

***Thala evelynae* Rosenberg & Salisbury, 2014**

Determination Manfred Herrmann.

***Thaluta rosenbergi* Poppe, de Suduiraut & Tagaro, 2006**

Ph. Bouchet informed us that the genus name *Visaya* Poppe, Suduiraut & Tagaro, 2006 is a junior homonym of *Visaya* Ahyong, 2004, a genus of stomatopods. We place the species for the moment in *Thaluta.*

***Vexillum angulosum* (Kuster, 1839)**

Correct date is 1839, not 1840.

***Vexillum cithara* (Reeve, 1845)**

The *Vexillum arracanense* (Sowerby, 1874) is a synonym of *V. cithara.*

***Vexillum caffrum* (Linnaeus, 1758)**

On plate 426, the nr. 6 is a *V. maduranum* Dekkers, 2007. The others are correct.

***Vexillum castum* (H. Adams, 1872)**

Figured as *Vexillum* cf. *V. sagamiense* (Kuroda & Habe, 1971) .
"Vexillum albatum Cernohorsky, 1988 : the correct name is *Vexillum castum* (H. Adams, 1872). Sowerby II, 1874 introduced the new replacement name *Mitra hastata* G. B. Sowerby II, 1874 for *Turricula casta* H. Adams, 1872 non *Voluta casta* Gmelin, 1791, both of which he placed in *Mitra*, but Sowerby's name is preoccupied by *M. hastata* Karsten, 1849. Since the replacement name is no longer in use and the taxa are no longer considered congeneric (Gmelin's taxon is now called *Scabricola casta*), Adams' name should be used (ICZN Article 59.3). *Vexillum albatum* Cernohorsky, 1988 is an unnecessary replacement name, as secondary homonymy did not exist at the time Cernohorsky replaced the name, and the replacement occurred after 1960." (Gary Rosenberg, pers. comm. April 2012)
This species is different from the real *V. sagamiense*, which is rare in the Philippines but apparently more common in the China sea. *V. castum* is smaller and has almost no siphonal canal, while real *V. sagamiense* is larger and with a clear broad siphonal canal. We figure real *V. sagamiense* in the Volume 5.

***Vexillum cinctella* Lamarck, 1822**
According to WORMS, "*Mitra cinctella*" is accepted as *V. cingulatum* (Lamarck, 1811). Double checking this statement, we agree with that. The shells figured do not correspond to the material shown in literature as either *V. cingulatum* or *V. cinctella*, but are close to or belong to the taxon *Vexillum caffrum*.

***Vexillum citrinum* (Gmelin, 1791)**
Figured as *Vexillum compressa* (G. B. Sowerby II, 1874)

***Vexillum concentricum* forma *echinatum* (A. Adams, 1853)**
We now consider "*echinatum*" as a forma, no longer a valid species.

***Vexillum costellaris* Lamarck, 1811**
In WORMS *V. costellaris* is accepted as *V. subdivisum* (Gmelin, 1791). While this is true in most of the recent popular literature, old authors show the same species for *V. costellaris* as we did: see Kiener (Vol. 3 of the Coquilles Vivantes), Reeve, 1843, Küster, 1841). Therefore we maintain this name for the shells we showed.

***Vexillum crocatum* (Lamarck, 1811)**
We maintain the form names in this species. We joined forma *cumingi*, which was in our book as a separate species. WORMS puts *cumingi* in the synonymy of *V. crocatum.*

***Vexillum croceorbis* Dekkers, 2013**
This species, discovered near the Nucnucan passage (north Bohol) by Guphil I, was named In Vol. 4 V. *sitangkaianum* Cate, 1968. The discovery was described in Visaya Supplement 4 (2009). Aart Dekkers figured the holotype of *V. sitangkaianum* in Gloria Maris 52 (2013) and states that it is different from the new shells which he describes as *V. croceorbis* Dekkers, 2013. I think that indeed the new species is valid and that the photograph of the holotype of *V. sitangkaianum* is a very dead collected shell with the typical "white" coloration which is semitransparent and found in thousands of subfossil or fossil shells. The shoulder shows it is possibly a dead *V. vulpecula* (Linnaeus, 1758).

***Vexillum evelynianum* Huang, 2017**
The new name for the former *Vexillum evelynianum* Guillot de Suduiraut, 2007. This name was preoccupied by *V. evelynae* (Melvill, 1895), a synonym of *V. millecostatum* (Broderip, 1836).

***Vexillum filiareginae* (J. Cate, 1961)**
The new name for *V. citrinum* and *V. citrinum* forma *filiareginae* in our books.
V. filiareginae forma *coloscopulus* instead of *V. citrinum* forma *coloscopulus.*

***Vexillum formosense* forma *minahassae* (Schepman, 1907)**
We did not find "*minahassae*" in WORMS, but maintain the name.

***Vexillum fusiforme* (Kiener, 1838)**
We did not find "*fusiforme*" in WORMS, but maintain the name. Figured as *Vexillum* cf. *V. spicatum* (Reeve, 1845) in Volume II. Correct spelling is "*V. fusiforme*", not "*V. fusiformis*".

***Vexillum herosae* Herrmann & Salisbury, 2012**
This is the shell shown on Plate 458 as *V. kuboi* Turner, Gori & Salisbury, 2007, nr. 7.

***Vexillum longispira* (G. B. Sowerby III, 1874)**
Corrected from *V. longispirum*. (Gary Rosenberg, Pers. comm., April 2012).

***Vexillum millecostatum* (Broderip, 1836)**
Is the new name for our *V. adamsoni* Reeve, 1844. We could not view the holotype of the *V. millecostatum* (as yet), and follow WORMS in this decision. We have the impression that in the literature both names – *adamsoni* and *millecosatum* – are used for two different species: one form is almost uniform brown with two fine cream spiral lines on the body whorl, the other form has a fleck pattern. But this is just an impression. Proper study is needed in order to be able to make firm decision on the status of these different forms.

***Vexillum multitriangulum* Salisbury & Callomon, 1998**
The correct spelling for the former "*Vexillum multitriangula".*

***Vexillum patriarchale* (Gmelin, 1791)**
The text of fig. nr. 6 is missing, please add: "6. 25 mm. Olango Island. 25 m."

Moved from Mitridae to Costellariidae.

***Vexillum pullatum* (Reeve, 1844)**
Correct date is 1844, not 1845, and author between brackets.

***Vexillum recurvirostris* (G. B. Sowerby III, 1908)**
Accepted as such in WORMS, correct from our books where it was *V. recurvirostre.*

***Vexillum rufobalteatum* (Hervier, 1897)**
WORMS accepts this as *V. turriger* (Reeve, 1845), but we maintain the species status for the shells as figured.

***Vexillum sanguisuga* (Linnaeus, 1758)**
Correct spelling for the former "*V. sanguisugus"* (Gary Rosenberg, Pers. comm. April 2012). The form *castaneostictum* Dautzenberg & Bouge, 1923 is not mentioned in WORMS

***Vexillum strnadi* Poppe & Tagaro, 2010**
As usual in periods where supply is short, the people from Punta Engano, Mactan Island, faked a number of *V. costatum* and changed these in shells resembling strongly *V. strnadi.* We estimate there are at present 50 fakes for one real *strnadi*. But the "real" thing does exist.

***Vexillum trilineatum* Herrmann & Stossier, 2011 & *V. suave* (Souverbie, 1875)**
This species was called *V. suave* (Souverbie, 1875) in the PMM books, in Matsumoto (1979) and Springsteen & Leobrera (1986). The real *V. suave* has been recorded from New Caledonia, the Maldives, Reunion, Mozambique, Mauritius and Fiji. *V. trilineatum* was descibred by Hermann & Stossier in 2011 in Conchylia.

***Vexillum umbrosum* (G. B. Sowerby II, 1874)**
Author is G.B. Sowerby II (not II & III.)

CRANCHIIDAE Prosch, 1849
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Bathothauma lyromma Chun, 1906 ..... Vol. 4. Pl. 1261.
Cranchia scabra Leach, 1817 ..... Vol. 4. Pl. 1262.
Egea inermis Joubin, 1933 ..... Not yet documented.
Leachia pacifica (Issel, 1908) ..... Not yet documented.
Liocranchia reinhardti (Steenstrup, 1856) ..... Vol. 4. Pl. 1262.
Sandalops melancholicus Chun, 1906 ..... Not yet documented.
Taonius pavo (Lesueur, 1821) ..... Vol. 4. Pl. 1262.

CRASSATELLIDAE Férussac, 1822

Bathytormus jousseaumi (Lamy, 1919) ..... Vol. 5. Pl. 1416.
Chattina omanensis (E. A. Smith, 1906) ..... Vol. 5. Pl. 1416.
Chattina picta (Adams & Reeve, 1850) ..... Vol. 4. Pl. 1051.
Chattina rikae (Lamprell, 2003) ..... Vol. 4. Pl. 1051.
Chattina truncata (A. Adams, 1854) ..... Vol. 5. Pl. 1416.
Indocrassatella quadrata (Noda, 1980) ..... Vol. 5. Pl. 1416.

CHANGE OF GENUS

***Chattina picta* (Adams & Reeve, 1850)** Was in the genus Talabrica.
***Chattina rikae* (Lamprell, 2003)** Was in the genus Talabrica.

CRESEIDAE Rampal, 1973

Creseis clava (Rang, 1828) ..... Vol. 3. Pl. 767 & 768.

THE FAMILY CRESEIDAE

The family CRESEIDAE Rampal, 1973 was until recently part of the CAVOLINIIDAE. Now a valid family, the CRESEIDAE contains the genera *Creseis*, *Hyalocylis*, and *Styliola*.

CHANGES AND REMARKS

***Creseis clava* (Rang, 1828)**

This is the former *Creseis acicula* Rang, 1828. This species changed name: see Gasca & Janssen, 2014.

CROSSEOLIDAE Hickman, 2013

Conradia cingulifera A. Adams, 1860 ..... Vol. 4. Pl. 1307, Add. 1.
Conradia sulcifera A. Adams, 1863 ..... Vol. 1. Pl. 64.
Crossea bellula A. Adams, 1865 ..... Vol. 1. Pl. 64.
Crossea victori Poppe, Tagaro & Stahlschmidt, 2015..... Vol. 5. Pl. 1416.

THE FAMILY CROSSEOLIDAE

These shells were figured in our book in the family SKENEIDAE.
CROSSEOLIDAE are now a valid family and contains 4 genera (of which two have been reported from the Philippines by now): *Conjectura*, *Conradia*, *Crossea* and *Crosseola*.

MOVES BETWEEN FAMILIES

***Conradia sulcifera* A. Adams, 1863**

Was in the family SKENEIDAE, as *Gottoina sulcifera*.

CHANGES AND REMARKS

***Conradia cingulifera* A. Adams, 1860**

We wrongly identified this species as the Japanese *Crossea miranda* A. Adams, 1865.

CRYPTOPLACIDAE H. Adams & A. Adams, 1858

Author: Vol. 4 – Bruno Anseeuw.

Cryptoplax larvaeformis (Burrow, 1815)..... Vol. 4. Pl. 1212.
Cryptoplax oculata (Quoy & Gaimard, 1835)..... Vol. 4. PL. 1208 & 1212.

CUCULLAEIDAE Stewart, 1930

Author: Vol. 3 – Klaus Groh.

Cucullaea labiata (Lightfoot, 1786)..... Vol. 3. Pl. 937.

CHANGES AND REMARKS

The family name **CUCULLAEIDAE** is now written with double L.

CUSPIDARIIDAE Dall, 1886

Author: Vol. 4 – Guido Poppe & Takashi Okutani.

Cardiomya alcocki (E. A. Smith, 1894) ..... Vol. 4. Pl. 1061.
Cardiomya fortisculpta (Kuroda, 1948) ..... Vol. 4. Pl. 1059.
Cardiomya gouldiana (Hinds, 1843)..... Vol. 4. Pl. 1059.
Cardiomya kashimana Okutani & Sakurai, 1964..... Vol. 5. Pl. 1417.
Cardiomya sinica Xu, 1980..... Vol. 4. Pl. 1059.

Cuspidaria chinensis (Gray in Griffith & Pidgeon, 1833) ..... Vol. 4. Pl. 1059.
Cuspidaria convexa Pelseneer, 1911 ..... Vol. 4. Pl. 1061.
Cuspidaria corrugata Prashad, 1932 ..... Vol. 4. Pl. 1062.
Cuspidaria gigantea Prashad, 1932 ..... Vol. 4. Pl. 1059.
Cuspidaria hindsiana (A. Adams, 1864) ..... Vol. 4. Pl. 1061.
Cuspidaria japonica Kuroda, 1948 ..... Vol. 4. Pl. 1059.
Cuspidaria kyushuensis Okutani, 1962 ..... Vol. 4. Pl. 1061.
Cuspidaria lubangensis Poutiers, 1981 ..... Vol. 4. Pl. 1060.
Cuspidaria macrorhynchus E. A. Smith, 1895 ..... Vol. 4. Pl. 1060.
Cuspidaria nobilis (A. Adams, 1864) ..... Vol. 4. Pl. 1060.
Cuspidaria prolatissima Poutiers, 1981 ..... Vol. 4. Pl. 1060.
Cuspidaria steindachneri Sturany, 1899 ..... Vol. 4. Pl. 1061.
Cuspidaria tomricei Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1417.
Cuspidaria vicdani Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1417.
Leiomya adunca (Gould, 1861) ..... Vol. 4. Pl. 1060.
Myonera dautzenbergi Prashad, 1932 ..... Vol. 4. Pl. 1062.
Myonera rostra Poutiers & Bernard, 1995 ..... Vol. 4. Pl. 1062.
Plectodon ligula (Yokoyama, 1922) ..... Vol. 4. Pl. 1060.
Plectodon obtusirostris (Okutani, 1962) ..... Vol. 5. Pl. 1417.
Pseudoneaera minor Thiele & Jaeckel, 1931 ..... Vol. 4. Pl. 1060.
Pseudoneaera semipellucida (Kuroda, 1948) ..... Vol. 4. Pl. 1060.
Rengea caduca (E. A. Smith, 1894) ..... Vol. 4. Pl. 1059.
Rhinoclama dubia (Pelseneer, 1911) ..... Vol. 4. Pl. 1060.
Sonomya kurohijii (Okutani, 1972) ..... Vol. 4. Pl. 1059.
Sonomya kurohijii forma (Okutani, 1972) ..... Vol. 4. Pl. 1059.

***Halonympha leiomyoides* (Poutiers, 1981)**
Has now been moved to the family HALONYMPHIDAE.
***Leiomya adunca* (Gould, 1861)**
Is the new name for the former *Plectodon tanabensis.*
***Plectodon ligula* (Yokoyama, 1922)**
Is the new name for the former *Plectodon ligulus.*
***Rengea caduca* (E. A. Smith, 1894)**
Is the new (genus-)name for the former *Cuspidaria caduca.*
***Rhinoclama dubia* (Pelseneer, 1911)**
Is the new (genus-)name for the former *Cuspidaria dubia.*
***Sonomya kurohijii* (Okutani, 1972)**
Is the new (genus-)name for the former *Cuspidaria kurohijii.*

CUVIERINIDAE van der Spoel, 1967

Cuvierina columnella (Rang, 1827) ..... Vol. 3. Pl. 768.
Cuvierina urceolaris (Mörch, 1850) ..... Vol. 3. Pl. 768.

THE FAMILY CUVIERINIDAE

Contains the recent genus *Cuvierina* and the fossil genus *Ireneia*. Until recently the CUVIERINIDAE were considered part of the CAVOLINIIDAE.

CYCLOTEUTHIDAE Naef, 1923

Discoteuthis discus Young & Roper, 1969..... Not yet documented.

CYLICHNIDAE H. Adams & A. Adams, 1854
Author: Vol. 3 – Richard Willan & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Cylichna biplicata (A. Adams in Sowerby, 1850)..... Vol. 3. Pl. 757 & 758.
Cylichna cf. *C. brevissima* A. Adams, 1850 ..... Vol. 3. Pl. 757.
Cylichna consobrinoides (Kuroda & Habe, 1952) ..... Vol. 3. Pl. 756.
Cylichna kawamurai (Habe, 1858)..... Vol. 3. Pl. 757.
Cylichna sibogae Schepman, 1913 ..... Vol. 3. Pl. 757.
Cylichna striatula (A. Adams, 1850)..... Vol. 3. Pl. 757.
Truncacteocina arata (Watson, 1883)..... Vol. 3. Pl. 758.
Truncacteocina biplex (A. Adams, 1850)..... Vol. 3. Pl. 761.
Truncacteocina coarctata (A. Adams, 1850) ..... Vol. 3. Pl. 761.
Truncacteocina oryzaella (Habe, 1956) ..... Vol. 3. Pl. 762.

MOVES BETWEEN FAMILIES

Following WORMS we no now move a considerable number of former CYLICHNIDAE to other families, but we feel much will still change in the future. The confusion in classic literature is just gigantic in this group of mollusks.

Moved to the ALACUPPIDAE
***Alacuppa supracancellata* (Schepman, 1913)**
Moved to the CYLICHNIDAE
***Truncacteocina biplex* (A. Adams, 1850)**
***Truncacteocina coarctata* (A. Adams, 1850)**
***Truncacteocina oryzaella* (Habe, 1956)**
Moved to the MNESTIIDAE
***Ventomnestia girardi* (Audouin, 1826)**
Moved to the RETUSIDAE
***Relichna venustula* (A. Adams, 1862)**
Moved to the SCAPHANDRIDAE
***Cylichnium ancillarioides* (Schepman, 1913)**
***Cylichnium nanum* Valdés, 2008**
***Roxania pacifica* (Habe, 1955)**
***Roxania punctulata* A. Adams, 1862**)
***Roxania umbilicata* (Habe, 1955)**
***Sabatia japonica* Habe, 1952**

CHANGE OF GENUS

***Relichna venustula* (A. Adams, 1862)**	Was in the genus *Eocylichna*.
***Alacuppa supracancellata* (Schepman, 1913)**	Was in the genus *Sabatia*.
***Cylichna consobrinoides* (Kuroda & Habe, 1952)**	Was in the genus *Adamnestia*.

CHANGES AND REMARKS

***Cylichna biplicata* (A. Adams in Sowerby, 1850)**
The former *Eocylichna braunsi* Yokoyama, 1920
***Ventomnestia girardi* (Audouin, 1826)**
The former *Adamnestia bizona* (A. Adams, 1850), in WORMS in the genus *Cylichna*.
Also the former *Adamnestia kawamurai* Habe, 1950, in WORMS.

CYMBULIIDAE Gray, 1840

Corolla ovata (Quoy & Gaimard, 1833) ..... Vol. 3. Pl. 769.

CYPRAEIDAE Rafinesque, 1815
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Annepona mariae (Schilder, 1927) ..... Vol. 1. Pl. 154.
Arestorides argus argus (Linnaeus, 1758) ..... Vol. 1. Pl. 119.
Austrasiatica hirasei (Roberts, 1913) ..... Vol. 1. Pl. 125, Vol. 4, Pl. 1283, Add. 1.
Austrasiatica langfordi langfordi (Kuroda, 1938) ..... Vol. 1. Pl. 124.
Austrasiatica sakuraii (Habe, 1970) ..... Vol. 1. Pl. 125.
Bistolida brevidentata brevidentata (G. B. Sowerby II, 1870) ... Vol. 1 & Vol. 5. Pl. 1418.
Bistolida goodalli fuscomaculata (Pease, 1865) ..... Vol. 1. Pl. 142.
Bistolida hirundo neglecta (J.E. Gray in G. B. Sowerby I, 1832) ..... Vol. 1. Pl. 141.
Bistolida kieneri depriesteri Schilder, 1933 ..... Vol. 1. Pl. 142.
Bistolida stolida (Linnaeus, 1758) ..... Vol. 1. Pl. 142 & 143.
Bistolida urselluss (Gmelin, 1791) ..... Vol. 1. Pl. 141.
Blasicrura pallidula pallidula (Gaskoin, 1849) ..... Vol. 1. Pl. 140 & 141.
Chelycypraea testudinaria (Linnaeus, 1758) ..... Vol. 1. Pl. 100.
Contradusta lapillus Poppe, Tagaro & Groh, 2013 ..... Vol. 5. Pl. 1418.
Contradusta walkeri walkeri (G. B. Sowerby I, 1832) .....
..... Vol. 1. Pl. 128 & Vol. 5. Pl. 1418.
Contradusta walkeri surabayensis (Schilder, 1937) ..... Vol. 1. Pl. 128.
Cribrarula cribraria (Linnaeus, 1758) ..... Vol. 1. Pl. 139.
Cryptocypraea dillwyni (F. Schilder, 1922) ..... Vol. 1. Pl. 154.
Cypraea tigris Linnaeus, 1758 ..... Vol. 1. Pl. 110-112.
Eclogavena dayritiana dayritiana (Cate, 1963) ..... Vol. 1. Pl. 140.
Eclogavena dayritiana dani (Beals, 2002) ..... Vol. 1. Pl. 140.
Eclogavena quadrimaculata quadrimaculata (J.E. Gray, 1824) ..... Vol. 1. Pl. 140.
Erosaria beckii (Gaskoin, 1836) ..... Vol. 1. Pl. 147.
Erosaria boivinii forma *cuatoni* (Kosuge, 1983) ..... Vol. 1. Pl. 146.
Erosaria boivinii (Kiener, 1843) ..... Vol. 1. Pl. 146.
Erosaria cernica cernica (G. B. Sowerby II, 1870) ..... Vol. 1. Pl. 145.
Erosaria erosa (Linnaeus, 1758) ..... Vol. 1. Pl. 143 & 144.
Erosaria helvola helvola (Linnaeus, 1758) ..... Vol. 1. Pl. 144 & 145.
Erosaria labrolineata (Gaskoin, 1849) ..... Vol. 1. Pl. 147.
Erosaria miliaris (Gmelin, 1791) ..... Vol. 1. Pl. 144.
Erosaria poraria (Linnaeus, 1758) ..... Vol. 1. Pl. 145.
Erronea caurica caurica (Linnaeus, 1758) ..... Vol. 1. Pl. 131.
Erronea cylindrica cylindrica (Born, 1778) ..... Vol. 1. Pl. 129.
Erronea errones (Linnaeus, 1758) ..... Vol. 1. Pl. 127.
Erronea fernandoi Cate, 1969 ..... Vol. 1. Pl. 127.
Erronea onyx (Linnaeus, 1758) ..... Vol. 1. Pl. 130.
Erronea ovum (Gmelin, 1791) ..... Vol. 1. Pl. 127.
Erronea ovum forma *chrysostoma* F. A. Schilder, 1927 ..... Vol. 1. Pl. 127.
Erronea pyriformis pyriformis (Gray, 1824) ..... Vol. 1. Pl. 128.
Erronea rabaulensis Schilder, 1964 ..... Vol. 1. Pl. 138.
Erronea vredenburgi Schilder, 1927 ..... Vol. 1. Pl. 129.

THE FAMILY CYPRAEIDAE

The family is stabilizing, mainly Felix Lorenz took care of updating once in a while the changing systematics. In May 2012 appeared a new magazine entirely decidated to CYPRAEIDAE: “Beautiful cowries Magazine”. The issue nr. 6 from December 2014 solves, in our modest opinion, quite well the mappa-problem. We adapt to these changes. In 2014 Lorenz published a volume on the complex genus *Pustularia*: “Monograph of the genus PUSTULARIA”, and here again, we adapt to the changes.

CHANGE OF GENUS

***Ficadusta pulchella pulchella* (Swainson, 1823)**	Was in the genus *Contradusta*.
***Ficadusta pulchella aliguayensis* (van Heesvelde & Deprez, 2002)**	Was in the genus *Contradusta*.
***Erronea rabaulensis* Schilder, 1964**	Was in the genus *Notadusta*.

CHANGES AND REMARKS

***Austrasiatica deforgesi* (Lorenz, 2002)**

Mentioned as *Nesiocypraea deforgesi* (Lorenz, 2002).

In the Addendum on plate 20 (plate 1283) of Vol. 4 we figured a shell we thought was *Austrasiatica deforgesi.* According to Lorenz this is a dead collected dwarf specimen, most probably of *Austrasiatica*

hirasei (Roberts, 1913). After having seen fresher shells than the type of *A. N. deforgesi*, I agree with his opinion and the *A. deforgesi* does not belong (as yet ?) to the Philippine fauna.

***Bistolida brevidentata* (G. B. Sowerby II, 1870)**

Several specimens have been collected in Palawan. The shell figured on Plate 143 nr. 2 belongs to this species, possibly also the nr. 1 of which I'm not sure it came with the correct label.

***Bistolida goodalli fuscomaculata* (Pease, 1865)**

Experts now look at the *fuscomaculata* as a subspecies, not a species.

***Contradusta walkeri surabayensis* (Schilder, 1937)**

Experts look at this taxon as a subspecies, not a "forma".

***Eclogavena dayritiana dayritiana* (Cate, 1963)**

The nominate subspecies, endemic to Coron Island.

***Eclogavena dayritiana dani* (Beals, 2002)**

From the start on, "*E. dayritiana*" has been wrongly presented to the wide public and the present use of the names is erroneous – read "not corresponding to the type material". (F. Lorenz, personal communication). We therefore do not yet modify the situation as presented in our book, waiting for a soon to come revision of this group of Calmianan cowries.
On Lasi Island lives a subspecies which is intermediate between the typical *E. dayritiana* from Coron Island and the Cullion Island *E. d. dani*. Not described as yet.
Petuch & Meyers described in 2014 "*E. dayritiana mondejarorum*", but here again there is confusion about the sources of the shells which are in doubt, and the use of semi-adult shells mixed with adults and the like. We wait for the decisive upcoming publication before forming an opinion on "*mondejarorum*".

***Leporicypraea mappa*-complex**

The December number of 2014 of the magazine Beautiful cowries contains a special issue on the *Leporicypraea mappa* by Bergonzoni & Passamonti. They split the classic "*mappa*" into two species, subdivide both of these in subspecies and give a number of viable "forms". For the Philippines we deal with two subspecies: *mappa* s.s. and *alga*. The latter with the form "*geographica*". For the pink colored shells the name "forma *panerythra* Melvill, 1888" can be used. Personally, we think the pink coloration in the mappa is a classic but rare case of isabellism.
We think this is the best review of the complex of species until now, and adapt the views of Bergonzoni & Passamonti. For the Philippines this results in the following:

***Leporicypraea mappa mappa* (Linnaeus, 1758)**

Vol. 1. Pl. 105. Fig. 2.
Vol. 1. Pl. 106. Fig. 1, 3 & 4.
Vol. 1. Pl. 107. Figs. 1 to 5.
Vol. 1. Pl. 108. Figs. 1 to 3.
Vol. 1. Pl. 109. Figs. 1, 3 & 5.

***Leporicypraea mappa mappa* forma *panerythra* Melvill, 1888**

Vol. 1. Pl. 105. Fig. 4.
Vol. 1. Pl. 106. Fig. 2.
Vol. 1. Pl. 108. Fig. 4.
Vol. 1. Pl. 109. Fig. 4.

***Leporicypraea mappa alga* forma *geographica* (Schilder & Schilder, 1933)**

Vol. 1. Pl. 105. Figs. 1 & 3.
Vol. 1. Pl. 109. Figs. 2 & 6.

***Luria tesselata lani* M. G. Raybaudi, 1986**

Either a case of gigantism or a valid subspecies. We rather consider this a subspecies. Collected from Japan over Taiwan south to Balut Island in the Philippines. Rare everywhere, and today less than two dozen shells have been found.

***Lyncina leviathan* Schilder & Schilder, 1937**

The former *Lyncina carneola* forma *leviathan*. We now accept this taxon, as suggested by WORMS, as a valid species.

***Nesiocypraea lisetae* (Kilburn, 1975)**

The former *Nesiocypraea maricola* Cate, 1976.
Based on Lorenz & Hubert (2000), WORMS suggests the synonymy of these two names and I agree after having studied the literature at present. There is virtually no noticeable difference between East African and Philippine specimens juding after the photographic material we have. Some authors call the Philippine lisetae "Maricola" as we did, others use the latter name as a subspecies.

The genus *Pustularia*

In 2014 Felix Lorenz published a Monograph of the genus *Pustularia*. This very welcome work solved several of the many problems haunting this genus in the past. With 5 different species in the south of Palawan, and 4 different species in the rest of the Archipelago, we can call the Philippines the center of the genus.

The situation for our area is as follows:

***Pustularia cicercula cicercula* (Linnaeus, 1758)**
Vol. 1. Pl. 153. Figs. 5; Vol. 5.

***Pustularia margarita* (Dillwyn, 1817)**
Vol. 1. Pl. 153. Figs. 1, 3, 4 & 9; Vol. 5.

***Pustularia globulus sphaeridium* Schilder & Schilder, 1938**
Vol. 5.

***Pustularia bistrinotata bistrinotata* Schilder & Schilder, 1937**
Vol. 5.

***Pustularia bistrinotata bistrinotata* forma *samarensis* Lorenz, 2014**
Vol. 1. Pl. 153. Figs. 6, 7 & 8; Pl. 154. Fig. 1; Vol. 5.

***Pustularia bistrinotata bistrinotata* forma *jandeprezi* Poppe & Martin, 1997**
Vol. 1. Pl. 154. Figs. 2; Vol. 5.

***Pustularia bistrinotata excelsior* Lorenz, 2014**
Vol. 5.

***Pustularia chiapponii chiapponii* Lorenz, 1999**
Vol. 1. Pl. 153. Figs. 2; Pl. 154. Figs. 3. Vol. 5.

***Pustularia chiapponii beatricae* Lorenz, 2014**
Vol. 1. Pl. 154. Figs. 7 & 8; Vol. 5.

The *Ransoniella punctata* – complex

We now find back the *Ransoniella* in WORMS in the genus *Notadusta*. Definitely the dance of the punctata between "*Cypraea*", "*Ransoniella*", "*Notadusta*", "*Palmadusta*" and "*Evenaria*" is not yet finished. In 2007 Dolin recognized a large series of species within the Philippine "*punctata*". We maintained two of these as valid species, the *R. fusula* and the *R. glandina*, as both of them have little to do in shape with classic *R. punctata* an both of these are extremely stable in shape. The shape of a *R. fusula* seems closer to a *Notadusta martini* than to a *Ransoniella punctata*…
We therefore keep the situation in our books "as is", and we hope there are more detailed studies on the group in order to enlighten us. Dolin with his work got the merit to point to a huge problem in the species complex.

***Talostolida teres* forma *alveolus* (Tapparone Canefri, 1882)**

Lorenz treats this taxon as a subspecies of *T. teres,* which is bizarre, as both live together. He suggests that *alveolus* may be a valid species, and I am also enclined to believe that. We wait his further research before changing our "forma" status for *alveolus*.

CYRENIDAE Gray, 1847

Batissa violacea (Lamarck, 1818) ..... Vol. 4. Pl. 1123.

THE FAMILY CYRENIDAE

Were until recently called CORBICULIDAE, and in almost all collections you will still find these shells under this name.

CYSTISCIDAE Stimpson, 1865

Author: Vol. 2 – Tiziano Cossignani.

Crithe cossinea T. Cossignani, 1997 ..... Vol. 2. Pl. 510.
Crithe huna (Kay, 1979) ..... Vol. 2. Pl. 510.
Crithe nipponica (Habe, 1951) ..... Vol. 2. Pl. 510.
Cystiscus angasi (Crosse, 1870) ..... Vol. 5. Pl. 1425.
Cystiscus beqae Wakefield & McCleery, 2006 ..... Vol. 5. Pl. 1425.
Cystiscus triangularis Cossignani, 2008 ..... Vol. 2. Pl. 510.
Gibberula candida Cossignani, 2008 ..... Vol. 2. Pl. 510.
Gibberula ovata (Habe, 1951) ..... Vol. 2. Pl. 510.
Gibberula poppei T. Cossignani, 2001 ..... Vol. 2. Pl. 510.
Gibberula sueziensis (Issel, 1869) ..... Vol. 2. Pl. 510.

Hyalina cotamago Yokohama, 1922 ..... Vol. 5. Pl. 1425.

MOVES BETWEEN FAMILIES

***Granulina falsijaponica* (Habe, 1957)** Now in MARGINELLIDAE.
***Granulina philpoppei* Cossignani, 2006** Now in MARGINELLIDAE.

CHANGE OF GENUS

***Granulina falsijaponica* (Habe, 1957)**

Was in the genus *Kogomea*, now in *Granulina* and as such has been moved to the MARGINELLIDAE.

DENDRODORIDIDAE O'Donoghue, 1924 (1864)

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Dendrodoris carbunculosa (Kelaart, 1858)..... Vol. 3. Pl. 862.
Dendrodoris elongata Baba, 1936..... Vol. 3. Pl. 860.
Dendrodoris fumata (Rüppell & Leuckart, 1830) ..... Vol. 3. Pl. 859.
Dendrodoris guttata (Odhner, 1917) ..... Vol. 3. Pl. 860.
Dendrodoris krusensternii (Gray, 1850) ..... Vol. 3. Pl. 861.
Dendrodoris nigra (Stimpson, 1855)..... Vol. 3. Pl. 859.
Dendrodoris tuberculosa (Quoy & Gaimard, 1832) ..... Vol. 3. Pl. 862.

CHANGES AND REMARKS

***Dendrodoris krusensternii* (Gray, 1850)**

Is the former *Dendrodoris denisoni* (Angas, 1864); we herein follow WORMS, which is based on Valdés & Fahey, 2006.

DENDRONOTIDAE Allman, 1845

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Dendronotus regius Pola & Stout, 2008..... Vol. 3. Pl. 889.

DENTALIIDAE Children, 1834

Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Antalis boucheti Scarabino, 1995 ..... Vol. 4. Pl. 1196.
Antalis longitrorsa (Reeve, 1842) ..... Vol. 4. Pl. 1196.
Antalis perinvoluta (Ludbrook, 1954) ..... Vol. 4. Pl. 1196.
Antalis porcata (A. Gould, 1859)..... Vol. 4. Pl. 1198.
Antalis tibana (Nomura, 1940)..... Vol. 4. Pl. 1196.
Antalis usitata (E. A. Smith, 1894)..... Vol. 4. Pl. 1196.
Coccodentalium gemmiparum (Melvill, 1909)..... Vol. 4. Pl. 1196.
Compressidentalium compressiusculum (Boissevain, 1906)..... Vol. 4. Pl. 1196.
Compressidentalium sedecimcostatum (Boissevain, 1906)..... Vol. 4. Pl. 1196.
Compressidentalium sibogae (Boissevain, 1906)..... Vol. 5. Pl. 1425.
Compressidentalium subcurvatum (E. A. Smith, 1906) ..... Vol. 4. Pl. 1196.
Dentalium aprinum Linnaeus, 1767 ..... Vol. 4. Pl. 1197.
Dentalium bisexangulatum G. B. Sowerby II, 1860..... Vol. 4. Pl. 1197.
Dentalium elephantinum Linnaeus, 1758 ..... Vol. 4. Pl. 1197.

CHANGE OF GENUS

***Entalinopsis habutae* (Kuroda & Kikuchi, 1933)**	Was in the genus *Dentalium.*
***Fissidentalium malayanum*(Boissevain, 1906)**	Was in the genus *Dentalium.*
***Paradentalium intercalatum* Gould, 1859)**	Was in the genus *Dentalium.*
***Paradentalium pseudosexagonum* (Deshayes, 1825)**	Was in the genus *Dentalium.*
***Pictodentalium formosum* (A. Adams & Reeve, 1850)**	Was in the genus *Fissidentalium.*

CHANGES AND REMARKS

Antalis longitrorsa (Reeve, 1842)
The correct spelling for the former "*Antalis longitrorsum"*.
Antalis perinvoluta (Ludbrook, 1954)
The correct spelling for the former "*Antalis perinvolutum"*.
***Antalis porcata* (Gould, 1859)**
The correct name for the former *Dentalium porcatum* A. Gould, 1859.
Antalis tibana (Nomura, 1940)
The correct spelling for the former "*Antalis tibanum"*.
Antalis usitata (E. A. Smith, 1894)
The correct spelling for the former "*Antalis usitatum"*.
***Entalopsis intercostata* (Boissevain, 1906)**
The correct name for the former *Dentalium nivosum* Kuroda & Kikuchi, 1933.
Based on Steiner & Kabat (2004).
Graptacme acutissima (Watson, 1879)
The correct spelling for the former "*Graptacme accutissima"*.
***Fissidentalium pseudohungerfordi* Sahlmann, Van Der Beek & Wiese, 2016**

This is the new name of the species we called *Compressidentalium hungerfordi* (Pilsbry & Sharp, 1897) in Volume 4. The authors of the new species name use now *Compressidentalium* as a subgenus (!?). They state that the real *C. hungerfordi* has a range limited to the South China Sea and Japan.

DIALIDAE Kay, 1979
Author: Vol. 1 – Philippe Bouchet & Ellen Strong.

Diala albugo (Watson, 1886) ..... Vol. 1. Pl. 94.
Diala semistriata (Philippi, 1849) ..... Vol. 1. Pl. 94.

DIMYIDAE P. Fischer, 1886
Dimya japonica Habe, 1971 ..... Vol. 4. Pl. 1050.
Dimya lima Bartsch, 1913 ..... Not yet documented.
Neoatreta filipina (Bartsch, 1913)..... Vol. 5. Pl. 1425.

DISCODORIDIDAE Bergh, 1891
Author: Vol. 3 – Richard Willan & Philippe Poppe.

Asteronotus cespitosus van Hasselt, 1824 ..... Vol. 3. Pl. 828.
Asteronotus hepaticus (Abraham, 1877) ..... Vol. 3. Pl. 829.
Asteronotus raripilosus (Abraham, 1877) ..... Vol. 3. Pl. 841.
Atagema intecta (Kelaart, 1858)..... Vol. 3. Pl. 840.
Atagema spongiosa (Kelaart, 1858)..... Vol. 3. Pl. 841.
Discodoris boholiensis Bergh, 1877 ..... Vol. 3. Pl. 834.
Discodoris schmeltziana (Bergh, 1875)..... Vol. 3. Pl. 833.
Halgerda batangas Carlson & Hoff, 2000 ..... Vol. 3. Pl. 830.
Halgerda carlsoni Rudman, 1978 ..... Vol. 3. Pl. 831.
Halgerda tessellata (Bergh, 1880)..... Vol. 3. Pl. 831.
Halgerda willeyi Eliot, 1904..... Vol. 3. Pl. 832.
Hoplodoris estrelyado Gosliner & Behrens, 1998..... Vol. 3. Pl. 828.
Hoplodoris grandiflora (Pease, 1860) ..... Vol. 3. Pl. 827.
Jorunna funebris (Kelaart, 1859)..... Vol. 3. Pl. 842.
Jorunna rubescens (Bergh, 1876)..... Vol. 3. Pl. 843.
Montereina concinna (Alder & Hancock, 1864) ..... Vol. 3. Pl. 833.
Paradoris liturata (Bergh, 1905)..... Vol. 3. Pl. 835.
Peltodoris murrea (Abraham, 1877) ..... Vol. 3. Pl. 833.
Platydoris cruenta (Quoy & Gaimard, 1832)..... Vol. 3. Pl. 837.
Platydoris formosa (Alder & Hancock, 1864)..... Vol. 3. Pl. 838.
Platydoris ocellata Dorgan, Valdés & Gosliner, 2002..... Vol. 3. Pl. 839.
Platydoris sanguinea Bergh, 1905..... Vol. 3. Pl. 837.
Platydoris scabra (Cuvier, 1804) ..... Vol. 3. Pl. 836.
Sclerodoris apiculata (Alder & Hancock, 1864)..... Vol. 3. Pl. 829.
Sclerodoris coriacea Eliot, 1904 ..... Vol. 3. Pl. 829.
Sclerodoris rubicunda (Baba, 1949)..... Vol. 3. Pl. 829.
Sebadoris nubilosa (Pease, 1871)..... Vol. 3. Pl. 836.

Taringa halgerda Gosliner & Behrens, 1998 ..... Vol. 3. Pl. 841.

MOVES BETWEEN FAMILIES

Casella rubra Bergh, 1905, the former *Paradoris rubra*, is now in CHROMODORIDIDAE.

CHANGE OF GENUS

***Casella rubra* Bergh,** 1905	Was in the genus *Paradoris*.
***Montereina concinna* (Alder & Hancock, 1864)**	Was in the genus *Discodoris*.

CHANGES AND REMARKS

***Asteronotus raripilosus* (Abraham, 1877)**
The former *Otinodoris winckworthi* White, 1948.
***Peltodoris murrea* (Abraham, 1877)**
The former *Discodoris* cf. *D. mauritiana* Bergh, 1889.

DONACIDAE Fleming, 1828

Author: Vol. 4 – Richard Willan.

Donax cuneatus Linnaeus, 1758 ..... Vol. 4. Pl. 1166.
Donax erythraeensis Bertin, 1881 ..... Vol. 5. Pl. 1426.
Donax faba Gmelin, 1791 ..... Vol. 4. Pl. 1166.
Donax semisulcatus Hanley, 1843 ..... Vol. 5. Pl. 1426.

CHANGE OF GENUS

***Donax cuneatus* Linnaeus, 1758**	Was in the genus *Latona*.

DORIDOMORPHIDAE Er. Marcus & Ev. Marcus, 1960 (1908)

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Doridomorpha gardineri Eliot, 1903 ..... Vol. 3. Pl. 887.

ELLOBIIDAE L. Pfeiffer, 1854 (1822)

Author: Vol. 3 – Klaus Groh.

Allochroa bronni (Philippi, 1846) ..... Vol. 3. Pl. 916.
Allochroa layardi (H. Adams & A. Adams, 1855) ..... Vol. 3. Pl. 916.
Auriculastra duplicata (L. Pfeiffer, 1854) ..... Vol. 3. Pl. 914.
Auriculastra incrassata (H. Adams & A. Adams, 1854) ..... Vol. 3. Pl. 914.
Auriculastra saccata (L. Pfeiffer, 1856) ..... Vol. 3. Pl. 914.
Auriculastra subula (Quoy & Gaimard, 1832) ..... Vol. 3. Pl. 914.
Blauneria quadrasi Möllendorff, 1895 ..... Vol. 5. Pl. 1426.
Cassidula aurisfelis (Bruguière, 1789) ..... Vol. 3. Pl. 915.
Cassidula nucleus (Gmelin, 1791) ..... Vol. 3. Pl. 915.
Cassidula paludosa nigrobrunnea Pilsbry & Hirase, 1905 ..... Vol. 3. Pl. 915.
Cassidula philippinarum Hidalgo, 1888 ..... Vol. 3. Pl. 915.

Cassidula schmackeriana Möllendorff, 1895 ..... Vol. 3. Pl. 915.
Cassidula sowerbyana (Pfeiffer, 1853) ..... Vol. 3. Pl. 915.
Cassidula vespertilionis (Lesson, 1831) ..... Vol. 3. Pl. 915.
Cylindrotus quadrasi Möllendorff, 1895 ..... Vol. 3. Pl. 914.
Ellobium aurisjudae (Linnaeus, 1758) ..... Vol. 3. Pl. 914.
Ellobium aurismidae (Linnaeus, 1758) ..... Vol. 3. Pl. 914.
Laemodonta monilifera (H. Adams & A. Adams, 1854) ..... Vol. 3. Pl. 917.
Laemodonta octanfracta (Jonas, 1845) ..... Vol. 3. Pl. 917.
Laemodonta punctigera (H. Adams & A. Adams, 1854) ..... Vol. 3. Pl. 917.
Laemodonta siamensis (Morelet, 1875) ..... Vol. 3. Pl. 917.
Laemodonta typica (H. Adams & A. Adams, 1854) ..... Vol. 3. Pl. 917.
Melampus cristatus L. Pfeiffer, 1855 ..... Vol. 3. Pl. 918.
Melampus fasciatus (Deshayes, 1830) ..... Vol. 3. Pl. 918.
Melampus flavus (Gmelin, 1791) ..... Vol. 3. Pl. 918.
Melampus granifer granifer (Mousson, 1849) ..... Vol. 3. Pl. 918.
Melampus nucleolus Martens, 1856 ..... Vol. 3. Pl. 918.
Melampus parvulus Pfeiffer, 1856 ..... Vol. 3. Pl. 918.
Melampus siamensis (Martens, 1865) ..... Vol. 3. Pl. 918.
Melampus sincaporensis L. Pfeiffer, 1855 ..... Vol. 3. Pl. 918.
Pedipes affinis (Férussac, 1821) ..... Vol. 3. Pl. 916.
Pedipes jouani Montrouzier, 1862 ..... Vol. 3. Pl. 916.
Pythia cf. *P. savaiensis* (Mousson, 1869) ..... Vol. 3. Pl. 919.
Pythia imperforata (A. Adams, 1850) ..... Vol. 3. Pl. 919.
Pythia pantherina (A. Adams, 1851) ..... Vol. 3. Pl. 919.
Pythia scarabaeus (Linnaeus, 1758) ..... Vol. 3. Pl. 919.
Pythia trigona (Troschel, 1838) ..... Vol. 3. Pl. 919.
Tralia costata (Quoy & Gaimard, 1832) ..... Vol. 3. Pl. 918.
Tralia sculpta L. Pfeiffer, 1850 ..... Vol. 3. Pl. 918.

CHANGE OF GENUS

***Melampus siamensis* Martens, 1865**	Was in the genus *Micromelampus*.
***Pedipes affinis* (Férussac, 1821)**	Was in the genus *Allochroa*.

ENOPLOTEUTHIDAE Pfeffer, 1900
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Abralia andamanica Goodrich, 1896 ..... Vol. 4. Pl. 1259.
Abralia armata (Quoy & Gaimard, 1832) ..... Vol. 4. Pl. 1259.
Abralia multihamata Sasaki, 1929 ..... Vol. 4. Pl. 1259.
Abralia spaercki Grimpe, 1931 ..... Vol. 4. Pl. 1260.
Abralia steindachneri Weindl, 1912 ..... Not yet documented.
Abraliopsis hoylei (Pfeffer, 1884) ..... Not yet documented.
Abraliopsis lineata Goodrich, 1896 ..... Not yet documented.
Enoploteuthis leptura (Leach, 1817) ..... Not yet documented.
Enoploteuthis reticulata Rancurel, 1970 ..... Not yet documented.

CHANGES AND REMARKS

***Abralia andamanica* Goodrich, 1896**
Correct date for that species.

ENTALINIDAE Chistikov, 1979
Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Costentalina tuscarorae Chistikov, 1982 ..... Vol. 4. Pl. 1203.
Entalina mirifica (E. A. Smith, 1895) ..... Vol. 4. Pl. 1203.
Entalina dorsicostata Lamprell & Healy, 1998..... Vol. 4. Pl. 1202.
Entalinopsis intercostata (Boissevain, 1906) ..... Vol. 4. Pl. 1202.
Entalinopsis stellata Scarabino, 1995..... Vol. 4. Pl. 1202.
Pertusiconcha tridentata Chistikov, 1982..... Vol. 4. Pl. 1202.
Rhomboxiphus tricarinatus (Boissevain, 1906)..... Vol. 4. Pl. 1202.
Spadentalina ingrata Scarabino, 1995..... Vol. 4. Pl. 1202.
Spadentalina tubiformis (Boissevain, 1906)..... Vol. 4. Pl. 1202.

EOACMAEIDAE Nakano & Ozawa, 2007

Eoacmaea javanica (Nakano, Aswan & Ozawa, 2005) ..... Vol. 1. Pl. 3.
Eoacmaea profunda (Deshayes, 1863)..... Vol. 1. Pl. 3.

MOVES BETWEEN FAMILIES
Both species in this newly erected family were shown in the family LOTTIIDAE in our Volume 1.

EPITONIIDAE Berry, 1910 (1812)
Author: Vol. 1 – Lenny Brown.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Alora annulata (Kuroda & Ito, 1961)..... Vol. 1. Pl. 299.
Alora turbinata Poppe, 2008 ..... Vol. 4. Pl. 1284., Add. 1.
Amaea foulisi Kilburn, 1985..... Vol. 5. Pl. 1427.
Amaea gazeoides Kuroda & Habe, 1950..... Vol. 5. Pl. 1427.
Amaea martinii (W. Wood, 1828) ..... Vol. 5. Pl. 1427.
Amaea rubigosola (Lee, 2001) ..... Vol. 1. Pl. 298.
Amaea setonaikaiensis Masahito & Habe, 1975 ..... Vol. 5. Pl. 1428.
Amaea splendida (de Boury, 1913) ..... Vol. 1. Pl. 292.
Amaea sulcata (Sowerby, 1844)..... Vol. 1. Pl. 300.
Amaea thielei (de Boury, 1913)..... Vol. 5. Pl. 1428.
Cirsotrema amamiense Nakayama, 2000 ..... Vol. 1. Pl. 292.
Cirsotrema amplsum Nakayama, 2000..... Not yet documented.
Cirsotrema bonum (Melvill, 1906)..... Vol. 5. Pl. 1428.
Cirsotrema browni Poppe, 2008..... Vol. 4. Pl. 1284., Add. 1.
Cirsotrema cloveri Brown, 2002 ..... Vol. 1. Pl. 292.
Cirsotrema edgari (de Boury, 1912) ..... Vol. 1. Pl. 292.
Cirsotrema ernestoilaoi Garcia E., 2001 ..... Vol. 1. Pl. 292.

Epitonium yamakawai (Yokoyama, 1922) ..... Vol. 5. Pl. 1432.
Epitonium yangi L. G. Brown, 2010..... Vol. 5. Pl. 1431.
Epitonium zatrephes (Melvill, 1910)..... Vol. 5. Pl. 1433.
Globiscala bullata (G. B. Sowerby II, 1844) ..... Vol. 1. Pl. 300.
Globiscala globosa (Masahito, Kuroda & Habe, 1971) ..... Vol. 5. Pl. 1431.
Gregorioiscala xanthotaenia Garcia, 2004 ..... Vol. 5. Pl. 1433.
Gyroscala lamellosa (Lamarck, 1822) ..... Vol. 1. Pl. 299.
Gyroscala watanabei Nakayama, 2000 ..... Vol. 1. Pl. 299.
Kurodacirsa lotus Masahito & Habe, 1975 ..... Vol. 1. Pl. 299.
Narvaliscala dorysa Iredale, 1936.....Vol. 5.
Opalia attenuata (Pease, 1860) ..... Vol. 4. Pl. 1284., Add. 1.
Opalia bicarinata (G. B. Sowerby II, 1844)..... Vol. 1. Pl. 299.
Opalia corolla (Melvill & Standen, 1903) ..... Vol. 5. Pl. 1428.
Opalia dushaneae Garcia, 2004..... Vol. 5. Pl. 1432.
Opalia garciai Kilburn, 1994 ..... Vol. 1. Pl. 299.
Opalia gracilis (Masahito, Kuroda & Habe, 1971)..... Vol. 4. Pl. 1284., Add. 1.
Opalia longissima Garcia, 2004 ..... Vol. 1. Pl. 299.
Opalia matajiroi (Kuroda, 1954)..... Vol. 5. Pl. 1433.
Opalia sumatrensis (Thiele, 1925) ..... Vol. 4. Pl. 1284., Add. 1.
Opalia thorsenae Garcia, 2004 ..... Not yet documented.
Opalia wareni Garcia, 2004..... Vol. 5. Pl. 1431.
Plasticala morchi (Angas, 1871)..... Vol. 1. Pl. 298.
Rectacirsa peltei (Viader, 1938)..... Vol. 4. Pl. 1283., Add. 1.
Surrepifungium costulatum (Kiener, 1839) ..... Vol. 1. Pl. 295.

MOVES BETWEEN FAMILIES

An EPITONIIDAE split-off: NYSTIELLIDAE. The EPITONIIDAE are clearly one of the hotspots of biodiversity worldwide. The number of species exceeds the wildest dreams. Scientists now accept the split-off of the family NYSTIELLIDAE Clench & Turner, 1952. In this family we see the genera *Eccliseogyra, Iphitus, Murdochella, Narrimania, Opaliopsis* and *Papuliscala.*

***Constantia elegans* A. Adams, 1860** Now in the family VANIKORIDAE.

CHANGE OF GENUS

***Amaea rubigosola* (Lee, 2001)**	Was in the genus *Epitonium*.
***Cylindriscala solar* (Nakayama, 1995)**	Was in the genus *Claviscala*.
***Epitonium laidlawi* (Melvill & Standen, 1903)**	Was in the genus *Amaea*.
***Epitonium sakuraii* (Kuroda & Habe, 1961)**	Was in the genus *Amaea*.
***Globiscala bullata* (G. B. Sowerby II, 1844)**	Was in the genus *Epitonium*.
***Globiscala globosa* (Masahito, Kuroda & Habe, 1971)**	Was in the genus *Sagamiscala*.
***Opalia corolla* (Melvill & Standen, 1903)**	Was in the genus *Epitonium*.
***Opalia gracilis* (Masahito, Kuroda & Habe, 1971)**	Was in the genus *Nodiscala*.
***Rectacirsa peltei* (Viader, 1938)**	Was in the genus *Cirsotrema*.

CHANGES AND REMARKS

***Amaea martinii* (W. Wood, 1828)**
This species is accepted by worms as *Filiscala raricosta* (Lamarck, 1804). An impossible affair, as the *raricosta* is a short shaped Indian Ocean species, as broad as wide, while *Amaea martini* has a long and slender shell.

***Cirsotrema ernestoilaoi* Garcia E., 2001**
Change *emestoilanoi* in "*ernestoilaoi*". Size is 21.4 mm, not 6.4 mm.

***Cycloscala laxata* (G. B. Sowerby, 1844)**
Correct spelling for the former "*Epitonium laxatum"*.

***Epitonium jomardi* (Audouin, 1827) & *E. similis* (G. B. Sowerby II, 1844).**

According to WORMS these are synonyms. But in reality, when viewing the types, these are different species: *E. jomardi* has a less slender shell, a thinner shell and a shell with a much larger aperture. *E. similis* is more slender, has a very oblique smaller aperture and is thicker shelled.

***Epitonium thorssoni* DuShane, 1988**

The shell figured on plate 299 is a poor specimen. Simon Aiken has send an image of a much better specimen, in fact, even better than all other figures we could consult, including the one of the desription. It is shown in volume 5.

***Nodiscala gracilis* Masahito, Kuroda & Habe, 1971**

We do not agree that this is *Opalia bicarinata* as suggested by WORMS. We refer to E.F. Garcia in Novapex (2004) who figures the type of *Opalia bicarinata,* which has two strong spiral ribs on the last whorl (from where the name). The *Nodiscala gracilis* does not have these strong spiral ribs. The type of the latter has been figured by Higo, Callomon & Goto (2001).

EUBRANCHIDAE Odhner, 1934

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Eubranchus cf. *E. virginalis* Baba, 1949 ..... Vol. 3. Pl. 895.
Eubranchus mandapamensis (Rao, 1968) ..... Vol. 3. Pl. 895.
Eubranchus rubropunctatus Edmunds, 1969 ..... Vol. 3. Pl. 895.

EUCIROIDAE Dall, 1895

Acreuciroa rostrata (Thiele & Jaeckel, 1931)..... Vol. 4. Pl. 1056.
Acreuciroa teramachii Kuroda, 1952 ..... Vol. 4. Pl. 1056.
Euciroa crassa Thiele & Jaeckel, 1931 ..... Vol. 4. Pl. 1056.
Euciroa eburnea (Wood-Mason & Alcock, 1891)..... Vol. 4. Pl. 1056.
Euciroa millegemmata Kuroda & Habe in Kuroda, 1952 ..... Vol. 4. Pl. 1056.
Euciroa spinosa Thiele & Jaeckel, 1931 ..... Vol. 4. Pl. 1056.

THE FAMILY EUCIROIDAE

In WORMS, Bouchet revives this 1895 Dall family, the EUCIROIDAE. Apparently Dall used materials from the Miocene and Pliocene western American fossil beds to create this fascinating family of carnivore bivalves. At present, the family only contains 2 recent genera: *Acreuciroa* and *Euciroa*.

MOVES BETWEEN FAMILIES

All the EUCIROIDAE were formerly listed in our books in the VERTICORDIIDAE.

EULIMIDAE Philippi, 1853

Author: Vol. 1 – Anders Warén.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Annulobalcis maculatus Dgebuadze, Fedosov & Kantor, 2012 ..... Vol. 5. Pl. 1434.
Annulobalcis shimazui Habe, 1965..... Not yet documented.
Annulobalcis species..... Vol. 1. Pl. 303 & 304.
Apicalia habei Warén, 1981 ..... Vol. 5. Pl. 1434.
Apicalia teramachii (Habe,1958) ..... Vol. 5. Pl. 1434.
Apicalia tokii (Habe, 1974)..... Vol. 1. Pl. 303 & Vol. 5. Pl. 1434 & Pl. 1437.
Arcuella mirifica G. Nevill & H. Nevill, 1874 ..... Vol. 5. Pl. 1435.
Bacula striolata H. & A. Adams, 1863 ..... Vol. 5. Pl. 1435.
Clypeastericola clypeastericola (Habe, 1976)..... Vol. 5. Pl. 1437.
Curveulima distorta (Pease, 1860) ..... Vol. 5. Pl. 1435.

Melanella teramachii (Habe, 1952)..... Vol. 5. Pl. 1439 & Pl. 1444.
Melanella tortuosa (A. Adams & Reeve, 1850) ..... Vol. 5. Pl. 1445.
Melanella yamazii (Habe, 1952)..... Vol. 5. Pl. 1445.
Mucronalia bicincta Adams, 1860 ..... Vol. 4. Pl. 1284., Add. 1 & Vol. 5. Pl. 1445.
Mucronalia exilis A. Adams, 1862..... Vol. 5. Pl. 1450.
Niso brunnea (G. B. Sowerby I, 1834)..... Vol. 5. Pl. 1446.
Niso dorcas Kuroda & Habe, 1950..... Vol. 5. Pl. 1446.
Niso goniostoma A. Adams, 1854 ..... Vol. 1. Pl. 302. & Vol. 5. Pl. 1446.
Niso hizenensis Kuroda & Habe, 1950 ..... Vol. 5. Pl. 1446.
Niso hizenensis forma *yokoyamai* Kuroda & Habe, 1950 ..... Vol. 5. Pl. 1446.
Niso rubropicta (Habe, 1975)..... Vol. 5. Pl. 1447.
Palisadia subulata Laseron, 1956 ..... Vol. 1. Pl. 197.
Parvioris fulvescens (A. Adams, 1854)..... Vol. 5. Pl. 1441.
Parvioris shoplandi (Melvill, 1988)..... Vol. 5. Pl. 1444.
Parvioris species..... Vol. 1. Pl. 304.
Peasistilifer obesula (A. Adams, 1854)..... Vol. 5. Pl. 1447.
Pelseneeria guntheri (Angas, 1877) ..... Vol. 5. Pl. 1447.
Pelseneeria sibogae (Schepman & Nierstrasz, 1909) .....
.....Vol. 1. Pl. 303 & 305. & Vol. 5. Pl. 1447 & 1450.
Pictobalcis articulata (G. B. Sowerby I, 1834)..... Vol. 5. Pl. 1448.
Pyramidelloides mirandus ..... Vol. 3. Pl. 739.
Scalenostoma carinatum Deshayes, 1863 ..... Vol. 5. Pl. 1450.
Scalenostoma subulatum (Broderip, 1832)..... Vol. 5. Pl. 1448.
Stilifer ovoideus H. Adams & A. Adams, 1853..... Vol. 1 & Vol. 5. Pl. 1447.
Stilifer utinomii (Habe, 1951) ..... Not yet documented.
Thyca astericola (A. Adams & Reeve, 1850)..... Vol. 1. Pl. 305 & Vol. 5. Pl. 1449.
Thyca crystallina (Gould, 1846)..... Vol. 1. Pl. 305 & Vol. 5. Pl. 1449.
Thyca nardoafrianti (Habe, 1976)..... Vol. 5. Pl. 1449.
Trochostilifer hawaiiensis Warén, 1980..... Vol. 5. Pl. 1449.
Vitreobalcis holdsworthi (H. Adams, 1874)..... Vol. 5. Pl. 1448.

THE FAMILY EULIMIDAE

Warén gave a didactic overview of the family in the Vol. I. After scrutinizing the literature, we could determinate a number of species accurately. We went back to the very basic views of Wenz for the classification and limited ourselves to a few genera only. We then confronted the determinations with the generic approach in WORMS, and the above listing is the result.

NOT FOUND IN WORMS

Eulima ozawai (Yokoyama, 1927)
Niso rubropicta (Habe, 1975)
Pelseneeria guntheri (Angas, 1877)

MOVES BETWEEN FAMILIES

***Palisadia subulata* Laseron, 1956**

According to M. Faber and WORMS now in the EULIMIDAE, but formerly placed by Ponder (1985) in RISSOIDAE, which we first followed.

***Pyramidelloides mirandus* (A. Adams, 1861)**

Was in PYRAMIDELLIDAE as "*Pyramidelloides miranda*"

CHANGE OF GENUS

***Apicalia tokii* (Habe, 1974)** Was in the genus *Echineulima*.

***Eulitoma langfordi* (Dall, 1925)** Was in the genus *Curveulima.*

CHANGES AND REMARKS

***Curveulima major* (G. B. Sowerby I, 1834**
Shown as *Melanella bovicornu* (Pilsbry, 1905) in Vol. 1, Plate 302, fig. 4.

***Hemiliostraca kawamurai* Habe, 1961**
We think the genus *Hemiliostraca* is more appropriate than *Eulima* for this species.

***Hemiliostraca lentiginosa* (A. Adams, 1861)**
Worms suggests this species is in the genus *Sticteulima*, but *Hemiliostraca* is more appropriate.

***Hemiliostraca vincta* A. Adams, 1864**
Worms suggests this species is in the genus *Leiostraca*, but *Hemiliostraca* is more appropriate.

***Hypermastus philippianus* (Dunker, 1860)**
Was shown as *Melanella teinostoma* (A. Adams, 1854) in Vol. 1, plate 302, figs. 5 & 6.

***Melanella subangulata* (Sowerby, 1834)**
In WORMS accepted as *Melanella alba* (da Costa, 1778), but *M. subangulata* is a different Indo-Pacific species from the European *Melanella alba.*

***Niso goniostoma* A. Adams, 1854**
Also as *Niso species* in Vol. 1: plate 302, fig. 7.

***Niso hizenensis* forma *yokoyamai* Kuroda & Habe, 1950**
WORMS accepts *Niso yokoyamai* as a valid species, but this has not yet been checked by a taxonomic editor. Judging after the figure in Okutani, this is a dark *N. hizenensis*.

***Pelseneeria sibogae* (Schepman & Nierstrasz, 1909)**
As *Stilifer ovoideus* in Vol. 1, plate 305, fig. 1.
As *Stilifer species* in Vol. 1, plate 305, fig. 5.

FACELINIDAE Bergh, 1889

Author: Vol. 3 – Richard Willan & Philippe Poppe.

CHANGE OF GENUS

***Caloria indica* (Bergh, 1896)** Was in the genus *Phidiana*.

CHANGES AND REMARKS

***Phyllodesmium briareum* (Bergh, 1896)**
The correct spelling for the former "*briareus*".

***Phyllodesmium longicirrum* (Bergh, 1905)**
The correct spelling for the former "*longicirra*".

FASCIOLARIIDAE Gray, 1853
Author: Vol. 2 – Paul Callomon & Martin Snyder.

CHANGE OF GENUS

***Filifusus filamentosus* (Röding, 1798)**	Was in the genus *Pleuroploca*.
***Fusinus williami* Poppe & Tagaro, 2006**	Was in the genus *Latirus*.
***Marmorofusus nicobaricus* (Röding, 1798)**	Was in the genus *Fusinus*.
***Nodolatirus nodatus* (Gmelin, 1791)**	Was in the genus *Benimakia*.
***Nodolatirus recurvirostra* (Schubert & J. A. Wagner, 1829)**	Was in the genus *Hemipolygona*.
***Pseudolatirus discrepans* (Kuroda & Habe, 1961)**	Was in the genus *Granulifusus*.
***Pseudolatirus kurodai* Okutani & Sakurai, 1964**	Was in the genus *Latirus*.
***Pseudolatirus pallidus* Kuroda & Habe, 1961**	Was in the genus *Fusinus*.
***Turrilatirus nagasakiensis* (E. A. Smith, 1880)**	Was in the genus *Fusolatirus*.

CHANGES AND REMARKS

***Granulifusus suboblitus* (Pilsbry, 1904)**

WORMS accepts this *Granulifusus* as *G. niponicus* (E. A. Smith, 1879). The *G. suboblitus* was described as as subspecies of *G. niponicus*. However, comparing the holotypes there are considerable differences. The *suboblitus* holotype measures 36.7 mm, the *niponicus* 22.2 mm. The shape of *G. niponicus* is considerably broader, the spiral ribs

are flattened and sharp, while these are knob shaped and short in *G. suboblitus*. The columellar area in *G. suboblitus* is smooth, while strongly sculptured in *G. niponicus*. The siphonal canal is curved in *G. niponicus* while straight in *G. suboblitus.* The spire in *G. subolitus* is raised and thin while broad and bulky in *G. niponicus*. Finally, the color pattern is different: uniform brown in *G. niponicus* while bicolored in *G. suboblitus*: two dark bands on the body whorl.
When browsing the literature, it is visible that several species are understood under the name "*niponicus*" a name which is rather used for a complex of different *Granulifusu*-species.

***Latirus lautus* (Reeve, 1847)**

The former *L. lautus* has now been split into two valid species: the *Latirus lautus* (our figures 4 and 5 on plate 347) and the *Peristernia schepmani* Dekkers, 2014 (our figure 6).

***Latirus martinorum* (Cernohorsky, 1987)**

We do not agree with Snyder (2013) that this is a *Granulifusus*: the texture of this species is different, and while the shell does not fit well in the megagenus *Latirus,* it is better awaiting a proper genus than to place it in *Granulifusus.*

***Latirus philberti* (Récluz, 1844)**

The now correct name for the former *Latirus belcheri* (Reeve, 1847), used in shell books for more than a century.

***Peristernia castanoleuca* Tapparone Canefri, 1879**

P. philberti (Récluz, 1844) was wrongly figured by Reeve. The correct name for this species is now *P. castanoleuca* Tapparone Canefri, 1879. (comm. H. Lee).

***Peristernia melanorhyncus* (Tapparone Canefri, 1882)**

This is the former *Peristernia* cf. *P. despecta*. Positively determinated through the efforts of M. A. Snyder and P. Callomon who made a study of the types of Tapparone Canefri. (2010).

FICIDAE Meek, 1864 (1840)

CHANGES AND REMARKS

***Ficus filosa* (G. B. Sowerby III, 1892)**

The correct spelling for "*Ficus filosus*". The living animal on p. 472 is also this species, not *F. ficus.*

FISSURELLIDAE Fleming, 1822

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

CHANGE OF GENUS

***Emarginella eximia* (A. Adams, 1852)**	Was in the genus *Roya*.
***Emarginula bicancellata* Montrouzier, 1860**	Was in the genus *Emarginella*.
***Hemimarginula biangulata* (Sowerby III, 1901)**	Was in the genus *Emarginella*.
***Montfortista kirana* (Habe, 1963)**	Was in the genus *Hemitoma*.
***Montfortista panhi* (Quoy & Gaimard, 1834)**	Was in the genus *Hemitoma*.
***Puncturella nana* (H. Adams, 1872)**	Was in the genus *Vacerrena*.
***Tugalina plana* (Schepman, 1908)**	Was in the genus *Tugali*.
***Tugalina radiata* Habe, 1953**	Was in the genus *Tugali*.
***Variegemarginula variegata* (A. Adams, 1852)**	Was in the genus *Emarginula*.
***Zeidora nesta* (Pilsbry, 1890)**	Was in the genus *Nesta*.

CHANGES AND REMARKS

***Diodora octagona* (Reeve, 1850)**

Figured as *Diodora reevei* Schepman, 1908. According to WORMS, a synonym of *D. octagona*.

***Diodora sieboldii* (Reeve, 1850)**

The correct spelling for the form "*Diodora sieboldi*".

***Emarginella incisura* (A. Adams, 1852)**

Correct spelling is *"incisura",* not "*incisula*".

FLABELLINIDAE Bergh, 1889
Author: Vol. 3 – Richard Willan & Philippe Poppe.

Flabellina bicolor (Kelaart, 1858)..... Vol. 3. Pl. 892.
Flabellina bilas (Gosliner & Willan, 1991)..... Vol. 3. Pl. 893.
Flabellina exoptata Gosliner & Willan, 1991 ..... Vol. 3. Pl. 893.
Flabellina macassarana Bergh, 1905..... Vol. 3. Pl. 893.
Flabellina riwo Gosliner & Willan, 1991..... Vol. 3. Pl. 892.
Flabellina rubrolineata (O'Donoghue, 1929)..... Vol. 3. Pl. 894.

FUSTIARIIDAE Steiner, 1991
Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Fustiaria caesura (Colman, 1958)..... Vol. 4. Pl. 1200.
Fustiaria mariae Scarabino, 2008 ..... Vol. 4. Pl. 1200.
Fustiaria nipponica (Yokoyama, 1922) ..... Vol. 4. Pl. 1200.

GADILIDAE Stoliczka, 1868
Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Cadulus aratus Hedley, 1899 ..... Vol. 4. Pl. 1202.
Cadulus chuni Jaeckel, 1932 ..... Vol. 4. Pl. 1202 & Vol. 5. Pl. 1457.
Cadulus cyathoides Jaeckel, 1932 ..... Vol. 4. Pl. 1202.
Cadulus cf. *C. deschampsi* Scarabino, 2008..... Vol. 4. Pl. 1202.
Cadulus deverdensis Scarabino, 2008 ..... Vol. 4. Pl. 1202.
Cadulus labeyriei Scarabino, 1995..... Vol. 4. Pl. 1202.
Cadulus macleani Emerson, 1978 ..... Vol. 5. Pl. 1457.
Compressidens kikuchi (Kuroda & Habe, 1952) ..... Vol. 5. Pl. 1457.
Compressidens stearnsii (Pilsbry & Sharp, 1898)..... Vol. 5. Pl. 1425.
Dischides prionotus (Watson, 1879) ..... Vol. 4. Pl. 1203.
Dischides yateensis Scarabino, 1995..... Vol. 4. Pl. 1203.
Gadila clavata (Gould, 1859)..... Vol. 4. Pl. 1203.
Gadila desaintlaurentae Scarabino, 1995 ..... Vol. 4. Pl. 1203.
Gadila virginalis (Boissevain, 1906)..... Vol. 4. Pl. 1203.
Gadila monodonta Scarabino, 1995 ..... Vol. 5. Pl. 1457.
Gadila zonata (Boissevain, 1906) ..... Vol. 4. Pl. 1204.
Polyschides pelamidae Chistikov, 1979 ..... Vol. 4. Pl. 1204.
Siphonodentalium colubridens (Watson, 1879)..... Vol. 4. Pl. 1204.
Striocadulus sagei Scarabino, 1995..... Vol. 4. Pl. 1204.

MOVES BETWEEN FAMILIES

The following two species are GADILIDAE INCERTAE SEDIS
Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Megaentalina cornucopiae (Boissevain, 1906)..... Vol. 4. Pl. 1204.

Megaentalina mediocarinata (Boissevain, 1906)..... Vol. 4. Pl. 1204.

CHANGES AND REMARKS

***Cadulus artatus* Hedley, 1903**

The *C. artatus* was described by Locard in 1897, not by Hedley, 1903 and it is a European species living more than a 1000 meters deep in the Atlantic, offshore France and Spain. But *Cadulus aratus* Hedley, 1899 exists and has been recorded from the Philippines by Scarabino (1995), so this was a spelling mistake with wrong date.

***Cadulus chuni* Jaeckel, 1932**

We now got quite some nice material of this species which is apparently common at depths exceeding 250 meters. In Volume 4 we could only demonstrate the drawing of Scarabino (1995). We therefore refigure the species with photographs in Volume 5.

GADILINIDAE Chistikov, 1975

Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Episiphon virgula (Hedley, 1903) ..... Vol. 4. Pl. 1201.
Episiphon virginieae Scarabino, 1995 ..... Vol. 4. Pl. 1201.
Gadilina insolita (E. A. Smith, 1894)..... Vol. 4. Pl. 1201.

MOVES BETWEEN FAMILIES

***Anulidentalium bambusa* Chistikov, 1975**

Moved to the family ANULIDENTALIIDAE Chistikov, 1975.

GALEOMMATIDAE Gray, 1840

Author: Vol. 4 – Jorgen Lützen.

Galeomma ambigua Deshayes, 1856..... Vol. 4. Pl. 1082.
Galeomma argentea Deshayes, 1856 ..... Vol. 5. Pl. 1458.
Scintilla anomala Deshayes, 1856..... Vol. 4. Pl. 1082.
Scintilla candida Deshayes, 1856..... Vol. 5. Pl. 1458.
Scintilla opalina Deshayes, 1856..... Vol. 4. Pl. 1082.
Scintilla philippinensis Deshayes, 1856 ..... Vol. 4. Pl. 1082.
Scintilla violescens Kuroda & Iw. Taki, 1961 ..... Vol. 4. Pl. 1082.
Scintillula ovulina (G. P. Deshayes, 1856)..... Vol. 5. Pl. 1458.

CHANGE OF GENUS

***Scintilla opalina* Deshayes, 1856** Was in the genus *Sagamiscintilla.*

GASTROCHAENIDAE Gray, 1840

Cucurbitula cymbium (Spengler, 1783)..... Vol. 5. Pl. 1458.
Eufistulana grandis (Deshayes, 1855)..... Vol. 4. Pl. 1084.
Eufistulana mumia (Spengler, 1783) ..... Not yet documented.
Gastrochaena cuneiformis Spengler, 1783 ..... Vol. 4. Pl. 1084.
Gastrochaena macrochisma Deshayes, 1855..... Vol. 4. Pl. 1084.
Gastrochaena tenera Deshayes, 1855 ..... Vol. 4. Pl. 1084.
Lamychaena weinkauffi Sturany, 1899..... Vol. 4. Pl. 1084.

Spengleria mytiloides (Lamarck, 1818)..... Vol. 4. Pl. 1084.

NOT FOUND IN WORMS

***Gastrochaena tenera* Deshayes, 1855**

CHANGE OF GENUS

***Lamychaena inaequistriata* Jousseaume in Lamy, 1923** Was in the genus *Gastrochaena*.

CHANGES AND REMARKS

***Gastrochaena cuneiformis* Spengler, 1783**
The older and valid name for the former *Gastrochaena gigantea* Deshayes, 1830.

***Gastrochaena tenera* Deshayes, 1855**
Is listed in WORMS as nomen dubium.

***Lamychaena weinkauffi* (Sturany, 1899)**
Is the correct name for the former *L. inaequistriata* Jousseaume in Lamy 1923

***Spengleria mytiloides* (Lamarck, 1818)**
The older and valid name for the former *Spengleria plicatilis* (Deshayes, 1855).

GASTROPTERIDAE Swainson, 1840

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Sagaminopteron ornatum Tokioka & Baba, 1964..... Vol. 3. Pl. 755.
Sagaminopteron psychedelicum Carlson & Hoff, 1974 ..... Vol. 3. Pl. 754.
Siphopteron cf. *S. tigrinum* Gosliner, 1989 ..... Vol. 3. Pl. 755.

GLAUCONOMIDAE Gray, 1853

Glauconome radiata Reeve, 1844 ..... Vol. 4. Pl. 1151.
Glauconome virens (Linnaeus, 1767)..... Vol. 4. Pl. 1151.
Glauconome straminea Reeve, 1844 ..... Vol. 5. Pl. 1458.

GLOSSIDAE Gray, 1847 (1840)

Meiocardia cumingi (A. Adams, 1864)..... Vol. 4. Pl. 1087.
Meiocardia hawaiana Dall, Bartsch & Rehder, 1938 ..... Vol. 4. Pl. 1086.
Meiocardia lamarckii (Reeve, 1845)..... Vol. 4. Pl. 1086.
Meiocardia moltkiana (Gmelin, 1791)..... Vol. 4. Pl. 1087.
Meiocardia nishimurai Kosuge & Kase, 1994 ..... Vol. 4. Pl. 1087.
Meiocardia samarangiae Bernard, Cai & Morton, 1993 ..... Vol. 4. Pl. 1086.
Meiocardia sanguineomaculata (Dunker, 1882)..... Vol. 4. Pl. 1087.
Meiocardia vulgaris (Reeve, 1845)..... Vol. 4. Pl. 1086.

CHANGES AND REMARKS

***Meiocardia lamarckii* (Reeve, 1845)**
We do not agree with Matsukuma & Habe (1995) that this species is a synonym of *M. moltkiana* (Gmelin, 1791) and follow in this the Asian authors such as Fengshan & Suping (2008), Kira (1959, 1962), Kosuge & Kase (1994) & Kosuge (1994). We also checked photographs of the syntype of *M. lamarckii* and the holotype of *M. moltkiana*: these are different species indeed.

***Meiocardia nishimurai* Kosuge & Kase, 1994**

We do not agree that this species is a synonym of *M. moltkiana* (Gmelin, 1791). The *M. nishimurai* is a smaller species with a thick shell and a different shape and sculpture. The species has been well documented by Kosuge (1994). We also checked photographs of the holotypes of both species: *M. moltkiana* & *M. nishimurai.*

GLYCYMERIDIDAE Dall, 1908 (1847)

CHANGES AND REMARKS

***Glycymeris tenuicostata* (Reeve, 1843)**

Following Huber (2010), this is the new name for the former *Tucetilla amamiensis* Kuroda, 1930

GONIODORIDIDAE H. Adams & A. Adams, 1854

GRYPHAEIDAE Vialov, 1936

MOVES BETWEEN FAMILIES

The following species are moved to OSTREIDAE. Remark that some changed name. (See in CHANGES AND REMARKS)

***Anomiostrea coralliophila* Habe, 1975**
Dendostrea rosacea (Deshayes, 1836)
***Hyotissa inermis* (G. B. Sowerby II, 1871)**
Neopycnodonte cochlear (Poli, 1795)

CHANGES AND REMARKS

Dendostrea rosacea (Deshayes, 1836)

Is the new name for the *Parahyotissa chemnitzii* Hanley, 1846

***Hyotissa inermis* (G. B. Sowerby II, 1871)**

The new name for the former *Parahyotissa imbricata (*Lamarck, 1819).

Neopycnodonte cochlear (Poli, 1795)

Is the new name for the *Neopycnodonte musashiana* Yokoyama, 1920

GYMNODORIDIDAE Odhner, 1941

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Gymnodoris alba (Bergh, 1877) ..... Vol. 3. Pl. 882.
Gymnodoris aurita (Gould, 1852) ..... Vol. 3. Pl. 883.
Gymnodoris ceylonica (Kelaart, 1858) ..... Vol. 3. Pl. 883.
Gymnodoris impudica (Rüppell & Leuckart, 1830) ..... Vol. 3. Pl. 882.
Gymnodoris subflava Baba, 1949 ..... Vol. 3. Pl. 883.

HALIOTIDAE Rafinesque, 1815

Author: Vol. 1 – Daniel Geiger.

Haliotis asinina Linnaeus, 1758 ..... Vol. 1. Pl. 11.
Haliotis clathrata Reeve, 1846 ..... Vol. 1. Pl. 11 & 12.
Haliotis fatui Geiger, 1999 ..... Vol. 1. Pl. 16.
Haliotis glabra Gmelin, 1791 ..... Vol. 1. Pl. 13.
Haliotis jacnensis Reeve, 1846 ..... Vol. 1. Pl. 13 & 14.
Haliotis ovina Gmelin, 1791 ..... Vol. 1. Pl. 14.
Haliotis thailandis Dekker & Patamakanthin, 2001 ..... Vol. 1. Pl. 15.
Haliotis varia Linnaeus, 1758 ..... Vol. 1. Pl. 15 & 16.
Haliotis varia forma *dohrniana* Dunker, 1863 ..... Vol. 1. Pl. 12.

CHANGES AND REMARKS

***Haliotis varia* forma *dohrniana* Dunker, 1863**

Dohrniana is no longer a valid species, but now a form of *Haliotis varia.*

HALONYMPHIDAE Scarlato & Starobogatov, 1983

Halonympha leiomyoides (Poutiers, 1981) ..... Vol. 4. Pl. 1062.

MOVES BETWEEN FAMILIES

This species was in the family CUSPIDARIIDAE.

HALOCERATIDAE Warén & Bouchet, 1991

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Zygoceras okutanii Poppe & Tagaro, 2010 ..... Vol. 4. Pl. 1286., Add. 1.

HAMINOEIDAE Pilsbry, 1895
Author: Vol. 3 – Richard Willan & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Aliculastrum cylindricum (Helbling, 1779) ..... Vol. 3. Pl. 744.
Aliculastrum solidum (Bruguière, 1792) ..... Vol. 3. Pl. 744.
Atys multistriatus Schepman, 1913 ..... Vol. 5. Pl. 1459.
Atys naucum (Linnaeus, 1758) ..... Vol. 3. Pl. 743.
Diniatys dentifer (A. Adams, 1850) ..... Vol. 3. Pl. 744.
Diniatys dubia (Schepman, 1913) ..... Vol. 5. Pl. 1416.
Haminoea fusca (Pease, 1863) ..... Vol. 3. Pl. 743.
Haminoea japonica Pilsbry, 1895 ..... Vol. 3. Pl. 743.
Haminoea vitrea (A. Adams, 1850) ..... Vol. 4. Pl. 1286., Add.1.
Haminoea yamagutii (Habe, 1952) ..... Vol. 5. Pl. 1459.
Liloa porcellana (Gould, 1859) ..... Vol. 3. Pl. 745.
Limulatys constrictus Habe, 1952 ..... Vol. 3. Pl. 745.
Limulatys muscarius (Gould, 1859) ..... Vol. 3. Pl. 745.
Limulatys okamotoi (Habe, 1952) ..... Vol. 3. Pl. 745.
Limulatys tortuosus (A. Adams, 1850) ..... Vol. 3. Pl. 745.
Micratys wareni Valdés, 2008 ..... Vol. 3. Pl. 763.
Mimatys fukuokaensis Habe, 1952 ..... Vol. 3. Pl. 745.
Phanerophthalmus luteus (Quoy & Gaimard, 1833) ..... Vol. 3. Pl. 746.
Phanerophthalmus smaragdinus (Rüppell & Leuckart, 1830) ..... Vol. 3. Pl. 746.

MOVES BETWEEN FAMILIES

***Cylichnium ancillarioides* (Schepman, 1913)**	Was in CYLICHNIDAE - Vol. 3. Pl. 758.
Cylichnium nanum Valdés, 2008	Was in CYLICHNIDAE - Vol. 3. Pl. 758.
***Micratys wareni* Valdés, 2008**	Was in RETUSIDAE - Vol. 3, Pl. 763.
***Phanerophthalmus luteus* (Quoy & Gaimard, 1833)**	Was in SMARAGDINELLIDAE - Vol. 3, Pl. 746.
***Phanerophthalmus smaragdinus* (Rüppell & Leuckart, 1830)**	Was in SMARAGDINELLIDAE - Vol. 3, Pl. 746.

CHANGE OF GENUS

Haminoea vitrea (A. Adams, 1850)	Was in the genus *Haloa*.

CHANGES AND REMARKS

***Ventomnestia girardi* (Audouin, 1826)**
An older name for the former *Adamnestia bizona* (A. Adams, 1850)

HARPIDAE Bronn, 1849

Harpa amouretta Röding, 1798 ..... Vol. 2. Pl. 504.
Harpa articularis Lamarck, 1822 ..... Vol. 2. Pl. 504.
Harpa cabriti Lamarck, 1816 ..... Vol. 2. Pl. 505.
Harpa davidis Röding, 1798 ..... Vol. 2. Pl. 506.
Harpa harpa (Linnaeus, 1758) ..... Vol. 2. Pl. 505.
Harpa kajiyamai Habe, 1970 ..... Vol. 2. Pl. 506.
Harpa major Röding, 1798 ..... Vol. 2. Pl. 506 & 507.

Morum amabile Shikama, 1973 ..... Vol. 2. Pl. 508.
Morum exquisitum (A. Adams & Reeve, 1848) ..... Vol. 2. Pl. 508.
Morum grande (A. Adams, 1855) ..... Vol. 2. Pl. 508.
Morum joelgreenei Emerson, 1981 ..... Vol. 2. Pl. 508.
Morum kurzi Petuch, 1979 ..... Vol. 2. Pl. 508.
Morum teramachii Kuroda & Habe, 1961 ..... Vol. 2. Pl. 509.
Morum uchiyamai Kuroda & Habe, 1961 ..... Vol. 2. Pl. 509.
Morum watanabei Kosuge, 1981 ..... Vol. 2. Pl. 509.

CHANGES AND REMARKS

***Harpa major* forma *kawamurai* Habe, 1970**

We do no longer apply this form name, used formerly for *H. major* with thin ribs. This characteristic is highly unstable and varies a lot, even within one population of *H. major,* from where.

***Morum amabile* Shikama, 1973**

Correct spelling for the former *"Morum amabilis"*.

HEMIDONACIDAE Scarlato & Starobogatov, 1971

Hemidonax donaciformis (Bruguière, 1789) ..... Vol. 4. Pl. 1123.

HEXABRANCHIDAE Bergh, 1891

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Hexabranchus sanguineus (Rüppell & Leuckart, 1830) ..... Vol. 3. Pl. 884.

HIATELLIDAE Gray, 1824

Hiatella arctica forma *flaccida* Gould, 1861 ..... Vol. 4. Pl. 1083.

HIPPONICIDAE Troschel, 1861

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Cheilea bulla (Reeve, 1859) ..... Vol. 1. Pl. 275.
Cheilea cepacea (Broderip, 1834) ..... Vol. 1. Pl. 275.
Cheilea cicatricosa (Reeve, 1858) ..... Vol. 5. Pl. 1460.
Cheilea costifera (Schepman, 1909) ..... Vol. 5. Pl. 1460.
Cheilea equestris (Linnaeus, 1758) ..... Vol. 5. Pl. 1460.
Cheilea hipponiciformis (Reeve, 1858) ..... Vol. 5. Pl. 1460.
Cheilea layardi (Reeve, 1858) ..... Vol. 4. Pl. 1286., Add.1.
Cheilea scutula (Reeve, 1858) ..... Vol. 1. Pl. 275.
Cheilea tectumsinensis (Lamarck, 1822) ..... Vol. 1. Pl. 275.
Cheilea tortilis (Reeve, 1858) ..... Vol. 1. Pl. 276.
Hipponix mogul Chino, 2006 ..... Vol. 1. Pl. 276.
Hipponix prionocidaricola (Habe & Kanazawa, 1991) ..... Vol. 1. Pl. 276.
Malluvium otohimeae (Habe, 1946) ..... Vol. 1. Pl. 99.
Sabia conica (Schumacher, 1817) ..... Vol. 1. Pl. 276.

MOVES BETWEEN FAMILIES

***Malluvium otohimeae* (Habe, 1946)** was in the family CAPULIDAE, as *Capulus otohimeae* in Vol. 1., Pl. 99.

CHANGES AND REMARKS

***Cheilea tectumsinensis* (Lamarck, 1822)**

On the page 660 Nr. 4 measures 14 mm, not 41 mm.

***Cheilea tortilis* (Reeve, 1858)**

On the page 662. Size is 6.5 mm, not 65 mm.

***Sabia conica* (Schumacher, 1817)**

Is the correct name for the former "*Hipponix conicus*".

HISTIOTEUTHIDAE Verrill, 1881

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Histioteuthis celeteria pacifica (G. Voss, 1962)..... Vol. 4. Pl. 1260.
Histioteuthis hoylei (Goodrich, 1896) ..... Not yet documented.
Histioteuthis meleagroteuthis (Chun, 1910)..... Vol. 4. Pl. 1260.
Histioteuthis oceani (Robson, 1948) ..... Not yet documented.

IDIOSEPIIDAE Appellöf, 1898

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Idiosepius cf. *I. paradoxus* (Ortmann, 1888)..... Vol. 4. Pl. 1230.
Idiosepius pygmaeus Steenstrup, 1881 ..... Vol. 4. Pl. 1230 & 1257.

IRAVADIIDAE Thiele, 1928

Iravadia delicata (Philippi, 1849) ..... Vol. 5. Pl. 1462.
Iravadia tenella Bavay & Dautzenberg, 1912 ..... Vol. 5. Pl. 1462.
Liroceratia sulcata (Boettger, 1893) ..... Vol. 5. Pl. 1462.

CHANGES AND REMARKS

***Iravadia tenella* Bavay & Dautzenberg, 1912**

This species is not mentioned in WORMS, however, the shell we collected on Mactan Island perfectly fits the figure and size of the piece shown by Bavay & Dautzenberg in the Journal de Conchyliologie Vol. 60.

ISCHNOCHITONIDAE Dall, 1889

Author: Vol. 4 – Bruno Anseeuw.

Ischnochiton cf. *I. bouryi* Dupuis, 1917 ..... Vol. 4. Pl. 1209.
Ischnochiton bouryi Dupuis, 1917..... Vol. 4. Pl. 1205.
Ischnochiton caliginosus (Reeve, 1847)..... Vol. 4. Pl. 1205 & 1210.
Lepidozona cf. *L. luzonica* (G. B. Sowerby II, 1842)..... Vol. 4. Pl. 1205 & 1209.
Lepidozona ferreirai Kaas & Van Belle, 1987..... Vol. 4. Pl. 1206.

Stenoplax alata (G.B. Sowerby II, 1841) ..... Vol. 4. Pl. 1205 & 1210.

ISOGNOMONIDAE Woodring, 1925 (1828)

MOVES BETWEEN FAMILIES

This family has now been placed in the PTERIIDAE.

JANTHINIDAE Lamarck, 1822

Janthina exigua Lamarck, 1816..... Vol. 1. Pl. 306.
Janthina janthina (Linnaeus, 1758)..... Vol. 1. Pl. 306.
Janthina pallida W. Thompson, 1840 ..... Vol. 1. Pl. 306.
Recluzia lutea Bennett, 1840 ..... Vol. 1. Pl. 306.

JULIIDAE E. A. Smith, 1885

Author: Vol. 3 – Richard Willan.

Berthelinia limax (Kawaguti & Baba, 1959)..... Vol. 3. Pl. 775.
Julia exquisita Gould, 1862..... Vol. 3. Pl. 775.
Julia japonica Kuroda & Habe, 1951..... Vol. 3. Pl. 775.
Julia zebra Kawaguchi, 1981 ..... Vol. 3. Pl. 775.

CHANGES AND REMARKS

***Berthelinia limax* (Kawaguti & Baba, 1959)**

Is the correct spelling for "*Berthelina*"

LAEVIDENTALIIDAE Palmer, 1974

Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Laevidentalium coruscum Pilsbry, 1905..... Vol. 4. Pl. 1201.
Laevidentalium eburneum (Linnaeus, 1767) ..... Vol. 4. Pl. 1201.
Laevidentalium gofasi Scarabino, 1995..... Vol. 4. Pl. 1201.
Laevidentalium martyi Lamprell & Healy, 1998..... Vol. 4. Pl. 1201.

LAROCHEIDAE

Trogloconcha lozoueti Geiger, 2008 ..... Not yet documented.
Trogloconcha ohashii Kase & Kano, 2002 ..... Not yet documented.
Trogloconcha tesselata Kase & Kano, 2002 ..... Not yet documented.

THE FAMILY LAROCHEIDAE

We refer to the text on the family level in the family ANATOMIDAE for further information.

LASAEIDAE Gray, 1842

Melliteryx punticulata (Yokoyama, 1924)..... Vol. 5. Pl. 1461.

LATERNULIDAE Hedley, 1918 (1840)

Laternula anatina (Linnaeus, 1758)..... Vol. 4. Pl. 1055.
Laternula gracilis (Reeve, 1860)..... Vol. 4. Pl. 1055.
Laternula spengleri (Gmelin, 1791)..... Vol. 4. Pl. 1055.
Laternula truncata (Lamarck, 1818)..... Vol. 4. Pl. 1055.

CHANGES AND REMARKS

***Laternula truncata* (Lamarck, 1818)**

WORMS claims that this species is a synonym of *Cochlodesma praetenue* (Pulteney, 1799). We do not think this is correct and continue to follow Lozouet & Plaziat (2008) and several other authors.

LEPTOCHITONIDAE Dall, 1889

Author: Vol. 4 – Bruno Anseeuw.

Leptochiton cf. *L. foresti* (Leloup, 1981)..... Vol. 4. Pl. 1205.
Leptochiton juvenis (Leloup, 1981)..... Vol. 4. Pl. 1205.
Leptochiton samadiae Sigwart & Sirenko, 2012 ..... Not yet documented.

LIMACINIDAE Gray, 1840

Author: Vol. 3 – Richard Willan, Philippe Poppe & Guido Poppe.

Heliconoides inflatus (d'Orbigny, 1834) ..... Vol. 3. Pl. 768.
Limacina bulimoides (d'Orbigny, 1834)..... Vol. 3. Pl. 768.
Limacina trochiformis (d'Orbigny, 1834)..... Vol. 3. Pl. 768.

CHANGE OF GENUS

***Heliconoides inflatus* (d'Orbigny, 1834)** Was in the genus *Limacina*.

LIMIDAE Rafinesque, 1815

Acesta cf. *A. virgo* Habe & Okutani, 1968 ..... Vol. 3. Pl. 981.
Acesta goliath (G. B. Sowerby III, 1883)..... Vol. 5. Pl. 1461.
Acesta marissinica Yamashita & Habe, 1969 ..... Vol. 5. Pl. 1461.
Acesta rathbuni (Bartsch, 1913)..... Vol. 3. Pl. 981.
Acesta vitrina Poppe, Tagaro & Stahlschmidt, 2015..... Vol. 5. Pl. 1461.
Ctenoides ales (Finlay, 1927)..... Vol. 3. Pl. 982.
Ctenoides annulatus (Lamarck, 1819)..... Vol. 3. Pl. 982.
Ctenoides concentricus (G. B. Sowerby III, 1888)..... Vol. 3. Pl. 982.
Ctenoides lischkei (Lamy, 1930) ..... Vol. 3. Pl. 983.
Ctenoides philippinarum Masahito & Habe, 1978 ..... Vol. 3. Pl. 983.

Ctenoides suavis Masahito, Kuroda & Habe in Kuroda & Al., 1971..... Vol. 3. Pl. 983.
Divarilima iwaotakii (Habe, 1961)..... Vol. 5. Pl. 1461.
Lima fujitai Oyama, 1943..... Vol. 3. Pl. 984.
Lima lima (Linnaeus, 1758)..... Vol. 3. Pl. 984 & 985.
Lima nakayasui Habe, 1987..... Vol. 3. Pl. 984.
Lima quantoensis Yokoyama, 1920..... Vol. 3. Pl. 984.
Limaria aurilirata J. R. Stuardo, 1967..... Vol. 5. Pl. 1461.
Limaria basilanica (Adams & Reeve, 1850)..... Vol. 3. Pl. 986.
Limaria cumingii (G. B. Sowerby II, 1843)..... Vol. 3. Pl. 986.
Limaria fragilis (Gmelin, 1791)..... Vol. 3. Pl. 986.
Limaria kawamurai Masahito & Habe, 1972..... Vol. 3. Pl. 986.
Limaria orientalis (A. Adams & Reeve, 1850)..... Vol. 3. Pl. 987.
Limatula bullata (Born, 1778)..... Vol. 3. Pl. 987.
Limatula cf. *L. japonica* A. Adams, 1864..... Vol. 3. Pl. 987.
Limea limopsis (Nomura & Zinbo, 1934)..... Vol. 3. Pl. 983.
Limea tosana (Oyama, 1943)..... Vol. 3. Pl. 987.

CHANGE OF GENUS

***Limea tosana* (Oyama, 1943)** Was in the genus *Limatula*.

CHANGES AND REMARKS

Ctenoides annulatus (Lamarck, 1819)
Correct spelling for the former *Ctenoides annulata.*
***Ctenoides concentricus* (G. B. Sowerby III, 1888)**
Correct spelling for the former *Ctenoides concentrica.*

LIMOPSIDAE Dall, 1895

Limopsis azumana Yokoyama, 1910..... Vol. 3. Pl. 940 & Vol. 5. Pl. 1461.
Limopsis cf. *L. martini* (Finlay, 1927)..... Vol. 3. Pl. 940.
Limopsis forskalii A. Adams, 1863..... Vol. 3. Pl. 940.
Limopsis striata Gmelin, 1791..... Vol. 3. Pl. 940.

LITIOPIDAE Gray, 1847
Author: Vol. 1 – Philippe Bouchet & Ellen Strong.

Litiopa limnophysa Melvill & Standen, 1896..... Vol. 5. Pl. 1462.
Litiopa melanostoma Rang, 1829..... Vol. 1. Pl. 94.
Styliferina goniochila A. Adams, 1860..... Vol. 1. Pl. 94.

LIOTIIDAE Gray, 1850
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Bathyliotina cf. *lamellosa* (Schepman, 1908)..... Vol. 5. Pl. 1462.
Bathyliotina glassi McLean, 1988..... Vol. 1. Pl. 76.

Bathyliotina nakayasui Habe, 1981 ..... Vol. 1. Pl. 76.
Cyclostrema japonicum Sakurai & Habe, 1977..... Vol. 1. Pl. 76.
Dentarene rosadoi Bozzetti & Ferrario, 2005 ..... Vol. 1. Pl. XXX & Vol. 5. Pl. 1462.
Liotia affinis (A. Adams, 1850)..... Vol. 4. Pl. 1286., Add. 1.
Liotia cidaris (Reeve, 1843) ..... Vol. 1. Pl. 76.
Liotina fijiensis Pilsbry, 1934 .....Vol. 1.
Liotina peronii (Kiener, 1838)..... Vol. 1. Pl. 76.
Liotinaria scalarioides (Reeve, 1843) ..... Vol. 1. Pl. 76.
Pseudoliotina discoidea (Reeve, 1843) ..... Vol. 1. Pl. 76.
Pseudoliotina springsteeni McLean, 1988 ..... Vol. 1. Pl. 76.

CHANGE OF GENUS

***Liotia cidaris* (Reeve, 1843)** Was in the genus *Globarene.*
***Liotina fijiensis* Pilsbry, 1934** Was in the genus *Liotinaria.*
***Liotina peronii* (Kiener, 1839)** Was in the genus *Liotinaria.*
***Liotia affinis* (A. Adams, 1850)** Was under the unpublished name *Coronaliotia.*

CHANGES AND REMARKS

***Liotina peronii* (Kiener, 1838)**
The correct date is 1838, not 1839.
***Liotinaria scalarioides* (Reeve, 1843)**
The correct spelling for the former *L. scalaroides.*

LITTORINIDAE Children, 1834

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Echinolittorina philippinensis Reid, 2007 ..... Vol. 1. Pl. 183.
Echinolittorina wallaceana Reid, 2007 ..... Vol. 1. Pl. 182.
Littoraria carinifera (Menke, 1830)..... Vol. 1. Pl. 182.
Littoraria coccinea (Gmelin, 1791)..... Vol. 1. Pl. 182.
Littoraria intermedia (Philippi, 1846)..... Vol. 4 Pl. 1286., Add. 1.
Littoraria lutea (Philippi, 1847) ..... Vol. 4 Pl. 1286., Add. 1.
Littoraria pallescens (Philippi, 1846)..... Vol. 4 Pl. 1286., Add. 1.
Littoraria pintado (Wood, 1828)..... Vol. 1. Pl. 182.
Littoraria scabra scabra (Linnaeus, 1758)..... Vol. 1. Pl. 182 & 183.
Littoraria undulata (Gray, 1839)..... Vol. 1. Pl. 183.
Echinolittorina biangulata (Martens, 1897) ..... Vol. 1. Pl. 183.
Nodilittorina pyramidalis (Quoy & Gaimard, 1833)..... Vol. 1. Pl. 183.
Tectarius coronatus (Valenciennes, 1832) ..... Vol. 1. Pl. 182.
Tectarius cumingii (Philippi, 1846)..... Vol. 1. Pl. 182.
Tectarius pagodus (Linnaeus, 1758) ..... Vol. 1. Pl. 182.
Tectarius spinulosus (Philippi, 1847)..... Vol. 1. Pl. 182.

CHANGE OF GENUS

***Littoraria undulata* (Gray, 1839)** Was in the genus *Littorina.*
***Littoraria scabra scabra* (Linnaeus, 1758)** Was in the genus *Littorina.*

CHANGES AND REMARKS

***Echinolittorina biangulata* (Martens, 1897)**
Is now the correct name for the former *Nodilittorina leucosticta biangulata.*

LOLIGINIDAE Lesueur, 1821
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Sepioteuthis lessoniana Férussac in Lesson, 1831 ..... Vol. 4. Pl. 1234-1237 & 1258.
Uroteuthis bartschi Rehder, 1945..... Vol. 4. Pl. 1258.
Uroteuthis chinensis (Gray, 1849)..... Not yet documented.
Uroteuthis duvaucelii (d'Orbigny, 1835)..... Vol. 4. Pl. 1257.
Uroteuthis edulis (Hoyle, 1885) ..... Vol. 4. Pl. 1258.
Uroteuthis reesi (Voss, 1962)..... Vol. 4. Pl. 1257.
Uroteuthis singhalensis (Ortmann, 1891)..... Vol. 4. Pl. 1258.
Uroteuthis vossi (Nesis, 1982)..... Not yet documented.

CHANGES AND REMARKS

***Uroteuthis duvaucelii* (d'Orbigny, 1835)**
The correct spelling for the former "*Uroteuthis duvauceli*".

***Sepioteuthis lessoniana* Férussac in Lesson, 1831**
The correct author and date for this species.

LOMANOTIDAE Bergh, 1890
Author: Vol. 3 – Richard Willan & Philippe Poppe.

Lomanotus vermiformis Eliot, 1908..... Vol. 3. Pl. 890.

LOTTIIDAE Gray, 1840
Author: Vol. 1 – James McLean.

Nipponacmaea gloriosa (Habe, 1944)..... Vol. 1. Pl. 4 & Vol. 5. Pl. 1486.
Niveotectura pallida (Gould, 1859)..... Vol. 5. Pl. 1463.
Patelloida lanx (Reeve, 1855) ..... Vol. 1. Pl. 3 & Vol. 5. Pl. 1463.
Patelloida lentiginosa (Reeve, 1855) ..... Vol. 1. Pl. 3 & Vol. 5. Pl. 1463.
Patelloida pygmaea (Dunker, 1860)..... Vol. 5. Pl. 1463.
Patelloida saccharina (Linnaeus, 1758)..... Vol. 1. Pl. 3.
Patelloida striata Quoy & Gaimard, 1834 ..... Vol. 1. Pl. 4 & Vol. 5. Pl. 1463.

MOVES BETWEEN FAMILIES

The following species have been moved to the family EOACMAEIDAE:
Eoacmaea javanica - our former *Patelloida javanica*.
Eoacmaea profunda - our former *Patelloida profunda*.

CHANGE OF GENUS

***Eoacmaea javanica* (Nakano, Aswan & Ozawa, 2005)**	Was in the genus *Patelloida*.
***Eoacmaea profunda* (Deshayes, 1863)**	Was in the genus *Patelloida*.

CHANGES AND REMARKS

***Nipponacmaea gloriosa* (Habe, 1944)**
This is the shell on Plate 4 fig. 1, as *Patelloida striata* Quoy & Gaimard, 1834.
***Patelloida lanx* (Reeve, 1855)**
We consider *lanx* as a valid species, no longer a subspecies of *P. saccharina*.
***Patelloida lentiginosa* (Reeve, 1855)**
This is the shell on Plate 3 fig. 3, as *Patelloida pygmaea* (Dunker, 1860).

LUCINIDAE J. Fleming, 1828
Author: Vol. 4 – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Alucinoma alis Cosel & Bouchet, 2008 ..... Not yet documented.
Anodontia semiasperatoides (Nomura, 1932) ..... Vol. 4. Pl. 1063.
Austriella corrugata (Deshayes, 1843)..... Vol. 4. Pl. 1063.
Bretskya scapula Glover & Taylor, 2007 ..... Not yet documented.
Cardiolucina civica (Yokoyama, 1927) ..... Vol. 4. Pl. 1068.
Cardiolucina eucosmia (Dall, 1901) ..... Vol. 4. Pl. 1068.
Cardiolucina euglypta (E. A. Smith, 1916)..... Vol. 4. Pl. 1064.
Cardiolucina macassari (Prashad, 1932) ..... Not yet documented.
Cardiolucina quadrata (Prashad, 1932*)* ..... Vol. 4. Pl. 1068.
Cardiolucina rugosa (Hedley, 1909)..... Not yet documented.
Cardiolucina serrata Glover & Taylor, 2016..... Vol. 4. Pl. 1068 &Not yet documented.
Cardiolucina siquijorensis Taylor & Glover, 1997..... Not yet documented.
Cavatidens bullula (Reeve, 1850) ..... Not yet documented.
Chavania striata (Tokunaga, 1906)..... Vol. 5. Pl. 1464.
Codakia interrupta (Lamarck, 1818)..... Vol. 4. Pl. 1065.
Codakia punctata (Linnaeus, 1758)..... Vol. 5. Pl. 1464.
Codakia tigerina (Linnaeus, 1758)..... Vol. 4. Pl. 1065 &1066.
Cryptophysema insulosa Taylor & Glover, 2005 ..... Not yet documented.
Cryptophysema ovulum (Reeve, 1850)..... Not yet documented.
Cryptophysema vesicula (Gould, 1850)..... Vol. 5. Pl. 1464.
Ctena bella (Conrad, 1837) ..... Vol. 4. Pl. 1068.
Ctena delicatula (Pilsbry, 1904)..... Vol. 5. Pl. 1464.
Discolucina virginea (Deshayes, 1832)..... Vol. 4. Pl. 1070.
Divalucina soyoae (Habe, 1952) ..... Vol. 5. Pl. 1464.
Divaricella ornatissima (d'Orbigny, 1846)..... Vol. 4. Pl. 1064.
Dulcina guidoi Cosel & Bouchet, 2008..... Vol. 4. Pl. 1070.
Dulcina karubari Cosel & Bouchet, 2008 ..... Vol. 4. Pl. 1070.
Dulcina minor Cosel & Bouchet, 2008 ..... Vol. 4. Pl. 1070.
Dulcina musorstomi Cosel & Bouchet, 2008 ..... Vol. 4. Pl. 1072.
Easmithia bracteata Glover & Taylor, 2016..... Not yet documented.
Easmithia brevis Glover & Taylor, 2016..... Vol. 4. Pl. 1067.
Elliptiolucina labeyriei Cosel & Bouchet, 2008..... Vol. 4. Pl. 1072.
Elliptiolucina magnifica Cosel & Bouchet, 2008..... Vol. 4. Pl. 1072.
Elliptiolucina williamsae Glover & Taylor, 2016 ..... Not yet documented.
Epicodakia izuensis (Okutani & Matsukuma, 1982) ..... Vol. 5. Pl. 1464.
Epicodakia sweeti (Hedley, 1899)..... Vol. 4. Pl. 1068.
Euanodontia hawaiensis (Dall, Barstch & Redher, 1938)..... Not yet documented.

ON THE FAMILY LUCINIDAE

The Philippine LUCINIDAE have been reviewed in extenso by A. Glover & J. Taylor who published their results in Tropical Deep Sea Benthos nr. 29 in 2016.

NOT FOUND IN WORMS

***Lucinoma acutilineatum* Conrad, 1849**

MOVES BETWEEN FAMILIES

***Cumingia lamellosa* G. B. Sowerby I, 1833**

Is the former *Myrtea lamellosa* and is now in the family SEMELIDAE.

Our former *Notomyrtea tanimbarensis* (Cosel & Bouchet, 2008)

Is now in SEMELIDAE as *Semele lamellosa* (Reeve, 1853)

CHANGE OF GENUS

***Cardiolucina civica* (Yokoyama, 1927)**	Was in the genus *Bellucina*.
***Cardiolucina semperiana* (Issel, 1869)**	Was in the genus *Bellucina*.
***Ctena bella* (Conrad, 1837)**	Was in the genus *Epicodakia*.
***Ctena divergens* (Philippi, 1850)**	Was in the genus *Epicodakia*.
***Divalucina cumingi* (A. Adams & Angas, 1864)**	Was in the genus *Divaricella*.
***Lamellolucina gemma* (Reeve, 1850)**	Was in the genus *Lucina*.
***Notomyrtea tanimbarensis* (Cosel & Bouchet, 2008)**	Was in the genus *Myrtea*.

CHANGES AND REMARKS

***Cardiolucina eucosmia* (Dall, 1901)**

Is the correct name for the former *Bellucina pisum*. (in part)

***Cardiolucina euglypta* (E. A. Smith, 1916)**

Is the correct name for the former *Lucina philippinarum* Reeve, 1850 & *Lucina speciosa* (Reeve, 1850)

***Cardiolucina rugosa* (Hedley, 1909)**

Is the correct name for the former *Bellucina pisum*. (in part)

***Cardiolucina serrata* Glover & Taylor, 2016**

Is the correct name for the former *Bellucina semperiana* (Issel, 1869)

***Codakia interrupta* (Lamarck, 1818)**

This is the correct name for the shells figured as *C. paytenorum* (Iredale, 1937). (J. Taylor, pers. comm.)

***Codakia tigerina* (Linaneus, 1758)**

This is also the correct name for the shell we figured on plate 1065 fig. 3 as *C. punctata.*

***Easmithia brevis* Glover & Taylor, 2016**

Is the correct name for the former *Myrtea minima* Okutani, 1964.

***Epicodakia sweeti* (Hedley, 1899)**

Is the correct name for the former *Epicodakia transversa* Dall, Bartsch & Rehder, 1938 (in part)

***Fimbria soverbii* (Reeve, 1842)**

Is the correct spelling for the former "*Fimbria sowerbyi"*.

***Jallenia inanis* (Prashad, 1932)**

Is the correct name for the former *Cavatidens imajimai* Habe, 1981

***Lucina philippinarum* Reeve, 1850**

We do not agree this is the same species as *Austriella corrugata* (Deshayes, 1843)

***Myrtea scitulum* (A. Adams, 1853)**

Is the correct name for the former *Myrtea* cf. *M. fabula* (Reeve, 1850)

***Notomyrtea catonii* Glover & Taylor, 2016**

Is the correct name for the former *Myrtea flabelliformis* (Prashad, 1932)

***Pegophysema philippiana* (Reeve, 1850)**

Is the correct name for the former *Anodontia stearnsiana* Oyama, 1954 (Plate 1063, fig. 5) and *Anodontia edentula* (Linnaeus, 1758) (Plate 1063 fig. 1)

***Pillucina profusa* Glover & Taylor, 2016**

Is the correct name for the former *Epicodakia transversa* (Dall, Bartsch & Rehder, 1938) (in part)

***Wallucina fijiensis* (E. A. Smith, 1885)**

Is the correct name for the former *Wallucina gordoni* E. A. Smith, 1885

LYONSIELLIDAE Dall, 1895

Policordia pilula (Pelseneer, 1911)..... Not yet documented.

MACTRIDAE Lamarck, 1809

Lutraria curta Reeve, 1854 ..... Vol. 4. Pl. 1183.
Lutraria lucida Gould, 1861 ..... Vol. 4. Pl. 1183.
Lutraria rhynchaena Jonas, 1844 ..... Vol. 4. Pl. 1183 & Pl. 1184.
Mactra achatina Holten, 1802 ..... Vol. 4. Pl. 1186.
Mactra cuneata Gmelin, 1791 ..... Vol. 4. Pl. 1185.
Mactra cygnus Gmelin, 1791 ..... Vol. 4. Pl. 1185.
Mactra grandis Gmelin, 1791 ..... Vol. 4. Pl. 1186.
Mactra iridescens Kuroda & Habe in Habe, 1958 ..... Vol. 4. Pl. 1185.
Mactra luzonica Reeve, 1854 ..... Vol. 5. Pl. 1466.
Mactra maculata Gmelin, 1791 ..... Vol. 4. Pl. 1185.
Mactra nipponica Kuroda & Habe in Kuroda & al., 1971 ..... Vol. 5. Pl. 1466.
Mactra violacea Gmelin, 1791 ..... Vol. 4. Pl. 1186.
Mactrotoma angulifera (Reeve, 1854) ..... Vol. 4. Pl. 1187.
Meropesta capillacea (Reeve, 1854) ..... Vol. 4. Pl. 1184.
Oxyperas cf. *O. aspersa* (G. B. Sowerby I, 1825)..... Vol. 4. Pl. 1187.

CHANGES AND REMARKS

***Lutraria lucida* Gould, 1861**

WORMS suggests that *Lutraria lucida* is a synonym of *L. rhynchaena.* We do not accept this view, as the type of *L. lucida* has been figured by Higo, Callomon & Goto (2001). This is a different species.

***Lutraria rhynchaena* Jonas, 1844**

Is the new name for the former *L. arcuata* Reeve, 1854 and for the former *L. philippinarum* Reeve, 1854.
The *L. philippinarum* on Plate 1184 we consider now two different species. The figure 2 is *L. rhynchaena.* The figure 1 we think is close to or the same as *L. curta.*

***Mactra achatina* Holten, 1802**

Is the older and correct name for *Mactra ornata* Gray, 1837

MALLEIDAE Lamarck, 1818

Malleus albus Lamarck, 1819..... Vol. 3. Pl. 958.
Malleus malleus (Linnaeus, 1758)..... Vol. 3. Pl. 959.
Malleus regula (Forsskål in Niebuhr, 1775)..... Vol. 3. Pl. 959.

MOVES BETWEEN FAMILIES

***Vulsella vulsella* (Linnaeus, 1758)** — Is now in the family family PTERIIDAE.

CHANGE OF GENUS

***Malleus regula* (Forsskål in Niebuhr, 1775** — Was in the genus *Malvifundus*.

MANZANELLIDAE Chronic, 1952 †

MOVES BETWEEN FAMILIES

The single species we listed in this family, *Huxleyia sulcata,* is now in the family NUCINELLIDAE. MANZANELLIDAE is now exclusively used for fossil species.

MARGINELLIDAE Fleming, 1828

Author: Vol. 2 – Tiziano Cossignani.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Cryptospira fischeri (Bavay, 1903) ..... Vol. 2. Pl. 511.
Cryptospira immersa (Reeve, 1865)..... Vol. 2. Pl. 511.
Cryptospira mccleeryi Wakefield, 2010..... Vol. 5. Pl. 1467.
Cryptospira onychina (A. Adams & Reeve, 1850) ..... Vol. 5. Pl. 1467.
Cryptospira quadrilineata (Gaskoin, 1849) ..... Vol. 2. Pl. 511.
Cryptospira tricincta (Hinds, 1844) ..... Vol. 2. Pl. 511.
Cryptospira ventricosa (Fischer von Waldheim, 1807) ..... Vol. 2. Pl. 511.
Demissa philippinarum Boyer, 2016 ..... Not yet documented.
Demissa poppei Boyer, 2016 ..... Vol. 5. Pl. 1467.
Dentimargo balicasagensis T. Cossignani, 2001 ..... Vol. 2. Pl. 512.
Dentimargo cingulatus Boyer, 2002..... Vol. 4. Pl. 1287., Add.1.
Dentimargo ringicula (G. B. Sowerby III, 1901)..... Vol. 2. Pl. 512.
Granulina cartwrighti (G. B. Sowerby, 1915) ..... Vol. 5. Pl. 1467.
Granulina falsijaponica (Habe, 1957)..... Vol. 2. Pl. 510.
Granulina philpoppei Cossignani, 2006..... Vol. 2. Pl. 510.
Hyalina sagamiensis Kuroda, Habe & Oyama, 1971 ..... Vol. 2. Pl. 512.
Hydroginella guttula (G. B. Sowerby I, 1832)..... Vol. 5. Pl. 1467.
Volvarina bevdeynzeri Cossignani, 2005..... Vol. 2. Pl. 512. Vol. 4. Pl. 1287., Add.1.
Volvarina compressa (Reeve, 1865)..... Vol. 4. Pl. 1287., Add.1.
Volvarina hirasei (Bavay, 1917) ..... Vol. 2. Pl. 512.
Volvarina janneefsi Bozzetti, 1997..... Vol. 2. Pl. 512.
Volvarina philippinarum (Redfield, 1848) ..... Vol. 2. Pl. 512.
Volvarina pseudophilippinarum Cossignani, 2008 ..... Vol. 2. Pl. 512.

CHANGE OF GENUS

***Hyalina sagamiensis* Kuroda, Habe & Oyama, 1971** Was in the genus *Hydroginella*.

CHANGES AND REMARKS

***Cryptospira immersa* (Reeve, 1865)**

Is the correct name for the former *Cryptospira quiquandoni C*ossignani, 2006 .

***Volvarina bevdeynzeri* Cossignani, 2005**

The shell shown on Plate 512 fig. 8 is not this species, but another specimen of *V. janneefsi.*

MASTIGOTEUTHIDAE Verrill, 1881

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Idioteuthis cordiformis (Chun, 1908) ..... Vol. 4. Pl. 1261.

CHANGE OF GENUS

***Idioteuthis cordiformis* (Chun, 1908)** Was in the genus *Mastigoteuthis*.

MATHILDIDAE Dall, 1889

Mathilda amanda Thiele, 1925 ..... Vol. 3. Pl. 727.
Mathilda cancellataa Kuroda, 1958 ..... Vol. 3. Pl. 727.
Mathilda carystia Melvill & Standen, 1903 ..... Vol. 3. Pl. 727.
Mathilda cerea Kuroda, 1958 ..... Vol. 3. Pl. 727.
Mathilda gemmulifera Kuroda, 1958..... Vol. 3. Pl. 727.
Mathilda quinquelirata Kuroda, 1958 ..... Vol. 3. Pl. 727.
Mathilda sagamiensis (Kuroda & Habe in Kuroda, Habe & Oyama, 1971) Vol. 3. Pl. 727.
Mathilda scalaris (Kuroda & Habe in Kuroda, Habe & Oyama, 1971)..... Vol. 3. Pl. 727.

CHANGES AND REMARKS

***Mathilda amanda* Thiele, 1925**

Is the correct name for the former *Mathilda japonica* Kuroda & Habe in Kuroda, Habe & Oyama, 1971

MELONGENIDAE Gill, 1871 (1854)

Hemifusus cariniferus Habe & Kosuge, 1966 ..... Vol. 2. Pl. 360.
Volegalea cochlidium (Linnaeus, 1758) ..... Vol. 2. Pl. 360.
Volema myristica Röding, 1798..... Vol. 2. Pl. 360.

CHANGE OF GENUS

Volegalea cochlidium (Linnaeus, 1758) Was in the genus *Pugilina*.

MESODESMATIDAE Gray, 1840

MOVES BETWEEN FAMILIES

Ervilia bisculpta is now in the family SEMELIDAE.

MITRIDAE Swainson, 1829

Author: Vol. 2 – Guido Poppe & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

Cancilla abyssicola (Schepman, 1911) ..... Vol. 2. Pl. 492.
Cancilla acuminata Shuto, 1969 ..... Vol. 2. Pl. 491.
Cancilla aegra (Reeve, 1845)..... Vol. 4. Pl. 1293., Add. 1.
Cancilla apprimapex Poppe, Tagaro & Salisbury, 2009 .....
..... Vol. 2. Pl. 492., Vol. 4. Pl. 1292.
Cancilla armonica (T. Cossignani & V. Cossignani, 2005) ..... Vol. 4. Pl. 1288., Add. 1.
Cancilla baeri Turner & Cernohorsky, 2003..... Vol. 2. Pl. 493.
Cancilla chuoi Huang & Salisbury, 2017..... Vol. 5. Pl. 1470.
Cancilla duplilirata (Reeve, 1845) ..... Vol. 2. Pl. 492.
Cancilla fibula Poppe, Tagaro & Salisbury, Vol. 4. Pl. 1293., Add. 1.

THE FAMILY MITRIDAE

The family MITRIDAE has never been decently studied on the generic level. The works of Cernohorsky on Indo-Pacific mollusks (1976, 1991) are very useful as reference works and for consulting type figures but are close to worthless on the taxonomic level. The level of lumping and misunderstanding of genera is exemplary. We have spent 3 months studying the Mitrids and grouping these in proper genera before publishing the Philippine species in Volume 2 but never went on with describing the more than a dozen necessary genera to reach a comprehensive conchological overview of the family. Many of the species we have placed in "*Mitra*" deserve separate genera. We maintain the generic names as proposed in our Volume 2. The scientific impediment in the MITRIDAE and sister family COSTELLARIIDAE is gigantic. One of the reasons may be that the Atlantic is not very rich in species of these families while the Indo-Pacific region has an overwhelming number of species. Many are still to describe. Both the MITRIDAE and the COSTELLARIIDAE have a mixture of species with huge ranges – often divided in many geographically separate subspecies – and on the other hand numerous endemics with small ranges.

CHANGES AND REMARKS

***Domiporta manoui* Huang, 2011**

This is the species formerly called in Vol. 2 *Mitra aglais* Li, Zhang & Li, 2005. The true *aglais* is from Keelung Island and is another species.

***Imbricaria conus* (Gmelin, 1791)**

"Collected at a depth of 10-20 m" is not correct and was misinformation from our suppliers. The correct data is "intertidal in mangroves". This has been pointed out in the Abatan river publication and we could repeatedly confirm this during our fieldwork.

***Mitra baerorum* Poppe & Tagaro, 2010**

These are the shells figured on Pl. 437 as *Vexillum pyramis* (Wood, 1828). The true "*pyramis*" is endemic to Reunion Island.

***Mitra labecula* Herrmann & Dekkers, 2009**

This is the new species figured as *Mitra salva* Turner, 2001 in Vol. 2 plate 502, figs. 8.

***Mitra indentata* G. B. Sowerby II, 1874**

The author is G.B. Sowerby II, not III.

***Mitra lienardi* G. B. Sowerby II, 1874**
The author is G.B. Sowerby II, not III.
***Mitra maesta* Reeve, 1845**
Remove Holotype and Paratype, technical mistake.
***Mitra margaritata* Poppe, Tagaro & Salisbury, 2009**
Correct spelling for the *M. margaritatus*.
***Neocancilla maculosa* (Gmelin, 1791)**
This is the correct name for the shells figured in Volume 2 as *Neocancilla clathrus* (Gmelin, 1791)
***Strigatella zebra* Lamarck, 1811**
According to WORMS this is a synonym of *S. paupercula* (Linnaeus, 1758). As long as a study with figures of the type material does not appear we maintain both as separate species. This is what they are when studying the modern literature. In case the types belong to one species then one of the species has to be described.
***Subcancilla baisei* Poppe, Tagaro & Salisbury, 2009**
This species was figured as *Ziba insculpta* & as *Ziba* cf. *annulata* on Plate 495, figs. 4 to 6.
Correctly figured in Vol. 4. Pl. 1294., Add. 1.
***Subcancilla philpoppei* Poppe, Tagaro & Salisbury, 2009**
Figured as *Ziba insculpta* on Vol. 2. & Plate 495, Figs. 7 and 8.
Correctly figured in Vol. 4. Pl. 1294., Add. 1.
***Subcancilla rufescens* A. Adams, 1853**
WORMS follows in this Cernohorsky in his work in Indo-Pacific Mollusca (1991). Cernohorsky figures both lectotypes in one photograph: the lectotype of "*circula*" and the lectotype of "*rufescens*", the latter he calls "broad form". It is clear that after having handled several hundred "*circula*" and over a hundred shells of "*rufescens*" that these are different species with very stable color pattern and very stable shapes.
***Swainsonia mariae* (A. Adams, 1853)**
WORMS follows in this the opinion of Thorsson & Salisbury (2003) and considers the *S. mariae* as a valid species, not a form of *S. ocellata*. We agree that this is likely correct. WORMS however, keeps the genus *Scabricola* for this species, which we do not follow.
***Swainsonia schepmani* (Salisbury & Guillot de Suduiraut, 2003)**
The correct name for the shells figured as *S. millepunctata* (Shepman, 1911) in Vol. 2 on plate 464.
***Tiarella gorii* Turner, 2007**
The size of the shell nr. 4 is 17 mm, not 20 mm.
***Tiarella scabricula* (Linnaeus, 1767)**
The size of the shell nr. 3 is 20 mm, not 17 mm.
***Ziba flammigera* Reeve, 1844**
WORMS puts this species in the synonymy of *Z. flammea* (Quoy & Gaimard, 1833), following in this Dautzenberg (1923). Having seen much material of both *Z. flammea* and *Z. flammigera* we continue to distinguish these species.

PHILIPPE BOUCHET BATCH 6

MNESTIIDAE Oskars, Bouchet & Malaquias, 2015
Ventomnestia girardi (Audouin, 1826) ..... Vol. 3. Pl. 756.

MOVES BETWEEN FAMILIES
***Ventomnestia girardi* (Audouin, 1826)** Was in CYLICHNIDAE as *Adamnestia bizona* (A. Adams, 1850)

MODULIDAE P. Fischer, 1884
Modulus tectum (Gmelin, 1791) ..... Vol. 1. Pl. 94.

MONTACUTIDAE W. Clark, 1855

Barrimysia cumingii (A. Adams, 1856)..... Vol. 4. Pl. 1083.
Fronsella ohshimai Habe, 1958..... Vol. 4. Pl. 1083.
Salpocola tellinoides (Hanley, 1857)..... Vol. 4. Pl. 1083.

CHANGES AND REMARKS

***Salpocola tellinoides* (Hanley, 1857)**

New name for *Fronsella philippinensis* Habe & Kanazawa, 1981
WORMS follows in this the decision made by Huber (2015).

MURCHISONELLIDAE Casey, 1904

Murchisonella anabathron (Hedley, 1906) ..... Not yet documented.
Murchisonella cebuana Bandel, 2005 ..... Not yet documented.
Murchisonella columna (Hedley, 1907)..... Vol. 5. Pl. 1473.
Murchisonella curvistriata Peñas & Rolán, 2013 ..... Not yet documented.
Murchisonella declivata (Laseron, 1951)..... Not yet documented.
Murchisonella densistriata (Nomura, 1936) ..... Vol. 5. Pl. 1473.
Murchisonella dubia Peñas & Rolán, 2013..... Not yet documented.
Murchisonella hatienensis (Saurin, 1962)..... Not yet documented.
Murchisonella modesta Peñas & Rolán, 2013..... Vol. 5. Pl. 1473.
Murchisonella modestissima Peñas & Rolán, 2013..... Not yet documented.
Pseudoaclisina conica Peñas & Rolán, 2013 ..... Not yet documented.

MURICIDAE Rafinesque, 1815

Author: Vol. 2 – Roland Houart.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Aspella anceps (Lamarck, 1822) Vol. 5. Pl. 1474.
Aspella media Houart, 1987..... Vol. 2. Pl. 388.
Aspella producta (Pease, 1861) ..... Vol. 2. Pl. 388.
Aspella thomassini Houart, 1985..... Vol. 5. Pl. 1474.
Attiliosa caledonica (Jousseaume, 1881)..... Vol. 2. Pl. 380.
Attiliosa nodulifera (G. B. Sowerby II, 1841) ..... Vol. 2. Pl. 380.
Attiliosa ruthae Houart, 1996 ..... Vol. 2. Pl. 380.
Bedeva blosvillei (Deshayes, 1832) ..... Vol. 2. Pl. 394.
Chicomurex globus Houart, Moe & Chen, 2015 ..... Vol. 5. Pl. 1474.
Chicomurex gloriosus (Shikama, 1977) ..... Vol. 2. Pl. 368.
Chicomurex laciniatus (G. B. Sowerby II, 1841) ..... Vol. 2. Pl. 367.
Chicomurex problematicus (Lan, 1981) ..... Vol. 2. Pl. 367.
Chicomurex pseudosuperbus Houart, Moe & Chen, 2015 ..... Vol. 5. Pl. 1474.
Chicomurex superbus (G. B. Sowerby III, 1889) ..... Vol. 2. Pl. 367 & 368.
Chicoreus aculeatus (Lamarck, 1822)..... Vol. 2. Pl. 369.
Chicoreus akritos Radwin & D'Attilio, 1976 ..... Vol. 2. Pl. 369 & 370.
Chicoreus asianus Kuroda, 1942..... Vol. 2. Pl. 370.
Chicoreus axicornis (Lamarck, 1822) ..... Vol. 2. Pl. 370.
Chicoreus banksii (G. B. Sowerby II, 1841) ..... Vol. 2. Pl. 371.
Chicoreus brunneus (Link, 1807)..... Vol. 2. Pl. 372.

THE FAMILY MURICIDAE

In March 2011 appeared the first volume of "Fossil and Recent Muricidae of the World" by Merle, Garrigues & Pointier (here called MGP). The next volume was expected 3 years later but did not yet appear. This first volume is quite impressive in quality and we follow most of their systematic changes. Updates are indicated below for the species where changes occur, the book is referred to as MGP.
The generic changes in this family are tremendous and do not seem to stop. We are still far from a stabilization.

CHANGE OF GENUS

***The genus Vokesimurex* Petuch, 1994**

Remains confusing, we stick to the Houart view, but also believe that an extensive Iconographic work showing variation within each species is necessary. Possibly there are much more species involved than the ones grouped together in certain names today. I do not believe that *M. djarianiensis poppei* Houart, 1979 lives in the Philippines, despite the reference to this locality in MGP.

***Bedeva blosvillei* (Deshayes, 1832)**
The type species of *Bedeva* is "*Trophon hanleyi* Angas, 1867". The species "*blosvillei*" is much more closer in shape and texture to *T. hanleyi* than to *Lataxiena fimbriata,* Hinds, 1844, the type species of *Lataxiena* (as *Lataxiena lataxiena* Jousseaume, 1883). The latter species has a strongly sculpture shell of a very different type. We therefore do not follow Hylleberg & Kilburn (2003) in this matter, as WORMS does, and keep the genus "*Bedeva*" for *blosvillei*.

***Cytharomorula lefevreiana* (Tapparone Canefri, 1880)**
The former *Pascula lefevriana.* Following Houart (2013) and WORMS. Note that also the spelling of the species name has been corrected.

***Drupella margariticola* (Broderip, 1833)**
Correct name for *Ergalatax margariticola.* WORMS based this change likely on Claremont, Reid & Williams (2011).

***Drupina grossularia* (Röding, 1798)**
Correct genus for the former *Drupa grossularia.*

***Flexopteron poppei* (Houart, 1993)**
In Volume 2 as *Poirieria poppei.* Later changed in *Paziella poppei* (MGP). Now in *Flexopteron*, since the publication of Houart & Héros (2015) on the Muricidae from the western Indian Ocean.

***Flexopteron oliverai* (Kosuge, 1984)**
The former *Pazinotus oliverai*. This species changed genus several times, and it is found in the literature in *Muricopsis, Paziella, Pazinotus* and *Poirieria*. In *Flexopteron* since Bouchet, Héros, Lozouet & Maestrati (2008).

***Haustellum kurodai* f. *vicdani* Kosuge, 1980**
MGP have put *H. vicdani* as a subspecies from *H. kurodai.* The type locality of *H. kurodai* is the Arafura Sea, the type locality of *H. vicdani* is Sorsogon. Both are highly suspect. But it is occasionally difficult to distinguish *H. kurodai* from *H. vicdani*. So I rather go into the sense of MGP. We use the name *H. vicdani* for the purple colored *H. kurodai*, as a form name. On plate 3666, figs. 1 & 3 are *H. kurodai,* and figs. 2 are *H. kurodai f. vicdani.*

***Lataxiena cumella* (Jousseaume, 1898)**
The former *Thaisiella kochiana* G. B. Sowerby III, 1900. The Jousseaume name is the oldest name but was "forgotten" in recent literature. *Thaisiella kochiana* has been figured 4 times as we could find out. We follow WORMS.

***Mancinella alouina* (Röding, 1798)**
The former *Thais alouina.* We follow in this Claremont & All (2013), as does WORMS.

***Mancinella armigera* Link, 1807**
The former *Reishia armigera.* This species is found in the literature in the genera *Reishia, Purpura, Stramonita, Thais* and *Turbinella*. We now follow Claremont, Vermeij, Williams & Reid (2013) as does WORMS.

***Mancinella echinata* (Blainville, 1832)**
The former *Thais echinata.* We follow in this Claremont & All (2013), as does WORMS.

***Mancinella echinulata* (Lamarck, 1822)**
The former *Thais echinulata.* We follow in this Claremont & All (2013), as does WORMS.

***Mancinella grossa* (Houart, 2001)**
The former *Thais grossi.* We follow in this Claremont & All (2013), as does WORMS.

***Menathais intermedia* (Kiener, 1836)**
The former *Thais intermedia.* We follow in this Claremont & All (2013), as does WORMS.

***Menathais tuberosa* (Röding, 1798)**
The former *Thais tuberosa*. We follow in this Claremont & All (2013), as does WORMS.

***Morula ambrosia* (Houart, 1995)**
Bouchet & Houart (2015) have now placed *Habromorula* as a subgenus of *Morula*.

***Morula biconica* (Blainville, 1832)**
Bouchet & Houart (2015) have now placed *Habromorula* as a subgenus of *Morula*.

***Morula dichrous* (Tapparone Canefri, 1880)**
Bouchet & Houart (2015) have now placed *Habromorula* as a subgenus of *Morula*.

***Morula lepida* (Houart, 1995)**
Bouchet & Houart (2015) have now placed *Habromorula* as a subgenus of *Morula*.

***Morula spinosa* (H. Adams & A. Adams, 1853)**
Bouchet & Houart (2015) have now placed *Habromorula* as a subgenus of *Morula*.

***Neothais marginatra* (Blainville, 1832)**
The former *Semiricinula marginatra.* This species is another big traveler from genus to genus: in the literature we find it back in *Cronia, Drupa, Morula, Purpura, Semiricinula* and *Sistrum*. We now follow Claremont, Vermeij, Williams & Reid (2013) as does WORMS.

***Oppomorus purpureocinctus* (Preston, 1909)**
The former *Morula purpureocincta*. This since the article of Claremont, Houart, Williams & Reid (2012). See WORMS.

***Pterynotus aparrii* D'Attilio & Bertsch, 1980**

The former *Pterymarchia aparii*. *Pterymarchia* is now a subgenus of *Pterynotus* (MGP).

***Pterynotus barclayanus* (H. Adams, 1873)**
The former *Pterymarchia barclayana. Pterymarchia* is now a subgenus of *Pterynotus* (MGP).

***Pterynotus bibbeyi* (Radwin & D'Attilio, 1976)**
The former *Pterymarchia bibbeyi. Pterymarchia* is now a subgenus of *Pterynotus* (MGP).

***Pterynotus bipinnatus* (Reeve, 1845)**
The former *Pterymarchia bipinnata. Pterymarchia* is now a subgenus of *Pterynotus* (MGP).

***Pterynotus martinetanus* (Röding, 1798)**
The former *Pterymarchia martinetana*. *Pterymarchia* is now a subgenus of *Pterynotus* (MGP).

***Pterynotus martinetanus* forma *fenestratus* Dillwyn, 1817**
Technically it is difficult to distinguish the *P. fenestratus* from Dillwyn from the considerably smaller *P. martinetana*, but experienced conchologists have the gut-feeling that this is not even a form, but another valid species. The *P. m*. forma *fenestratus* is shown in Vol. 2 on plate 383, fig. 8. In the MGP book, these are the shells on plate 92 nrs. 8 to 14. We here put the *fenestratus* as a form. True, small and thin-shelled *P. martinetana* are usually caught on depths between 100 and 200 m. The form *fenestratus* lives between 15 and 60 m, usually in caves.

***Pterynotus miyokoae* (Kosuge, 1979)**
This species moved to *Timbellus* but in WORMS is now back into *Chicoreus* (*Chicopinnatus*) and is accepted as an alternate representation. We feel that this species is much closer to and better placed in the genus *Pterynotus* and leave it as such.

***Pterynotus tripterus* (Born, 1778)**
The former *Pterymarchia triptera. Pterymarchia* is now a subgenus of *Pterynotus* (MGP).

***Reishia bitubercularis* (Lamarck, 1822)**
The former *Thais bitubercularis.* We follow in this Claremont & All (2013), as does WORMS.

***Semiricinula nodosa* (Hombron & Jacquinot, 1841)**
The former *Orania nodosa.*

***Siratus pliciferoides* (Kuroda, 1942)**
The former *Chicoreus pliciferoides.* We follow in this Houart (2014), as does WORMS.

***Tenguella granulata* (Duclos, 1832)**
The former *Morula granulata*. The genus *Tenguella* now houses *T. ceylonica, T. ganulata, T. marginalba* and *T. musiva.* This since the article of Claremont, Houart, Williams & Reid (2012). See WORMS.

***Tenguella musiva* (Kiener, 1835)**
The former *Morula musiva*. See also *M. granulata* for the change of genus.

***Thalessa aculeata* (Deshayes, 1844)**
The former *Thais aculeata.* We follow in this Claremont & All (2013), as does WORMS.

***Thalessa virgata* (Dillwyn, 1817)**
The former *Thais virgata.* We follow in this WORMS.

***Timbellus concavopterus* (Kosuge, 1980)**
Was in the genus *Pterynotus*, now in *Timbellus*. (MGP)

***Timbellus vespertilio* (Kuroda in Kira, 1959)**
Was in the genus *Pterynotus*, now in *Timbellus*. (MGP)

CHANGES AND REMARKS

***Chicomurex problematicus* (Lan, 1981)**
The correct spelling for "*C. problematica"*. We keep this as a species, different from *C. superbus* at present, until further "clear" publications on the subject appear.

***Chicomurex gloriosus* (Shikama, 1977)**
This is the correct name for the former *C. venustulus* (Rehder & Wilson, 1975) of authors. The real *C. venustulus* seems to be an endemic from the Marquesas Islands.

***Cytharomorula dollfusi* (Lamy, 1938)**
This is the former *C. paucimaculata* (G. B. Sowerby III, 1903). Corrected in a small revision in Novapex (2013) by R. Houart. The real *C. paucimaculata* is restricted to Japan.

***Drupa ricinus* (Linnaeus, 1758)**
The correct spelling for the former *"Drupa ricina"*.

***Favartia tetragona* (Broderip, 1833)**
The correct spelling for the former "*Favartia tetragonus*".

***Pterynotus alatus* (Röding, 1798)**
The former *P. pinnatus.* When searching the literature we find this species indeed as *P. pinnatus* and as *P. alatus.* However, the name *P. pinnatus* is used twice as much as *P. alatus*. But of course, *P. alatus* is an older name and has

priority. We therefore change into *P. alatus*.

***Taurasia striata* (Quoy & Gaimard, 1833)**

The former *Thais buccinea*. For some reason *Thais buccinea* has no author and date in WORMS, but in the literature we found 12 records with all as author Deshayes, half of these with "Deshayes, 1844). The name *T. striata* has been proposed for this species by Claremont & All (2013), followed in this by WORMS.

***Vokesimurex dolichourus* (Ponder & Vokes, 1988)**

Wrongly spelled as *V. dolichorus*.

MURICIDAE - CORALLIOPHILINAE Chenu, 1859

Author: Vol. 2 – Marco Oliverio.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

THE SUBFAMILY CORALLIOPHILINAE

This former family which mainly consists of parasites on Corals – from where the name "lovers of coral – Coralliophilidae" has now been downgraded to a subfamily of the MURICIDAE Rafinesque, 1815.

NOT FOUND IN WORMS

***Babelomurex purus* Kosuge, 1985**

This is an extremely rare species, as we could only see the holotype figured: in Bulletin of the Institute of Malacology 2(2-3) and in Kosuge & Suzuki (1985).

***Babelomurex squalida* Kosuge, 1985**

A rare deep water species, described in the Bulletin of the Institute of Malacology 2(2-3) and refigured later in Kosuge & Suzuki (1985). Uncommon around 200 m deep in the southern Bohol Sea.

Coralliophila turrita G. B. Sowerby III, 1888

This species has been figured by Kaicher, card nr. 4028, the holotype from Mauritius. By Kosuge & Suzuki (1985), a large shell from Mauritius. By Poppe in PMM, Vol. 4 (2011), a shell from Balicasag, almost a copy of the Kaicher holotype.

CHANGE OF GENUS

***Coralliophila fearnleyi* (Emerson & D'Attilio, 1965)**

The former *Babelomurex fearnleyi.* We agree with Oliverio (2008) and WORMS that this is a better genus for this Coralliophilid.

***Coralliophila monodonta* (Blainville, 1832)**

The former Quoyula *monodonta.* WORMS follows in this Oliverio (2008) who uses the genus *Coralliophila* for this speices which is most often found in *Quoyula* in the literature. It is with some reluctance we follow this.

***Mipus* cf. *M. fusiformis* (Martens, 1902)**

The former *Babelomurex* cf. *B. fusiformis.* We agree with Kilburn, Marais & Marais (2010) that this is a better genus for this Coralliophilid.

***Latiaxis latipinnatus* (Azuma, 1961)**

Oliverio (2008) placed this species is *Babelomurex* and WORMS follows in this. We do not agree as the type species of Latiaxis is *L. mawae*, a not so far away cousin species of *L. latipinnatus.*

CHANGES AND REMARKS

Babelomurex cuspidifera (Dall, 1924)

Oliveria (2008) placed this species in synonymy with *Babelomurex couturieri* (Jousseaume, 1898). I do not know from where this idea came. We now got one shell from Zamboanga, figured earlier in our coffee-table book 1000 Shells (2014, Poppe, Poppe & Tagaro), which fits perfectly the holotype that one can see online on the homepage of the Smithsonian. The shell of *B. cuspidifera* is much broader and differently shaped when compared to *B. couturieri.*

***Babelomurex michikoae* Shikama, 1978**

Our former *B. indicus* forma *michikoae.* WORMS here follows Kilburn, Marais & Marais (2010) who put *L. michikoae* in the synonymy of *B. indicus*. The holotypes of B. indicus and B. michikoae have both been figured in Higo, Callomon & Goto (2001) in the same book. They are substantially different from each other and definitely good species. After having studied more material and the figures of the hootypes, we now consider B. michikoae as a valid species.

***Coralliophila bathus* Oliverio, 2008**

Figured on Plate 415, fig. 5. This shell is not *C. bulbiformis* (Conrad, 1837).

***Coralliophila ovoidea* (Kosuge, 1985)**

The former *Mipus ovoidea.* We follow in this Severns (2011) and WORMS.

***Hirtomurex isshikiensis* (Shikama, 1971)**

The shells on Pl. 409, figs; 13 and 14 are not *B. indicus* (E. A. Smith, 1899), but *H. isshikiensis.*

MYOCHAMIDAE Carpenter, 1861

Myadora compressa E. A. Smith, 1881 ..... Vol. 4. Pl. 1055 & Vol. 5. Pl. 1482.

CHANGES AND REMARKS

***Myadora compressa* E. A. Smith, 1881**

WORMS follows in this Huber (2010) who places 4 different former *Myadora* in synonymy of *M. compressa*. After checking the literature, we agree with him that *M. teramachii* is indeed a synonym of *M. compressa*. We figure one more *M. compressa* in Vol. 5, with a different and more pronounced sculpture compared to the one in Vol. 4 (as *M.* cf. *M. teramachii*).

MYTILIDAE Rafinesque, 1815

Author: Vol. 3 – For the subfamily Lithophaginae: Karl Kleemann.

Adipicola crypta (Dall, Bartsch & Rehder, 1938) ..... Vol. 5. Pl. 1482.
Amygdalum peasei (Newcomb, 1870) ..... Vol. 3. Pl. 948.
Amygdalum soyoae Habe, 1958 ..... Vol. 3. Pl. 948.
Arcuatula japonica (Dunker, 1857) ..... Vol. 3. Pl. 948.
Arcuatula perfragilis (Dunker, 1857) ..... Vol. 5. Pl. 1482.
Arenifodiens vagina (Lamarck, 1819) ..... Vol. 3. Pl. 944.
Botula cinnamomea (Gmelin, 1791) ..... Vol. 3. Pl. 944.
Brachidontes erosus (Lamarck, 1819) ..... Vol. 3. Pl. 946.
Brachidontes evansi (E. A. Smith, 1903) ..... Vol. 5. Pl. 1482.
Brachidontes setiger (Dunker, 1857) ..... Vol. 3. Pl. 946.
Dacrydium nipponicum Okutani, 1975 ..... Vol. 3. Pl. 948.
Gregariella difficilis (Deshayes, 1863) ..... Vol. 3. Pl. 946.
Jolya elongata (Swainson, 1821) ..... Vol. 3. Pl. 944.
Jolya rhomboidea (Reeve, 1857) ..... Vol. 5. Pl. 1482.
Lioberus ligneus (Reeve, 1858) ..... Vol. 3. Pl. 944.
Lithophaga canalifera (Hanley, 1843) ..... Vol. 3. Pl. 942.
Lithophaga curta Lischke, 1874 ..... Vol. 3. Pl. 943.
Lithophaga divaricalx Iredale, 1939 ..... Vol. 3. Pl. 942.
Lithophaga hanleyana (Reeve, 1857) ..... Vol. 3. Pl. 943.
Lithophaga laevigata (Quoy & Gaimard, 1835) r ..... Vol. 3. Pl. 942.
Lithophaga lima (Lamy, 1919) ..... Vol. 3. Pl. 943.
Lithophaga malaccana (Reeve, 1857) ..... Vol. 3. Pl. 943.
Lithophaga mucronata (Philippi, 1846) ..... Vol. 3. Pl. 942.
Lithophaga nasuta (Philippi, 1846) ..... Vol. 3. Pl. 942.
Lithophaga obesa (Philippi, 1847) ..... Vol. 3. Pl. 941.
Lithophaga pulchra Jousseaume, 1919 ..... Vol. 3. Pl. 942.
Lithophaga simplex Iredale, 1939 ..... Vol. 3. Pl. 942.
Lithophaga teres (Philippi, 1846) ..... Vol. 3. Pl. 941.
Lithophaga zitteliana Dunker, 1882 ..... Vol. 3. Pl. 942.
Modiolatus cf. *M. flavidus* (Dunker, 1857) ..... Vol. 3. Pl. 944.
Modiolatus flavidus (Dunker, 1857) ..... Vol. 3. Pl. 944.
Modiolus auriculatus (Krauss, 1848) ..... Vol. 3. Pl. 946.
Modiolus philippinarum (Hanley, 1843) ..... Vol. 3. Pl. 945.

CHANGE OF GENUS

***Arenifodiens vagina* (Lamarck, 1819)**

Our former *Modiolus vaginus*. WORMS follows in this Huber (2010).

***Perna viridis* (Linnaeus, 1758)**

Our former *Chloromytilus viridis* (a misspelling of *Choromytilus*). This species is now in the genus *Perna*. Synonyms are *M. opalus* Lamarck, 1819 and *M. smaragdinus* Gmelin, 1791. WORMS follows in this Wood & All (2007) who made a molecular phylogeny of the genus *Perna*.

CHANGES AND REMARKS

***Botula cinnamomea* (Gmelin, 1791)**

Contains also our former *B. silicula* and *B.* cf. *silicula*. The experts of WORMS, among these M. Huber (2015) have put *Botula silicula* and our *Botula* cf. *B. silicula* in synonymy with *B. cinnamomea*. Checking all images we have of these "species", we can agree with that.

***Dacrydium nipponicum* Okutani, 1975**

The former *Dacrydium minimum*. WORMS bases this synonymy on an article of Kamenev (2013) who studies the bivalves of the bathyal and abyssal depths of the Sea of Japan.

***Gregariella difficilis* (Deshayes, 1863)**

The former *Modiolus difficilis*. Change of genus following Huber (2010).

***Jolya elongata* (Swainson, 1821)**

The correct spelling for our former "*Jolya elongates*".

NACELLIDAE Thiele, 1891

CHANGES AND REMARKS

***Cellana articulata* (Reeve, 1855)**

This is the shell on Plate 1 fig. 4, as *C radiata radiata* (Born, 1778).
Also the shells on Plate 4 figs. 3 and 5, as *Patelloida striata* Quoy & Gaimard, 1834.

WORMS considers *Patella articulata* Reeve, 1855 as a synonym of *Cellana cylindrica* (Gmelin, 1791), while we think that the latter this is a valid species.

***Cellana enneagona* (Reeve, 1854)**

These are the shells on Plate 4 figs. 4 and 6, as *Patelloida striata* Quoy & Gaimard, 1834.

***Cellana grata* (Gould, 1859)**

This is the shell on Plate 1 fig. 2, as *C radiata radiata* (Born, 1778).

***Cellana lentiginosa* Reeve, 1855**

This is the shell on Plate 3 figs. 3, as *Patelloida pygmaea* Dunker, 1861

***Cellana radiata* (Born, 1778)**

In WORMS, *Cellana radiata* (Born, 1778) is split into two subspecies: the Indian ocean *Cellana radiata capensis*, common on the Indian Ocean coast from Mozambique south to South Africa, and the Indo-Pacific *Cellana radiata radiata.* This differs from the opinion of Ponder (1973) in Indo-Pacific mollusca who split *C. radiata* in 4 subspecies: *radiata* s.s., *orientalis* (Pilsbry, 1891), *enneagona* (Reeve, 1854) and *capensis* (Gmelin, 1791). We think that *C. enneagona* and *C. capensis* are valid species and agree with WORMS that *orientalis* is a synonym of *radiata* proper. So, we maintain the name *C. radiata* as first published.

As WORMS does not accept form names, scalata, aster and luzoni, all from Reeve, 1855 they are not mentioned there. *Cellana radiata* is on Plate 1 Figs. 1-8 but not Figure 2 which is *Cellana grata* (Gould, 1859) and figure 4 which is *Cellana articulata* Reeve, 1855.

***Cellana radiata* forma *scalata* (Reeve, 1855)**

Plate 1 Shell nr. 1 corresponds to the type of Reeve. This is a color form.

***Cellana radiata* forma *aster* (Reeve, 1855)**

Plate 1 Shell nr. 3 corresponds to the type of Reeve. This is a color form.

***Cellana radiata* forma *luzonica* (Reeve, 1855)**

Plate 1 Shell nr. 5 corresponds to the type of Reeve. This is a color form.

NASSARIIDAE Iredale, 1916 (1835)

Author: Vol. 2 – Jean-Claude Martin.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

THE FAMILY NASSARIIDAE

The content of the Indo-Pacific NASSARIIDAE changed considerably following the 2016 article of Galindo, Puillandre, Utge, Lozouet & Bouchet on the phylogeny and systematics of the NASSARIIDAE. The following genera moved from BUCCINIDAE to NASSARIIDAE: *Antillophos, Engoniophos, Phos, Nassaria, Tomlinia* and *Anentome*.
In 2017, Galindo, Kool & H. Dekker published part 3 of the review of the *Nassarius pauperus* group, and they revived *Reticunassa* Iredale, 1936. Of the 6 new species they described, 3 also live in the Philippines.

NOT FOUND IN WORMS

***Nassarius mamillatus* (Preston, 1907)**

CHANGE OF GENUS

***Reticunassa paupera* (Gould, 1850)**

Correct genus and correct spelling for the former *"Nassarius pauperus."*

CHANGES AND REMARKS

***Cyllene japonica* Pilsbry, 1904**

WORMS follows in this Cernohorsky, and has placed *C. japonica* in the synonymy of *C. concinna* A. Adams, 1851, despite the fact that the *C. japonica* has been named by the excellent conchologist Pilsbry. *C. japonica* is a different species: the lectotype of *C. concinna* has strong ribs all over the dorsum, even the shell has been dead collected. The aperture in the lectotype of *C. concinna* is small compared to the aperture in *C. japonica*. The spire is larger in *C. concinna* and the whorls are much more convex. The type of *C. japonica* has been figured by Higo, Callomon & Goto (2001). That shell has only three spiral grooves below the suture and is smooth for the rest. For all these reasons we maintain *C. japonica* as a valid species.

***Cyllene oblonga* Schepman, 1911**

WORMS accepts this name as a synonym of *C. pulchella*, an action of the mega-lumping attitude of Cernohorsky in his 1984 work. We consider this a valid species, sympatric with another deep water species: C. sibogae, described by the

same author Schepman.

***Cyllene sibogae* Schepman, 1911**

The author Schepman, 1911 should be without brackets.

***Nassaria amboynensis* (Watson, 1881)**

The author with brackets.

***Nassaria bitubercularis* (A. Adams, 1855)**

Is no longer a subspecies of N. acuminata but a species: *N. bitubercularis.* Correct date is 1855, not 1851.

***Nassarius canaliculatus* (Lamarck, 1822)**

Based on Cernohorsky (1984) WORMS follows the opinion that *N. canaliculatus* is a synonym of *N. siquijorensis* (A. Adams, 1852). Both the shells figured on plate 355 correspond very well to the black and white figures in Cernohorsky, and it is clear that these are different species. Recent literature confirms this generally well accepted opinion – two different species – and we find at once 23 *N. siquijorensis* figured versus also 11 *N. canaliculatus*.

***Nassarius cinnamomea* (A. Adams, 1852)**

New spelling for the former "*Nassarius cinnamomeus"*.

***Nassarius celebensis* (Schepman, 1907)**

Correct date is 1907 not 1911.

***Nassarius cinnamomea* (A. Adams, 1852)**

Our former *Nassarius politus* Marrat, 1880Vol. 2. Pl. 354. WORMS declares "*N. polita*" a synonym of *N. comptus* (A. Adams, 1852). Judging after the drawing of Reeve, we think this is possibly correct. The shell we figured as "*N. politus*" has been determinated based on a drawing of Drivas & Maurice (1988), which we think is a wrong identification. Both our shells, and likely also the Drivas & Maurice shell belong to *N. cinnamomea* (A. Adams, 1852). The holotype of *N. cinnamomea* is a dead shell from Dumaguete Negros, which lost the columellar dent and the protoconch and which has a hole. It is a classic "ex-hermit" specimen. But we agree with Okutani (2000) and Kase & Kinjo (1996) that the living shell has this columellar tooth. So, we use this name for our figure 15.

***Nassarius comtessei* (Iredale, 1929)**

WORMS follows in this Cernohorsky (1984) blindly and puts this very distinct species in synonymy with *N. conoidalis*. Cernohorsky however figured the lectotype of *N. conoidalis* (Deshayes, 1832) from the 2cole des Mines on Plate 17 and there we see a shell with a very fine reticulate sculpture, substantially different from what we see in the holotype of *N. comtessei*, shown on the same plte, figure 9. The *N. conoidalis*, as interpreted by Cernohorsky is an extensive group of species, and represents even possibly a distinct genus within the family NASSARIIDAE.

***Nassarius fuscus* (Hombron & Jacquinot, 1848)**

An older name with priority over the more recent *Nassarius mitralis* A. Adams, 1852.

***Nassarius gerstenbrandt*i Preston, 1908**

WORMS follows in this Cernorhorsky (1984) who puts this species in synonymy with N. ecstilbus (Melvill & Standen, 1896). The type of N. ecstilbus is much bigger than N. gerstenbrandti (about one third bigger), and has a small protoconch, while N. gerstenbrandti has a big protoconch. Both types have been shown by Cernohorsky (1984). Apart from the large protoconch whorls, the gerstenbrandti has also fewer and stronger axial ribs compared to N. ecstilbus. So, we maintain gerstenbrandti as a valid species.

***Nassarius graniferus* (Kiener, 1834)**

Correct spelling for "*N. granifer*".

***Nassarius graphiterus* (Hombron & Jacquinot, 1848)**

The correct name for the former N. luridus (Gould, 1850). The Hombron & Jacquinot name is indeed two years older. This is a major change as "N. luridus" has been widely accepted in 20th century literature for this species.

***Nassarius gruneri* forma *fragum* Hombron & Jacquinot, 1848**

Figured on plate 355 of Vol. 2 as *Nassarius fragum.* WORMS puts *N. fragum* in synonymy with *N. gruneri (*Dunker, 1846). We can agree with that. The supposed syntype of *N. gruneri* as shown by Cernohorsky (1984) is much shorter in shape than the shell we figured. Our shell perfectly fits with the elongate type of *N. gruneri,* described as *N. fragum* by Hombron & Jacquinot in 1848. The type of *N. fragum* has been shown also by Cernohorsky (1984) where he claims it measures 19.1 mm. The same specimen shown online by MNHN measures 18.5 mm. We use the name "fragum" as a form name to distinguish this particular type of *N. gruneri* which is possibly even a subspecies.

***Nassarius haldemani* (Dunker, 1847)**

Correct spelling for "*N. haldemanni*".

***Nassarius idyllius* (Melvill & Standen, 1901)**

Has priority over the name "*Nassarius ovoideus* (Locard, 1886) which is the correct spelling for the former *N. ovoidea.*

***Nassarius kooli* Dekker & Dekkers, 2009**

Wrongly figured as *Nassarius siquijorensis* (A. Adams, 1852) in Vol. 2. plate 359 fig. 13, refigured in the Addendum in Vol. 4, Pl. 1295.

***Nassarius macrocephalus* (Schepman, 1911)**

Correct spelling for *N. macrocephala*.

***Nassarius marratii* (E. A. Smith, 1876)**

Correct spelling for *N. marrati*.

***Nassarius nigrus* (Hombron & Jacquinot, 1848)**

An older name for what we called H. corticata. We think this is correct. These are the shells figured on Plate 352, nrs. 4-5-6. We think the number 7 is not this species.

***Nassarius ocellatus* Kool & Galindo, 2014**

The correct name for the species we first figured as *N. multigranosus* (Dunker, 1847). The real *N. multigranosus* is slightly different;

***Nassarius olivaceus* forma *approximata* Pease, 1868**

Also the shell figured in Vol. 2, Pl. 357 nr. 11 belongs to the form *approximata.*

***Nassarius reeveanus* (Dunker, 1847)**

In the literature this species is treated as a megaspecies, and it unites a number of variants, mixed up all together. Many of the variants are in fact valid species. So are what we call the "form *zonalis*" and the "form *luctuosa*" most probably valid species. A revision of this group is suggested. We maintain the nomenclature "as is" for this species.

***Nassarius sinusigerus* (A. Adams, 1852)**

Cernohorsky placed *Nassarius beata* Gould, 1860 in synonymy with *N. sinusigerus*. Both the types of these species were later figured by Higo, Callomon & Goto (2001). This escaped our attention as it is very visible that both are the same species. WORMS followed this correct opinion. We could not determinate the shell we called N. beatus on Plate 353 in Volume 2, figure 5. This specimen we dived in northern Bohol in the same very muddy and dark biotope of *Conus insculptus.* It is possibly an undescribed species.

***Nassarius smithii* (A. Adams, 1852)**

This species is not the same as *N. concinnus* (Powys, 1835). The latter is much bigger and has a different dentition inside the aperture. The shell is also thinner. The lectotype of "*Nassa smithii*" has been shown by Cernohorsky (1984). He put this taxon in synonymy with *N. concinnus*, conform with his lumping habits. WORMS followed that opinion, but we do not and so did also not Okutani (2000).

***Nassarius unicolor* (Hombron & Jacquinot, 1848)**

The correct name for *Nassarius micans* (A. Adams, 1852), as it has priority with 4 years.

***Nassaria wanneri visayensis* Fraussen & Poppe, 2007**

Nassaria wanneri visayensis Fraussen & Poppe, 2007 is no longer a subspecies but a valid species: *Nassaria visayaensis.*

***Phos textus* (Gmelin, 1791)**

The correct spelling for the former "*Phos textum".*

NATICIDAE Guilding, 1834

Author: Vol. 1 – Michael Hollmann.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

MOVES BETWEEN FAMILIES

Cernina fluctuata (G. B. Sowerby I, 1825) has been moved to the family AMPULLINIDAE Cossmann, 1919. It is apparently the only survivor of this vast family of which all other members are known as fossils. *Cernina fluctuata* is endemic to Palawan and the Cuyo Islands. It is not found elsewhere in the Philippines.

CHANGE OF GENUS

Naticarius alapapilionis (Röding, 1798)

The former *Glyphepithema alapapilionis*. The genus *Glyphepithema* is apparently a synonym of the genus *Natica.*

***Polinices albumen* (Linnaeus, 1758)**

Was in the genus *Neverita*.

***Tanea tosaensis* (Kuroda, 1961)**

Was in the genus *Notocochlis*.

CHANGES AND REMARKS

***Natica arachnoidea* (Gmelin, 1791)**

Also the shells on Plate 190, figs. 10 belong to this species.

***Polinices flemingianus* (Récluz, 1844)**

On p. 486 delete *"*Type species of *Polinices* Montfort, 1810*"*. This is a mistake, the type species of *Polinices* is *Polinices albus* Montfort, 1810, by original designation.

NAUTILIDAE Blainville, 1825

Author: Vol. 4 – Guido Poppe & Roland De Prins.

THE FAMILY NAUTILIDAE

The NAUTILIDAE are considered living fossils and as such the taxonomy and nomenclature of this small group of species has been mistreated in the interest of commercial and professional goals of the people and nations involved. We do not follow these temporary creations of genera and species and stick to the basic view of three living species, with a number of local variants and/or subspecies.

NOT FOUND IN WORMS

***Nautilus pompilius* forma *suluensis* Habe & Okutani, 1988**

The "suluensis" is a dwarf race of *N. pompilius* that occurs in the waters around Parawan Island in the Sulu Sea. The author of this book has send middlemen to Parawan Island who came back indeed with a fairly large number of this dwarf form. Apart from the size and slightly more purplish color pattern, nothing distinguishes the *suluensis* from typical *N. pompilius* which has occasionally also local variants in the Philippines with a similar purple hue in some other areas. Habe and Okutani described the *suluensis* as a subspecies in the journal Venus. This may be indeed a valid subspecies, as our suppliers did not bring in normal sized pompilius from that area. But they can also have chosen on purpose the small *pompilius*. We do not know and prefer to use the more prudent "form" condition for the *suluensis*.

CHANGES AND REMARKS

***Nautilus pompilius* forma *repertus* Iredale, 1944**

We handled this giant form as a valid species "*Nautilus repertus"* in Volume 4. WORMS uses *"*nomen dubium". Our experience is that this is a typical type of Nautilus pompilius, large and slightly differently colored which occurs from the Northwestern Australian coast over Indonesia all the way to the southern Philippines. In the early years oft the 1990's, the first author has viewed dozens of shells on Bali where fishermen catched these together with N. scrobiculatus. Earlier he could view dozens in Port Hedland, northern Western Australia. These were also brought in by fishermen but could have been caught as far offshore as Scott Reef, an area where at that time there was intensive dredging below 400

m deep. The repertus is possibly a southern subspecies of N. pompilius, but again, we prefer to use the "form" status at present.

Nautilus scrobiculatus (Lightfoot, 1786)

We join this species to the Philippine fauna as we were shown two specimen caught on the northwest corner of Siquijor Island in very deep water by tangle net fishermen.

NEILONELLIDAE Schileyko, 1989

Neilonella dubia Prashad, 1932 ..... Vol. 3. Pl. 924.
Neilonella japonica Okutani, 1962 ..... Vol. 3. Pl. 924.
Neilonella soyoae Habe, 1958 ..... Vol. 3. Pl. 924.

NERITIDAE Rafinesque, 1815

Author: Vol. 1 – Tom Eichhorst.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Clithon bicolor (Récluz, 1843) ..... Vol. 5 Pl. 1495.
Clithon castanea (Hombron & Jacquinot, 1854) ..... Vol. 1.
Clithon chlorostomum (G.B. Sowerby I, 1833) ..... Vol. 1. Pl. 78.
Clithon circumvolutum (Récluz, 1843) ..... Vol. 5 Pl. 1495.
Clithon corona (Linnaeus, 1758) ..... Vol. 1. Pl. 78.
Clithon faba (G. B. Sowerby I, 1836) ..... Vol. 5 Pl. 1495.
Clithon leachii (Récluz, 1841) ..... Vol. 1. Pl. 85.
Clithon mertoniana (Récluz, 1843) ..... Vol. 5 Pl. 1496.
Clithon oualaniense (Lesson, 1831) ..... Vol. 1. Pl. 78.
Clithon parvulum (Le Guillou, 1841) ..... Vol. 1. Pl. 85.
Clithon sowerbianum (Récluz, 1843) ..... Vol. 5 Pl. 1497.
Clithon squamosa (Récluz, 1843) ..... Not yet documented.
Clithon squarrosum (Récluz, 1843) ..... Vol. 5 Pl. 1497 & 1498.
Neripteron siquijorense (Récluz, 1843) ..... Vol. 1. Pl. 79.
Neripteron subauriculatum (Récluz, 1843) ..... Vol. 5 Pl. 1498.
Neripteron violaceum (Gmelin, 1791) ..... Vol. 1. Pl. 79.
Nerita albicilla Linnaeus, 1758 ..... Vol. 1. Pl. 79.
Nerita antiquata Récluz, 1841 ..... Vol. 1. Pl. 79.
Nerita balteata Reeve, 1855 ..... Vol. 4. Pl. 1296., Add. 1.
Nerita balteata forma *auriculata* Reeve, 1855 ..... Vol. 1. Pl. 85.
Nerita chamaeleon Linnaeus, 1758 ..... Vol. 1. Pl. 79.
Nerita costata Gmelin, 1791 ..... Vol. 1. Pl. 80.
Nerita exuvia Linnaeus, 1758 ..... Vol. 1. Pl. 80.
Nerita grayana Récluz, 1844 ..... Not yet documented.
Nerita helicinoides Reeve, 1855 ..... Vol. 1. Pl. 80.
Nerita histrio Linnaeus, 1758 ..... Vol. 1. Pl. 80 & 82.
Nerita insculpta Récluz, 1841 ..... Vol. 1. Pl. 80.
Nerita litterata Gmelin, 1791 ..... Vol. 1. Pl. 81.
Nerita nigerrima Dillwyn, 1817 ..... Vol. 1. Pl. 81.
Nerita olivaria Le Guillou, 1841 ..... Vol. 1. Pl. 85.
Nerita planospira Anton, 1838 ..... Vol. 1. Pl. 81.

THE FAMILY NERITIDAE

In 2016 appeared a majestic book "NERITIDAE of the World Volume One" from the hand of Thomas E. Eichhorst, author on the NERITIDAE in our Volume I. We did not yet compare the content of that book with the shells figured in our Volume I but will do so befor the publication of Volume 6, so that eventual discrepancies can be solved at that moment. In the meantime we compare and eventually adapt our nomenclature to the listings of WORMS.

NOT FOUND IN WORMS

***Clithon squamosa* (Récluz, 1843)**
***Neritina* cf. *powisiana* (Récluz, 1843)**
***Neritodryas cornea* (Linnaeus, 1758)**
***Neritodryas dubia* (Gmelin, 1791)**
***Vittina pulchella* (Busch, 1872)**

Some of the *Clithon*, *Neritodryas* and *Vittina* species are not in WORMS. For such species it is indeed difficult to judge if they are either fresh, brackish or marine. WORMS is limited to marine species, but will often include brackish water species (for example *Neripteron subauriculatum*).

CHANGES AND REMARKS

***Clithon castaneum* (Hombron & Jacquinot, 1854)**
The correct spelling for the former *"Clithon castaneus"*.
***Clithon chlorostomum* (G.B. Sowerby I, 1833)**
The correct spelling for the former *"Clithon chlorostomus"*.
***Clithon oualaniense* (Lesson, 1831)**
The correct spelling for the former *"Clithon oualaniensis"*.
***Clithon parvulum* (Le Guillou, 1841)**
The correct spelling for the former *"Clithon parvulus"*.
***Neripteron siquijorense* (Récluz, 1843)**
The correct spelling for the former *"Neripteron siquijorensis"*.

***Neripteron violaceum* (Gmelin, 1791)**
The correct spelling for the former *"Neripteron violaceus"*.
***Nerita striata* Burrow, 1815**
Eichhorst now uses the older name *N. striata* for the shells we figured as *Nerita aurantia* Récluz, *1842*
***Nerita winteri* Philippi, 1844**
Eichhorst now uses the older name *N. winteri* for the shells we figured as *Nerita erubescens Reeve, 1855.*

NERITILIIDAE Schepman, 1908
Neritilia cavernicola Kano & Kase, 2004 ..... Vol. 1. Pl. 77.
Pisulina adamsiana G. Nevill & H. Nevill, 1869..... Vol. 1. Pl. 77.
Pisulina maxima Kano & Kase, 2000..... Vol. 1. Pl. 77.
Pisulina tenuis Kano & Kase, 2000..... Vol. 1. Pl. 77.

NERITOPSIDAE Gray, 1847
Neritopsis radula (Linnaeus, 1758)..... Vol. 1. Pl. 86.

NEWTONIELLIDAE Korobkov, 1955
Ataxocerithium abnormale (G. B. Sowerby III, 1903).....Vol. 5.

NIERSTRASZELLIDAE Sirenko, 1992
Author: Vol. 4 – Bruno Anseeuw.

Nierstraszella lineata (Nierstrasz, 1905)..... Vol. 4. Pl. 1205.

NOETIIDAE Stewart, 1930
Arcopsis sculptilis (Reeve, 1844) ..... Vol. 3. Pl. 936.
Estellacar saga Iredale, 1939 ..... Vol. 3. Pl. 936.
Striarca pisolina (Lamarck, 1819) .....Vol. 5. Pl. XXX.
Striarca zebuensis (Reeve, 1844) ..... Vol. 3. Pl. 936.
Verilarca bivia Iredale, 1939..... Vol. 5. Pl. 1499.
Verilarca fausta (Habe, 1951) ..... Vol. 3. Pl. 936.
Verilarca sinensis (Thiele & Jaeckel, 1931) .....Vol. 5. Pl. XXX.

MOVES BETWEEN FAMILIES
In the past we were suspicious about the splitting of ARCIDAE and NOETIIDAE. Recent molecular studies confirmed that it concerns two different species, we therefore adapt the modern view and place the following genera in NOETIIDAE: *Arcopsis, Congetia, Didimacar, Estellacar, Mulinarca, Noetia, Noetiella, Quadrilatera, Ribriarca, Sheldonella, Stenocista, Striarca and Verilarca*. 4 of these have been discovered in the Philippines already. The studies were carried out by Combosch D.J. & Giribet G. (2016).
Of the 7 Philippine NOETIIDAE, 4 species were in Volume 3 in ARCIDAE in the past.

CHANGES AND REMARKS
***Verilarca bivia* Iredale, 1939**
The shell shown by Huber (2010) is not the same species as the *Arcopsis bivia* of Lamprell & Healy (1998). It is also not the same species as the *Striarca sinensis* as figured by Habe & Kosuge (1996). We follow the latter and determinated our

sinensis based on that figure. The *bivia* as shown in modern works concerns two species: a confusing situation.

NYSTIELLIDAE Clench & Turner, 1952.

Iphitus boucheti Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1501.
Iphitus escondida Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1501.

NUCINELLIDAE H. E. VOKES, 1956

Huxleyia sulcata A. Adams, 1860 ..... Vol. 3. Pl. 923 & Vol. 5. Pl. 1499.
Nucinella boucheti La Perna, 2005 ..... Not yet documented.
Nucinella giribeti Glover & Taylor, 2013 ..... Not yet documented.
Nucinella surugana Matsukuma, Okutani & Tsuchi, 1982 ..... Vol. 5. Pl. 1499.

NUCULANIDAE H. Adams & A. Adams, 1858 (1854)

Lamellileda soyomaruae (Okutani, 1962) ..... Vol. 5. Pl. 1499.
Nuculana confusa (Hanley, 1860) ..... Vol. 5. Pl. 1499.
Nuculana novaeguineensis (E. A. Smith, 1885)..... Vol. 3. Pl. 924.
Nuculana sematensis Suzuki & Ishizuka, 1943 ..... Vol. 5. Pl. 1500.
Nuculana sufficientia Poppe & Tagaro, 2016..... Vol. 5. Pl. 1500.
Propeleda conceptionis (Dall, 1896) ..... Vol. 5. Pl. 1500.

NUCULIDAE Gray, 1824

Acila jucunda (Thiele & Jaeckel, 1931) ..... Vol. 5. Pl. 1500.
Ennucula cumingii (Hinds, 1843)..... Vol. 3. Pl. 923.
Ennucula niponica (E. A. Smith, 1885)..... Vol. 3. Pl. 923.
Nucula crystallina Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1500.
Nucula paulula A. Adams, 1856 ..... Vol. 3. Pl. 923.
Nucula trigonica Lan & Lee, 2001 ..... Vol. 3. Pl. 923.

OCTOPODIDAE d'Orbigny, 1840

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Abdopus abaculus (Norman & Sweeney, 1997)..... Vol. 4. Pl. 1241.
Amphioctopus aegina (Gray, 1849)..... Vol. 4. Pl. 1242.
Amphioctopus kagoshimensis (Ortmann, 1888) ..... Vol. 4. Pl. 1245.
Amphioctopus marginatus (Iw. Taki, 1964) ..... Vol. 4. Pl. 1247 & 1248.
Amphioctopus membranaceus (Quoy & Gaimard, 1832)..... Vol. 4. Pl. 1263.
Callistoctopus cf. *C. luteus* (Sasaki, 1929)..... Vol. 4. Pl. 1243 & 1246.
Callistoctopus luteus (Sasaki, 1929)..... Vol. 4.
Callistoctopus Octopus nocturnus (Norman & Sweeney, 1997)..... Vol. 4. Pl. 1246.
Hapalochlaena lunulata (Quoy & Gaimard, 1832)..... Vol. 4. Pl. 1240.
Octopus bocki Adam, 1941..... Vol. 4. Pl. 1244.
Octopus cyanea Gray, 1849..... Vol. 4. Pl. 1244.
Thaumoctopus mimicus Norman & Hochberg, 2005..... Vol. 4. Pl. 1249.
Wunderpus photogenicus Hochberg, Norman & Finn, 2006..... Vol. 4. Pl. 1250.

CHANGE OF GENUS

Abdopus abaculus (Norman & Sweeney, 1997)	Was in the genus *Octopus*.
Amphioctopus aegina (Gray, 1849)	Was in the genus *Octopus*.
Amphioctopus kagoshimensis (Ortmann, 1888)	Was in the genus *Octopus*.
Amphioctopus marginatus (Iw. Taki, 1964)	Was in the genus *Octopus*.
Amphioctopus membranaceus (Quoy & Gaimard, 1832)	Was in the genus *Octopus*.
Callistoctopus cf. *C. luteus* (Sasaki, 1929)	Was in the genus *Octopus*.
Callistoctopus nocturnus (Norman & Sweeney, 1997)	Was in the genus *Octopus*.

OCTOPOTEUTHIDAE Berry, 1912

Ocotopoteuthis sicula Rüppell, 1844 ..... Not yet documented.
Taningia danae Joubin, 1931 ..... Not yet documented.

OLIVIDAE Latreille, 1825

Author: Vol. 2 – Ed Petuch & Dennis Sargent.

Oliva amethystina (Röding, 1798) ..... Vol. 2. Pl. 539.
Oliva amethystina forma *carnicolor* Dautzenberg, 1927 ..... Vol. 2. Pl. 539.
Oliva amethystina forma *nebulosa* Dautzenberg, 1927 ..... Vol. 2. Pl. 539.
Oliva bathyalis Petuch & Sargent, 1986 ..... Vol. 2. Pl. 540.
Oliva buelowi phuketensis Tursch, Germain & Greifeneder, 1986 ..... Vol. 2. Pl. 540.
Oliva bulbiformis Duclos, 1835 ..... Vol. 2. Pl. 538.
Oliva caerulea (Röding, 1798) ..... Vol. 2. Pl. 537 & 540.
Oliva caerulea forma *lugubris* Lamarck, 1811 ..... Vol. 2. Pl. 540.
Oliva carneola (Gmelin, 1791) ..... Vol. 2. Pl. 544.
Oliva carneola forma *adspersa* Dautzenberg, 1927 ..... Vol. 2. Pl. 544.
Oliva carneola forma *bizonalis* Dautzenberg, 1927 ..... Vol. 2. Pl. 544.
Oliva carneola forma *trichroma* Dautzenberg, 1927 ..... Vol. 2. Pl. 544.
Oliva carneola forma *violacea* Prior, 1975 ..... Vol. 2. Pl. 544.
Oliva chrysoplecta Tursch & Greifeneder, 1989 ..... Vol. 2. Pl. 540.
Oliva concavospira G. B. Sowerby III, 1914 ..... Vol. 2. Pl. 537.
Oliva cylindrica Marrat, 1867 ..... Vol. 2. Pl. 534.
Oliva dubia Schepman, 1904 ..... Vol. 2. Pl. 543.
Oliva elegans Lamarck, 1811 ..... Vol. 2. Pl. 534.
Oliva faba Marrat, 1867 ..... Vol. 2. Pl. 545.
Oliva faba forma *smithi* Bridgman, 1906 ..... Vol. 5. Pl. 1501.
Oliva hemiltona Duclos, 1835 ..... Vol. 2. Pl. 534.
Oliva hirasei Kira, 1959 ..... Vol. 2. Pl. 537.
Oliva irisans forma *albescens* Johnson, 1915 ..... Vol. 2. Pl. 536.
Oliva irisans forma *chrysoides* Dautzenberg, 1927 ..... Vol. 2. Pl. 536.
Oliva irisans forma *concinna* Marrat, 1870 ..... Vol. 2. Pl. 536.
Oliva irisans forma *fordii* Johnson, 1910 ..... Vol. 2. Pl. 536.
Oliva irisans forma *oldi* Zeigler, 1969 ..... Vol. 2. Pl. 536.
Oliva irisans Lamarck, 1811 ..... Vol. 2. Pl. 536.
Oliva keeni Marrat, 1870 ..... Vol. 2. Pl. 537.
Oliva lacanientai Greifeneder & Blöcher, 1985 ..... Vol. 2. Pl. 545.
Oliva lepida Duclos, 1835 ..... Vol. 2. Pl. 545.

THE FAMILY OLIVIDAE

On the intraspecific level in OLIVIDAE

WORMS does not work with “form” names. For the people handling OLIVIDAE, which are often highly variable species, with

regularly "returning" base colors and patterns – often linked, but more often not linked – to subspecific variation, this is a quite difficult situation. We therefore continue to apply some of the multiple form names and use most often the names mentioned or applied by Zeigler & Porreca (1969); Tursch & Greifeneder (2001) Sterba (2003) and Hunon, Hoarau & Robin (2009).

NOT FOUND IN WORMS

Oliva hemiltona Duclos, 1835

CHANGE OF FAMILY

For a few years, the Olivella were placed in a separate family: the OLIVELLIDAE. They are now back as part of the family OLIVIDAE.
On the other hand an important part of the OLIVIDAE has been split off in the newly raised family ANCILLARIIDAE.
It concerns the following genera:

Alocospira
Amalda
Ancilla
Ancillina
Ancillista
Anolacia
Eburna
Entomoliva
Exiquaspira
Micrancilla
Turrancilla

In the Philippines, we have already members in *Amalda, Ancilla* and *Turrancilla*.

CHANGE OF GENUS

WORMS now applies the genus *Miniaceoliva* for the following species:

efasciata (Dautzenberg, 1927)
flammeocolor (Petuch & Sargent, 1986)
hayesi (Sargent & Petuch, 2012)
lamberti (Jousseaume, 1884)
miniacea (Röding, 1798)
olympiadina (Duclos, 1835)
tremulina (Lamarck, 1811)

In Visaya 3(5) of 2012 authors Sargent & Petuch use this genus name as a subgenus name.
We prefer this subgeneric use of the name *Miniaceoliva,* as anatomical and conchyological differences between the species in the genus *Oliva* as understood in the classic literature are minimal.

Amalda sinensis (G. B. Sowerby II, 1859)	Was in the genus *Ancilla*.
Turrancilla apicalis (Ninomiya, 1988)	Was in the genus *Ancilla*.

CHANGES AND REMARKS

***Amalda hilgendorfi* (E. von Martens, 1897)**

In Volume 2 we called this species "*Amalda vernedei herlaari* Van Pel, 1989". Van Pel described the large *Amalda* collected by shrimpers in the early 1980's around Scott Reef at great depth (400 to 500 m) in huge quantities "*A. hilgendorfi herlaari*". In accordance with *A. hilgendorfi*, a more northern species. We think these large Australian shells are more related to the famous *A. vernedei* (Sowerby, 1925) of which only scarce material is known. Reviewing the whole story, we will now follow the opinion of Sterba (2003) and call the Philippine shells *A. hilgendorfi* (E. von Martens, 1897). This species is known from Japan south to the Philippines where it is most often found around Balut Island, in deep water.

***Ancilla cylindrica* (G. B. Sowerby II, 1859)**

Ancilla cylindrical is a very small deep water species, from around 10 mm in length. A. ampla is a large, similar looking species from the Indian ocean and lives mainly in shallow water. It measures most often over 30 mm in length and grows up to 38 mm. They are different species, so we maintain A. cylindrical as a valid species and not a subspecies of A. ampla as suggested in WORMS.

***Oliva cylindrica* Marrat, 1867**

This is the species we figured as *Oliva hanleyorum* Petuch & Sargent, 1986 on plate 534 in Vol. 2. WORMS put this name in synonymy of *O. cylindrica* based on a personal communication of Vervaet & Recourt (2010). We did not see the types of Marrat, but the shell figured as *O. cylindrica* by Sowerby (1880) in the Thesaurus, vol. 4, figs. 193 and 194 is exactly this species. Tryon (1883) copied this figure in the Manual in Conchology (series 1, vol. 5, fig. 42.). We therefore change the name "*hanleyorum*" into "*cylindrica*" for this beautiful species.

***Oliva dubia* Schepman, 1904**

This is the species figured in Volume 2, plate 543 as *O. sibogae* Petuch & Sargent, 1986. *O. dubia* is an older name and

well established in the literature. "*Oliva sibogae*" is not mentioned in WORMS, but should be mentioned as a synonym.

***Oliva lepida* Duclos, 1835**

Huge confusion on this species: the type is a pale quite broad shell figured in WORMS and on the homepage of the MNHN. WORMS put this species in the synonymy of *O. todos*ina Duclos, 1835, a species twice as large. French experts (Hunon, Hoarau & Robin (2009)) place *O. lepida* in the synonymy of *O. sidelia* Duclos, 1840. Until further studies appear on this complex group of small Indo-Pacific species, we leave things as they are in our volumes.

***Oliva miniacea miniacea* (Röding, 1798)**

Concerning the shell figured as *Oliva miniacea miniacea* forma *azemula* Duclos, 1840
WORMS accepts the "*azemula*" as *Miniaceoliva tremulina*. We double checked for this occasion the type figure of *O. azemula i*n Duclos, and there we see a broad shaped shell with a pink – not orange – aperture and a dull grey outside color. Our shell figured as *O. mineacea miniacea* forma *azemula* is not correct, and should be changed in *O. miniacea miniacea*. We also highly doubt the assignement of the name to *O. tremulina*. The figure in Duclos is too broad for that and does not have the right colors either.

***Oliva multiplicata* Reeve, 1850**

This is the oldest name for the valid *Oliva* described later as *O. labuanensis* Marrat, 1871 and *O. vicdani* da Motta, 1982. WORMS has put *O. labuanensis* in synonymy but not yet *Oliva vicdani*. The obvious color characteristic of this species is a slightly or pronounced darker lower half of the body whorl, a color difference strongly marked abruptly – as painted. The drawing of the type figure clearly shows this color demarcation. *O. labuanensis* is based on maroon colored shells with a strong separation of the color patterns, and so is *Oliva vicdani* of which the types have been perfectly shown in La Conchiglia (1982) by da Motta. We continue to use the name *labuanensis* for light to dark brown shells, a regularly seen coloration in the species and in strong contrast with the rather "olive-greenish" color of the Reeve shell.

***Oliva rufofulgurata* Schepman, 1903**

Correct date is Schepman, 1903, not 1904.

Oliva similis Marrat, 1867

WORMS follows a personal communication of Vervaet & Recourt for the synonymy of this species with *O. bulbiformis* Duclos, 1835. We continue to follow Sterba (2004) who considers both *O. bulbiformis* and *O. similis* as different species, our material at hand confirming such. *O. similis* has a much more slender shell than *O. bulbiformis* in the Philippines.

***Oliva vidua* (Röding, 1798)**

Sargent & Petuch used "*Oliva vidua vidua*", suggesting there is another existing subspecies. We did not find this back in current literature and therefore change into "*Oliva vidua*".

OMMASTREPHIDAE Steenstrup, 1857

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Hyaloteuthis pelagica (Bosc, 1802)..... Not yet documented.
Nototodarus hawaiiensis (Berry, 1912)..... Vol. 4. Pl. 1261.
Sthenoteuthis oualaniensis (Lesson, 1830)..... Vol. 4. Pl. 1261.
Todarodes pusillus Dunning, 1988..... Not yet documented.

OMNIGLYPTIDAE Chistikov, 1975

Author: Vol. 4 – Bernd Sahlmann & Guido Poppe.

Omniglypta cerina (Pilsbry, 1905) ..... Vol. 4.

ONCHIDIIDAE Rafinesque, 1815

Author: Vol. 3 – Klaus Groh.

Onchidium multinotatum Plate, 1893 ..... Vol. 3. Pl. 920.

Paraoncidium cf. *P. graniferum* (Semper, 1885) ..... Vol. 3. Pl. 921.
Paraoncidium graniferum (Semper, 1885)..... Vol. 3. Pl. 920.
Paraonchidium palaense (Semper, 1885) ..... Vol. 3. Pl. 920.
Platevindex cf. *P. coriaceum* (Semper, 1885) ..... Vol. 3. Pl. 921 & 922.
Platevindex coriaceum (Semper, 1885)..... Vol. 3. Pl. 920.
Semperoncis glabra (Semper, 1885) ..... Vol. 3. Pl. 920.

CHANGES AND REMARKS

***Paraonchidium palaense* (Semper, 1885)**

An older name for the former *Onchidium gracile* Stantschinsky, 1907

***Platevindex coriaceum* (Semper, 1885)**

The correct name for the former *Platevindex coriaceus*.

ONYCHOTEUTHIDAE Gray, 1847

Author: Vol. 4 – Guido Poppe & Roland De Prins.

Onychoteuthis banksi (Leach, 1817) ..... Vol. 4. Pl. 1260.
Onykia loennbergii (Ishikawa & Wakiya, 1914)..... Not yet documented.
Walvisteuthis virilis Nesis & Nikitina, 1986 ..... Not yet documented.

OSTREIDAE Rafinesque, 1815

Alectryonella plicatula..... Vol. 3. Pl. 960.
Anomiostrea coralliophila Habe, 1975..... Vol. 3. Pl. 964.
Booneostrea subucula (Jousseaume in Lamy, 1925)..... Vol. 5. Pl. 1503.
Crassostrea cf. *C. laperousei* Schrenk, 1861 ..... Vol. 3. Pl. 961.
Crassostrea cf. *C. virginica* (Gmelin, 1791) ..... Vol. 3. Pl. 962.
Crassostrea nippona (Seki, 1934)..... Vol. 3. Pl. 961.
Dendostrea crenulifera (G. B. Sowerby II, 1871)..... Vol. 5. Pl. 1503.
Dendostrea cristata (Born, 1778)..... Vol. 5. Pl. 1504.
Dendostrea frons (Linnaeus, 1758) ..... Vol. 3. Pl. 960.
Dendostrea rosacea (Deshayes, 1836) ..... Vol. 3. Pl. 966 & Vol. 5. Pl. 1504.
Dendostrea sandvichensis (G. B. Sowerby II, 1871) ..... Vol. 5. Pl. 1504.
Empressostrea philippinarum (Hanley, 1856)..... Vol. 3. Pl. 962.
Lopha cristagalli (Linnaeus, 1758) ..... Vol. 3. Pl. 963.
Nanostrea exigua Harry, 1985 ..... Vol. 3. Pl. 962.
Neopycnodonte cochlear (Poli, 1795) ..... Vol. 5. Pl. 1505.
Ostrea palmipes G. B. Sowerby II, 1871 ..... Vol. 3. Pl. 962.
Planostrea pestigris (Hanley, 1846)..... Vol. 3. Pl. 960.
Saccostrea cucullata (Born, 1778) ..... Vol. 3. Pl. 963.
Saccostrea kegaki Torigoe & Inaba, 1981..... Vol. 3. Pl. 963.
Saccostrea malabonensis (Faustino, 1932) ..... Vol. 5. Pl. 1505.
Saccostrea scyphophilla (Peron & Lesueur, 1807) ..... Vol. 3. Pl. 963.

NOT FOUND IN WORMS

Empressostrea philippinarum (Hanley, 1856)

CHANGES AND REMARKS

***Crassostrea* cf. *C. laperousei* Schrenk, 1861**

WORMS accepts this name (spelled as *C. laperousii*) as *C. gigas* (Thunberg, 1793), based on CLEMAM database online. We have no proper opinion on this, and we follow in our case the figures and determination of Swennen & All (2001) and Thach (2007). Both these publications also use the "cf." Apparently the species concerns lives from Thailand and Vietnam east to the Philippines.

***Nanostrea exigua* Harry, 1985**

WORMS follows Harry H. W. (1985) in putting this taxon in synonymy with *N. fluctigera* (Jousseaume in Lamy, 1925). This does not correspond to the literature we consulted, and we think our shells figured are closer to the N. exigua as shown in Australian books.

***Ostrea palmipes* G. B. Sowerby II, 1871**

WORMS accepts palmipes as a synonym of P. pestigris (Hanley 1846), a very different species of which the type has been figured in Higo, Callomon & Goto (2001). We therefore maintain O. palmipes.

***Saccostrea scyphophilla* (Peron & Lesueur, 1807)**

An older name for our former *Saccostrea mordax* (Gould, 1850)

OVULIDAE Fleming, 1822

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

THE FAMILY OVULIDAE

The OVULIDAE are a particularly difficult family. The history of the determinations of our material was a true nightmare. Myself, together with S. Tagaro worked weeks on a proper determination, mainly based on type figures. A visit of G. Rosenberg working with S. Tagaro mixed up all that. We tried to stabilize the data in our Encyclopedia online and in the collection, but a visit of F. Lorenz, working again with S. Tagaro mixed it up once more. We trusted the work then to D. Fehse, who changed opinion time after time. The result after all this changing and changing non stop is quite satisfactory, but then came the book of Lorenz & Fehse, with more modifications: from genera to species.

The problem is that the Ovulids are extremely variable in some cases and not in other cases. One can collect different colored shells from the same species on the same branch of soft coral. Definitely many species take the color of their host coral, but then again, the shells may be almost identical in different species, with different animals and vice versa. The book of Lorenz & Fehse is a fabulous Iconographic work and used together with our Encyclopedia we get a good idea of what is what. The present list is only partially reworked. Later more changes – I hope for a long time and a stable situation.

NOT FOUND IN WORMS

***Cuspivolva howlandae* (Cate, 1974)**
***Phenacovolva tayloriana* (Azuma & Cate, 1971)**

CHANGE OF GENUS

The genus *Adamantia* is, according to WORMS, a synonym of *Diminovula*.
The genus *Aperiovula* is, according to WORMS, a synonym of *Pseudosimnia*.
The genus *Delanovola* is, according to WORMS, a synonym of *Cuspivolva*.
The genus *Inflatovula* is, according to WORMS, a synonym of *Diminovula*.
Different species in these former genera have been assigned to still other genera:

Calcarovula ildiko Lorenz, 2006	In the former genus *Phenacovolva*.
Calcarovula logirostrata (Sowerby I, 1828)	In the former genus *Phenacovolva*.
Calcarovula mikado (Kurohara & Habe, 1991)	In the former genus *Phenacovolva*.
Contrasimnia xanthochila (Kuroda, 1928)	In the former genus *Xandarovula*.
Crenavolva aureola (Fehse, 2002)	In the former genus *Primovula*.
Crenavolva vitrea (Omi & Iino, 2005)	In the former genus *Phenacovolva*.
Cuspivolva celzardi (Fehse, 2008)	In the former genus *Primovula*.
Cuspivolva cf. *bellica* (Cate, 1973)	In the former genus *Primovula*.
Cuspivolva cf. *mucronata* (Azuma & Cate, 1971)	In the former genus *Primovula*.
Cuspivolva formosa (G.B. Sowerby II in A. Adams & Reeve, 1848)	In the former genus *Delanovolva*.
Dentiovula azumai (Cate, 1970)	In the former genus *Cuspivolva*.
Diminovula culmen (Cate, 1973)	In the former genus *Inflatovula*.
Diminovula marginata (G.B. Sowerby I, 1828)	In the former genus *Inflatovula*.
Diminovula stigma (Cate, 1978)	In the former genus *Inflatovula*.
Margovula anulata (Fehse, 2001)	In the former genus *Diminovula*.
Naviculavolva cf. *deflexa* (G.B. Sowerby II? 1848)	In the former genus *Cymbovula*.
Primovula astra Omi & Iino, 2005	In the former genus *Adamantia*.
*Primovula fulguris (*Azuma & Cate, 1971)	In the former genus *Adamantia*.
Prionovolva choshiensis (Cate, 1973)	In the former genus *Habuprionovolva*.

Pseudosimnia jeanae (Cate, 1973)	In the former genus *Aperiovula*.
Quasisimnia hirasei (Pilsbry, 1913)	In the former genus *Phenacovolva*.
Quassisimnia robertsoni (Cate, 1973)	In the former genus *Aperiovula*.
Takasagovolva honkakujiana (Kuroda, 1928)	In the former genus *Phenacovolva*.

CHANGES AND REMARKS

***Calcarovula arthritica* Lorenz & Fehse, 2009**

We figured this species as *C. yoshioi* Azuma & Cate, 1971 in Volume 1 on plate 179. We later corrected in Volume 4 on plate 1296 as *C. arthritica. C. yoshioi* is a synonym of *C. gracillima* (E. A. Smith, 1901).

***Crenavolva aureola* (Fehse, 2002)**

The correct name for *C. chiapponii* Lorenz & Fehse, 2009. The synonymy was revealed by Molecular data by Reijnen B. (2015).

***Crenavolva periopsis* Cate, 1978**

According to Lorenz & Fehse (2009) this is a synonym of C. virgo (Azuma & Cate, 1971). We do not agree, the shape of the shells of the holotypes are very different indeed.

***Crenavolva takeoi* Cate & Azuma in Cate, 1973**

The types of *C. takeoi* and *C. striatula* (G.B. Sowerby I, 1828) are definitely different species, so we do not follow worms who puts the latter in synonymy. We have to point out that "*Crenovolva takuoi*" is a different species. In WORMS the latter is called "*C. tokuoi*".

***Dentiovula azumai* (Cate, 1970)**

This is the correct name for the shell we figured on plate 168 nr. 2 in Volume 1 as *Primovula myrakeenae* Azuma & Cate, 1971. WORMS puts D. azumai and Crenavolva myrakeenae in synonymy. So do Lorenz & Fehse (2009). We do not agree and are convinced, judging after the good photographs of the types, that these are both different species.

***Dentiovula colobica (*Azuma & Cate, 1971)**

WORMS follows Lorenz & Fehse (2009) and puts *D. saturnalia* in the synonymy of this species. We do not agree and think that the holotype of *D. saturnalia* is a different species. A specimen of true *saturnalis* as been shown in color in Okutani (2000), as "*D. colobica*". In PMM, Vol. 1 on plate 159, our *D. saturnalia* is also wrongly identified. It is a true *D. colobica.*

***Diminovula filia* Azuma, 1974**

WORMS places this species in *Pseudosimnia* (the genus it was described in) and puts it in the synonymy of *P. rosewateri* (Cate, 1973), following in this Lorenz & Fehse (2009). The types of both species are completely different and exclude possible confusion. Cate was even so prudent to place an at that time costly color photograph of the *P. rosewateri* in his publication, in order to exclude confusion with other species.

***Diminovula perilla* Cate, 1973**

Diminovula perilla and *D. dautzenbergi* (F.A. Schilder, 1931) are both very different species, figured in black and white in the same publication from Cate (in the Veliger, 1973). Easy to compare: *dautzenbergi* is figure 85, perilla figure 56. WORMS has put both in synonymy, a very impossible affair.

***Dissona tosaensis* (Azuma & Cate, 1971)**

After having checked the type figures, we agree with WORMS that D. dolabra and D. tosaensis are one and the same species. D. tosaensis is the oldest name and has priority.

***Pellasimnia improcera* (Azuma & Cate, 1971)**

After having checked the types, we agree with WORMS that *Pellasimnia hasta* is the same as this species. The name *improcera* has priority by two years.

***Phenacovolva tokioi* Cate, 1973**

Comparing the types, we cannot accept this species as *P. nectarea* Iredale, 1930, as suggested by WORMS. *P. tokioi* has a much more slender and delicately shaped shell, while *P. nectarea* is plump and broad in shape.

***Primovula concinna* Schilder, 1932**

WORMS accepts this small Ovulid as the large *Procalpurnus semistriatus* (Pease, 1863). We think this is an accidental mistake: both species have nothing to do with each other, the *Primovula concinna* is a very common rather small species (about 6-7 mm), while *P. semistriatus* is a large Ovulid, close to real *Calpurnus* and big (about 12-20 mm).

***Primovula* cf. *P. rosewateri* (Cate, 1973)**

In volume 1 on plate 164 we published a "*Primovula filia* (Azuma, 1979). This is an essentially different shell from the *Diminovula filia* (Azuma, 1979) which Fehse showed on plate 160 in the same volume. We went through our literature and think that the figure 9 on plate 88 in Lorenz & Fehse (2009) corresponds best to that specimen. There it is called *Primovula* cf. *rosewateri.*

***Primovula fulguris* (Azuma & Cate, 1971)**

The new name for the former *Adamantia dubia* Cate, 1973. We follow in this WORMS who follow Lorenz & Fehse (2009).

***Prionovolva brevis* (G. B. Sowerby I, 1828)**

WORMS put into synonymy of this species *P. nivea* and *P. wilsoniana*, following in this an article of Rosenberg (2010). Still, in Lorenz & Fehse (2009) the three names (*brevis, nivea and wilsoniana*) stand for separate species. Our personal opinion is that Rosenberg is probably correct. However, we feel that within all the shells shown as "*nivea*" in the literature there may be more than one species. We keep the names "*wilsoniana*" to indicate particularly banded shells, and "*nivea*" for the white pieces.

OXYNOIDAE Stoliczka, 1868 (1847)

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Lobiger souverbii P. Fischer, 1857 ..... Vol. 3. Pl. 774.

PACHYCHILIDAE P. Fischer & Crosse, 1892

Author: Vol. 1 – Philippe Bouchet & Ellen Strong.

Faunus ater (Linnaeus, 1758) ..... Vol. 1. Pl. 95.

PANDORIDAE Rafinesque, 1815

Frenamya ceylanica (G. B. Sowerby I, 1835) ..... Vol. 4. Pl. 1054.
Pandora cumingii Hanley, 1861 ..... Vol. 5. Pl. 1509.
Pandora elongatus Carpenter, 1865 ..... Vol. 4. Pl. 1054.

CHANGE OF GENUS

Frenamya ceylanica (G.B. Sowerby I, 1835) The former genus was *Pandora.*

CHANGES AND REMARKS

WORMS follows Huber and has placed this species in "*Coelodon*" while it is accepted as *Pandora aversa* (Hedley, 1913). An uppermost confusing situation. We suppose *aversa* is an Australian species – as Hedley mostly described Australian shells – and have no information or image of this species. So, we keep things as they are in our Volume 4, plate 1054.

PARILIMYIDAE Morton, 1981

Parilimya pacifica (Dall, 1907) ..... Vol. 4. Pl. 1054.

CHANGE OF GENUS & FAMILY

In our Vol. 4 this species was called *Pholadomya pacifica* in PHOLADIDAE.

PATELLIDAE Rafinesque, 1815

Scutellastra flexuosa (Quoy & Gaimard, 1834) ..... Vol. 1. Pl. 2.
Scutellastra optima (Pilsbry, 1927) ..... Vol. 5. Pl. 1509.
Scutellastra exusta (Reeve, 1854) ..... Vol. 1. Pl. 2 & Vol. 5. Pl. 1509.

CHANGES AND REMARKS

***Scutellastra flexuosa* (Quoy & Gaimard, 1834)**

Was figured as *Scutellastra flexuosa flexuosa.* These are the shells figured on Plate 2 nr. 1 & 2. The figs. 3 are not this species: it probably concerns an undescribed *Patella*. The nr. 4 is *Scutellastra exusta* (Reeve, 1854).

***Scutellastra exusta* (Reeve, 1854)**

This species was figured as *S. flexuosa flexuosa* on Plate 2 nr. 4. *S. pica* (Reeve, 1854) is a synonym.

PECTINIDAE Rafinesque, 1815

Author: Vol. 3 – Bret Raines.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Laevichlamys wilhelminae (Bavay, 1904) ..... Vol. 3. Pl. 1002.
Mimachlamys albolineata (Sowerby II, 1842) ..... Vol. 3. Pl. 1010.
Mimachlamys cloacata (Reeve, 1853) ..... Vol. 3. Pl. 1010.
Mimachlamys funebris (Reeve, 1853) ..... Vol. 5. Pl. 1512.
Mimachlamys gloriosa (Reeve, 1853) ..... Vol. 3. Pl. 1011.
Mimachlamys kauaiensis (Dall, Bartsch & Rehder, 1938) ..... Not yet documented.
Mimachlamys lentiginosa (Reeve, 1853) ..... Vol. 3. Pl. 1013.
Mimachlamys sanguinea (Linnaeus, 1758) ..... Vol. 3. Pl. 1012.
Mimachlamys pseudolima (G. B. Sowerby II, 1842) ..... Vol. 3 & Vol. 5. Pl. 1513.
Minnivola pyxidata (Born, 1778) ..... Vol. 3. Pl. 999.
Mirapecten mirificus (Reeve, 1853) ..... Vol. 3. Pl. 996.
Mirapecten moluccensis Dijkstra, 1988 ..... Vol. 3. Pl. 997.
Mirapecten rastellum (Lamarck, 1819) ..... Vol. 3. Pl. 997.
Palliolum minutulum Dijkstra & Southgate, 2000 ..... Vol. 3. Pl. 988.
Pascahinnites coruscans (Hinds, 1845) ..... Vol. 3. Pl. 1006.
Pedum spondyloideum (Gmelin, 1791) ..... Vol. 3. Pl. 1004.
Scaeochlamys squamea Dijkstra & Maestrati, 2009 ..... Vol. 3. Pl. 1005.
Semipallium barnetti Dijkstra, 1989 ..... Vol. 3. Pl. 1006.
Semipallium dianae (Crandall, 1979) ..... Vol. 3. Pl. 1007.
Semipallium dringi (Reeve, 1853) ..... Vol. 3. Pl. 1008.
Semipallium flavicans (Linnaeus, 1758) ..... Vol. 3. Pl. 1009.
Semipallium fulvicostatum (A. Adams & Reeve, 1850) ..... Vol. 3. Pl. 1009.
Serratovola angusticostata Dijkstra, 2008 ..... Vol. 5. Pl. 1512.
Serratovola gardineri (E. A. Smith, 1903) ..... Vol. 3. Pl. 999.
Serratovola rubicunda (Récluz, 1843) ..... Vol. 3. Pl. 999.
Veprichlamys deynzerorum Dijkstra, 2004 ..... Vol. 4. Pl. 1303., Add. 1.

THE FAMILY PECTINIDAE

Expert H. Dijkstra has send some remarks and pointed out that this may be a personal view that may differ from the B. Raines opinion. So, I refer to Dijkstra each time for these remarks and occasionally give my own opinion.
In 2013, H. Dijkstra published the results of the Panglao expedition scallops in Vita Malacolgica nr. 10. The title is "PECTINOIDEA (BIVALVIA: PROPEAMUSSIIDAE and PECTINIDAE from the Panglao region, Philippine Islands." This is a useful contribution to the ones that want to go deeper into the matters of Philippine scallops.

MOVES BETWEEN FAMILIES

Cyclopecten horridus Dijkstra, 1995 has been moved to the PROPEAMUSSIIDAE.

CHANGE OF GENUS

Laevichlamys gladysiae (Melvill, 888) In the former genus *Talochlamys*.

CHANGES AND REMARKS

***Cryptopecten bernardi* (Philippi, 1851)**

H. Dijkstra informs us that the shell figured on Plate 1014 nr. 4 belongs to this species: in *C. bernardi* the umbo is situated above the hinge line, which is not so in *C. nux (*Reeve, 1853). The species also becomes bigger than *C. nux.* I agree with that.

***Hemipecten forbesianus* A. Adams & Reeve, 1849**

H. Dijkstra informed us that this is the correct name for the scallop of fig. 4 on plate 988. This is indeed correct.

***Juxtamusium coudeini* (Bavay, 1903)**

According to H. Dijkstra, correct date is Bavay, 1903. The journal in which the species was described is dated 1902 but it appeared only in January 1903.

***Juxtamusium maldivense* (E. A. Smith, 1903)**

H. Dijkstra points out that there is a mix in *J. coudeini* and *J. maldivense*. *J. coudeini* has regular flat ribs, *J. maldivense* has many irregular ribs. This is possible. Personally I find this feature difficult to observe and I had a lot of difficulties with many specimens.

***Mimachlamys gloriosa* (Reeve, 1853)**

According to H. Dijkstra, these are all *M. sanguinea* (Linnaeus, 1758). He writes that true *M. gloriosa* (Reeve, 1853) is common in the tropical waters of Queenslandand New Caledonia, that it has bigger lamellae or spines on the ribs that all start quite low. Personally I have no opinion as yet on this matter and leave things as such, following B. Raines at present.

***Mimachlamys pseudolima* (G.B. Sowerby II, 1842)**

In WORMS this species is accepted as *Mimachlamys sanguinea* (Linnaeus, 1758). Base on field experience and much conchological sorting out of thousands of shells, the species is quite clear: rounder shell, with most often clear radiating zones. The species lives often mixed with *M. sanguinea*. However, not all agree on the validity. We handled for a long time the *M. pseudolima* as *M. porphyrea* Chemnitz, 1784 (an invalid name). H. Dijkstra worked out that the best name to use is *M. pseudolima* but he thinks that these shells are still within the variation of *M. sanguinea*. In Volume 3 plate 1012 fig. 2 is *M. pseudolima*. We figure an extra set of *M. pseudolima* of different colors in Volume 5.

***Palliolum minutulum* Dijkstra & Southgate, 2000**

In Vol. 3, Pl. 988 figs. 3, 5 & 6. Fig. 4 is *Hemipecten forbesianus* (see above in this listing).

***Scaeochlamys squamea* Dijkstra & Maestrati, 2009**

According to H. Dijkstra all the *S. squamata* (Gmelin, 1791) and the *S. livida* (Lamarck, 1819) figured on plate 1005 belong to this new species: *S. squamea* Dijkstra & Maestrati, 2009. The true *S. squamata* is more common in Japan and does not have secondary radial ribs. According to Dijkstra, the *S. livida* only occurs in the temperate zone of southeast and southwest Australia.

In WORMS, *S. squamea* has been put in synonymy of S. squamata (Gmelin, 1791) in 2016.

PECTINODONTIDAE Pilsbry, 1891

Pectinodonta aurora Marshall & All., 2016..... Not yet documented.
Pectinodonta philippinarum Marshall & All., 2016..... Not yet documented.

THE FAMILY PECTINODONTIDAE

The genus Pectinodonta of the family PECTINODONTIDAE, formerly considered a subfamily of ACMAEIDAE, but now well established as a valid family, was studied by B. A. Marshall, N. Puillandre, J. lambourdiere, A. Couloux & S. Samadi who published the results in Tropical Deep-Sea Benthos Vol. 29, 2016. In this article they revise the Pectinodonts of the South West Pacific.

PEDICULARIIDAE Gray, 1853

Author: Vol. 1 – Dirk Fehse.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Lunovula finleyi Rosenberg, 1990 ..... Vol. 4. Pl. 1303., Add. 1.
Lunovula superstes (Dolin, 1991)..... Vol. 1. Pl. 180.
Pedicularia pacifica Pease, 1865..... Vol. 1. Pl. 180.
Pedicularia cf. *P. pacifica* Pease, 1865 ..... Vol. 5. Pl. 1514.
Pseudocypraea adansonii (Sowerby I, 1832)..... Vol. 4. Pl. 1303., Add. 1.
Pseudocypraea exquisita Petuch, 1979 ..... Vol. 1. Pl. 180.

CHANGES AND REMARKS

***Pedicularia pacifica* cf. Pease, 1865**

The as yet undescribed *pacifica* cf. as shown by Lorenz & Fehse (2009) - figure 7 on plate 197.

PENICILIIDAE d'Orbigny, 1844

Brechites nagahamai (Kosuge, 1979) ..... Vol. 5. Pl. 1514.
Brechites philippinensis (Chenu, 1843) ..... Vol. 4. Pl. 1054.

MOVES BETWEEN FAMILIES

The members of this family were in CLAVAGELLIDAE before. See that family for the proper split-up in CLAVAGELLIDAE and PENICILIIDAE.

PERSONIDAE Gray, 1854

Author: Vol. 1 – Alan Beu & Gijs Kronenberg.

Distorsio anus (Linnaeus, 1758)..... Vol. 1. Pl. 259.
Distorsio decipiens (Reeve, 1844)..... Vol. 1. Pl. 260.
Distorsio euconstricta Beu, 1987 ..... Vol. 1. Pl. 259.
Distorsio graceiellae Parth, 1989 ..... Vol. 1. Pl. 259.
Distorsio habei Lewis, 1972..... Vol. 1. Pl. 259.
Distorsio kurzi Petuch & Harasewych, 1980..... Vol. 1. Pl. 259.
Distorsio perdistorta Fulton, 1938 ..... Vol. 1. Pl. 259.
Distorsio reticularis (Linnaeus, 1758)..... Vol. 1. Pl. 260.
Distorsio ventricosa Kronenberg, 1994..... Vol. 1. Pl. 260.
Distorsionella lewisi (Beu, 1978) ..... Vol. 1. Pl. 260.
Distorsomina pusilla (Pease, 1861)..... Vol. 1. Pl. 260.
Personopsis purpurata Beu, 1998 ..... Vol. 1. Pl. 260.

PHARIDAE H. Adams & A. Adams, 1856

Author: Vol. 4 – Rudo von Cosel.

Cultellus attenuatus Dunker, 1862 ..... Vol. 4. Pl. 1182.
Ensiculus australis (Dunker, 1862)..... Vol. 4. Pl. 1182.
Ensiculus cultellus (Linnaeus, 1758)..... Vol. 4. Pl. 1182.
Ensiculus marmoratus (Dunker, 1862)..... Vol. 4. Pl. 1182.
Pharella acutidens (Broderip & Sowerby, 1829)..... Vol. 4. Pl. 1182.
Pharella javanica (Lamarck, 1818)..... Vol. 4. Pl. 1182.

PHASIANELLIDAE Swainson, 1840

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Tricolia fordiana (Pilsbry, 1888)..... Vol. 1. Pl. 77 & Vol. 4. Pl. 1304., Add. 1.
Tricolia modesta Gould, 1861 ..... Vol. 1. Pl. 77.
Tricolia solida (Born, 1778) ..... Vol. 1. Pl. 77.

CHANGES AND REMARKS

In WORMS both "*modesta* Gould, 1861" and "*solida* (Born, 1778)" are in the genus *Phasianella*. The type species of this genus is *Buccinum australe* Gmelin, 1791, a name applied for a common Australian large PHASIANELLIDAE. The type of *Tricolia* is *Turbo pul*lus Linnaeus, 1758. This species is the classic common *Tricolia* found on almost all European coasts, both in the Atlantic and the Mediterranean. Both "*modesta*" and "*solida*" are similar to the European shells and have nothing to do with real "*Phasianella*", a genus which members is restricted to the Australian continent. As for the synonymy of *T. modesta* and *T. solida*, we do not agree, as there has not been a proper revision of the genus, and we applied the general common view as encountered in recent literature. So, we leave things as they are in the Volume 1.

PHENACOLEPADIDAE Pilsbry, 1895

Phenacolepas crenulata (Broderip, 1834) ..... Vol. 1. Pl. 86.
Phenacolepas cf. *galathea* (Lamarck, 1819) ..... Vol. 1. Pl. 86.
Phenacolepas cf. *senta* Hedley, 1899 ..... Vol. 1. Pl. 86.
Plesiothyreus cf. *P. cossmanni* Jousseaume, 1894 ..... Vol. 1. Pl. 86.

CHANGE OF GENUS

Plesiothyreus cf. *P. cossmanni* Jousseaume, 1894 — In the former genus *Phenacolepas*.

CHANGES AND REMARKS

***Phenacolepas crenulata* (Broderip, 1834)**

The correct spelling for the former "*P. crenulatus*".

***Plesiothyreus* cf. *P. cossmanni* Jousseaume, 1894**

The correct spelling for the former "*P. cosmanni*"

PHILINIDAE Gray, 1850 (1815)

Author: Vol. 3 – Richard Willan.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Hermania infantilis Habe, 1950 ..... Vol. 3. Pl. 747.
Philine argentata Carcelles, 1947 ..... Vol. 3. Pl. 747.
Philine cumingii (A. Adams, 1862) ..... Vol. 4. Pl. 1307., Add. 1.
Philine japonica Lischke, 1872 ..... Vol. 5. Pl. 1515.
Philine kurodai Habe, 1946 ..... Vol. 3. Pl. 747.
Philine orientalis A. Adams, 1854 ..... Vol. 3. Pl. 747.
Philine vitrea Gould, 1859 ..... Vol. 4. Pl. 1304., Add. 1.

MOVES BETWEEN FAMILIES

***Philine cumingii* (A. Adams, 1862)**

The former *Scaphander cumingi* (A. Adams, 1862) in Vol. 4, Pl. 1307. Was in SCAPHANDRIDAE.

CHANGES AND REMARKS

***Philine japonica* Lischke, 1872**

WORMS follows Price, Gosliner & Valdes and has put *P. japonica* as a synonym of *P. orientalis.* We continue to follow Pilsbry & Tryon who first distinguished both species and figured these (1895-1896 Vol. 16).

PHOLADIDAE Lamarck, 1809

Author: Vol. 4 – Takuma Haga.

Barnea dilatata (Souleyet, 1843)..... Vol. 4. Pl. 1193.
Barnea manilensis (Philippi, 1847)..... Vol. 4. Pl. 1191.
Jouannetia globulosa (Quoy & Gaimard, 1835)..... Vol. 4. Pl. 1191.
Lignopholas rivicola (G. B. Sowerby II, 1849)..... Vol. 4. Pl. 1192.
Martesia striata (Linnaeus, 1758)..... Vol. 4. Pl. 1192.
Pholadidea fauroti Jousseaume, 1888..... Vol. 4. Pl. 1191.
Pholas orientalis Gmelin, 1791..... Vol. 4. Pl. 1193.

CHANGE OF GENUS

Pholadidea fauroti Jousseaume, 1888 — In the former genus *Aspidopholas*.

PHOLADOMYIDAE King, 1844

MOVES BETWEEN FAMILIES

The single Philippine species *Pholadomya pacifica* has now been placed in the genus *Parilimya*, which belongs to the family PARILIMYIDAE.

PHOLIDOTEUTHIDAE Adam, 1950

Pholidoteuthis massyae (Pfeffer, 1912)..... Not yet documented.

PHYLLIDIIDAE Rafinesque, 1814

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Ceratophyllidia africana Eliot, 1903..... Vol. 3. Pl. 844.
Phyllidia babai Brunckhorst, 1993..... Vol. 3. Pl. 853.
Phyllidia carlsonhoffi Brunckhorst, 1993..... Vol. 3. Pl. 854.
Phyllidia coelestis Bergh, 1905..... Vol. 3. Pl. 858.
Phyllidia elegans Bergh, 1869..... Vol. 3. Pl. 854.
Phyllidia exquisita Brunckhorst, 1993..... Vol. 3. Pl. 854.
Phyllidia ocellata Cuvier, 1804..... Vol. 3. Pl. 852.
Phyllidia picta Pruvot-Fol, 1957..... Vol. 3. Pl. 857.
Phyllidia polkadotsa Brunckhorst, 1993..... Vol. 3. Pl. 853.
Phyllidia varicosa Lamarck, 1801..... Vol. 3. Pl. 856.
Phyllidia willani Brunckhorst, 1993..... Vol. 3. Pl. 853.
Phyllidiella cooraburrama Brunckhorst, 1993..... Vol. 3. Pl. 850.
Phyllidiella granulata Brunckhorst, 1993..... Vol. 3. Pl. 850.
Phyllidiella lizae Brunckhorst, 1993..... Vol. 3. Pl. 849.
Phyllidiella nigra (van Hasselt, 1824)..... Vol. 3. Pl. 848.
Phyllidiella pustulosa (Cuvier, 1804)..... Vol. 3. Pl. 848.
Phyllidiella rosans (Bergh, 1873)..... Vol. 3. Pl. 849.
Phyllidiella rudmani Brunckhorst, 1993..... Vol. 3. Pl. 850.
Phyllidiopsis annae Brunckhorst, 1993..... Vol. 3. Pl. 844.
Phyllidiopsis burni Brunckhorst, 1993..... Vol. 3. Pl. 847.
Phyllidiopsis cardinalis Bergh, 1876..... Vol. 3. Pl. 844.

PICKWORTHIIDAE Iredale, 1917

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

THE FAMILY PICKWORTHIIDAE

In 2003 Jacques Le Renard and Philippe Bouchet made an important contribution to Indo-Pacific Pickworthiids by publishing 9 new species and an overview of the family in Zoosystema. A work for all who love this group of fascinating cave dwellers with shells that have the most intriguing sculptures.

CHANGES AND REMARKS

***Sansonia andrei* Jousseaume, 1921**

WORMS followed in this Le Renard & Bouchet (2003) who put *S. andrei* in synonymy of *S. kirkpatricki* (Iredale, 1917). We based our determination on Okutani (2000) who figures a shell identical to our "andrei" but different from classic *S. kirkpatricki*. The distinction between the two was already made by Bavay based on shells from Christmas Island. The *S. andrei* he called *S. kirkpatricki* form A, and the typical *S. kirkpatricki* he called form B. We have to point out that we did not study the types, so possibly *andrei* and *kirkpatricki* are synonyms, but then we have one undesribed species left.

***Sansonia umbilicata* Jousseaume, 1921**

In WORMS this species is regarded as a synonym of *S. andamanica* (Preston, 1908). In the important work of Le Renard & Bouchet on the Pickworthiidae, both *S. adamanica* and *S. umbilicata* are looked at as separate valid species. Again, we could not view the types as yet, so we leave things as they are.

***Sansonia shigemitsui* Kase, 1988**

It is with some hesitance that we determinate this specimen as *S. shigemitsui*, a Japanese *Sansonia.* The shell figured as such by Severns (2011) is definitely not this species.

PINNIDAE Leach, 1819

Atrina cf. *A. pectinata* (Linnaeus, 1767) ..... Vol. 3. Pl. 971.
Atrina chinensis (Deshayes, 1841) ..... Vol. 3. Pl. 971.
Atrina exusta (Gmelin, 1791) ..... Not yet documented.
Atrina hystrix (Hanley, 1858) ..... Vol. 3. Pl. 968.
Atrina inflata (Dillwyn, 1817) ..... Vol. 3. Pl. 970.
Atrina kinoshitai Habe, 1953 ..... Vol. 3. Pl. 970.
Atrina strangei (Reeve, 1858) ..... Vol. 3. Pl. 969.
Atrina vexillum (Born, 1778) ..... Vol. 3. Pl. 972 & 973.
Pinna atropurpurea G. B. Sowerby I, 1825 ..... Vol. 5. Pl. 1517.
Pinna attenuata Reeve, 1858 ..... Vol. 3. Pl. 977 & Vol. 5. Pl. 1517.
Pinna bicolor Gmelin, 1791 ..... Vol. 3. Pl. 974 & 975.
Pinna cellophana Matsukuma & Okutani, 1986 ..... Vol. 5. Pl. 1517.
Pinna deltodes Menke, 1843 ..... Vol. 3. Pl. 967.
Pinna epica Jousseaume, 1894 ..... Vol. 3. Pl. 976.
Pinna incurva Gmelin, 1791 ..... Vol. 3. Pl. 977.
Pinna muricata Gmelin, 1791 ..... Vol. 3. Pl. 978.
Pinna pumata Hanley, 1858 ..... Vol. 3. Pl. 978 & 979.
Pinna zebuensis Reeve, 1858 ..... Vol. 3. Pl. 980.
Streptopinna saccata Linnaeus, 1758 ..... Vol. 3. Pl. 980.

THE FAMILY PINNIDAE

In April 2013 Peter Schultz and Markus Huber made a "revision" of the worldwide recent PINNIDAE in Acta Conchyliorum nr. 13. They claim that works on PINNIDAE of the Indo-Pacific were merely inadequate in the last 60 years. However, in PMM, we recognized already 15 different species for the Philippines alone, but our work was curiously not mentioned in the bibliography. We here update with their more global approach and can fortunately join some ameliorations and additions to the Philippine fauna.

CHANGES AND REMARKS

***Atrina* cf. *A. pectinata* (Linnaeus, 1767)**

Our *A. pectinata* cf. is possibly an *A. hystrix* (Hanley, 1858).

***Atrina chinensis* (Deshayes, 1841)**

A. pectinata (Linnaeus, 1767), according to Schultz & Huber (2013) does not live in the Philippines, but the species which looks as such is now called here *A. chinensis* (Deshayes, 1841). This is the shell in Vol. 3, Plate 971, fig. 1.

***Atrina strangei* (Reeve, 1858)**

A. strangei is now considered a valid species. To research in the field if this is really true.

***Pinna attenuata* Reeve, 1858**

This is the *incurva* Gmelin, 1791 nr. 1 on plate 977 in Vol. 3.

***Pinna pumata* Hanley, 1858**

The *P. pumata* is not mentioned in WORMS. Most of our *P. pumata* are called *P. trigonium* Dunker, 1852 by Schultz & Huber (2013). We keep the name *P. pumata* as our shells correspond perfectly to the drawings in Reeve (1859).

***Pinna zebuensis* Reeve, 1858**

This species is looked at as a synonym of *P. muricata* Linnaeus, 1758 by Schultz & Huber (2013) but we do not agree. Shape and texture are different from *P. muricata* and our shells correspond perfectly to the specimens that Reeve presented as such.

PISANIANURIDAE Warén & Bouchet, 1990

Pisanianura breviaxe (Kuroda & Habe, 1961) ..... Vol. 5. Pl. 1518.

PLACUNIDAE Rafinesque, 1815

Placuna ephippium (Philipsson, 1788)..... Vol. 4. Pl. 1049.
Placuna lobata G. B. Sowerby II, 1871 ..... Vol. 4. Pl. 1050.
Placuna placenta (Linnaeus, 1758)..... Vol. 4. Pl. 1050.
Placuna quadrangula (Philipsson, 1788)..... Vol. 4. Pl. 1050.

PLAKOBRANCHIDAE Gray, 1840

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Elysia ornata (Swainson, 1840)..... Vol. 3. Pl. 776.
Elysia pusilla (Bergh, 1871)..... Vol. 3. Pl. 776.
Plakobranchus ocellatus van Hasselt, 1824 ..... Vol. 3. Pl. 778.
Thuridilla albopustulosa Gosliner, 1995 ..... Vol. 3. Pl. 776.
Thuridilla carlsoni Gosliner, 1995 ..... Vol. 3. Pl. 777.
Thuridilla gracilis (Risbec, 1928) ..... Vol. 3. Pl. 777.
Thuridilla hoffae Gosliner, 1995 ..... Vol. 3. Pl. 778.
Thuridilla lineolata (Bergh, 1905)..... Vol. 3. Pl. 778.

CHANGE OF GENUS

Elysia pusilla (Bergh, 1871) — In the former genus *Elysiella*.

CHANGES AND REMARKS

***Thuridilla gracilis* (Risbec, 1928)**

According to WORMS the correct name for the former *Thuridilla bayeri* Er. Marcus, 1965

PLANAXIDAE Gray, 1850

Author: Vol. 1 – Pierre Lozouet.

Fissilabia decollata (Quoy & Gaimard, 1833)..... Vol. 1. Pl. 94.
Fossarus cumingii (A. Adams, 1855) ..... Vol. 5. Pl. 1518.
Fossarus japonicus (A. Adams, 1861) ..... Vol. 5. Pl. 1518.
Fossarus trochlearis A. Adams, 1853 ..... Vol. 1. Pl. 94.
Hinea inepta (Schepman, 1911) ..... Vol. 1. Pl. 94.
Planaxis sulcatus (Born, 1778)..... Vol. 1. Pl. 94.
Planaxis suturalis E. A. Smith, 1872..... Vol. 5. Pl. 1518.
Supplanaxis leyteensis Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1518.
Supplanaxis niger (Quoy & Gaimard, 1833)..... Vol. 1. Pl. 94.

CHANGES AND REMARKS

We could not (yet) trace *Hinea inepta* (Schepman, 1911) in WORMS.

PLESIOTROCHIDAE Houbrick, 1990

Author: Vol. 1 – Philippe Bouchet & Ellen Strong.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Plesiotrochus pagodiformis Hedley, 1907 ..... Vol. 1. Pl. 97.
Plesiotrochus souverbianus P. Fischer, 1878 ..... Vol. 4. Pl. 1304., Add. 1.
Plesiotrochus unicinctus (A. Adams, 1853) ..... Vol. 1. Pl. 97.

PLEUROBRANCHAEIDAE Pilsbry, 1896

Euselenops luniceps (Cuvier, 1816) ..... Vol. 3. Pl. 785.
Pleurobranchaeas brockii Bergh, 1897 ..... Vol. 3. Pl. 785.
Pleurobrancchella nicobarica Thiele, 1925 ..... Vol. 3. Pl. 784.

CHANGES AND REMARKS

***Euselenops luniceps* (Cuvier, 1816)**

Correct with the author between brackets.

PLEUROBRANCHIDAE Gray, 1827

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Berthella martensi (Pilsbry, 1896)..... Vol. 3. Pl. 781.
Berthella stellata (Risso, 1826) ..... Vol. 3. Pl. 782.
Berthellina citrina (Rüppell & Leuckart, 1828)..... Vol. 3. Pl. 781.
Euselenops luniceps Cuvier, 1816..... Vol. 3. Pl. 785.
Pleurobranchaea brockii Bergh, 1897 ..... Vol. 3. Pl. 785.
Pleurobranchella nicobarica Thiele, 1925..... Vol. 3. Pl. 784.
Pleurobranchus albiguttatus (Bergh, 1905)..... Vol. 3. Pl. 782.
Pleurobranchus forskalii Rüppell & Leuckart, 1828 ..... Vol. 3. Pl. 783.
Pleurobranchus grandis Pease, 1868 ..... Vol. 3. Pl. 784.
Pleurobranchus peronii Cuvier, 1804 ..... Vol. 3. Pl. 782.

MOVES BETWEEN FAMILIES

The superfamily PLEUROBRANCHOIDEA is split into PLEUROBRANCHAEIDAE Pilsbry, 1896 and PLEUROBRANCHIDAE Gray, 1827.

From our family PLEUROBRANCHIDAE, the following species moved to PLEUROBRANCHAEIDAE:

Euselenops luniceps (Cuvier, 1816)
Pleurobranchaea brockii Bergh, 1897
Pleurobrancchella nicobarica Thiele, 1925

PLEUROTOMARIIDAE Swainson, 1840

Author: Vol. 1 – Patrick Anseeuw & Yoshihiro Goto.

Bayerotrochus philpoppei Anseeuw, Poppe & Goto, 2006..... Vol. 1. Pl. 18.
Bayerotrochus teramachii (Kuroda, 1955)..... Vol. 1. Pl. 17.
Entemnotrochus rumphii (Schepman, 1879) ..... Vol. 1. Pl. 18,19 & 20.
Mikadotrochus anseeuwi Kanazawa & Goto, 1991..... Vol. 1. Pl. 21.
Mikadotrochus gotoi (Anseeuw, 1990) ..... Vol. 1. Pl. 22.
Mikadotrochus hirasei (Pilsbry, 1903) ..... Vol. 1. Pl. 17.
Mikadotrochus salmianus (Rolle, 1899)..... Vol. 1. Pl. 22.

Perotrochus vicdani Kosuge, 1980 ..... Vol. 1. Pl. 23.

CHANGES AND REMARKS

In WORMS we find the "*anseeuwi*" back in the genus *Perotrochus*, based on a private checklist made by expert Patrick Anseeuw in 2010. We follow the lastest publication and overview of the species as published in Visaya (2005). The systematics and organization of this family are in full movement with the discovery of several new species and subspecies in the Indo-Pacific. We will update our listing with the upcoming larger revision of the group.

PLICATULIDAE Gray, 1854

Plicatula australis Lamarck, 1819 ..... Vol. 4. Pl. 1046.
Plicatula complanata Deshayes in Maillard, 1863 ..... Vol. 4. Pl. 1046.
Plicatula imbricata Menke, 1843 ..... Vol. 4. Pl. 1046.
Plicatula muricata G. B. Sowerby II, 1873 ..... Vol. 4. Pl. 1046.
Plicatula ramosa G. B. Sowerby II, 1847 ..... Vol. 4. Pl. 1046.

THE FAMILY PLICATULIDAE

In WORMS, a major part of the family has been put in the synonymy of the then megaspecies "*Plicatula plicata* (Linnaeus, 1767)". They based this on Huber (2010). We do not agree with this lumping unless we see a detailed study with holotypes, ranges and the like, documenting all of the different named species involved. We therefore leave our report on the Philippine species "as such". We accept the synonymy of *Spiniplicatula* and *Plicatula*, because several species have "spines" and are assigned already in "*Plicatula*".

CHANGE OF GENUS

Plicatula muricata G.B. Sowerby II? 1873 — In the former genus *Spiniplicatula*.

POLYCERIDAE Alder & Hancock, 1845

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Kaloplocamus acutus Baba, 1949 ..... Vol. 3. Pl. 867.
Nembrotha aurea Pola, Cervera & Gosliner, 2008 ..... Vol. 3. Pl. 873.
Nembrotha chamberlaini Gosliner & Behrens, 1997 ..... Vol. 3. Pl. 874.
Nembrotha cristata Bergh, 1877 ..... Vol. 3. Pl. 868.
Nembrotha kubaryana Bergh, 1877 ..... Vol. 3. Pl. 869.
Nembrotha lineolata Bergh, 1905 ..... Vol. 3. Pl. 872.
Nembrotha livingstonei Allan, 1933 ..... Vol. 3. Pl. 871.
Nembrotha milleri Gosliner & Behrens, 1997 ..... Vol. 3. Pl. 870.
Nembrotha mullineri Gosliner & Behrens, 1997 ..... Vol. 3. Pl. 871.
Nembrotha yonowae Goethel & Debelius, 1992 ..... Vol. 3. Pl. 870.
Plocamopherus ceylonicus (Kelaart, 1858) ..... Vol. 3. Pl. 867.
Plocamopherus maculapodium Vallès & Gosliner, 2006 ..... Vol. 3. Pl. 868.
Plocamopherus tilesii Bergh, 1877 ..... Vol. 3. Pl. 867.
Polycera fujitai Baba, 1937 ..... Vol. 3. Pl. 879.
Roboastra gracilis (Bergh, 1877) ..... Vol. 3. Pl. 877.
Roboastra luteolineata (Baba, 1936) ..... Vol. 3. Pl. 876.
Tambja gabrielae Pola, Cervera & Gosliner, 2005 ..... Vol. 3. Pl. 876.
Tambja morosa (Bergh, 1877) ..... Vol. 3. Pl. 875.
Tambja olivaria Yonow, 1994 ..... Vol. 3. Pl. 876.
Thecacera pacifica (Bergh, 1884) ..... Vol. 3. Pl. 879.

Thecacera picta Baba, 1972 ..... Vol. 3. Pl. 878.

POROMYIDAE Dall, 1886

Author: Vol. 4 – Guido Poppe & Takashi Okutani.

Cetomya eximia (Pelseneer, 1911)..... Vol. 4. Pl. 1058.
Poromya species aff. *P. sumatrana* Thiele & Jaeckel, 1931 ..... Vol. 4. Pl. 1058.
Poromya carinata Lan, 2000..... Vol. 4. Pl. 1058.
Poromya sansibarica Thiele & Jaeckel, 1931 ..... Vol. 4. Pl. 1058.

MOVES BETWEEN FAMILIES

Part of this family has now moved to CETOCONCHIDAE, a revived family created in 1903 by Ridewood. This is now one out of two families forming the superfamily POROMYOIDEA Dall, 1886, the other family being the POROMYIDAE. The CETOCONCHIDAE contains only one genus: *Cetoconcha* and the former *Cribrosoconcha* and *Silenia* are now synonyms of this genus too.
The following species are now in CETOCONCHIDAE:

Cetoconcha boucheti Poutiers & Bernard, 1995
Cetoconcha exigua Poutiers & Bernard, 1995
Cetoconcha tenuissima Okutani, 1966

CHANGE OF GENUS

***Cetomya eximia* (Pelseneer, 1911)**	Was in the genus *Poromya*.
***Poromya species* aff. *P. sumatrana* Thiele & Jaeckel, 1931**	Was in the genus *Cetomya*.

CHANGES AND REMARKS

***Poromya sansibarica* Thiele & Jaeckel, 1931**

Correct for the former "*Poromya sansibaria*"

POTAMIDIDAE H. Adams & A. Adams, 1854

Author: Vol. 1 – Pierre Lozouet.

Cerithidea balteata A. Adams, 1855 ..... Vol. 1. Pl. 87.
Cerithidea quoyii (Hombron & Jacquinot, 1848)..... Vol. 1. Pl. 88.
Cerithideopsis largillierti (Philippi, 1848) ..... Vol. 1. Pl. 88.
Pirenella alata (Philippi, 1849) ..... Vol. 1. Pl. 87 & 88.
Pirenella cingulata (Gmelin, 1791)..... Vol. 1. Pl. 88.
Pirenella microptera (Kiener, 1842) ..... Vol. 1. Pl. 87.
Telescopium fusca (Okutani & Habe, 1981) ..... Vol. 1. Pl. 87, fig. 1.
Telescopium telescopium (Linnaeus, 1758)..... Vol. 1. Pl. 87, fig. 3.
Terebralia palustris (Linnaeus, 1767)..... Vol. 1. Pl. 87.
Terebralia sulcata (Born, 1778) ..... Vol. 1. Pl. 87.

THE FAMILY POTAMIDIDAE

In 2014, David Reid published an article on the genus *Cerithidea* Swainson, 1840 in the Indo Pacific. It was published online inZootaxa, but we could not download this as yet. We have contacted Zootaxa and wait for further news. We follow the results of this article as published in WORMS.
In 2016, David Reid and Ozawa Tomowo published an extensive monograph on the the genus Pirenella in the online journal Zootaxa. This work, well documented changed several names of Philippine species. We did not study the

complete article with our material as yet, but will do so before the publication of Vol. 6 in which eventually more modifications will be noticed. One of the main changes for the Philippine species is the synonymy of the genus *Cerithideopsilla*, which changed in *Pirenella* Gray, 1847.

CHANGE OF GENUS

***Cerithideopsis largillierti* (Philippi, 1848)**	In the former genus *Cerithidea*.
***Pirenella cingulata* (Gmelin, 1791)**	In the former genus *Cerithideopsilla*.
***Pirenella microptera* (Kiener, 1842)**	In the former genus *Cerithideopsilla*.

CHANGES AND REMARKS

***Cerithidea balteata* A. Adams, 1855**

The correct name for the former *Cerithidea ornata* A. Adams, 1863

***Cerithidea quoyii* (Hombron & Jacquinot, 1848)**

The correct name for the former *Cerithidea quadrata* G.B. Sowerby II, 1866.

***Pirenella alata* (Philippi, 1849)**

The correct name for the former *Cerithideopsilla djadjariensis* (K. Martin, 1899)

***Telescopium fusca* (Okutani & Habe, 1981)**

In 2001 Higo, Callomon & Goto published the holotype of "*Mathilda fusca* (Okutani & Habe, 1981)" in the MATHILDIDAE. This 49.8 mm shell looks as an albino shell of the common *Telescopium telescopium (*Linnaeus, 1758). We got several shells of this type, which we now think are not albino *Telescopium*, but a different species of *Telescopium*, with a range from Japan south to the Philippines. Bieler (1995) was confused and published a 14.2 mm shell with a clearly different sculpture than the holotype of "*M. fusca*" in MUSORSTOM. The species he determinated there as *Mathilda fusca* is likely an undescribed species of *Mathilda* indeed.

PROPEAMUSSIIDAE Abbott, 1954

Author: Vol. 4 – Henk Dijkstra.

Cyclopecten horridus Dijkstra, 1995 ..... Vol. 4. Pl. 1303., Add. 1.
Parvamussium aldeynzeri Dijkstra, 2004 ..... Vol. 4. Pl. 1015.
Parvamussium araneum Dijkstra, 1991 ..... Vol. 4. Pl. 1015.
Parvamussium cristatellum (Dautzenberg & Bavay, 1912) ..... Vol. 4. Pl. 1015.
Parvamussium dautzenbergi (Dijkstra, 1990) ..... Vol. 5. Pl. 1519.
Parvamussium largoi Dijkstra, 2013 ..... Not yet documented.
Parvamussium lozoueti Dijkstra & Maestrati, 2008 ..... Vol. 5. Pl. 1519.
Parvamussium pauciliratum (E. A. Smith, 1903) ..... Vol. 4. Pl. 1016.
Parvamussium scitulum (E. A. Smith, 1885) ..... Vol. 4. Pl. 1016.
Parvamussium squalidulum Dijkstra, 1995 ..... Vol. 4. Pl. 1016.
Parvamussium vesiculatum Dijkstra, 1995 ..... Vol. 4. Pl. 1017.
Propeamussium caducum (E. A. Smith, 1885) ..... Vol. 5. Pl. 1519.
Propeamussium jeffreysii (E. A. Smith, 1885) ..... Vol. 4. Pl. 1017.
Propeamussium rubrotinctum (Oyama, 1951) ..... Vol. 4. Pl. 1017.
Propeamussium sibogai (Dautzenberg & Bavay, 1904) ..... Vol. 4. Pl. 1017.
Propeamussium siratama (Oyama in Kuroda, 1951) ..... Not yet documented.
Similipecten eous (Melvill in Melvill & Standen, 1907) ..... Not yet documented.

MOVED FROM ANOTHER FAMILY

Cyclopecten horridus Dijkstra, 1995 has been moved here, coming from the PECTINIDAE.

CHANGES AND REMARKS

***Propeamussiusm jeffreysii* (E. A. Smith, 1885)**

The correct name for *P. jeffreysi*. (one "i").

PSAMMOBIIDAE Fleming, 1828

Author: Vol. 4 – Richard Willan & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Asaphis violascens (Forsskål in Niebuhr, 1775)..... Vol. 4. Pl. 1167.
Gari amethystus (Wood, 1815)..... Vol. 4. Pl. 1169.
Gari anomala (Deshayes, 1855)..... Vol. 4. Pl. 1173.
Gari elongata (Lamarck, 1818)..... Vol. 4. Pl. 1168.
Gari galatheae (Powell, 1958) ..... Vol. 5. Pl. 1519.
Gari juliae Willan & M. Huber, 2007 ..... Vol. 4. Pl. 1170.
Gari lessoni (Blainville, 1826) ..... Vol. 4. Pl. 1175.
Gari maculosa (Lamarck, 1818)..... Vol. 4. Pl. 1172.
Gari occidens (Gmelin, 1791) ..... Vol. 4. Pl. 1171.
Gari oriens (Deshayes, 1855)..... Vol. 4. Pl. 1170.
Gari pallida (Deshayes, 1855)..... Vol. 4. Pl. 1173.
Gari pennata (Deshayes, 1855)..... Vol. 4. Pl. 1176.
Gari pulcherrima (Deshayes, 1855) ..... Vol. 4. Pl. 1174.
Gari pusilla Bertin, 1880..... Vol. 4. Pl. 1175.
Gari radiata (Dunker in Philippi, 1845)..... Vol. 4. Pl. 1169.
Gari squamosa (Lamarck, 1818)..... Vol. 4. Pl. 1174.
Gari togata (Deshayes, 1855)..... Vol. 4. Pl. 1168.
Gari truncata (Linnaeus, 1767)..... Vol. 4. Pl. 1175.
Heteroglypta contraria (Deshayes in Maillard, 1863) ..... Vol. 4. Pl. 1176.
Hiatula adamsii (Reeve, 1857)..... Vol. 4. Pl. 1176.
Hiatula ambigua (Reeve, 1857) ..... Vol. 4. Pl. 1168.

CHANGE OF GENUS

The genus *Soletellina* Blainville, 1824 is now a synonym of *Hiatula* Modeer, 1793. WORMS follows in this an article of Masubara T. on the validity of *Hiatula*, published in Malacologia 56.

Hiatula ambigua (Reeve, 1857) — The former genus was *Gari*.
Hiatula adamsii (Reeve, 1857) — The former genus was *Soletellina*.

CHANGES AND REMARKS

***Gari amethystus* (Wood, 1815)**

The correct name for the former *G. amethysta.*

***Gari oriens* (Deshayes, 1855)**

The correct name for the former "*Gari castrensis oriens*". Huber uses the name *Gari castrensis* (L. Spengler, 1794) for a West African species resembling the Indo-Pacific *G. oriens* (Deshayes, 1855).

PTERIIDAE GRAY, 1847 (1820)

Electroma japonica Dunker, 1852 ..... Vol. 3. Pl. 954.
Electroma ovata (Quoy & Gaimard, 1835) ..... Vol. 3. Pl. 954.
Pterelectroma physoides (Lamarck, 1819)..... Vol. 3. Pl. 954.
Pinctada margaritifera (Linnaeus, 1758)..... Vol. 3. Pl. 949 & 950.
Pinctada nigra (Gould, 1850)..... Vol. 3. Pl. 950.
Pteria admirabilis Wang, 2002 ..... Vol. 5. Pl. 1520.
Pteria avicular (Holten, 1802)..... Vol. 3. Pl. 952.
Pteria maura (Reeve, 1857) ..... Vol. 3. Pl. 952.

MOVES BETWEEN FAMILIES

This family now also contains the former members of the ISOGNOMONIDAE and *Vulsella vulsella* which was in the MALLEIDAE.

CHANGE OF GENUS

***Pterelectroma physoides* (Lamarck, 1819)** In the former genus *Electroma*.

CHANGES AND REMARKS

In WORMS, *Electroma japonica* Dunker, 1852 and *Electroma ovata* (Quoy & Gaimard, 1835) are declared synonyms of *Electroma alacorvi* (Dillwyn, 1817), based on an article of Sheppard (1984) on the molluscan fauna of remote Chagos in the Indian Ocean. A large number of species has been put together as "*E. alacorvi*". This kind of synonymy is very impossible to prove in a seven page article. The *Electroma* are very common mollusks, occurring by the millions between hard coral branches. The range is immense, the variety of corals and their colors and species are considerable and we may expect a splitting of the genus in many species, at present poorly understood. We followed classic literature in deciding for the names *E. japonica* and *E. ovata* and continue to do so. In the literature we could study in our offices, we could view only the "*Avicula alacorvi*" as shown by Reeve, in 1858 – he demonstrates a dark purple shell and a smaller piece with two kinds of patterns. Both from the Red Sea. Another shell determinated as such was in Maes (1967), on the littoral mollusks of the Cocos-Keeling Islands. Equally very black, and equally elongate in shape.

Another article on which WORMS based conclusions for synonymy is the work of Ilya Temkin (2010) on the Moleduclar phylogeny of pearl oysters and their relatives. This is a highly scientific molecular research work, but there is no reference to the literature or there are no photos of what he understands under a given name – virtually no shells are figured and the article is in black and white ! This is not the kind of work to accept any given synonymy from as it is not documented at all. So, we cannot follow these synonymies.

The synonymy shown under *Isognomon isognomon* is impressive. We do not know where the source comes from. Drivas & Jay (1987) is given as a source, but this is merely a tourist book for collectors making a randon trip to either Reunion or Mauritius. We therefore keep our Isognomon fimbriatus as such – based on the drawing of Reeve and nothing to do with an *Isognomon isognomon*. The same is true for *Crenatula picta*. About two dozen names have been put in synonymy, no source is given. Basis of record is Vine (1986) on Red Sea invertebrates. This is a didactic book for newcomers in marine life, not a scientific reference.

***Pteria maura* (Reeve, 1857)**

A valid older name for *Pteria coturnix* (Dunker, 1872).

PTYCHATRACTIDAE Stimpson, 1865

Exilia hilgendorfi (Martens, 1897) ..... Vol. 2. Pl. 513.
Exilia kiiense (Kuroda, 1931) ..... Vol. 2. Pl. 513.
Exilia krigei (Kilburn, 1971) ..... Vol. 2. Pl. 513.

THE FAMILY PTYCHATRACTIDAE

This family, unknown to the wide public, has been revived in 2005 in Malacologia by Bouchet & Rocroi. The family contains 7 genera at present: *Ceratoxancus, Egestas, Exilia, Exilioidea, Latiromitra, Metzgeria* and *Ptychatractus*. Major changes for collectors are: *Benthovoluta* is now a synonym of *Exilia* and *Cyomesus* is now a syonym of *Latiromitra*.

MOVES BETWEEN FAMILIES

The members here moved to PTYCHATRACTIDAE were in our Volume 2 in the family TURBINELLIDAE.

CHANGE OF GENUS

All former *Benthovoluta* are now in the genus *Exilia*, this is the case of the species listed above.

CHANGES AND REMARKS

WORMS accepts *Benthovoluta kiiense* Kuroda, 1931 as a synonym of *Exilia hilgendorfi* (Martens, 1897). We figured of what we believe to be three different species. Our shells are sparse Philippine material from deep water, and the whole literature is very confusing. We are not very sure about our determinations of that material today and we are not sure neither of the synonymy given in WORMS.

PYRAMIDELLIDAE Gray, 1840

Author: Vol. 3 – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

Asmunda exilissima (Nomura, 1938)..... Vol. 3. Pl. 735.
Asmunda metula (A. Adams, 1860)..... Vol. 3. Pl. 736.
Babella caelatior (Dall & Bartsch, 1906)..... Vol. 3. Pl. 738.
Bouchetmella boucheti Penas & Rolàn, 2016..... Not yet documented.
Bouchetmella minor Penas & Rolàn, 2016..... Not yet documented.
Chrysallida pura (Saurin, 1962)..... Vol. 3. Pl. 738.
Chrysallida stupa Hori & Fukuda, 1999 ..... Vol. 3. Pl. 738.
Cingulina laticingulata (Dall & Bartsch, 1906)..... Vol. 3. Pl. 738.
Colsyrnola brunnea (A. Adams, 1854) ..... Vol. 3. Pl. 733.
Colsyrnola ornata (Gould, 1861) ..... Vol. 3. Pl. 729.
Ebalina scripta Penas & Rolàn, 2016..... Not yet documented.
Egilina mariella (A. Adams, 1860) ..... Vol. 3. Pl. 739.
Egilina mariellaeformis (Nomura, 1938) ..... Vol. 5. Pl. 1521.
Eulimastoma eutropia (Melvill, 1899) ..... Vol. 3. Pl. 740.
Eulimella aurifasciata Penas & Rolàn, 2016..... Not yet documented.
Eulimella comparabilis Penas & Rolàn, 2016..... Not yet documented.
Eulimella fractapex Penas & Rolàn, 2016..... Not yet documented.
Eulimella funicula Penas & Rolàn, 2016..... Not yet documented.
Eulimella hinomotoensis Nomura, 1938..... Vol. 3. Pl. 734.

Eulimella infrafasciata Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella lagoenaeformis Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella magna Penas & Rolàn, 2016 ..... Vol. 5. Pl. 1524.
Eulimella perstriata Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella philippinensis Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella modica A. Adams, 1860 ..... Vol. 3. Pl. 734.
Eulimella porrecta Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella pressa Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella rugata Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella scalaris Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella subcarina Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella syrnoloides Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella tantula Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella toshikazui Hori & Fukuda, 1999 ..... Vol. 3. Pl. 734.
Eulimella uniuspecei Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella varia Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella vegrandis Penas & Rolàn, 2016 ..... Not yet documented.
Eulimella voluminis Penas & Rolàn, 2016 ..... Not yet documented.
Iolaea cf. *I. amicalis* (Yokoyama, 1927) ..... Vol. 3. Pl. 738.
Iphiana tenuisculpta (Lischke, 1872) ..... Vol. 3. Pl. 733.
Liamorpha gemmifera (Dautzenberg & H. Fischer, 1907) ..... Vol. 5. Pl. 1521.
Linopyrga tantilla (A. Adams, 1863) ..... Vol. 3. Pl. 738, fig. 5 & Vol. 5. Pl. 1521.
Longchaeus insularum (Pilsbry, 1922) ..... Vol. 3. Pl. 729.
Marginodostomia abnorma (Nomura, 1937) ..... Vol. 5. Pl. 1521.
Marginodostomia suturamarginata (Nomura, 1936) ..... Vol. 3. Pl. 740.
Megastomia tenera (A. Adams, 1860) ..... Vol. 3. Pl. 740.
*Microthyca crenellifera (*A. Adams, 1862) ..... Vol. 5. Pl. 1522.
Milda cincta (Reeve, 1842) ..... Vol. 3. Pl. 730.
Milda garretti (Tryon, 1886) ..... Vol. 3. Pl. 730.
Milda ventricosa (Guérin, 1831) ..... Vol. 3. Pl. 730.
Miralda attentissima (Nomura, 1936) ..... Vol. 5. Pl. 1522.
Miralda cf. *M. idalima* Melvill, 1896 ..... Vol. 5. Pl. 1522.
Miralda diadema (A. Adams, 1860) ..... Vol. 3. Pl. 739.
Miralda franciscae Saurin, 1958 ..... Vol. 5. Pl. 1521.
Miralda pretiosa (Dautzenberg & Fischer, 1906) ..... Vol. 5. Pl. 1522 & 1523.
Miralda scopulorum (Watson, 1886) ..... Vol. 3. Pl. 739.
Miralda senex (Hedley, 1902) ..... Vol. 5. Pl. 1521.
Moerchia morleti P. Fischer, 1877 ..... Vol. 5. Pl. 1523.
Moerchia perforata Rubio & Rolán, 2014 ..... Not yet documented.
Monotygma amoena (A. Adams, 1853) ..... Vol. 5. Pl. 1523.
Mumiola myrnae Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1523 & 1524.
Mumiola tessellata A. Adams, 1863 ..... Vol. 3. Pl. 739.
Numaegilina claudoni (Dautzenberg & Fischer, 1907) ..... Vol. 5. Pl. 1524.
Numaegilina gloria (Nomura, 1938) ..... Vol. 3. Pl. 738.
Odetta bosyuensis (Nomura, 1937) ..... Vol. 3. Pl. 738.
Odetta tenpeii (Nomura, 1937) ..... Vol. 5. Pl. 1524.
Odostomella cf. *O. germaini* (Dautzenberg & Fischer, 1906) ..... Vol. 3. Pl. 737.
Odostomia achatinella (A. Adams, 1860) ..... Vol. 5. Pl. 1524.
Odostomia cana A. Adams, 1860 ..... Vol. 3. Pl. 739.

Turbonilla icela Melvill, 1910 ..... Vol. 3. Pl. 735 & Vol. 5. Pl. 1529.
Turbonilla javiercondei Penas & Rolan, 2010 ..... Vol. 5. Pl. 1529.
Turbonilla kanagawana Nomura, 1938 ..... Vol. 3. Pl. 735.
Turbonilla kidoensis (Yokoyama, 1922) ..... Vol. 3. Pl. 736.
Turbonilla kuraenohamana Hori & Fukuda, 1999 ..... Vol. 3. Pl. 736.
Turbonilla kurodai Nomura, 1936 ..... Vol. 5. Pl. 1529.
Turbonilla laboutei Penas & Rolan, 2010 ..... Vol. 5. Pl. 1529 & 1530.
Turbonilla lataminuta Penas & Rolan, 2010 ..... Vol. 5. Pl. 1530.
Turbonilla lirata (A. Adams, 1855) ..... Vol. 3. Pl. 736.
Turbonilla loiclegoffi Penas & Rolan, 2010 ..... Vol. 5. Pl. 1530.
Turbonilla manoloi Penas & Rolan, 2010 ..... Vol. 5. Pl. 1530.
Turbonilla matsushimensis Nomura, 1936 ..... Vol. 3. Pl. 736.
Turbonilla molini Penas & Rolan, 2010 ..... Vol. 5. Pl. 1531.
Turbonilla nippona Nomura, 1936 ..... Vol. 3. Pl. 736.
Turbonilla nodoscalare Penas & Rolan, 2010 ..... Vol. 5. Pl. 1531.
Turbonilla obliquastructioris Penas & Rolan, 2010 ..... Vol. 5. Pl. 1531 & 1532.
Turbonilla orthoplicatulata Nomura, 1936 ..... Vol. 3. Pl. 736.
Turbonilla osyuensis Nomura, 1936 ..... Vol. 3. Pl. 736.
Turbonilla paupercula Nomura, 1936 ..... Vol. 3. Pl. 736.
Turbonilla pazondinae Penas & Rolàn, 2010 ..... Not yet documented.
Turbonilla pusilla (Philippi, 1844) ..... Vol. 3. Pl. 740.
Turbonilla raritans Nomura, 1936 ..... Vol. 3. Pl. 736.
Turbonilla scalaeformis Penas & Rolan, 2010 ..... Vol. 5. Pl. 1531.
Turbonilla subcylindrica Schepman, 1909 ..... Vol. 5. Pl. 1532.
Turbonilla tarragai Peñas & Rolán, 2010 ..... Vol. 5. Pl. 1532.
Turbonilla vaghena Peñas & Rolán, 2010 ..... Vol. 5. Pl. 1532.
Turbonilla varicifera Tate, 1898 ..... Vol. 3. Pl. 737.
Turbonilla varicosa (A. Adams, 1855) ..... Vol. 3. Pl. 734.

THE FAMILY PYRAMIDELLIDAE

The PYRAMIDELLIDAE are by now recognized as one of the hotspots of Biodiversity. This huge family has many genera containing "look-alike" but different species. Many difficulties for the determinations, not the least the use of SEM (Scanning electron microscopes) for the descriptions without a photograph showing how the species really looks in reality. Older descriptions are even more puzzling as the black and white drawings are often not accurate, and as in SEM photos one has no idea on how the shelly material of the shells is, neither do we have information on the colors. PYRAMIDELLIDAE, with a few exceptions are all small or very small. Little is known on their life-style but we know that most live in association with other organisms – under several forms – but parasitism does not seem to be an exception.
For the Indo-Pacific two important publications in the form of books appeared recently. They are a major achievement by authors Anselmo Penas and Emilio Rolan, who based most of their work on the results of the expeditions of the MNHN, Paris. The first work appeared in the series of the Tropical Deep-Sea Benthos: Volume 26. In this work the Turbonilla and related genera of deep water from the Tropical South Pacific are handled. The second work was published by the less well known Museo de Historio Nautral of the University of Santiago de Compostella, Spain. It concerns the tribes Eulimellini and Syrnolini. A third work, handling the Chrysallidini, is in press. A part of these publications has direct importance for the knowledge of the Philippine fauna. Many of these species will be figured in Volume 6.

MOVES BETWEEN FAMILIES

Pyramidelloides mirandus (A. Adams, 1861)
The name "*miranda*" changes in "*mirandus*" and the species is now in EULIMIDAE.

NOT FOUND IN WORMS

***Odostomia physoides* A. Gould, 1861**

Turbonilla chosuana **(Hori & Fukuda, 1999)**
Syrnola adamsi **(Tryon, 1886)**

CHANGE OF GENUS

Many species have changed genus since the publication of Volume 3. We here follow WORMS in the majority of the decisions which we did not double check (as yet).

Asmunda exilissima **(Nomura, 1938)**	The former *Turbonilla exilissima.*
Asmunda metula **(A. Adams, 1860)**	The former *Turbonilla metula.*
Chrysallida stupa **Hori & Fukuda, 1999**	The former *Oscilla stupa.*
Colsyrnola ornata **(Gould, 1861)**	The former *Pyramidella ornata.*
Egilina mariella **(A. Adams, 1860)**	The former *Miralda mariella.*
Eulimastoma eutropia **(Melvill, 1899)**	The former *Odostomia eutropia.*
Iolaea **cf.** ***I. C. amicalis*** **(Yokoyama, 1927)**	The former *Cingulina* cf. *C. amicalis.*
Iphiana tenuisculpta **(Lischke, 1872)**	The former *Syrnola tenuisculpta.*
Longchaeus insularum **(Pilsbry, 1922)**	The former *Pyramidella insularum.*
Marginodostomia suturamarginata **(Nomura, 1936)**	The former *Odostomia suturamarginata.*
Megastomia tenera **(A. Adams, 1860)**	The former *Odostomia tenera.*
Numaegilina gloria **(Nomura, 1938)**	The former *Babella gloria.*
Odetta bosyuensis **(Nomura, 1937)**	The former *Oscilla bosyuensis.*
Odostomella **cf.** ***O. germaini*** **(Dautzenberg & Fischer, 1906)**	The former *Chrysallida* cf. *C. germaini.*
Ondina elachisinoides **(Hori, Fukuda & Yoshizaki, 1999)**	The former *Chrysallida elachisinoides*.
Orinella pulchella **(A. Adams, 1854)**	The former *Pyramidella pulchella.*
Parthenina affectuosa **(Yokoyama, 1927)**	The former *Babella affectuosa.*
Polemicella piscatorum **Saurin, 1959)**	The former *Chrysallida piscatorum.*
Puposyrnola callembryon **(Dautzenberg & Fischer, 1906)**	The former *Syrnola callembryon.*
Pyrgiscus **cf.** ***P. gracilenta*** **(Nomura, 1936)**	The former *Turbonilla* cf. *T. gracilenta.*
Pyrgiscus mourazimanus **(Nomura, 1938)**	The former *Turbonilla mourazimana.*
Pyrgiscus plebeia **(Nomura, 1936)**	The former *Eulimella plebeia.*
Pyrgiscus speciosus **(A. Adams, 1860)**	The former *Turbonilla speciosa.*
Pyrgiscus yotukurensis **(Nomura, 1938)**	The former *Turbonilla yotukurensis.*
Pyrgulina consimilis **(A. Adams, 1861)**	The former *Chrysallida consimilis.*
Pyrgulina consobrina **(A. Adams, 1861)**	The former *Chrysallida consobrina*.
Pyrgulina plicata **(A. Adams, 1860)**	The former *Chrysallida plicata.*
Quirella suprafila **(Laseron, 1959)**	The former *Chrysallida suprafila.*
Tibersyrnola bacillum **(Pilsbry, 1901)**	The former *Syrnola brunnea.*
Tibersyrnola cinnamomea **(A. Adams, 1863)**	The former *Syrnola cinnamomea.*
Trabecula yositunei **(Nomura, 1938)**	The former *Turbonilla yositunei.*
Turbonilla aspera **Kuroda & Habe, 1971**	The former *Paramormula aspera.*
Turbonilla aulica **Dall & Bartsch, 1906**	The former *Lancella aulica*
Turbonilla pusilla **(Philippi, 1844)**	The former *Odostomia pusilla.*

CHANGES AND REMARKS

Linopyrga tantilla **(A. Adams, 1863)**

This is also the correct name for the shell wrongly identified as *Chrysallida pupula* in Vol. 3. Pl. 738, fig. 5.

Pyramidella sulcata **(A. Adams, 1854)**

WORMS accept this species as a synonym of *P. maculosa* Lamarck, 1822. We followed in this Springsteen & Leobrera (1986) and other authors in distinguishing the two species and using the names as proposed. We here deal with two valid species but a verification of the types may be needed to either conform the present nomenclature or change it.

Pyramidella terebellum **(O. F. Müller, 1774)**

WORMS accepts this name as a synonym of *P. dolabrata* (Linnaeus, 1758). The literature on this subject is far from stabilised, authors using at random P. terebelloides (A. Adams, 1854) (which we consider a valid separate species), P. dolabrata and P. terebellum, or they even mix the name (example P. dolabrata forma terebellum). We use P. terebellum for the Indo-Pacific species, understood as such, and P. dolabrata for the Atlantic species. At least until this matter is cleared. A proper study based on quantities of material is necessary here.

Pyramidella teres **(A. Adams, 1854)**

WORMS suggests this is the same species as *Longchaeus turritus* (A. adams, 1854) and puts *P. teres* in the synonymy of the latter. Our Philippine material fits perfectly with the holotype of *P. teres,* shown by Higo, Callomon & Goto (2001).

We have only two figures of "*turritus*": the *Obeliscus turritus* as shown by Sowerby (1855) and the specimen demonstrated by Fowler (2016), the latter from Kenya. Both figures, the drawing and the photo show shells with a slightly broader shell. We maintain *P. teres* as a valid species.

***Pyrgiscus microscopica* (Laseron, 1959)**

WORMS places this species in the synonymy of *Turbonilla mumia* (A. Adams, 1861). The figure we have of *P. microscopica* in Okutani (2000) shows a distinct species when compared to the figures of *P. mumia* shown in Okutani (2000); Robba & All (2006); Penas & Rolan (2010) and Thach (2012). The most obvious difference between the species is the presence of a subsutural cord in *P. microscopica*, absent in *P. mumia*.

***Pyrgolampros planitesta* (Nomura, 1936)**

WORMS places this species in the genus *Turbonilla*. We do not agree as this species is somewhere between *Turbonilla* and *Syrnola*. The axial ribs and the shelly material are of a very different style than in the genus *Turbonilla*. We maintain the genus *Pyrgolampros* as used by Higo, Callomon & Goto (2001).

***Turbonilla candida* (A. Adams, 1855)**

The correct name for *Turbonilla multigyrata* Dunker, 1882, now a synonym.

***Turbonilla matsushimensis* Nomura, 1936**

The correct name for the former "*Turbonilla matsusimensis*".

***Turbonilla varicosa* (A. Adams, 1855)**

Correct name for the species figured as *Lancella bella* Dall & Bartsch, 1906.

PYRAMIMITRIDAE Cossmann, 1901

Teremitra efatensis (Aubry, 1999)..... Not yet documented.
Vaughanites superstes Kantor, Lozouet, Puillandre & Bouchet, 2014 Not yet documented.

PYROTEUTHIDAE Pfeffer, 1912

Pyroteuthis margaritifera (Rüppell, 1844)..... Not yet documented.
Pterygioteuthis giardi Fischer, 1896 ..... Not yet documented.

RANELLIDAE Gray, 1854

Author: Vol. 1 – Alan Beu & Luc Segers.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Biplex aculeata (Schepman, 1909) ..... Vol. 1. Pl. 261.
Biplex perca Perry, 1811 ..... Vol. 1. Pl. 261.
Charonia sauliae (Reeve, 1844) ..... Vol. 4. Pl. 1305., Add. 1.
Charonia tritonis (Linnaeus, 1758) ..... Vol. 1. Pl. 264.
Cymatium grandimaculatum (Reeve, 1844)..... Vol. 1. Pl. 266.
Cymatium lotorium (Linnaeus, 1758)..... Vol. 1. Pl. 266.
Gelagna succinctum (Linnaeus, 1771) ..... Vol. 1. Pl. 265.
Gutturnium muricinum (Röding, 1798)..... Vol. 1. Pl. 265.
Gyrineum bituberculare (Lamarck, 1816)..... Vol. 1. Pl. 262.
Gyrineum cuspidatum (Reeve, 1844) ..... Vol. 1. Pl. 262.
Gyrineum gyrinum (Linnaeus, 1758)..... Vol. 1. Pl. 262.
Gyrineum hirasei (Kuroda & Habe in Habe, 1961)..... Vol. 1. Pl. 263.
Gyrineum lacunatum (Mighels, 1845)..... Vol. 1. Pl. 263.
Gyrineum longicaudatum Beu, 1998 ..... Vol. 1. Pl. 263.
Gyrineum roseum (Reeve, 1844)..... Vol. 1. Pl. 263.

CHANGE OF GENUS

Cymatium aegrotum is now *Ranularia aegrotum*
Cymatium aquatile is now *Monoplex aquatilis*
Cymatium bibbeyi is now *Septa bibbeyi*
Cymatium caudatum is now *Ranularia caudata*
Cymatium comptum is now *Monoplex comptus*
Cymatium encausticum is now *Ranularia encaustica*
Cymatium exile is now *Ranularia exilis*
Cymatium fittkaui is now *Turritriton fittkaui*
Cymatium flaveolum is now *Septa flaveola*
Cymatium gemmatum is now *Monoplex gemmatus*
Cymatium grandimaculatum is now *Lotoria grandimaculatum*
Cymatium gutturnium is now *Ranularia gutturnia*

Cymatium hepaticum is now *Septa hepatica*
Cymatium labiosum is now *Turritriton labiosus*
Cymatium loroisii is now *Triton loroisii*
Cymatium mixtum is now *Septa mixta*
Cymatium moniliferum is now *Ranularia monilifera*
Cymatium mundum is now *Monoplex mundus*
Cymatium muricinum is now *Gutturnium muricinum*
Cymatium nicobaricum is now *Monoplex nicobaricus*
Cymatium oblitum is now *Ranularia oblita*
Cymatium parthi is now *Ranularia parthi*
Cymatium perryi is now *Lotoria perryi*
Cymatium pfeifferianum is now *Reticutriton pfeifferianus*
Cymatium pileare is now *Monoplex pilearis*
Cymatium pyrulum is now *Ranularia pyrulum*
Cymatium pyrum is now *Ranularia pyrum*
Cymatium rubeculum is now *Septa rubecula*
Cymatium sarcostoma is now *Ranularia sarcostoma*
Cymatium sinense is now *Ranularia sinensis*
Cymatium springsteeni is now *Ranularia springsteeni*
Cymatium succinctum is now *Gelagna succinctum*
Cymatium tenuiliratum is now *Turritriton tenuiliratus*
Cymatium testudinarium is now *Ranularia testudinaria*
Cymatium vespaceum is now *Monoplex vespaceus*

CHANGES AND REMARKS

***Biplex aculeata* (Schepman, 1909)**

The modern name for the former *Biplex pulchra* (G. B. Sowerby II, 1836)

***Charonia lampas sauliae* (Reeve, 1844)**

WORMS does not accept the name sauliae, and puts it in synonymy with *C. lampas* (Linnaeus, 1758), the European species. We use sauliae as subspecies name, which differentiates the central Indo-Pacific species from the Eurpean *C. lampas lampas.*

***Linatella caudata* (Gmelin, 1791)**

The modern name for the former *Cymatium cingulatum* (Lamarck, 1822)

Monoplex parthenopeus (von Salis, 1793)

The modern name for the former *Cymatium parthenopeum* (von Salis, 1793)

***Turritriton fittkaui* Parth, 1991**

We think this is a different valid species, not a synonym of T. *tenuiliratus.*

***Triton loroisii* Petit de la Saussaye, 1852**

We do not believe this is a synonym of *T. labiosus*, but think it is a valid species.

RETUSIDAE Thiele, 1925

Author: Vol. 3 – Richard Willan & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

THE FAMILY RETUSIDAE

Species in this family are constantly dancing between several other related families. Now, the genus *Tornatina* is no longer accepted in WORMS and most of the species formerly placed in this genus are now in *Acteocina*, of the family ACTEOCINIDAE. But from the Philippines species, three also moved to CYLICHNIDAE. The genus *Volvulella* moved to the RHIZORIDAE, based on an article from Oskars T.R., Bouchet P. & Malaquias M. A. (2015) which proposed a new phylogeny of the CEPHALASPIDEA.

NOT FOUND IN WORMS

***Didontoglossa koyasensis* (Yokoyama, 1927)**
This species was shown in Zhongyan (2004) and Lee (2002).

***Tornatina planospira* A. Adams**
This species was shown by Pilsbry (1893) in the Manual, Vol. 15.

MOVES BETWEEN FAMILIES

***Acteocina decorata* (Pilsbry, 1904)**
The former *Tornatina decorata*, now in ACTEOCINIDAE.

***Acteocina exilis* (Dunker, 1860)**
The former Tornatina exilis, now in ACTEOCINIDAE.

***Acteocina gordonis* (Yokoyama, 1927)**
The former Tornatina gordonis, now in ACTEOCINIDAE.

***Micratys wareni* Valdés, 2008.**
Has been moved to the family HAMINOEIDAE, subfamily ATYDINAE.

***Truncacteocina biplex* (A. Adams, 1850)**
The former Tornatina biplex, now in CYLICHNIDAE.

***Truncacteocina coarctata* (A. Adams, 1850)**
The former Tornatina coarctata, now in CYLICHNIDAE.

***Truncacteocina oryzaella* (Habe, 1956)**
The former Tornatina oryzaella, now in CYLICHNIDAE.

***Volvulella fortis* (Thiele, 1925)**
Now in the family RHIZORIDAE.

***Volvulella kinokuniana* (Habe, 1946)**
Now in the family RHIZORIDAE.

***Volvulella ovalina* (A. Adams, 1862)**
Now in the family RHIZORIDAE.

CHANGES AND REMARKS

***Pyrunculus nitidus* A. Adams, 1850** and ***Pyrunculus pyriformis* (A. Adams, 1850)**
Are considered the same species (pyriformis) by WORMS, apparently based on Valdes (2008). This is strange, as already Pilsbry in 1893 figured both next to each other in Vol. 15 of the Manual, and we did the same in our Volume 3. These are both good species.

***Relichna venustula* (A. Adams, 1862)**
Was in RETUSIDAE as *Eocylichna venustula* (A. Adams, 1862)

RHIZORIDAE Dell, 1952

THE FAMILY RHIZORIDAE

A family apparently created in 1952 but not implemented. Now it is.

MOVES BETWEEN FAMILIES

All three *Volvulella* were in Vol. 3 on plate 762 in the family RETUSIDAE.

CHANGES AND REMARKS

***Volvulella ovalina* (A. Adams, 1850)**

Correct date for the wrongly mentioned "1862".

RINGICULIDAE Philippi, 1853

Author: Vol. 3 – Richard Willan.

Ringicula doliaris Gould, 1860 ..... Vol. 3. Pl. 741.
Ringicula fossulata de Folin, 1867 ..... Vol. 3. Pl. 741.
Ringicula oehlertiae Morelet, 1880 ..... Vol. 5. Pl. 1536.
Ringicula cf. *R. kurodai* Takeyama, 1935 ..... Vol. 3. Pl. 741.

RISSOIDAE Gray, 1847

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Alvania ogasawarana (Pilsbry, 1904) ..... Vol. 15. Pl. 198.
Benthonellania charope (Melvill & Standen, 1901) ..... Vol. 5. Pl. 1534.
Merelina wanawana (Kay, 1979) ..... Vol. 4. Pl. 1306., Add. 1.
Parashiela ambulata Laseron, 1956 ..... Vol. 5. Pl. 1534.
Parashiela invisibilis (Hedley, 1899) ..... Vol. 4. Pl. 1306., Add. 1.
Punctulum flavum (Okutani, 1964) ..... Vol. 5. Pl. 1535.
Rissoa olangoensis Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1535.

THE FAMILIES RISSOIDAE & RISSOINIDAE

Are now separate families, so we split the two families. Changes in these families are major.

MOVES BETWEEN FAMILIES

***Palisadia subulata* Laseron, 1956**

According to M. Faber and WORMS now in the EULIMIDAE, but formerly placed by Ponder (1985) in RISSOIDAE, which we first followed.

RISSOINIDAE Stimpson, 1865

Ailinzebina laticostata Faber, 2013 ..... Vol. 5. Pl. 1535.
Ailinzebina sleursi Faber, 2013 ..... Vol. 5. Pl. 1535 & 1536.
Apataxia cerithiiformis Tryon, 1887 ..... Vol. 1. Pl. 197.
Pachyrissoina walkeri E. A. Smith, 1893 ..... Vol. 5. Pl. 1536.
Phosinella aff. *P. angusta* (Laseron, 1956) ..... Vol. 5. Pl. 1539.
*Phosinella bellula (*A. Adams, 1853) ..... Vol. 5. Pl. 1538.
Phosinella clathrata (A. Adams, 1851) ..... Vol. 1. Pl. 197.
Phosinella nodicincta (A. Adams, 1851) ..... Vol. 1. Pl. 198.
Phosinella seguenziana (Issel, 1869) ..... Vol. 5. Pl. 1539.
Rissoina aff. *R. costata* A. Adams, 1853 ..... Vol. 1. Pl. 197.
Rissoina aff. *R. striata* (Quoy & Gaimard, 1833) ..... Vol. 1. Pl. 198.

THE FAMILY RISSOINIDAE

Marien Faber was heroic in starting the study of the Indo Pacific RISSOINIDAE. He corrected our Plates 197 and 198 in Volume 1, of which many names seems to be wrong: which means that virtually all literature in works of the latest decades is wrong too. Here included in the listing his opinions and determinations, communicated on 1 january 2015, for the above plates, concerning the RISSOINIDAE. We also joined a few species based on his publication with S. Gori in Basteria, documenting the infralittoral Rissoinidae of the Maldive Islands.

MOVES BETWEEN FAMILIES

In the meantime, the family ZEBINIDAE Coan, 1964 has been revived. The members of this family were for a long time most often in RISSOINIDAE. Among the Philippine genera, the following genera moved out to ZEBINIDAE: *Microstelma, Schwartziella, Stosicia, Tomlinella* and *Zebina*.

***Parashiela invisibilis* (Hedley, 1899)**

Now in the family RISSOIDAE.

CHANGE OF GENUS

***Phosinella clathrata* (A. Adams, 1851)**	Was in the genus *Rissoina*.
***Phosinella nodicincta* (A. Adams, 1851)**	Was in the genus *Rissoina*.
***Schwartziella triticea* (Pease, 1861)**	Was in the genus *Rissoina*.

CHANGES AND REMARKS

***Apataxia cerithiiformis* Tryon, 1887**
The correct name for our former *Rissoina balteata* Pease, 1869.

***Pachyrissoina walkeri* E. A. Smith, 1893**
WORMS follows Boettger (1893) who placed this spectacular species as a subgenus of "*Rissoina*". The type of the genus *Rissoina* is *R. inca* d'Orbigny, 1840, and represents very well what we understand as the genus today. This has very little to do with the shape as seen in *Pachyrissoina* which is definitely a valid genus.

Phosinella species
Figured as *Rissoina tornatilis* Gould, 1861 in Vol. 1. Pl. 198. According to M. Faber this is a species of the *P. hystrix* complex. See Weinkauff, 1855-1885 and Souverbie 1877.

***Rissoina ambigua* (Gould, 1849)**
The correct name for our former *Rissoina materinsulae* Pilsbry, 1904, in Vol. 1, Pl. 198, fig. 11. Our previous determination was wrongly based on Okutani (2000) figs. 24, right. A white form of the R. ambigua, correctly identified, was published in Vol. 4, Pl. 1306, fig. 4.

***Rissoina artensis* Montrouzier in Souverbie & Montrouzier, 1872**
The correct name for our *Rissoina lamberti* Souverbie, 1870 in Vol. 1, Pl. 198.

***Rissoina costata* A. Adams, 1851**
The correct name for our *Rissoina turricula* Pease, 1861 in Vol. 1, Pl. 198.

***Rissoina* aff. *costata* A. Adams, 1851**
The correct name for our *Rissoina crassa* Angas, 1871 in Vol. 1, Pl. 197.

***Rissoina costatogranosa* Garrett, 1873**
The correct name for our *Rissoina antoni* Schwartz von Mohrenstern, 1860 in Vol. 1. Pl. 197 & Vol. 5.

***Rissoina dorbignyi* A. Adams, 1851**
The correct name for our *Rissoina artensis* Montrouzier in Souverbie & Montrouzier, 1872 in Vol. 1, Pl. 197.

***Rissoina laevicostulata* Pilsbry, 1904**
The correct name for our *Rissoina plicatula Gould, 1861,* in Vol. 4. Pl. 1306., Add. 1.

***Rissoina scolopax* Souverbie, 1877**
The year of description is 1877, not 1881. We formerly copied Okutani (2000), which is not correct.

***Rissoina* aff. *R. striata* (Quoy & Gaimard, 1833)**
Figured as *Rissoina reticulata* (Sowerby I, 1833), in Vol. 1. Pl. 198. This is however a nomen dubium. We here use the *R. striata* sensu Okutani (2000).

***Rissoina torresiana* (Laseron, 1956)**
The correct name for our *Rissoina obeliscus* (Schwartz, 1860) figured in Vol. 1. Pl. 198*, which is a nomen dubium.*

***Zebinella tenuistriata* (Pease, 1868)**
The correct name for our *Rissoina striata* Quoy & Gaimard, 1832, figured in Vol. 1. Pl. 198.

***Zebinella evanida* (G. Nevill & H. Nevill, 1881)**
The correct name for our *Rissoina concinna* (Laseron, 1956), figured in Vol. 1. Pl. 197. *R. concinna* is a junior synonym.

RIMELLIDAE Stewart, 1926

THE FAMILY RIMELLIDAE

In 2013 Virgilio Liverani reviewed the Iconography series on STROMBIDAE with a separate issue: "Addenda and Corrigenda for the Superfamily STROMBOIDEA Rafinesque, 1815.
He reinstalled firmly RIMELLIDAE, ROSTELLARIIDAE AND SERAPHSIDAE, all families that were for a long time in the STROMBIDAE.
The RIMELLIDAE were once a flourishing family with a broad fossil record. Now we only know of 4 surviving species.

MOVES BETWEEN FAMILIES

Both species in this family were formerly listed among the STROMBIDAE.

ROSTELLARIIDAE Gabb, 1868

Author: Vol. 1 – Gijs Kronenberg.

Rimellopsis powisii (Petit de la Saussaye, 1840) ..... Vol. 1. Pl. 201.
Rimellopsis powisii forma *abyssicola* (Schepman, 1909) ..... Vol. 1. Pl. 201.
Rostellaria barbieri Morrison, 2008 ..... Vol. 1. Pl. 201.
Rostellariella martinii (Marrat, 1877) ..... Vol. 1. Pl. 201.
Tibia fusus (Linnaeus, 1758) ..... Vol. 1. Pl. 201.

THE FAMILY ROSTELLARIIDAE

In 2013 Virgilio Liverani reviewed the Iconography series on STROMBIDAE with a separate issue: "Addenda and Corrigenda for the Superfamily STROMBOIDEA Rafinesque, 1815.
He reinstalled firmly RIMELLIDAE, ROSTELLARIIDAE AND SERAPHSIDAE, all families that were for a long time in the STROMBIDAE.
The ROSTELLARIIDAE were once a flourishing family with a broad fossil record. In the Eocene the family developed spectacular species with sometimes huge flaring lips. The recent genera and species are limited. Only the genera *Tibia*, *Rostellariella* and *Rimellopsis* survived.

CHANGES AND REMARKS

***Rimellopsis powisii* forma *abyssicola* (Schepman, 1909)**

An older name and valid name for the widely accepted "forma *laurenti* Duchamps, 1992".
The type locality fo Schepman his "*abyssicola*" is Kajoa, Maluku Islands, Indonesia. Taken in 397 m by the Siboga expedition. The perfect sand engraving by Schepman leaves no doubt as to the correct identity of his "*abyssicola*".
Liverani writes (for the form *laurenti*: "this forma is absent in West Thailand and Vietnam uncommon in the Philippines, and abundant from Queensland to New Caledonia". In fact, the *abyssicola* is not uncommon in the Philippines, but it is rather local. Occasionally abundant in some areas, as it is the case around Aliguay Island.
The status of *R. powisii* forma *abyssicola* is still not clear, we think it may be a separate species, but careful nomenclature suggests the form name at present.

***Rostellaria barbieri* Morrison, 2008**

The correct name for the shell formerly called *Tibia* aff. *lorenzi* Morrison, 2005 in Vol. 1. On Pl. 201

SCALIOLIDAE Jousseaume, 1912

Author: Vol. 1 – Philippe Bouchet.

Finella pupoides A. Adams, 1860 ..... Vol. 1. Pl. 95.
Finella purpureoapicata Preston, 1905 ..... Vol. 1. Pl. 95.
Finella rufocincta (A. Adams, 1861) ..... Vol. 1. Pl. 95.
Scaliola arenosa A. Adams, 1862 ..... Vol. 5. Pl. 1540.
Scaliola gracilis A. Adams, 1862 ..... Vol. 5. Pl. 1540.

SCAPHANDRIDAE G.O. Sars, 1878

Author: Vol. 3 – Richard Willan & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Sheila Tagaro.

Cylichnium ancillarioides (Schepman, 1913) ..... Vol. 3. Pl. 758.

Cylichnium nanum Valdés, 2008 ..... Vol. 3. Pl. 758.
Roxania pacifica (Habe, 1955) ..... Vol. 3. Pl. 759.
Roxania punctulata A. Adams, 1862 ..... Vol. 3. Pl. 759.
Roxania umbilicata (Habe, 1955) ..... Vol. 3. Pl. 759.
Sabatia japonica (Habe, 1952) ..... Vol. 3. Pl. 759.
Sabatia pustulosa Dall, 1895 ..... Vol. 5. Pl. 1540.
Scaphander japonicus A. Adams, 1862 ..... Vol. 3. Pl. 760.
Scaphander subglobosus Schepman, 1913 ..... Vol. 3. Pl. 760.
Scaphander teramachii (Habe, 1954) ..... Vol. 3. Pl. 760.

MOVES BETWEEN FAMILIES

***Roxania pacifica* (Habe, 1955)**
Was in CYLICHNIDAE.
***Roxania punctulata* A. Adams, 1862**
Was in CYLICHNIDAE.
***Roxania umbilicata* (Habe, 1955)**
Was in CYLICHNIDAE.
***Sabatia japonica* Habe, 1952**
Was in CYLICHNIDAE.
***Philine cumingii* (A. Adams, 1862)**
The former *Scaphander cumingii* (A. Adams, 1862) in Vol. 4, Pl. 1307. Has changed genus and is moved to PHILINIDAE. Remark, now spelled "*cumingii*" with double "ii" at the end.

CHANGES AND REMARKS

***Scaphander cumingii* (A. Adams, 1862)**
Correct with double "ii" at the end.

SCHIZOCHITONIDAE Dall, 1889

Author: Vol. 4 – Bruno Anseeuw.

Schizochiton incisus (G. B. Sowerby II, 1841) ..... Vol. 4. Pl. 1206.

SCISSURELLIDAE Gray, 1847

Author: Vol. 1 – Daniel Geiger.

Satondella cachoi Luque, Geiger & Rolan, 2011 ..... Not yet documented.
Satondella tabulata (Watson, 1886) ..... Not yet documented.
Scissurella cebuana (Bandel, 1998) ..... Vol. 5. Pl. 1540.
Scissurella equatoria Hedley, 1899 XXX now in Anatomidae ..... Vol. 5. Pl. 1540.
Scissurella evaensis Bandel, 1998 ..... Not yet documented.
Scissurella lorenzi Geiger, 2006 ..... Not yet documented.
Scissurella mirifica (A. Adams, 1862) ..... Vol. 1. Pl. 24 & Vol. 5. Pl. 1540.
Scissurella quadrata Geiger & Jansen, 2004 ..... Not yet documented.
Scissurella rota Yaron, 1983 ..... Vol. 5. Pl. 1541.
Scissurella staminea (A. Adams, 1862) ..... Vol. 5. Pl. 1541.
Scissurella spinosa Geiger & Jansen, 2004 ..... Not yet documented.
Scissurella xandaros Geiger, 2012 ..... Not yet documented.

Sinezona danieldreieri Geiger, 2008 ..... Not yet documented.
Sinezona ferriezi (Crosse, 1867) ..... Vol. 5. Pl. 1541.
Sinezona macleani Geiger, 2006 ..... Not yet documented.
Sinezona marrowi Geiger, 2012 ..... Not yet documented.
Sinezona plicata (Hedley, 1899) ..... Vol. 1. Pl. 24 & Vol. 5. Pl. 1540 & 1542.
Sukashitrochus carinatus (A. Adams, 1862) ..... Not yet documented.
Sukashitrochus morleti (Crosse, 1880) ..... Vol. 1. Pl. 24 & Vol. 5. Pl. 1542.
Sukashitrochus atkinsoni (Tenison-Woods, 1877) ..... Vol. 5. Pl. 1542.

THE FAMILIES ANATOMIDAE and SCISSURELLIDAE

We refer to the text on the family level in the family ANATOMIDAE for further information.

SCYLLAEIDAE Alder & Hancock, 1855

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Scyllaea pelagica Linnaeus, 1758 ..... Vol. 3. Pl. 890.

SEGUENZIIDAE Verrill, 1884

Author: Vol. 1 – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

Ancistrobasis largoi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 25.
Calliobasis gemmata Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1543.
Calliobasis lapulapui Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 25.
Calliobasis magellani Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 25.
Calliobasis spectrum Marshall, 1991 ..... Vol. 1. Pl. 25.
Fluxinella membranacea B. A. Marshall, 1991 ..... Vol. 1. Pl. 25.
Fluxinella vitrina Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1543.
Halystina globulus Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 26.
Seguenzia balicasagensis Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 26.
Seguenzia beloni Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 26.
Seguenzia dabfari Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 26.
Seguenzia elegantissima Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 26.
Seguenzia keikoae Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 26 & 27.
Seguenzia trochiformis Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 27.
Visayaseguenzia cumingi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 27.
Visayaseguenzia maestratii Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 27.

SEMELIDAE Stoliczka, 1870 (1825)

Abra fujitai Habe, 1958 ..... Vol. 4. Pl. 1177.
Abra lunella (A. Gould, 1861) ..... Vol. 5. Pl. 1543.
Abra soyoae Habe, 1958 ..... Vol. 4. Pl. 1177.
Cumingia lamellosa G. B. Sowerby I, 1833 ..... Vol. 4. Pl. 1067.
Ervilia bisculpta Gould, 1861 ..... Vol. 4. Pl. 1188.

Leptomya cochlearis (Hinds, 1844)..... Vol. 5. Pl. 1543.
Semele exarata (A. Adams & Reeve, 1850)..... Vol. 5. Pl. 1543.
Semele lamellosa (Reeve, 1853)..... Vol. 4. Pl. 1067.
Semele scabra (Hanley, 1843)..... Vol. 4. Pl. 1177.
Semele zebuensis (Hanley, 1843)..... Vol. 4. Pl. 1177.

MOVES BETWEEN FAMILIES

***Cumingia lamellosa* G. B. Sowerby I, 1833**
Was the former *Myrtea lamellosa* from the family LUCINIDAE.

***Ervilia bisculpta* Gould, 1861**
Was in the family MESODESMATIDAE.

***Semele lamellosa* (Reeve, 1853)**
Was in the family LUCINIDAE as *Myrtea tanimbarensis.*

SEPIADARIIDAE Fischer, 1882
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Sepiadarium cf. *S. austrinum* Berry, 1921..... Vol. 4. Pl. 1231.
Sepiadarium gracilis Voss, 1962..... Vol. 4. Pl. 1255.
Sepiadarium kochi Steenstrup, 1881 ..... Vol. 4. Pl. 1231.

SEPIIDAE Leach, 1817
Author: Vol. 4 – Guido Poppe & Roland De Prins

Metasepia tullbergi (Appelöf, 1886) ..... Vol. 4. Pl. 1217 & 1218.
Sepia cf. *S. aculeata* Van Hasselt, 1835 ..... Vol. 4. Pl. 1224.
Sepia andreana Steenstrup, 1875 ..... Vol. 4. Pl. 1254 & 1255.
Sepia cf. *S. andreana* Steenstrup, 1875 ..... Vol. 4. Pl. 1219.
Sepia bandensis Adam, 1939..... Vol. 4. Pl. 1220.
Sepia cf. *S. bandensis* Adam, 1939..... Vol. 4. Pl. 1221-1223.
Sepia brevimana Steenstrup, 1875..... Not yet documented.
Sepia esculenta Hoyle, 1885..... Vol. 4. Pl. 1254 & 1255.
Sepia kobiensis Hoyle, 1885..... Vol. 4. Pl. 1219.
Sepia latimanus Quoy & Gaimard, 1832.....Vol. 4. Pl. 1225-1228 & 1254-1255.
Sepia lycidas Gray, 1849 ..... Not yet documented.
Sepia pharaonis Ehrenberg, 1831..... Vol. 4. Pl. 1254 & 1255.
Sepia papuensis Hoyle, 1885..... Not yet documented.
Sepia recurvirostra Steenstrup, 1875 ..... Not yet documented.

SEPIOLIDAE Leach, 1817
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Austrorossia bipapillata (Sasaki, 1920) ..... Vol. 4. Pl. 1256.
Euprymna albatrossae Voss, 1963 ..... Vol. 4. Pl. 1256.

Euprymna berryi Sasaki, 1929..... Vol. 4. Pl. 1232 & 1233.
Euprymna hoylei Adam, 1986 ..... Not yet documented.
Euprymna phenax Voss, 1963 ..... Vol. 4. Pl. 1256.
Inioteuthis maculosa Goodrich, 1896..... Vol. 4. Pl. 1256.
Sepiola parva Sasaki, 1913..... Not yet documented.
Sepiola trirostrata Voss, 1962..... Vol. 4. Pl. 1256.
Sepiolina nipponensis (Berry, 1911) ..... Vol. 4. Pl. 1256.

SERAPHSIDAE Gray, 1853
Author: Vol. 1 – Gijs Kronenberg.

Terebellum delicatum Kuroda & Kawamoto, 1961 ..... Vol. 5. Pl. 1544.
Terebellum hubrechti Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1544.
Terebellum terebellum (Linnaeus, 1758)..... Vol. 1. Pl. 231.
Terebellum terebellum forma *lineatum* Röding, 1798..... Vol. 1. Pl. 231.
Terebellum terebellum forma *nebulosum* Röding, 1798 ..... Vol. 1. Pl. 231.
Terebellum terebellum forma *punctulorum* Linnaeus, 1758
..... Vol. 1. Pl. 231. & Vol. 5. Pl. 1544.

SKENEIDAE Clark W., 1851
Author: Vol. 1 – Philippe Bouchet.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Dillwynella vitrea (Hasegawa, 1997) ..... Vol. 5. Pl. 1545.
Leucorhynchia caledonica Crosse, 1867 ..... Vol. 1. Pl. 64.
Leucorhynchia tricarinata Melvill & Standen, 1896 ..... Vol. 1. Pl. 64.
Munditiella ammonoceras (A. Adams, 1863) ..... Vol. 1. Pl. 64.

MOVES BETWEEN FAMILIES

***Conradia sulcifera* A. Adams, 1863**
The former "*Gottoina sulcifera*", *Gottoina* is now a subgenus *Conradia* in WoRMS

CHANGES AND REMARKS

***Leucorhynchia tricarinata* Melvill & Standen, 1896**
Correct author is: Melvill & Standen, 1896, not "Crosse, 1867".

SILIQUARIIDAE Anton, 1838
Tenagodus anguinus (Linnaeus, 1758)..... Vol. 1. Pl. 96.
Tenagodus cumingii Mörch, 1861 ..... Vol. 1. Pl. 96.
Tenagodus ponderosus Mörch, 1861 ..... Vol. 1. Pl. 96.
Tenagodus trochlearis Mörch, 1861..... Vol. 1. Pl. 96.

CHANGES AND REMARKS

***Tenagodus anguinus* (Linnaeus, 1758)**
In the genus *Siliquaria* in Vol. 1. Correct is "*anguinus*", not "*anguina*".
***Tenagodus cumingii* Mörch, 1861**

Correct is with double "ii" at the end.
***Tenagodus ponderosus* Mörch, 1861**
Was "*ponderosa*" in our Vol. 1.

SIPHONARIIDAE Gray, 1827
Author: Vol. 3 – Klaus Groh & Guido Poppe.

Siphonaria cf. *S. laciniosa* (Linnaeus, 1758)..... Vol. 3. Pl. 911.
Siphonaria corrugata Reeve, 1856..... Vol. 3. Pl. 911.
Siphonaria luzonica Reeve, 1856..... Vol. 3. Pl. 912.
Siphonaria sipho G. B. Sowerby I, 1823..... Vol. 3. Pl. 912.
Siphonaria sirius Pilsbry, 1894 ..... Vol. 3. Pl. 913.
Siphonaria subatra Pilsbry, 1904..... Vol. 3. Pl. 913.

NOT FOUND IN WORMS
Siphonaria corrugata Reeve, 1856
Siphonaria luzonica Reeve, 1856

SMARAGDINELLIDAE Thiele, 1925
This family has now been eliminated and the *Phanerophthalmus* and *Smaragdinella* are now genera in the HAMINOEIDAE.

SPIRULIDAE Owen, 1836

Spirula spirula (Linnaeus, 1758)..... Vol. 5. Pl. 1545.

SOLARIELLIDAE Powell, 1951
Author: Vol. 1 – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

Archiminolia ziczac (Kuroda & Habe, 1971) ..... Vol. 1. Pl. 57.
Arxellia tenorioi (Poppe, Tagaro & Dekker, 2006)..... Vol. 1. Pl. 57.
Bathymophila cf. *callomphala* (Schepman, 1908)..... Vol. 1. Pl. 57.
Elaphriella helios Vilvens & Williams, 2016 ..... Not yet documented.
Ilanga gotoi (Poppe, Tagaro & Dekker, 2006)..... Vol. 1. Pl. 58.
Microgaza fulgens Dall, 1907..... Vol. 1. Pl. 58.
Microgaza katoi (Kuroda & Habe, 1961)..... Vol. 5. Pl. 1545.
Minolia condei Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 57.
Solariella dedonderorum (Poppe, Tagaro & Dekker, 2006) ..... Vol. 1. Pl. 58.
Solariella ornatissima (Schepman, 1908) ..... Vol. 1. Pl. 58.
Solariella pygmaea Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 57.
Solariella sanjuanensis Poppe, Tagaro & Dekker, 2006..... Vol. 1. Pl. 58.
Solariella segersi (Poppe, Tagaro & Dekker, 2006) ..... Vol. 1. Pl. 57.
Spectamen mutabilis (Schepman, 1908)..... Vol. 1. Pl. 57.
Zetela tabakotanii (Poppe, Tagaro & Dekker, 2006) ..... Vol. 1. Pl. 57.

MOVES BETWEEN FAMILIES

Pseudominolia tramieri Poppe, Tagaro & Dekker, 2006
Has been moved to the family TROCHIDAE.

CHANGE OF GENUS

***Arxellia tenorioi* (Poppe, Tagaro & Dekker, 2006)**	Was in the genus *Bathymophila*.
***Ilanga gotoi* (Poppe, Tagaro & Dekker, 2006)**	Was in the genus *Microgaza*.
***Solariella dedonderorum* (Poppe, Tagaro & Dekker, 2006)**	Was in the genus *Zetela*.
***Solariella segersi* (Poppe, Tagaro & Dekker, 2006)**	Was in the genus *Minolia*.
***Spectamen mutabilis* (Schepman, 1908)**	Was in the genus *Zetela*.
***Zetela tabakotanii* (Poppe, Tagaro & Dekker, 2006)**	Was in the genus *Minolia*.

SOLECURTIDAE d'Orbigny, 1846

Azorinus coarctatus (Gmelin, 1791)..... Vol. 4. Pl. 1178.
Azorinus scheepmakeri (Dunker, 1852)..... Vol. 4. Pl. 1178.
Solecurtus philippinarum (Dunker, 1862)..... Vol. 4. Pl. 1179.
Solecurtus quoyi Deshayes, 1835 ..... Vol. 4. Pl. 1178.
Solecurtus rhombus (Spengler, 1794)..... Vol. 4. Pl. 1179.
Solecurtus sagamiensis Kuroda & Habe in Kuroda & al., 1971 ..... Vol. 4. Pl. 1179.

CHANGES AND REMARKS

WORMS follows Huber (2010) who claims that Solecurtus rhombus is the correct name for S. quoyi. This is not conform to the literature who shows that these are two different valid species. Even at first sight the shape of S. rhombus is different. Both species have been well illustrated in Volume 4.

SOLENIDAE Lamarck, 1809

Author: Vol. 4 – Rudo von Cosel.

Solen cf. *S. delesserti* Sowerby, 1874..... Vol. 4. Pl. 1181.
Solen cf. *S. madagascariensis* Cosel, 1989 ..... Vol. 4. Pl. 1180.
Solen roseomaculatus Pilsbry, 1901..... Vol. 4. Pl. 1180.
Solen sloanii Gray, 1843..... Vol. 4. Pl. 1180.
Solen soleneae Cosel, 2002 ..... Vol. 4. Pl. 1181.

SPONDYLIDAE Gray, 1826

Spondylus albibarbatus Reeve, 1856 ..... Vol. 4. Pl. 1032.
Spondylus anacanthus forma *flabellum* Reeve, 1856..... Vol. 4. Pl. 1027.
Spondylus anacanthus forma *sanguineus* Dunker, 1852..... Vol. 4. Pl. 1027.
Spondylus anacanthus Mawe, 1823..... Vol. 4. Pl. 1027.
Spondylus asperrimus G. B. Sowerby II, 1847..... Vol. 4. Pl. 1038.
Spondylus candidus Lamarck, 1819 ..... Vol. 4. Pl. 1028.
Spondylus cruentus Lischke, 1868 ..... Vol. 4. Pl. 1038.
Spondylus deforgesi Lamprell & Healy, 2001..... Vol. 4. Pl. 1044.
Spondylus echinatus Schreibers, 1793..... Vol. 4. Pl. 1033.
Spondylus echinatus forma *spectrum* Reeve, 1856 ..... Vol. 4. Pl. 1033.
Spondylus echinatus forma *zonalis* Lamarck, 1819..... Vol. 4. Pl. 1034.
Spondylus erectospinosus Habe, 1973..... Vol. 4. Pl. 1042.
Spondylus exiguus Lamprell & Healy, 2001 ..... Vol. 4. Pl. 1045.

CHANGES AND REMARKS

***Spondylus albibarbatus* Reeve, 1856**

WORMS, following Huber (2010) puts *S. albibarbatus* in the synonymy of *S. echinatus*.
This is without fondation, both species have been shown to be different in our books. *S. albibarbatus* is usually larger than *S. echinatus* and is almost always white spined with a brown umbo and brown radiating lines beteen the ribs of spines, while *S. echinatus* is smaller, often more round in shape, occasionally with a pattern of black flecks around the umbo, and most often differently colored, although dominantly white shells also exist.

***Spondylus cruentus* Lischke, 1868**

WORMS, following Huber (2010) puts *S. cruentus* in the synonymy of *S. squamosus*.
We do not agree, and stick to classic literature who illustrated "*cruentus*" well. The holotype has been shown by Higo, Callomon & Goto (2001). S. cruentus is a very short spined, round-oval species with an almost flat upper valve. The species was described as a subspecies of *S. barbatus* Reeve, 1856. Huber puts it as a form of *S. squam*osus and illustrates shells very close to the holotype indeed. Toba (2009), Zhenrui (2001), Poppe (2011), Okutani (2000), Fengshan & Suping (2008), Kira (1959-1962) all consider the species as a valid species.

***Spondylus erectospinosus* Habe, 1973**

Correct name for our former "*Spondylus erectospinus*".

***Spondylus foliaceus* Schreibers, 1793**

ORMS, following Huber (2010) puts *S. nux* in the synonymy of *S. foliaceus*.
After viewing the probable type figure of *S. nux* in Reeve, we agree with that. Reeve shows a small purple *foliaceus* in Volume 6 of the Icononica of 1856 as "*S. nux*".
On the plate of *Spondylus nux*, Volume 4, plate 1021, determinations should read as follows:
1., 2., 3 and 4 are *Spondylus regius* (deep water form). Figure 5 is a spineless *S. foliaceus* forma *croceus*.

Spondylus reevei Fulton, 1915

WORMS, following Huber (2010) puts *S. reevei* in the synonymy of *S. virgineus*.
We do not agree with that. Our information on *S. virgineus* is poor: Lamprell (2003) shows 2 shells in his revision of the

Spiny oysters. The probable type figure of Reeve (1856) shows the same species as demonstrated much later by Lamprell. The *S. virgineus* as shown by Dharma (2005) from Indonesia is, we think but we are not sure, an orange variant of *S. variegatus.* Apart from that, only Huber demonstrates *S. virgineus,* but his shells do not fit with the specimen shown by Reeve and they also do not correspond to what we understand as *S. reevei* today. The *S. reevei* Fulton was proposed as a replacement name for "*S. hystryx"* Reeve. The syntype of that shell has been shown in detail by Lamprell, 2003. And this is the species we present as such in our Philippine books. The drawing of the type of *S. hystrix* in Reeve, 1856 is much "embellished" and does not show very well the shell we still have today as a syntype.

***Spondylus* cf. *S. setiger* Reeve, 1856**

WORMS, following Huber (2010) puts *S. setiger* in the synonymy of *S. asiaticus* Chenu, 1844.
This is an interesting affair. Looking at the types, we see that *S. asiaticus* is a Queensland shell with a very oblique shape, almost no spines, brown outside with a purple border inside. The syntype has been shown by Lamprell (2003). When we view the Lectotype of Reeve, shown in the same book, we can conclude this is the same species, said to come from the Philippines. Equally oblique, the only difference are the longer thin spines and the purple inside that is missing. But we agree that these are the same species. This leaves us with the material figured as such as *S. setiger*, which we now will call *S.* cf. *S. setiger*, pending further determination – or description.

***Spondylus sinensis* G. B. Sowerby II, 1847**

WORMS, following Huber (2010) puts *S. sinensis* in the synonymy of *S. squamosus* Schreibers, 1793.
A quick look at the type material shows that this is completely wrong. The lectotype of *S. squamosus* has been figured by Lamprell, 2003. It is a small black shell with long white spines, but of a different type as seen in *S. sinensis.* The types of *S. sinensis* have been shown by Higo, Callomon & Goto (2001). The lower specimen is what we call *S. sinensis* today.

***Spondylus visayensis* Poppe & Tagaro, 2010**

Described as a subspecies of *S. gloriosus,* now considered by a majority of workers and collectors as a valid species, here confirmed.

STROMBIDAE Rafinesque, 1815

Author: Vol. 1 – Gijs Kronenberg.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

THE FAMILY STROMBIDAE

Quite some modifications in this popular family of mainly shallow water species. Virgilio Liverani (2013) made a nice contribution to the updating of this family in the Iconography.

NOT FOUND IN WORMS

MOVES BETWEEN FAMILIES

***Varicospira cancellata* (Lamarck, 1816)**
Moved to the RIMELLIDAE.

***Varicospira crispata* (G. B. Sowerby II, 1842)**
Moved to the RIMELLIDAE.

CHANGE OF GENUS

***Barneystrombus boholensis* (Mühlhäusser, 1981)**
Blackwood (2009) placed this species in the genus *Barneystrombus*. It was in the genus *Dolomena*.

***Margistrombus septimus* (Duclos, 1844)**
Was in the genus *Dolomena* as "*septima*".

***Sinustrombus latissimus* (Linnaeus, 1758)**
Was in the genus *Tricornis*.

***Sinustrombus sinuatus* (Lightfoot, 1786)**
Was in the genus *Tricornis*.
***Thersistrombus thersites* (Swainson, 1823)**
Was in the genus *Tricornis*.

CHANGES AND REMARKS

***Canarium scalariforme* (Duclos, 1833)**
This is the new name for the former *C. haemastoma.* See Kronenberg in Basteria (2015).
***Dolomena abbotti* Dekkers & Liverani, 2011**
This is the species figured as *Dolomena labiosa* (Wood, 1828). A. Dekkers & Liverani (2010) decided that the *D. labiosa* is limited to the Indian Ocean, the Thai, Indonesian and Philippine shells are now *D. abbotti* Dekkers & Liverani, 2010.
***Dolomena athenia* (Duclos, 1844)**
We maintain *D. athenia* (in our books was *athenius*) as a valid species and not a form or subspecies of *D. variabilis.* This is based on our field experience: we have seen thousands of D. variabilis (many times we were dining on these, it is a delicacy in the Visayas. An none even vaguely resemble *D athenia.*
***Doxander entropi* (Man in 't Veld & Visser, 1993)**
WORMS is a little bizarre there: *Doxander vitttatus entropi* is "represented"as *Doxander vittatus.* Liverani (2013) continues a classic view and considers *Doxander vittatus*, *entropi* and *apicatus* as subspecies of *Doxander vittatus.* All three species definitely belong to the same genus but are well established as valid species. The treatment as subspecies is arbitrary and we should not confuse genera with species. In earlier years *Doxander japonicus* and *campbelli* were also regarded as part of the "group" but they are now considered separate species already. We continue to use *D. entropi* as a valid species, separate from the sister species *D. vittatus.*
***Gibberulus gibbosus* (Röding, 1798)**
Liverani (2013) writes "The three (sub)specids have ranges in contact to one another, but apparently not overlapping; specimens with intermediate characteristics are non-existent or extremely rare. They may prove to be three separate species." We anticipated this and considered *G. gibbosus* as a valid species in our PMM Vol. 1. Already.
***Harpago arthriticus* (Röding, 1798)**
Correct spelling for the former "*H. arthritica."*
***Lambis adamii* Bozzetti & T. Cossignani, 2003**
We now have more information on this valid species of which we have handled more than 300 shells and seen much more. Liverani (2013) got his doubts on this species "…and is possibly of ecological or pollutional origin".
We now know that the species lives only on Sarangani Island, with rare pieces occurring also on the neighbouring Balut Island. It has never been found on Mindanao mainland. In collections, there are huge quantities of wrong labeling because of blunt "lying" of the middlemen, eager to protect the source of their material. Although there is resemblence to *Lambis lambis* in some shells, there are no real intergrades and I have seen dwarf Lambis lambis of the same size as adult *L. adamii.* This is another case of endemism in the *Lambis*-group: the members of this and related genera are prone to endemism. Other cases are the *Ophioglossolambis violacea* (Swainson, 1821) which occurs only on a few small Islands on the banks north of Mauritius or the *Lambis robusta* (Swainson, 1821) of which the main populations lives around the small Moorea Island, with sparse shells only on Tahiti.
The waters of Sarangani and Balut Island are luckily pristine and pure: there is no pollution at all. So, this is not a kind of "local deformation".

TEGULIDAE Kuroda, Habe & Oyama, 1971

THE FAMILY TEGULIDAE

A not yet well established family, a split off from former TROCHIDAE, with mainly Indo-Pacific genera (except *Tegula* which has also American Atlantic members). The family contains the following genera: *Carolesia, Chlorostoma, Cittarium, Norrisia,*

Omphalius, Tectus and *Tegula*. This has been done after molecular studies, but we feel that this should be better off as a subfamily within the TROCHIDAE as similarities between the genus *Tectus* and the genus *Trochus* are too close to be untrue. *Carolesia* is a new genus harboring the former "Calliostoma blackei Clench & Aguayoi, 1938". This species which lives in Argentina in the San Matias Gulf, was most often placed in *Photinula* and looks like a classic *Tegula*.

MOVES BETWEEN FAMILIES

All members of the Philippine TEGULIDAE come from the family TROCHIDAE.

CHANGE OF GENUS

Tectus conus (Gmelin, 1791)	Was in the genus *Trochus*.
Tectus elatus (Lamarck, 1822)	Was in the genus *Trochus*.

CHANGES AND REMARKS

***Tectus elatus* (Lamarck, 1822)**

The former *Trochus conus* forma *elatus* (Lamarck, 1822), now a valid species, no longer a form or subspecies.

***Tectus fenestratus* (Gmelin, 1791)**

Change the genus from *Trochus* to *Tectus* in the legend of the central photo on page 204.

TELLINIDAE Blainville, 1814

Author: Vol. 4 – Guido Poppe & Annie Langleit.

THE FAMILY TELLINIDAE

The family TELLINIDAE underwent big changes on the genus level. WORMS follows in this case the works of Huber, Langleit & Kreipl in Huber (2015). We follow these changes. Our version in Volume 4 was handled by A. Langleit, who apparently

changed slightly and most often only on the generic/subgeneric level, to the present situation. We removed the few subgenera that still remained after the changes to modern nomenclature and now limit the listing to generic assignements only, for the sake of uniformity.

CHANGE OF GENUS

Arcopagia cf. *A. isseli* (H. Adams, 1871)	Was in *Tellina* (*Arcopella*).
Bathytellina citrocarnea Kuroda & Habe, 1958	Was in *Tellina* (*Bathytellina*).
Cadella hoshiyamai Kuroda, 1960	Was in *Tellina* (*Cadella*).
Cadella semitorta (Sowerby, 1867)	Was in *Tellina* (*Cadella*).
Herouvalia caelata (A. Adams, 1854)	Was in *Tellina* (*Elliptotellina*).
Heteromacoma irus (Hanley, 1845)	Was in *Macoma* (*Heteromacoma*).
Jitlada culter (Hanley, 1844)	Was in *Tellina* (*Moerella*).
Loxoglypta cf. *L. rhomboides (Quoy & Gaimard, 1835)*	*Was in Macoma (Loxoglypta).*
Loxoglypta secunda (Bertin, 1878)	Was in *Macoma* (*Loxoglypta*).
Loxoglypta subpallida (E. A. Smith, 1891)	Was in *Macoma* (*Loxoglypta*).
Loxoglypta transculpta (Sowerby III, 1915)	Was in *Macoma* (*Loxoglypta*)
Moerella rutila (Dunker, 1860)	Was in *Tellina* (*Moerella*)
Pistripagia radians (Deshayes, 1855)	Was in *Tellina* (*Tellinella*).
Praetetellina praetexta (Martens, 1865)	Was in *Macoma* (*Macoma*).
Pristripagia subtruncata (Hanley, 1844)	Was in *Tellina* (Pistris).
Psammotreta maluccensis (Martens, 1865)	Was in *Tellinimactra.*
Strigilla tomlini E. A. Smith, 1915	Was in Strigilla (Aeretica).
Tellina asperrima Hanley, 1844	Was in *Tellina* (*Tellinella*).
Tellina capsoides Lamarck, 1818	Was in *Tellina* (*Pistris*).
Tellina cf. *T. pulcherrima* G.B. Sowerby I, 1825	Was in *Tellina* (*Tellinella*).
Tellina crucigera (Lamarck, 1818)	Was in *Tellina* (*Tellinella*).
Tellina cycladiformis Hanley, 1844	Was in *Macoma*.
Tellina cygnys Hanley, 1844	Was in *Macoma* (*Pinguimacoma*).
Tellina diaphana Deshayes, 1855	Was in *Tellina* (*Pistris*).
Tellina donaciformis Deshayes, 1855	Subgenus *Exotica* removed.
Tellina exculta Gould, 1850	Was in *Tellina* (*Tellinella*)
Tellina hokkaidoensis (Habe, 1961	Was in *Tellina* (*Nitidotellina*).
Tellina inerta Deshayes, 1855	Was in *Tellina* (*Tellinella*).
Tellina linguafelis Linnaeus, 1758	Was in *Scutarcopagia*.
Tellina margaritina Lamarck, 1818	Was in *Tellina* (Pistris).
Tellina miyatensis Yokoyama, 1920	Was in *Tellina* (*Semelangulus*).
Tellina ovalis (Sowerby I, 1825)	Was in *Tellina* (*Tellinides*).
Tellina perplexa Hanley, 1844	Was in *Tellina* (*Merisca*).
Tellina plicatus Valenciennes, 1827	Was in *Tellina* (*Hemimetis*).
Tellina rostrata forma aurea Perry, 1811	Was in *Tellina* (*Pharaonella*).
Tellina scobinata Linnaeus, 1758	Was in *Scutarcopagia*.
Tellina staurella Lamarck, 1818	Was in *Tellina* (*Tellinella*).
Tellina timorensis (Lamarck, 1818)	Was in *Tellina* (*Tellinides*).
Tellina tokunagai (Ikebe, 1936)	Was in *Tellina* (*Pistris*).
Tellina triradiata H. Adams, 1871	Subgenus *Exotica* removed.
Tellina valtonis Hanley, 1844	Was in *Tellina* (*Tellinides*).
Tellina verrucosa Hanley, 1844	Was in *Tellina* (*Tellinella*).
Tellina vestalioides Yokoyama, 1920	Subgenus *Angulus* removed.
Tellina vestalis Hanley, 1844	*Subgenus Angulus removed.*
Tellina virgata Hanley, 1844	Was in *Tellina (Tellinella).*
Tellinides coccineus (Gmelin, 1791)	Was in *Tellina (Tellinides).*
Tonganaella perna (Spengler, 1798)	Was in *Tellina* (*Pharaonella*).
Tonganaella tongana (Quoy & Gaimard, 1835)	Was in *Tellina (Pharaonella).*

CHANGES AND REMARKS

***Macoma corbuloides* (Hanley, 1844)**

According to WORMS, this species should be accepted as *Jitlada hanleyi* M. Huber, Langleit & Kreipl, 2015. We do not agree. In first instance, why should Huber, Langleit & Kreipl describe a new species when there is an older name. But

apart from that the *Jitlada hanleyi* has another shape: the shell is much more elongate when compared to the *Tellina corbuloides*, as shown by Sowerby in Thesaurus part 1, figures 30 and 31. The color pattern of very red umbo and dark red around the periphery could have been misleading for the authors: this is not a good feature on the specific level as many *Tellina* can have that. But the high shape of corbuloides is specific and corresponds to the shells we have figured in Volume 4 as such. We stick to the first opinion of A. Langleit and keep "*Macoma*", not "*Angulus*".

***Psammotreta maluccensis* (Martens, 1865)**

Correct name for "*moluccensis*".

***Loxoglypta* cf. *T. rhomboides* Gmelin, 1791**

WORMS, following Huber, puts *Tellina rhomboides* in the synonymy of *Jactellina clathrata* (Deshayes, 1835). We change the genus in *Loxoglypta*, more appropriate. This is a problematic affair, as in the literature we have at least 4 different species of *Tellina* figured as "*rhomboides* Quoy and Gaimard". The figures, which I presume are the type figures are shown in Sowerby, 1847. It concerns 2 different species: fig. 92 is a different species compared to the figures 96 and 97. We there can eliminate the *T. rhomboides* from Salvat & Rives (1975) and the *rhomboides* from Ramakrishna & Dey (2010) as wrongly identified. Our shells are more or less confomr to the figures 96 and 97 of Sowerby and so is the shell shown by Oliver (1992) from the Red Sea and the Bosch, Dance, Moolenbeek & Oliver shell from Easter Arabia (1995). The latter specimen corresponds to the 92 of Sowerby, the Oliver shell to the 96 of Sowerby. Huber considers his Jactellina clathrata as a variable species with a range from the Red Sea to the Galapagos and, in our humble opinion, illustrates different species in his 5 figures. We also think that, especially based on my European experience with Tellinidae, that such species are not very variable in shape. The *Angulus/Tellina* shells from Europe are stable in shape "on the mm". Regarding the confusion, we leave our "*rhomboides*" as such, and possibly our material may also prove to be different from the types. We join a careful "cf" *rhomboides* for this reason.

***Quidnipagus palatam* Iredale, 1929**

According to WORMS correct without brackets.

***Tellinella tithonia* (A.A. Gould, 1850)**

According to WORMS, following Huber & authors, this is our *Tellina crassiplicata* G. B. Sowerby II, 1869. The type of *Tellina tithonia* from the "Sooloo Sea" is shown online, and we believe this shell to be indeed conform to our former "*crassiplicata*". We therefore change to the older name.

***Tellina exculta* Gould, 1850**

Worms accept this species as a synonym of *Tellinella crucigera* (Lamarck, 1818), a completely different species. In the meantime the type of *T. exculta* can be seen online on the homepage of the Smithsonian, and our shell perfectly fits with the holotype. We maintain this species as valid and follow in this A. Langleit. According to Langleit and the Smithsonian, correct date is 1850, not 1851 as in WORMS.

TEREBRIDAE Mörch, 1852

Author: Vol. 2 – Yves Terryn.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Triplostephanus hoaraui (Drivas & Jay, 1988) ..... Vol. 2. Pl. 698.
Triplostephanus triseriatus (Gray, 1834) ..... Vol. 2. Pl. 698.
Triplostephanus waikikiensis (Pilsbry, 1921)..... Vol. 2. Pl. 698.

THE FAMILY TEREBRIDAE

Our TEREBRIDAE from the Philippines were handled by Y. Terryn in 2008. Shortly afterwards, Y. Terryn & M. Holford handled in Visaya the Tereridae of Vanuatu and revised especially the genus *Granuliterebra*. Another important contribution appeared in 2014. Aubry, Gargiulo and Picardal published a small book on the rare and uncommon TEREBRIDAE of Palawan. Curiously the work of Terryn (in Poppe) is even not mentioned in their bibliography. This work adds several species to the Philippine fauna.

CHANGE OF GENUS

Terryn Y. communicated us that the genus name "*Acus*" is not correct. This genus has now been replaced by "*Oxymeris*". A curiosity is the fact that *Terebra subulata* did not join the *Oxymeris*, while most of us consider this the sister species of *O. areolata*.

***Clathroterebra gulphilae* (Poppe, Tagaro & Terryn, 2009)**	Was in *Terebra*.
***Hastula hectica* (Linnaeus, 1758)**	Was in *Impages*.
***Myurella exiguoides* (Schepman, 1913**	Was in *Terebra*.
***Oxymeris cerithina* (Lamarck, 1822)**	Was in *Perirhoe*.
***Oxymeris areolata* (Link, 1807)**	Was in *Terebra.*
***Pellifronia jungi* (Lai, 2001)**	Was in *Pristiterebra* and *Terebra.*
***Strioterebrum lividum* (Reeve, 1860)**	Was in *Terebra*.
***Strioterebrum plumbeum* (Quoy & Gaimard, 1833)**	Was in *Terebra*.
***Terebra cossignanii* Aubry, 2008**	Was in *Cinguloterebra*.
***Terebra spectabilis* Hinds, 1844**	Was in *Duplicaria*.
***Triplostephanus elliscrossi* (Bratcher, 1979)**	Was in *Cinguloterebra*.
***Triplostephanus fenestrata* (Hinds, 1844)**	Was in *Cinguloterebra*.
***Triplostephanus hoaraui* (Drivas & Jay, 1988)**	Was in *Cinguloterebra*.
***Triplostephanus triseriatus* (Gray, 1834)**	Was in *Cinguloterebra*.
***Triplostephanus waikikiensis* (Pilsbry, 1921)**	Was in *Cinguloterebra*.

CHANGES AND REMARKS

***Cinguloterebra raybaudii* (Aubry, 1993)**
The former spelling was "raybaud…".

***Clathroterebra multistriata* (Schepman, 1913)**
This species is an ongoing problem. We here figure a specimen which corresponds to the drawing of Schepman. Likely a valid species. In WORMS mentioned as a syonym of *C. fortunei* (Deshayes, 1857), following in this Bratcher & Cernohorsky (1987).

***Hastula alboflava* Bratcher, 1988**
The correct author is Bratcher, 1988, not (Deshayes, 1859)

***Hastula strigilata* (Linnaeus, 1758)**
The living animal figured on in Vol. 2, p. 800 is this species, not *H. matheroniana* as written in the legend.

***Strioterebrum ballinum* (Hedley, 1915)**
The former spelling was "ballin…".

***Strioterebrum lividum* (Reeve, 1860)**
The former spelling was "livid….".

***Strioterebrum nitidum* (Hinds, 1844)**
Correct for spelling for " *"nitida"*.

***Strioterebrum plumbeum* (Quoy & Gaimard, 1833)**
The former spelling was "plum….".

***Triplostephanus triseriatus* (Gray, 1834)**
The former spelling was "triseriat…".

TEREDINIDAE Rafinesque, 1815

Author: Vol. 4 – Takuma Haga.

Bactronophorus thoracites (Gould, 1856)..... Not yet documented.
Bankia barthelowi Bartsch, 1927..... Not yet documented.
Bankia gracilis Moll, 1935..... Not yet documented.
Bankia philippinensis Bartsch, 1927 ..... Not yet documented.
Dicyathifer mannii (Wright, 1866)..... Not yet documented.
Kuphus polythalamia (Linnaeus, 1758)..... Vol. 4. Pl. 1194.
Lyrodus pedicellatus (Quatrefages, 1849)..... Not yet documented.
Teredo escarceoana Bartsch, 1927..... Not yet documented.
Teredo luzonensis Bartsch, 1927 ..... Not yet documented.
Teredo mindanensis Bartsch, 1923..... Not yet documented.
Teredo mindoroana Bartsch, 1927 ..... Not yet documented.
Teredo tanonensis Bartsch, 1927..... Not yet documented.
Teredora princesae (Sivickis, 1928) ..... Vol. 4. Pl. 1194.
Teredothyra matocotana (Bartsch, 1927)..... Not yet documented.
Teredothyra smithi (Bartsch, 1927)..... Not yet documented.
Uperotus clava (Gmelin, 1791) ..... Vol. 5. Pl. 1550.

THE FAMILY TEREDINIDAE

In 1927 Paul Bartsch published a booklet in the United States National Museum Bulletin, nr. 100, Vol. 2, part 5, on "The Shipworms of the Philippine Islands." This was mainly the result of his own collecting years earlier with the Albatros expeditions in the Philippines. As the figures belong to the public domain, we here reproduce part of these.

NOT FOUND IN WORMS

***Teredo tanonensis* Bartsch, 1927**

This species is well illustrated in Bartsch, 1927.

CHANGES AND REMARKS

***Uperotus clava* (Gmelin, 1791)**

We follow now the WORMS, based on Turner (1966). We illustrated this sensational species in our book "1000 Shells" as *Uperotus nucivorus* (Spengler, 1792) following in this Reeve (1879). The species was also vigured by Moore (1969) as *Uperotus clavus (*Gmelin) ; by Zhongyan (2004) and Lamprell & Healy (1998).

TERGIPEDIDAE Bergh, 1889

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Cuthona diversicolor Baba, 1975 ..... Vol. 3. Pl. 896.
Cuthona sibogae (Bergh, 1905)..... Vol. 3. Pl. 897.
Cuthona yamasui Hamatani, 1993..... Vol. 3. Pl. 896.
Phestilla lugubris (Bergh, 1870) ..... Vol. 3. Pl. 898.
Phestilla melanobrachia Bergh, 1874 ..... Vol. 3. Pl. 898.
Phestilla minor Rudman, 1981 ..... Vol. 3. Pl. 898.

CHANGE OF GENUS

Cuthona diversicolor Baba, 1975	Was in the genus *Trinchesia*.
Cuthona sibogae (Bergh, 1905)	Was in the genus *Trinchesia*.
Cuthona yamasui Hamatani, 1993	Was in the genus *Trinchesia*.

TETHYDIDAE Rafinesque, 1815
Author: Vol. 3 – Richard Willan & Philippe Poppe.

Melibe viridis (Kelaart, 1858)..... Vol. 3. Pl. 891.

THRACIIDAE Stoliczka, 1870 (1839)
Parvithracia sematana (Yokoyama, 1922) ..... Vol. 4. Pl. 1055.
Thracia concinna Reeve, 1859 ..... Vol. 4. Pl. 1055.
Thracidora japonica Habe, 1961..... Vol. 5. Pl. 1550.

CHANGES AND REMARKS

***Parvithracia sematana* (Yokoyama, 1922)**
The correct spelling for "*sematanus*".

THYSANOTEUTHIDAE Keferstein, 1866
Author: Vol. 4 – Guido Poppe & Roland De Prins.

Thysanoteuthis rhombus Troschel, 1857 ..... Vol. 4. Pl. 1239.

TONNIDAE Suter, 1913 (1825)
Author: Vol. 1 – Chris Vos.

Eudolium bairdii (Verrill & S. Smith [in Verrill], 1881) ..... Vol. 1. Pl. 242.
Eudolium crosseanum (Monterosato, 1869)..... Vol. 1. Pl. 242.
Malea pomum (Linnaeus, 1758) ..... Vol. 1. Pl. 242.
Tonna allium (Dillwyn, 1817) ..... Vol. 1. Pl. 243.
Tonna ampullacea (Philippi, 1845) ..... Vol. 1. Pl. 244 & 245.
Tonna canaliculata (Linnaeus, 1758)..... Vol. 1. Pl. 245.
Tonna chinensis (Dillwyn, 1817)..... Vol. 1. Pl. 246.
Tonna chinensis f. *pictum* (Schepman, 1893)..... Vol. 1. Pl. 246.
Tonna dolium (Linnaeus, 1758)..... Vol. 1. Pl. 247.
Tonna lischkeana (Küster, 1857)..... Vol. 1. Pl. 247.
Tonna perdix (Linnaeus, 1758)..... Vol. 1. Pl. 248 & 249.
Tonna sulcosa (Born, 1778)..... Vol. 1. Pl. 248.
Tonna tessellata (Lamarck, 1816) ..... Vol. 1. Pl. 250.
Tonna zonata (Green, 1830) ..... Vol. 1. Pl. 250.

CHANGES AND REMARKS

***Tonna chinensis* f. *pictum* (Schepman, 1893)**
We now use this name for the strongly patterned shells. *Dolium pictum* has been described in the Siboga expedition papers and was duly refigured by Van Der Bijl & All (2010). In PMM, the shells shown on plate 246, figs. 4 & 5 belong to that form.

TORNIDAE Sacco, 1896 (1884)
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Anticlimax aitormonzoi Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax cyclist Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax dentata Rubio & Rolán, 2014..... Not yet documented.
Anticlimax discus Rubio & Rolán, 2014..... Not yet documented.
Anticlimax elata Rubio & Rolán, 2014..... Not yet documented.
Anticlimax infaceta Rubio & Rolán, 2014..... Not yet documented.
Anticlimax juanae Rubio & Rolán, 2014..... Not yet documented.
Anticlimax lentiformis Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax levis Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax maestratii Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax maranii Rubio & Rolán, 2014 ..... Vol. 5. Pl. 1551.
Anticlimax obesa Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax philippinensis Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax philsmithi Rubio & Rolán, 2014..... Not yet documented.
Anticlimax puncticulata Rubio & Rolán, 2014..... Not yet documented.
Anticlimax religiosa Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax robusta Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax simulans Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax singularis Rubio & Rolán, 2014..... Not yet documented.
Anticlimax tamarae Rubio & Rolán, 2014 ..... Not yet documented.
Anticlimax umbiliglabra Rubio & Rolán, 2014..... Not yet documented.
Anticlimax uniformis Rubio & Rolán, 2014 ..... Not yet documented.
Circulus cinguliferus (A. Adams, 1850)..... Vol. 1. Pl. 199.
Circulus liricincta (Garrett, 1873)..... Vol. 5. Pl. 1553.
Circulus modestus (Gould, 1859) ..... Vol. 1. Pl. 199.
Circulus teramachii (Habe, 1958) ..... Vol. 1. Pl. 199 & Vol. 5. Pl. 1551.
Circulus tornatus (A. Adams, 1864) ..... Vol. 1. Pl. 199.
Cochliolepis fimbriata (E. C. von Martens, 1897) ..... Vol. 5. Pl. 1553.
Cyclostrema sculptile Garrett, 1874 ..... Vol. 5. Pl. 1551.
Lophocochlias minutissimus (Pilsbry, 1921) ..... Vol. 5. Pl. 1545.
Lophocochlias procerus Rubio & Rolán, 2015 ..... Not yet documented.
Lydiphnis euchilopteron (Melvill & Standen, 1903) ..... Vol. 5. Pl. 1551.
Pseudoliotia astericus (Gould, 1859)..... Vol. 5. Pl. 1551 & 1552.
Pseudoliotia granulosa (Kuroda & Habe, 1971)..... Vol. 5. Pl. 1552.
Pseudoliotia reeviana (Reeve, 1843)..... Vol. 1. Pl. 199.
Teinostoma sibogae Schepman, 1908..... Vol. 5. Pl. 1552.
Tornus trochula (A. Adams, 1863)..... Vol. 5. Pl. 1552.
Uzumakiella japonica Habe, 1958 ..... Vol. 5. Pl. 1552.
Woodringilla solida (Laseron, 1954)..... Vol. 4. Pl. 1307., Add. 1.

NOT FOUND IN WORMS

***Pseudoliotia granulosa* (Kuroda & Habe, 1971).**
***Pseudoliotia reeviana* (Reeve, 1843)**
***Teinostoma sibogae* Schepman, 1908**
***Tornus trochula* (A. Adams, 1863)**

In the literature found as *Adeorbus trochula*, but according to WORMS, this is a junior objective synonym of *Tornus*. ?? The species is shown very by Sowerby (1866), by Reeve (1874) and is further documented by Pilsbry & Tryon (1888). The type is from Gotto Islands, Japan.

CHANGE OF GENUS

***Circulus teramachii* (Habe, 1958)** Was in the genus *Pygmaerota.*

CHANGES AND REMARKS

***Circulus cinguliferus* (A. Adams, 1850)**
In Vol. 1, plate 199, correct on p. 508 is Fig. 1, not 2.

***Circulus modestus* (Gould, 1859)**
In Vol. 1, plate 199, correct on p. 508 is Fig. 2, not 3. Correct name for *C. modesta.*

***Circulus teramachii* (Habe, 1958)**
In Volume 1 figured on Plate 199: Fig. 3, not 4. Refigured in Vol. 5.

***Circulus tornatus* (A. Adams, 1864)**
In Vol. 1, plate 199, correct is Fig. 4, not 5.

***Cyclostrema sculptile* Garrett, 1874**
WORMS put this species in the synonymy of *C. marchei* Jousseaume, 1872 in the family LIOTIIDAE. Based on the information we have we cannot agree. The *C. sculptile* was figured by Pilsbry & Tryon (1888) in Volume 10. Our shell corresponds to that specimen, although in reality it is difficult to judge if this is a TORNIDAE or a CHILODONTIDAE. It is very different from the *C. marchei*, figured by the same authors (Pilsbry & Tryon) in the same volume.

***Pseudoliotia reeviana* (Reeve, 1843)**
In Vol. 1, plate 199, correct on p. 508 is Fig. 5, not 6.

TRAPEZIDAE Lamy, 1920 (1895)

Glossocardia obesa (Reeve, 1843)..... Vol. 4. Pl. 1085.
Glossocardia stoliczkana Prashad, 1932 ..... Vol. 4. Pl. 1085.
Neotrapezium sublaevigatum (Lamarck, 1819)..... Vol. 5. Pl. 1553.
Neotrapezium cf. *N. sublaevigatum* (Lamarck, 1819)..... Vol. 4. Pl. 1085.
Trapezium bicarinatum (Schumacher, 1817) ..... Vol. 4. Pl. 1085.
Trapezium gilvum (Martens, 1872)..... Vol. 4. Pl. 1085.
Trapezium oblongum (Linnaeus, 1758)..... Vol. 4. Pl. 1085.

TRIMUSCULIDAE J. Q. Burch, 1945 (1840)
Author: Vol. 3 – Klaus Groh & Guido Poppe.

Trimusculus escondidus Poppe & Groh, 2009..... Vol. 3. Pl. 913.

TRIPHORIDAE Gray, 1847
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Aclophora robusta Laseron, 1958 ..... Vol. 1. Pl. 307 & 311.
Aclophoropsis mcmichaeli (Kosuge, 1962)..... Vol. 1. Pl. 307.
Aclophora maxillaris (Hinds, 1843) ..... Vol. 1. Pl. 307.
Aclophora xystica (Jousseaume, 1884)..... Vol. 1. Pl. 307.
Cautor granulatus (A. Adams & Reeve, 1850)..... Vol. 5. Pl. 1554.
Cautotriphora alveolata (A. Adams & Reeve, 1850) ..... Vol. 1. Pl. 307.
Cautotriphora hervieri (Kosuge, 1962)..... Vol. 1. Pl. 307.

Viriola bayani Jousseaume, 1884 ..... Vol. 1. Pl. 310.
Viriola cancellata (Hinds, 18) ..... Vol. 1. Pl. 310.
Viriola corrugata (Hinds, 1843) ..... Vol. 1. Pl. 310.
Viriola intergranosa (Hervier, 1897) ..... Vol. 5. Pl. 1555.
Viriola pagodus (Hinds, 1843) ..... Vol. 1. Pl. 310.
Viriola tricincta (Dunker, 1882) ..... Vol. 1. Pl. 310.

NOT FOUND IN WORMS

Mastonia loyaltyensis (Hervier, 1898)

CHANGE OF GENUS

***Aclophora maxillaris* (Hinds, 1843)**	Was in the genus *Inella.*
***Coriophora cnodax* (Jousseaume, 1884)**	Was in the genus *Mastonia.*
***Coriophora granosa* (Pease, 1871)**	Was in the genus *Mastoniaeforis.*
***Costatophora iniqua* (Jousseaume, 1898)**	Was in the genus *Tetraphora.*
***Euthymella elongata* (Laseron, 1958)**	Was in the genus *Viriola.*
***Euthymella pyramidalis* (A. Adams & Reeve, 1850)**	Was in the genus *Inella.*
***Nanophora triticea* (Pease, 1861)**	Was in the genus *Triphora.*
***Nanophora truncis* Laseron, 1958**	Was in the genus *Triphora.*

CHANGES AND REMARKS

***Aclophora robusta* Laseron, 1958**
Worms accepts this species as *Aclophoropsis maculosa* (Hedley, 1903) but we are not convinced with the literature that we have. The types of Hedley should be viewed, in the meantime we continue to follow Okutani (2000).

***Aclophoropsis mcmichaeli* (Kosuge, 1962)**
Our former "*Cautor maculosus mcmichaelii*". The type has been figured by Higo, Callomon & Goto (2001) exactly with the name we used. Now placed in the genus *Aclophoropsis* and considered in WORMS as a valid spcies. In Higo, Callomon & Goto, the spelling is "*macmichaeli*".

***Inella spicula* Kosuge, 1962**
Volume 1, Pl. 308, change the number of the species from 13 to 14.

***Monophorus atratus* (Kosuge, 1962)**
Correct name for the former "*atrata*"

***Viriola pagodus* (Hinds, 1843)**
Correct name for the former "*pagoda*".

TRITONIIDAE Lamarck, 1809

Author: Vol. 3 – Richard Willan & Philippe Poppe.

Marionia elongoreticulata V. G. Smith & Gosliner, 2007 ..... Vol. 3. Pl. 887.
Marionia elongoviridis V. G. Smith & Gosliner, 2007 ..... Vol. 3. Pl. 888.
Marionia levis Eliot, 1904 ..... Vol. 3. Pl. 888.
Tritonia hombergii Cuvier, 1803 ..... Vol. 3. Pl. 887.

CHANGE OF GENUS

Marionia levis Eliot, 1904	Was in the genus *Marioniopsis.*

CHANGES AND REMARKS

***Tritonia hombergii* Cuvier, 1803**
WORMS, for some reason has put *Tritontiopsis alba* Alder & Hancock, 1854 in the synonymy of T*ritonia hombergii* Cuvier, 1803, and changed the genus into *Tritonia*.

TRIVIIDAE Troschel, 1863

Author: Vol. 1 – Dirk Fehse.

THE FAMILY TRIVIIDAE

ERATOIDAE are now once more a subfamily of the TRIVIIDAE: Eratoinae Gill, 1871.

NOT FOUND IN WORMS

Proterato hindlei (Ladd, 1977)

MOVES BETWEEN FAMILIES

All former ERATOIDAE are now in this family.

CHANGE OF GENUS

***Cleotrivia pilula* (Kiener, 1843)**	Was in the genus *Trivia*.
***Eratoena pagoboi* (T. Cossignani & V. Cossignani, 1997)**	Was in the genus *Sulcerato*.
***Proterato stalagmia* Cate, 1975**	Was in the genus *Sulcerato*.
***Dolichupis* cf. *producta* (Gaskoin, 1836)**	Was in the genus *Eratoena*.

CHANGES AND REMARKS

***Hespererato rubra* Fehse, 2016**

This is the shell figured in Vol. 1, Pl. 278 fig. 2 as *Sulcerato* cf. *olivaria* (Melvill, 1899). Now positively identified.

TROCHIDAE Rafinesque, 1815

Author: Vol. 1 – Guido Poppe & Sheila Tagaro.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.
Author: Vol. 5 – Guido Poppe & Sheila Tagaro.

Stomatolina angulata (A. Adams, 1850) ..... Vol. 1. Pl. 39.
Stomatolina rubra (Lamarck, 1822) ..... Vol. 1. Pl. 39.
Tosatrochus attenuatus (Jonas, 1844) ..... Vol. 1. Pl. 46.
Trochus cf. *rota* Dunker, 1860 ..... Vol. 1. Pl. 51.
Trochus ferreirai Bozzetti, 1996 ..... Vol. 1. Pl. 51.
Trochus intextus Kiener, 1850 ..... Vol. 1. Pl. 50 & 51.
Trochus maculatus Linnaeus, 1758 ..... Vol. 1. Pl. 50.
Trochus ochroleucus Gmelin, 1791 ..... Vol. 1. Pl. 50.
Trochus venetus ..... Vol. 1. Pl. 51.
Umbonium elegans (Kiener, 1838) ..... Vol. 1. Pl. 52.
Umbonium vestarium (Linnaeus, 1758) ..... Vol. 1. Pl. 52.
Vanitrochus geertsi Poppe, Tagaro & Dekker, 2006 ..... Vol. 1. Pl. 52.

THE FAMILY TROCHIDAE

The TROCHIDAE now again contain the fomer STOMATIIDAE, sometimes called also STOMATELLIDAE. These are now grouped within the TROCHIDAE as a subfamily: STOMATELLINAE Gray, 1840.

NOT FOUND IN WORMS

Trochus cf. *rota* Dunker, 1860

MOVES BETWEEN FAMILIES

The following ex-TROCHIDAE are now in TEGULIDAE. r

Some were in the genus Trochus before (see TEGULIDAE).

Tectus conus (Gmelin, 1791)
Tectus elatus (Lamarck, 1822)
Tectus fenestratus (Gmelin, 1791)
Tectus magnificus Poppe, 2004
Tectus niloticus (Linnaeus, 1767)
Tectus pyramis (Born, 1778)
Tectus triserialis (Lamarck, 1822)

***Pseudominolia tramieri* Poppe, Tagaro & Dekker, 2006**

Was in the family SOLARIELLIDAE.

The genus Euchelus has been moved to TROCHIDAE.

CHANGE OF GENUS

***Callogaza sericata* (Kira, 1959)** Was in the genus *Gaza*.
Conotalopia musiva Was in the genus *Pseudominolia*.

CHANGES AND REMARKS

***Clanculus persicus* Habe & Shikama [in Shikama], 1964**

The correct spelling for the former "*persica*".

***Diloma suavis* (Philippi, 1850)**

We discovered a huge population on the intertidal ocean side of Dinagat Island. Formerly thought to be rare in the Philippines, but now considered locally abundant.

TRUNCATELLIDAE Gray, 1840

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Taheitia semperi Kobelt, 1884 ..... Vol. 4. Pl. 1307., Add. 1.
Truncatella guerinii A. Villa & J. Villa, 1841 ..... Vol. 1. Pl. 200.
Truncatella pfeifferi Martens, 1860 ..... Vol. 1. Pl. 200.

NOT FOUND IN WORMS
***Truncatella pfeifferi* Martens, 1860**

CHANGES AND REMARKS
***Taheitia semperi* (Kobelt, 1884)**

This very particular Truncatellid with strong axial ribs is put by WORMS in the synonymy of *T. guerinii*, apparently following in this a nature guide on Singaporian shells: Tan & Low (2014). We do not agree with that and continue to maintain *Taheitia semperi*, our shell is almost a copy of the lectotype as figured by Zilch (1973) in the Archiv für Molluskenkunde 103(4-6).

TURBINELLIDAE Swainson, 1835

MOVES BETWEEN FAMILIES

All our former *Benthovoluta* are now in the family PTYCHATRACTIDAE, in the genus *Exilia*.

CHANGES AND REMARKS

Vasum turbinellus (Linnaeus, 1758)

The correct spelling for the former "*turbinellum*".

TURBINIDAE Rafinesque, 1815

Author: Vol. 1 – Axel Alf & Kurt Kreipl.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

THE FAMILY TURBINIDAE

Based on molecular studies, there are major changes going on the Turbinid and former Trochid families. We made several adaptations in order to be conform with the newly published part in "A Conchological Iconography", the Family TURBINIDAE, subfamilies Turbininae & Prisogasterinae, by Alf & Kreipl, 2011.
Alf A. also communicated the following:
"*Turbo parvulus* (also form "*stenogyrus*", plate 74, *Turbo aurantius*. *Turbo fortispiralis* (plates 73 and 74), *Turbo intercostalis* (Plate 74) are all *Turbo smithi* G.B. Sowerby III, 1886. *Turbo intercostalis* is a valid species but the shells figured under this name are *Turbo smithi*. The two species can be separated well by the operculum. *Turbo stenogyrus* is a valid species but quite different. *Lunella* is a valid genus, different from *Turbo.*"
I agree with the *Lunella* decision, but do not accept as yet the synonymy of *Turbo aurantius*, *T. fortispiralis* and *T. parvulus* with *T. smithi* G.B. Sowerby III, 1886.

MOVES BETWEEN FAMILIES

The *Homalopoma* and *Leptothyra* have now been moved to the COLLONIIDAE Cossmann, 1917.

CHANGES AND REMARKS

***Astralium provisorium* (Schepman, 1903)**
As suggested on p. 242, this now has been confirmed as the correct name for the former *A. roseobasis* Kreipl & Dekker, 2003. It concerns the shells in Vol. 1. Pl. 66.

***Astralium rhodostomum* (Lamarck, 1822)**
The correct name for our "*rhodostoma*".

***Bolma bartschii* Dall, 1913**
The correct name for our "*bartschi*".

***Bolma girgyllus* (Reeve, 1861)**
The correct spelling for the former *B.* "*girgylla*".

***Bolma millegranosa* (Kuroda & Habe in Habe, 1958)**
Alf communicated us that this is the correct name for the shells shown on plate 68 as *B. guttata* (A. Adams, 1863).

***Bolma persica* forma *erectospinosa* Kosuge, 1983**
Correct "*erectospina*" in "*erectospinosa*"

***Guildfordia aculeata* forma *tagaroae* Alf & Kreipl, 2006**
We agree that these are not a subspecies, but the name is useful to distinguish the spineless form of the *G. aculeata* as

regularly found in deep water around Aliguay island.

***Guildfordia yoka delicata* Habe & Okutani, 1983**

We continue to distinguish the subspecies *delicata* for the Philippine shells, differing in details with the Japanese *G. delicata delicata.*

***Lunella cinerea* (Born, 1778)**

The correct spelling for the former "*Turbo cinereus"*

TURRIDAE H. Adams & A. Adams, 1853 (1838)

Author: Vol. 2 – Baldomero Olivera.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

In our last update we wrote : "A complete revision on the generic level is needed, but nobody has the will or time to proceed with that at present."

We are happy that between 2010 and 2011 some heroic workers came up with articles of prime importance, which may be a solution to our suffering on the taxonomic level in this former gigafamily.

One of the prime articles has the very adequate title "The Dragon Tamed ? A molecular phylogeny of the Conoidea (Gastropoda)" and it is signed by an impressive number of authors: Puillandre, Kantor, Sysoev, Couloux, Meyer, Rawlings, Todd and Bouchet. A classic with genetic tree etc…

In these articles which go down to the generic level, a complete new classification is proposed which think will last.

In practise, we now only have to check type species of the genera, a still gigantic task, but there is hope we get a workable system. Many will be happy that CONIDAE and TEREBRIDAE remain families: a fact which upset the majority of conchologists in previous proposals.

The CONOIDEA have now been split into:

BORSONIIDAE Bellardi, 1875
BOUCHETISPIRIDAE Kantor, Strong & Puillandre, 2012
CLATHURELLIDAE H. Adams & A. Adams, 1858
CLAVATULIDAE Gray, 1853
COCHLESPIRIDAE Powell, 1942
CONIDAE Fleming, 1822
CONORBIDAE de Gregorio, 1880
DRILLIIDAE Olsson, 1964
HORAICLAVIDAE Bouchet, Kantor, Sysoev & Puillandre, 2011
MANGELIIDAE P. Fischer, 1883
MITROMORPHIDAE Casey, 1904
PSEUDOMELATOMIDAE Morrison, 1966
RAPHITOMIDAE Bellardi, 1875
TEREBRIDAE Mörch, 1852
TURRIDAE H. Adams & A. Adams, 1853 (1838)

At present, virtually nobody has a perfect clear view on which shell belongs to which new family of TURRIDAE. For this, it is way to early, and many among us have used the family name TURRIDAE for decades. A "Turris" is easy to distinguish from all other families at first glance. But often – not always – difficult to assign at once to the perfect "new" family. We therefore have grouped all families together by alphabetical order and following the prefix "TURRIDAE –". This is the exception on the otherwise perfect alphabetical order of this listing. CONIDAE and TEREBRIDAE are excempt from this provisional situation because they do not suffer the problematics here enlightened.

The BOUCHETISPIRIDAE is a family with one genus and one species, the Bouchetispira vitrea Kantor, Strong & Puillandre, 2012. The family represents a monotypic lineage, closely related to the MITROMORPHIDAE. It is known from 7 specimens, collected over 20 years in deep water off New Caledonia, and has not yet been found in the Philippines.

TURRIDAE - BORSONIIDAE Bellardi, 1875

Bathytoma atractoides (Watson, 1881) ..... Vol. 5. Pl. 1562.
Bathytoma stenos Puillandre, Sysoev, Olivera, Couloux & Bouchet, 2010.....

..... Vol. 5. Pl. 1562.
Bathytoma boholica Parth, 1994..... Vol. 2. Pl. 661.
Bathytoma episoma Puillandre, Sysoev, Olivera, Couloux & Bouchet, 2010.....
..... Vol. 5. Pl. 1562.
Bathytoma gordonlarki Tucker & Olivera, 2011..... Vol. 2. Pl. 661.
Bathytoma netrion Puillandre, Sysoev, Olivera, Couloux & Bouchet, 2010Not yet documented.

Bathytoma tippetti Vera-Peláez, 2004 ..... Vol. 2. Pl. 661.
Heteroturris sola Powell, 1967..... Vol. 5. Pl. 1562.
Microdrillia commentica (Hedley, 1915)..... Vol. 2. Pl. 669.
Microdrillia nipponica (E. A. Smith, 1879) ..... Vol. 5. Pl. 1562.
Microdrillia pertinax Hedley, 1922..... Vol. 2. Pl. 669.
Microdrillia stephenensis Laseron, 1954..... Vol. 2. Pl. 669.
Tomopleura cf. *T. reevii* (C. B. Adams, 1850)..... Vol. 2. Pl. 672.
Tomopleura nivea (Philippi, 1851)..... Vol. 2. Pl. 672.
Tomopleura reevii (C. B. Adams, 1850) ..... Vol. 2. Pl. 669.
Tomopleura subtilinea (Hedley, 1918)..... Vol. 5. Pl. 1562.

THE FAMILY BORSONIIDAE

The genus *Bathytoma* Harris & Burrows, 1891 from the western Pacific has been studied in depth by Puillandre, Sysoev, Olivera, Couloux & Bouchet (2010). The result has been published in Systematics and Biodiversity. Their publication adds 4 species to the Philippine fauna.
The BORSONIIDAE are a heterogeneous family based on molecular data, en there are conchologically different clades. Seems to be the case in older groups of mollusks. Some of these groups date back to the Palaeocene, others to the Eocene (*Bathythoma*, *Genota* and *Microdrillia* are Eocene). So, we here deal with an ancient group of the former TURRIDAE. On genus, *Zemacies*, has no radula.

MOVES BETWEEN FAMILIES

We follow WORMS in the placement of *Genotina* in MANGELIIDAE

CHANGE OF GENUS

We do not follow the assignement of "*pertinax* Hedley, 1922" in the *Turridrupa.* The protoconch of *M. pertinax* has nothing to do with the protoconches as seen in *Turridrupa,* only the shape vaguely resembles.

CHANGES AND REMARKS

***Bathytoma boholica* Parth, 1994**

Vol. 2. Pl. 661. The figure 6 is this species, fig. 7 is *B. gordonlarki* Tucker & Olivera, 2011.

TURRIDAE - CLATHURELLIDAE H. Adams & A. Adams, 1858

Author: Vol. 2 – Alexander Sysoev.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Acrista latirella (Melvill & Standen, 1896)..... Vol. 5. Pl. 1563.
Acrista longa Melvill & Standen, 1896..... Vol. 5. Pl. 1563.
Clathurella fuscobasis Rehder, 1980..... Vol. 2. Pl. 666 & Vol. 5. Pl. 1563.
Clathurella lenkospiralis (Chen & Huang, 2005) ..... Vol. 5. Pl. 1563.
Clathurella pulcherrima H. Adams, 1872..... Vol. 5. Pl. 1563.
Clathurella thereganum Melvill & Standen, 1896..... Vol. 5. Pl. 1563.
Clathurella tigroidella (Hervier, 1896) ..... Not yet documented.

THE FAMILY CLATHURELLIDAE

Not so large family of rather small to medium sized shells that have a typical multispiral protoconch. Operclum absent.

NOT FOUND IN WORMS

Clathurella lenkospiralis (Chen & Huang, 2005)
Clathurella tigroidella (Hervier, 1896)
Lienardia coccinea (Anton, 1838)
Lienardia subspurca (Hervier, 1896)

CHANGE OF GENUS

Etrema rubroapicata (E. A. Smith, 1882)	Was in the genus *Philbertia.*
Lienardia fallax (Nevill & Nevill, 1875)	Was in the genus *Clathurella*.

CHANGES AND REMARKS

***Glyphostoma oliverai* Kilburn & Lan, 2004**

Is the species figured as *G. dedonderi* Goethaels & D. Monsecour, 2008.

Clathurella fuscobasis

Clathurella acricula cf. is incorrectly determinated. The shell figured is definitely *Clathurella fuscobasis* Rehder, 1980. The holotype is in the USNM, nr. 756265 and the figure is online. It is a large range extension to the west for this *Clathurella.*

***Clathurella pulcherrima* A. Adams, 1872:**

In WORMS this species is accepted as *Eucyclotoma tricarinata* (Kiener, 1840). This is obviously a wrong interpretation of the drawing of Adams in the Proceedings (PZSL, 1872). His drawing, from a shell of the New Hebrides of 7 mm corresponds perfectly to the specimen we obtained in the central Philippines. Tryon (1884) considers the species also as valid and copied the drawing of Adams H. There are two specimen in the HMNS.

TURRIDAE - CLAVATULIDAE Gray, 1853

Author: Vol. 2 – Alexander Sysoev.

THE FAMILY CLAVATULIDAE

A family of medium sized to large species, which is more widely dispersed in the Atlantic than the Pacific. The protoconch is always paucispiral, with up to 2.5 smooth whorls only, and the operculum has a medio-laterial nucleus. The radula formula is 1-(1-R91)-1. Only two species known from the Philippines at present.

CHANGES AND REMARKS

***Turricula nelliae spuria* (Hedley, 1922)**

The Philippine subspecies "*spurius*" is now changed in "*spuria*", following WORMS.

TURRIDAE - COCHLESPIRIDAE Powell, 1942

THE FAMILY COCHLESPIRIDAE

A small family with average sized to large shells, which are either pagodiform or fusiform in shape. Most have great aesthetic qualities and the genus *Cochlespira* is much appreciated by collectors. The protoconches are smooth and paucispiral, the operculum with a terminal nucleus. The Radula formula is 1-0-R -0-1. The family content and extent is at present not yet well defined and some changes may be expected.

NOT FOUND IN WORMS

***Cochlespira pulchella semipolita* Powell, 1969**

WORMS does not mention this subspecies as yet, despite the fact that Powell gave two figures. This subspecies (or form ?) has even been shown by Abbott & Dance in the Compendium (1982).

MOVES BETWEEN FAMILIES

Clavosurcula sibogae Schepman, 1913

Was in the family PSEUDOMELATOMIDAE, genus *Epidirona*.

TURRIDAE - DRILLIIDAE Olsson, 1964

Author: Vol. 2 – Alexander Sysoev.

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Splendrillia disjecta (E. A. Smith, 1888)..... Vol. 5. Pl. 1571.
Splendrillia elongata Wells, 1995 ..... Not yet documented.
Splendrillia minima Wells, 1995 ..... Vol. 5. Pl. 1572.
Splendrillia problematica Wells, 1995..... Vol. 2. Pl. 675.
Splendrillia suluensis (Schepman, 1913)..... Vol. 5. Pl. 1572.
Splendrillia triconica Wells, 1995..... Vol. 2. Pl. 675.

THE FAMILY DRILLIIDAE

A rather large family with most often small to medium sized shells rarely exceeding 50 mm in length. The protoconches are paucispiral with up to 2 whorls, the operculum has a terminal nucleus and the radula formula is most often 1 –1-R-1-1. The DRILLIIDAE have usually pleasing shapes to the eye and some of the genera are amongst the most beautiful among all the ex-Turrids. We here think about *Clavus*, *Splendrilla* and the fabulously shaped *Plagiostropha*.

NOT FOUND IN WORMS

Clavus quadrasi (O. Böttger, 1895)
Iredalea balteata (Gould, 1860)

MOVES BETWEEN FAMILIES

Drillia regia (Habe & Murakami, 1970)
Was in the HORAICLAVIDAE in the genus *Paradrillia*.
Clathrodrillia Ptychobela cf. *C. flavidula* (Lamarck, 1822)..... Vol. 2. Pl. 686.
Was in the PSEUDOMELATOMIDAE in the genus *Ptychobela*.
Clathrodrillia Ptychobela flavidula (Lamarck, 1822)..... Vol. 2. Pl. 686.
Was in the PSEUDOMELATOMIDAE in the genus *Ptychobela*.

CHANGE OF GENUS

Clavus pica (Reeve, 1843) Was in the genus *Tylotiella*.
Clavus quadrasi (O. Böttger, 1895) Was in the genus *Tylotiella*.
Clavus subobliquata (E. A. Smith, 1879) Was in the genus *Tylotiella*.

CHANGES AND REMARKS

***Clavus bilineatus* (Reeve, 1845)**
The true *C. bilineatus* is figured on pate 675. The shells on Plate 673 are not *C. bilineatus*: it even concerns two different species, both most probably undescribed.

***Clavus viduus* (Reeve, 1845)**
WORMS thinks this is a synonym of *C. unizonalis* (Lamarck, 1822). This is wrong, as it concerns two very different species, as demonstrated in our volume 2. The holotype of *Clavus viduus* has been shown by Higo, Callomon & Goto (2001): the row of white spots on the black lower half of the body whorl combined with the upper half of the whorls white with numberous axial plicae on the periphery are so many characteristics not seen in *Clavus unizonalis (*Lamarck, 1822), well figured by older authors such as Kiener – who has likely seen the Lamarck collections.

***Drillia dunkeri* (Weinkauff, 1876)**
This species is shown in Vol. 2. On Pl. 673 fig. 7 as *Clavus enna*. It is however a much smaller species with distinct features.

***Drillia maculomarginata* Kilburn & Stahlschmidt, 201**
This is the correct name for our former "*Drillia poecila"* Sysoev & Bouchet, 2001as figured in Vol. 4. on Pl. 1311. The real *Drillia poecila* is a valid species from New Caledonia with a more pronounced sculpture, a concave subsutural zone and a broader shell.

***Drillia regia* (Habe & Murakami, 1970)**
These are the shells figured in Vol. 2. Pl. 673 & 674 as *Clavus enna*. The real "*Drillia enna*" (Dall, 1918) is a species from the waters of India. The shells here figured are *Drillia regia* (Habe & Murakami, 1970), except the much smaller Fig. 7 on plate 673 which is *C. dunkeri* (Weinkauff, 1876).

***Plagiostropha vertigomaeniata* Chino & Stahlschmidt, 2010**
The shell figured on Pl. 674 as *Splendrillia P.* aff. *P. turrita* (Wells, 1995) is this species.

TURRIDAE - HORAICLAVIDAE Bouchet, Kantor, Sysoev & Puillandre, 2011

Anacithara cf. *A. lita* (Melvill & Standen, 1896) ..... Vol. 2. Pl. 688.
Anacithara cf. *A. themeropis* (Melvill & Standen, 1896) ..... Vol. 2. Pl. 688.
Austrodrillia rubrozonata (Schepman, 1913) ..... Vol. 5. Pl. 1577.
Carinapex albarnesi Wiedrick, 2015 ..... Vol. 5. Pl. 1572.
Carinapex amirowlandae Wiedrick, 2015 ..... Not yet documented.
Carinapex cernohorskyi Wiedrick, 2015 ..... Vol. 5. Pl. 1572.
Carinapex chaneyi Wiedrick, 2015 ..... Vol. 5. Pl. 1572.
Carinapex johnwiedricki Wiedrick, 2015 ..... Vol. 5. Pl. 1572.
Carinapex minutissima (Garrett, 1873) ..... Vol. 2. Pl. 676.
Carinapex papillosa (Garrett, 1873) ..... Vol. 2. Pl. 676.
Carinapex philippinensis Wiedrieck, 2015 ..... Vol. 5. Pl. 1572.
Ceritoturris aff. *C. thailandica* Robba, Di Geronimo, Chaimanee, Pietro Negri & Sanfilippo, 2007 ..... Vol. 2. Pl. 666.
Graciliclava costata (Hedley, 1922) ..... Vol. 2. Pl. 687.
Horaiclavus cf. *H. madurensis* (Schepman, 1913) ..... Vol. 2. Pl. 687.
Horaiclavus filicinctus (E. A. Smith, 1882) ..... Vol. 2. Pl. 687.
Horaiclavus madurensis (Schepman, 1913) ..... Vol. 2. Pl. 687.
Horaiclavus ordinei Bonfitto & Morassi, 2014 ..... Vol. 5. Pl. 1573.
Marshallena philippinarum (Watson, 1882) ..... Vol. 2. Pl. 687.
Paradrillia consimilis (E. A. Smith, 1879) ..... Vol. 5. Pl. 1573.

THE FAMILY HORAICLAVIDAE

A new family created by Bouhet & All. in 2011. Contains a number of rather small species, usually between 5 and 25 mm in length with shells that have mainly axial sculpture only. The radular formula is 1-0-0-0-1 and it happens that some species have no radular apparatus. There are other distinguishing anatomical features. The family is close to PSEUDOMELATOMIDAE, but shells usually differ by a shorter shiphonal canal and poorly developed spiral sculptures.

MOVES BETWEEN FAMILIES

Drillia regia (Habe & Murakami, 1970)
Is now in DRILLIIDAE in the genus *Drillia*, no longer in *Paradrillia*.

CHANGES AND REMARKS

***Austrodrillia rubrozonata* (Schepman, 1913)**
Not yet documented in WORMS, but well shown by Schepman as "*Drillia*".

***Carinapex minutissima* (Garrett, 1873)**
Correct spelling for the former "*minutissimus*"

***Carinapex papillosa* (Garrett, 1873)**
Correct spelling for the former "*papillosus*"

TURRIDAE - MANGELIIDAE P. Fischer, 1883

Cytharopsis butonensis (Schepman, 1913) ..... Vol. 2. Pl. 664.
Cytharopsis cancellata A. Adams, 1865 ..... Vol. 2. Pl. 664.
Cytharopsis cf. *C. cancellata* A. Adams, 1865 ..... Vol. 2. Pl. 664.
Cytharopsis exquisita (E. A. Smith, 1882) ..... Vol. 5. Pl. 1573.
Cytharopsis kyushuensis Shuto, 1965 ..... Vol. 2. Pl. 664.
Eucithara angela (Adams & Angas, 1864) ..... Vol. 2. Pl. 663.

THE FAMILY MANGELIIDAE

This family contains small to medium sized shells, usually not exceeding 30 mm in length and most often between 6 and 12 mm. Spiral and axial sculptures present, the axial sculpture most often set on wavy axial ribs. Protoconch is multispiral, with up to 5 whorls, axially ribbed. If paucispiral, usually spirally lirate. Operculum with terminal nucleus absent. Radula of marginal teeth has a variable morphology.

NOT FOUND IN WORMS

Cytharopsis kyushuensis Shuto, 1965
Pseudorhaphitoma quisquilia (Melvill & Standen, 1903)
Pseudorhaphitoma sexcostata (E. A. Smith, 1882)

CHANGE OF GENUS

Cytharopsis butonensis (Schepman, 1913)	Was in the genus *Leiocithara.*
Gingicithara cylindrica (Reeve, 1846)	Was in the genus *Eucithara*.
Gingicithara ponderosa (Reeve, 1846)	Was in the genus *Eucithara*.
Mangelia zonata Reeve, 1846	Was in the genus *Eucithara.*

CHANGES AND REMARKS

***Eucithara capillacea* Reeve, 1846**

WORMS considers this a synonym of *E. coronata*, based on the publication of Kilburn (1992). In this work Kilburn lumps several species in his "megaspecies" "*coronata*". Our specimen are exactly matching the Philippine shell as figured by Reeve (1845) and copied later by Tryon (1884).

***Eucithara delacouriana* (Crosse, 1869)**

The shell figured in Vol. 2. Pl. 663 as *E. delacouriana*. The real *E. delacouriana* is a South African species, which resembles closely, but the upper part of the aperture is very different.

***Eucithara diatula* (Hervier, 1897)**

A rare species, shown in the Journal de Conchyliologie Vol. 45 and described there by Hervier from Lifou Island. Not yet documented by WORMS.

***Eucithara eupoecila* Hervier, 1897**

WORMS considers this a synonym of *E. coronata*, based on Kilburn (1992). Our specimen exactly matches the type of "eupoecila" in MNHN. Definitely a valid species.

***Eucithara pallida* (Reeve, 1846)**

WORMS considers this a synonym of *E. coronata*, based on Tucker J.K. (2004). Our specimen exactly matches the Philippine holotype from Ticao Island in BMNH, a clearly valid species.

***Mangelia chilosema* (Melvill, 1899)**

Not yet documented by WORMS, but a valid Melvill species, described from Karachi and the Mekran coast.

***Mangelia savuensis* (Schepman, 1913)**

WORMS accepts this species as *Guraleus savuensis*. The type species of *Guraleus* is *Mangelia picta* Adams & Angas, 1864, a rather typical "*Mangelia*". Schepman described his species as "*Mangilia*". WORMS places *Mangilia* in synonymy with *Mangelia*. We stick to *Mangelia* for this species, waiting for a better genus to house it.

***Mangelia terpnisma* forma *abyssicola* (Schepman, 1913)**

WORMS does not document this species as yet. The holotype has been figured by Van Der Bijl, Moolenbeek & Goud (2010).

***Mangelia zonata* Reeve, 1846**

WORMS considers this a synonym of *E. coronata*, based on the publication of Kilburn (1992). In this work Kilburn lumps several species in his "megaspecies" "*coronata"*. Now also in the genus *Mangelia*, not *Eucithara*.

***Pseudorhaphitoma zebuensis* (Reeve, 1846)**

This species is found in WORMS in the genus Heterocithara. The type species of *Heterocithara* is *Clathurella bilineata* Angas, 1871, which has nothing to do with the present species. *Pseudorhaphitoma* fits perfectly as this is one of the sister species of the type species of that genus which is *Mangelia fairbanki* Nevill & Nevill, 1875.

TURRIDAE - MITROMORPHIDAE Casey, 1904

Anarithma metula (Hinds, 1843) ..... Vol. 2. Pl. 669.

Anarithma stepheni (Melvill & Standen, 1897)..... Vol. 2. Pl. 669.
Lovellona atramentosa (Reeve, 1849)..... Vol. 2. Pl. 669.
Lovellona biconus Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1311., Add. 1.
Lovellona carbonaria Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1311., Add. 1.
Lovellona elongata Chino & Stahlschmidt, 2009..... Vol. 4. Pl. 1311., Add. 1.
Lovellona grandis Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1311., Add. 1.
Mitromorpha albosideralis Chino & Stahlschmidt, 2009.....Vol. 4. Pl. 1311., Add. 1.
Mitromorpha ambigua Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha candeopontis Chino & Stahlschmidt, 2009..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha dorcas (Kuroda & Oyama, 1971)..... Vol. 2. Pl. 669.
Mitromorpha flammulata Chino & Stahlschmidt, 2009..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha fuscafenestrata Chino & Stahlschmidt, 2014..... Vol. 5. Pl. 1577.
Mitromorpha fusiformis Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha granulata Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha nigricingulata Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha oliva Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1312., Add. 1.
Mitromorpha philippinensis Mifsud, 2001..... Vol. 5. Pl. 1577.
Mitromorpha poppei Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1313., Add. 1.
Mitromorpha punctata Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1313., Add. 1.
Mitromorpha purpurata Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1313., Add. 1.
Mitromorpha rubrimaculata Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1313., Add. 1.
Mitromorpha tagaroae Chino & Stahlschmidt, 2009..... Vol. 4. Pl. 1313., Add. 1.
Mitromorpha thalaoides Chino & Stahlschmidt, 2014 ..... Not yet documented.
Mitromorpha tenuicolor Chino & Stahlschmidt, 2009 ..... Vol. 4. Pl. 1313., Add. 1.
Mitromoropha unilineata Chino & Stahlschmidt, 2014..... Vol. 5. Pl. 1577.

THE FAMILY MITROMORPHIDAE

Shells are small to medium sized, not exceeding 30 mm in length, most often around 7 mm. Biconic and mitriform in shape. With or without 1 to 3 columellar plicae. Protoconch multispiral or paucispiral, with up to 4.5 smooth whorls. Operculum absent.

TURRIDAE - PSEUDOMELATOMIDAE Morrison, 1966

Aguilaria laterculata (G. B. Sowerby II, 1870) ..... Vol. 5. Pl. 1577.
Aguilaria subochracea (E. A. Smith, 1877)..... Vol. 2. Pl. 687.
Brachytoma cf. *B. tuberosa* (E. A. Smith, 1875) ..... Vol. 2. Pl. 686.
Comitas cf. *C. ilariae* Bozzetti, 1991 ..... Vol. 2. Pl. 688.
Comitas cf. *C. kamakurana* (Pilsbry, 1895) ..... Vol. 2. Pl. 688.
Comitas kaderleyi (Lischke, 1872)..... Vol. 5. Pl. 1578.
Comitas ilariae Bozzetti, 1991 ..... Vol. 2. Pl. 688.
Comitas peelae Bozzetti, 1993 ..... Vol. 2. Pl. 688.
Crassispira bruehli Stahlschmidt & Fraussen, 2014..... Vol. 5. Pl. 1578.
Crassispira pulchrepunctata Stahlschmidt & Bozzetti, 2007 ..... Vol. 2. Pl. 688.
Carinodrillia quadrilirata (E. A. Smith, 1882)..... Vol. 2. Pl. 687.
Crassispira cerithina (Anton, 1838) .....Vol. 2, Pl. 688 & Vol. 5. Pl. 1578.
Crassispira procera Kantor, Stahlschmidt, Aznar-Cormano, Bouchet & Puillandre, ... Not yet documented.
Crassispira scala Kantor, Stahlschmidt, Aznar-Cormano, Bouchet & Puillandre,

THE FAMILY PSEUDOMELATOMIDAE

Quite large shells, reaching 100 mm in length, often fusiform in shape. Protoconches in general paucispiral, exceptionally multispiral, with up to 3 whorls, either smooth or with sculptures. Operculum with terminal nucleus. Four types of radula have been recorded, with a relation to different genera. The most variable family of all Conoideans.

NOT FOUND IN WORMS

Ptychobela zebra Chang & Wu, 2000

MOVES BETWEEN FAMILIES

Clavosurcula sibogae Schepman, 1913
Now in the family **COCHLESPIRIDAE** in the genus *Clavosurcula*.
Clathrodrillia cf. *C. P. flavidula* (Lamarck, 1822)
Now in the family **DRILLIIDAE** in the genus *Clathrodrillia.*
Clathrodrillia flavidula (Lamarck, 1822)
Now in the family **DRILLIIDAE** in the genus *Clathrodrillia.*

CHANGE OF GENUS

Brachytoma cf. *B. tuberosa* (E. A. Smith, 1875)	Was in the genus *Inquisitor*.
Carinodrillia quadrilirata (E. A. Smith, 1882)	Was in the genus *Crassispira*.
Inquisitor jeffreysii (E. A. Smith, 1875)	Was in the genus *Funa*.
Inquisitor nudivaricosus Kuroda & Oyama, 1971	Was in the genus *Ptychobela*.

CHANGES AND REMARKS

***Aguilaria laterculata* (Sowerby II, 1870) Vol. 5.**
WORMS documents this species as "*Inquisitor*", but the genus *Aguilaria* fits much better.
***Crassispira bruehli* Stahlschmidt & Fraussen, 2014**
C. vezzaroi Cossignani, 2014 is a synonym.

***Crassispira cerithina* (Anton, 1838)**

According to WORMS a synonym of *Turridrupa cerithina* (Anton, 1838) and in the family TURRIDAE, genus *Turridrupa*. We follow Kantor, Stahlschmidt, Aznar-Cormanon Bouchet & Puillandre and leave the species in PSEUDOMELATOMIDAE in the genus *Crassispira.*
We figured this species on plate in Vol. 2 on plate 688 in figs. 3 & 4. A recent study by Kantor & All. (2016) proved this species to be a complex of at least three species. We found out that two of these are common and well definined: *C. cerithina* and *C. scala* Kantor & All, 2016. The *C. scala* is our former *C. cerithina* in the figure 3. The fig. 4 is real *C. cerithina*. A third species is apparently rare: *C. procera* Kantor & All, 2016. We will figure that species in a later paper.

***Inquisitor* cf. *I. chocolata* (E. A. Smith, 1875)**

The correct spelling for our former "*chocolatus*".

***Inquisitor insignata* (Melvill, 1923)**

For some time we handled this species as *Ptychobela zeba* Chang & Wu, 2000, but the Melvill name is definitely the correct one.

***Inquisitor intertincta* (E. A. Smith, 1877)**

The correct spelling for our former "*intertinctus*".

***Inquisitor rufovaricosa* (Kuroda & Oyama, 1971)**

The correct spelling for our former "*rufovaricosus*".

***Inquisitor taivaricosa* Chang & Wu, 2000**

The correct spelling for our former "*taivaricosus*".

***Inquisitor tuberosa* (E. A. Smith, 1875)**

The correct spelling for our former "*tuberosus*".

***Otitoma kwandangensis* (Schepman, 1913) & *Otitoma oneili* (Barnard, 1958)**

WORMS places both these species in *Thelecytharella*, a fossil genus, but both fit perfectly with the type of *Otitoma* which is *O. ottitoma* Jousseaume, 1898. The type of the genus is in the National Museum of Wales, Cardiff and comes from Aden.

TURRIDAE - RAPHITOMIDAE Bellardi, 1875

Tritonoturris poppei Vera-Pelaez & Vega-Luz, 1999 ..... Vol. 2. Pl. 670.
Tritonoturris subrissoides (Hervier, 1897)..... Vol. 2. Pl. 670.
Veprecula brunonia (Dall, 1924)..... Vol. 5. Pl. 1588.
Veprecula crystallina Stahlschmidt, Chino & Kilburn, 2012..... Vol. 5. Pl. 1588.
Veprecula polyacantha Stahlschmidt, Chino & Kilburn, 2012 ..... Vol. 5. Pl. 1588.
Veprecula vepratica (Hedley, 1903)..... Vol. 2. Pl. 671.

THE FAMILY RAPHITOMIDAE

Shells are variable in size and shape, from 2 to over 140 mm in length. Different types of protoconches, but the typical one multispiral. No operculum. Radula with hypodermic marginal teeth. The largest family in the Conoideans not only when it comes to number of species, but also with the biggest variation in bathymetry: from the intertidal to hadal depths.

NOT FOUND IN WORMS

***Pseudodaphnella maculosa* (Pease, 1863)**

Recorded in Fedosov & Puillandre (2012).

***Pseudodaphnella tritonoides* (Reeve, 1843)**

This species was described by Reeve as *Pleurotoma tritonoides* in 1843 and Tryon (1884) refigured the shell in Vol. 6 of the Manual.

MOVES BETWEEN FAMILIES

The *Hemilienardia* were moved from the CLATHURELLIDAE to the RAPHITOMIDAE. It her concerns:

Hemilienardia apiculata (Montrouzier, 1864)
Hemilienardia goubini (Hervier, 1896)
Hemilienardia homochroa Hedley, 1922

CHANGE OF GENUS

Daphnella boholensis (Reeve, 1843)	Was in the genus *Tritonoturris*.
Daphnella lifouana (Hervier, 1897)	Was in the genus *Tritonoturris*.
Daphnella lifouana Hervier, 1897	Was in the genus *Tritonoturris*.
Kuroshiodaphne saturata (Reeve, 1845)	Was in the genus *Daphnella*.

CHANGES AND REMARKS

***Daphnella deluta* Gould, 1860**

In WORMS we find this species as Otitoma deluta. However, we feel it is close to Daphnella, and especially to the sister species Daphnella atractoides Hervier, 1897. Already Gould described deluta as a Daphnella.

***Daphnella sandwicensis* Pease, 1860**

The correct spelling for our "*sandwichensis*".

***Kermia barnardi* (Brazier, 1876)**

WORMS follows Li & Li, 2014 in the assignement of this species in Pseudodaphnella. We feel however, based on conchological grounds, more inclined to follow Fedosov & Puillandre (2012) who placed this species in Kermia.

***Tritonoturris elegantissima* (Schepman, 1913)**

WORMS follows Tucker (2009 and assigned this species in the genus *Asperdaphne*. The type of the genus Asperdaphne is the former Taranis (Asperdaphne) versivestita (Hedley, 1912). This species has axial ribs on the first whorls but a smooth body whorl. The type of the genus Tritonoturris is Clathurella robillardi H. Adams, 1869. The shell of robillardi has strong axial ribs all over, also on the body whorl, exactly as is the case in T. elegantissima.

TURRIDAE - TURRIDAE H. Adams & A. Adams, 1853 (1838)

Author: Vol. 2 – Baldomero Olivera & Alexander Sysoev.

Gemmula aff. *G. monilifera* (Pease, 1860)..... Vol. 2. Pl. 677.

THE FAMILY TURRIDAE

The real TURRIDAE have medium sized to rather large shells that sometimes exceed 110 mm in length. There is almost no axial sculpture, the protoconches are multispiral with up to 6 whorls and of different types: type I are smooth, type II are with axial riblets. The operculum has a terminal nucleus and the radula formula is 1-(1:R:1)-1. Most shells are slender, narrowly fusiform in shape.

CHANGE OF GENUS

Gemmula hastula (Reeve, 1843)	Was in the genus *Lophiotoma*.
Gemmula Xenuroturris pseudogranosa (Nomura, 1940)	Was in the genus *Xenuroturris*.
Lophiotoma bisaya Olivera, 2004	Was in the genus *Unedogemmula*.
Lophiotoma cf. *U. indica* (Röding, 1798)	Was in the genus *Unedogemmula*.
Lophiotoma friedrichbonhoefferi Olivera, 2004	Was in the genus *Unedogemmula*.
Lophiotoma panglaoensis Olivera, 2004	Was in the genus *Unedogemmula*.
Lophiotoma Unedogemmula indica (Röding, 1798)	Was in the genus *Unedogemmula*.

CHANGES AND REMARKS

***Lophiotoma picturata* Weinkauff, 1876**
WORMS accepts this species as *Lophiotoma acuta* (Perry, 1811), a different species. We have little literature on the *L. picturata*: only the drawings from Weinkauff & Kobelt in their "PLEUROTOMIDAE" publications of 1875-887, but there is a lot of documentation on the very different *L. acuta.* We keep both as valid different species;

***Turris babylonia* (Linnaeus, 1758)**
In Vol. 2. Pl. 680 only fig. 8 is this species. Figs 6 & 7 are now *Turris chaldaea* Kilburn, Fedosov & Olivera, 2012.

***Turris chaldaea* Kilburn, Fedosov & Olivera, 2012**
In Vol. 2. Pl. 680 figured as *T. babylonia* (nrs. 6 & 7).

***Turris crispa* (Lamarck, 1816)**
WORMS has put *Turris dollyae* Olivera, 1999 in the synonymy of this species, following in this the excellent revision of Kilburn, Fedosov & Olivera of 2012.

***Turris guidopoppei* Kilburn, Fedosov & Olivera, 2012**
Figured in Vol. 2. Pl. 681. & Vol. 5 as *T. garnonsii* (Reeve, 1843), which is now limited to the western Indian Ocean and which has a different and broader shell.

***Turris hidalgoi* Vera-Pelaez, Vega-Luz & Lozano-Francisco, 2000**
Figured as *Turris totiphyllis*. In Vol. 2, Pl. 682, the Figs. 5, 6 & 7 are *T. hidalgoi.*

***Turris kathiewayae* Kilburn, Fedosov & Olivera, 2012**
In Vol. 2. Pl. 680 the former *Turris annulata* (Reeve, 1843), considered a different species now.

TURRITELLIDAE Lovén, 1847

Turritella cingulifera G. B. Sowerby I, 1825 ..... Vol. 1. Pl. 97.
Turritella concava Martens, 1880 ..... Vol. 5. Pl. 1592.
Turritella fascialis Menke, 1828 ..... Vol. 5. Pl. 1592.
Turritella monilis Kobelt, 1897 ..... Vol. 1. Pl. 97.
Turritella terebra (Linnaeus, 1758) ..... Vol. 1. Pl. 97.

CHANGE OF GENUS

Turritella cingulifera G.B. Sowerby I, 1825) Was in the genus *Haustator*.

CHANGES AND REMARKS

***Turritella monilis* Kobelt, 1897**

WORMS proposes this name as the correct name for our former *Torcula monilifera* Adams & Reeve in Reeve, 1849, a popular species name, based on 6 literature records at first sight – we found none in our databses on *T. monilis* ! The "details" are as follows: pre-occupied Lea 1840 (NOT by Deshayes, 1824 as stated by Kobelt 1897:13-14. Replaced by *Turritella* (*Torcula*) *monilis* Kobelt, 1897.

***Turritella concava* Martens, 1880**

WORMS thinks that this species is the same as *T. alba* (H. Adams, 1872). The *T. concava* Martens has been figured by Tryon (1886) and is essentially different from the *T. alba* shown by the same author. *T. concava* has straight whorls, *T. alba* has deeply incised whorls. We think that Jansen R., Zuschin M. & Baal (2011) should not be followed in this case and maintain *T. concava.*

TYLODINIDAE GRAY, 1847

Tylodina cf. *T. corticalis* (Tate, 1889) ..... Not yet documented.

UNGULINIDAE Gray, 1854

Cycladicama abbreviata (A. Gould, 1861) ..... Vol. 4. Pl. 1074.
Cycladicama gibbosula (Deshayes, 1854) ..... Vol. 4. Pl. 1074.
Diplodonta auriculata G. B. Sowerby III, 1905 ..... Vol. 5. Pl. 1595.
Diplodonta lateralis Smith, 1876 ..... Vol. 5. Pl. 1595.
Diplodonta subrugosa Dunker, 1849 ..... Vol. 5. Pl. 1595.
Transkeia globosa (Forsskal in Niebuhr, 1775) ..... Vol. 5. Pl. 1595.

NOT FOUND IN WORMS

Cycladicama gibbosula (Deshayes, 1854)

VANIKORIDAE Gray, 1840

Constantia elegans A. Adams, 1860 ..... Vol. 4. Pl. 1283., Add.1.
Macromphalus backeljaui Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1592.
Macromphalus magnificus Poppe & Tagaro, 2016 ..... Vol. 5. Pl. 1592.
Macromphalus walkeri Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1593.
Macromphalus cf. *subreticulatus* (Nevill, 1884) ..... Vol. 1. Pl. 274.
Macromphalus styliferinus (Nevill, 1884) ..... Vol. 5. Pl. 1593.
Macromphalus tornatilis (Gould, 1859) ..... Vol. 5. Pl. 1593.
Vanikoro acuta (Récluz, 1844) ..... Vol. 5. Pl. 1594.
Vanikoro cancellata (Lamarck, 1822) ..... Vol. 1. Pl. 274.
Vanikoro cuvieriana (Récluz, 1845) ..... Vol. 5. Pl. 1594.
Vanikoro fenestrata (A. Adams, 1863) ..... Vol. 1. Pl. 274.

Vanikoro gueriniana (Récluz, 1844) ..... Vol. 5. Pl. 1594.
Vanikoro helicoidea (Le Guillou, 1842) ..... Vol. 1. Pl. 274.
Zeradina parva Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1593.
Zeradina plicifera (Nevill, 1863) ..... Vol. 1. Pl. 274.
Zeradina translucida Poppe, Tagaro & Stahlschmidt, 2015 ..... Vol. 5. Pl. 1593.

NOT FOUND IN WORMS

***Vanikoro acuta* (Récluz, 1844)**

Not found in WORMS, but this species is well documented in the literature by Reeve (1878), Tryon (1886), Sowerby (1887), Kay (1979), Villaume (2008) and Severns (2011).

CHANGE OF GENUS

Zeradina plicifera (Nevill, 1863)	Was in the genus *Macromphalus* (as "*pliciferus*")

CHANGES AND REMARKS

***Constantia elegans* A. Adams, 1860**

Was in the family EPITONIIDAE, now in VANIKORIDAE.

***Macromphalus tornatilis* (Gould, 1859)**

This species is in *Fossarus*, family PLANAXIDAE in WORMS but we continue to follow the literature who all keep these species in *Macromphalus*, VANIKORIDAE.

VELUTINIDAE Gray, 1840

Coriocella cf. *nigra* Blainville, 1824 ..... Vol. 1. Pl. 277.
Coriocella species 1 ..... Vol. 1. Pl. 277.
Coriocella species 2 ..... Vol. 1. Pl. 277.
Coriocella species 3 ..... Vol. 1. Pl. 277.

VENERIDAE Rafinesque, 1815

Author: Vol. 4 – Petricolinae by Gene Coan, all others by Guido Poppe.

Anomalodiscus squamosus (Linnaeus, 1758) ..... Vol. 4. Pl. 1131.
Antigona chemnitzii (Hanley, 1845) ..... Vol. 4. Pl. 1125.
Antigona lacerata (Hanley, 1845) ..... Vol. 4. Pl. 1127.
Antigona lamellaris Schumacher, 1817 ..... Vol. 4. Pl. 1124.
Antigona magnifica (Hanley, 1845) ..... Vol. 4. Pl. 1128.
Antigona reticulata (G. B. Sowerby II, 1853) ..... Vol. 4. Pl. 1127.
Antigona sowerbyi (Deshayes, 1854) ..... Vol. 5. Pl. 1596.
Callista erycina (Linnaeus, 1758) ..... Vol. 4. Pl. 1135.
Aphrodora kurodai (Matsubara, 2007) ..... Vol. 4. Pl. 1141.
Callista cf. *C. roscida* Gould, 1861 ..... Vol. 4. Pl. 1136.
Callista glandula Gould, 1861 ..... Vol. 4. Pl. 1139.
Callista pilsbryi Habe, 1960 ..... Vol. 4. Pl. 1136.
Callista piperita (G. B. Sowerby II, 1851) ..... Vol. 4. Pl. 1136.
Callista spuma (Röding, 1798) ..... Vol. 4. Pl. 1135.
Callocardia guttata A. Adams, 1864 ..... Vol. 4. Pl. 1141.
Circe scripta (Linnaeus, 1758) ..... Vol. 4. Pl. 1129.
Circe scripta forma *tumefacta* G. B. Sowerby II, 1851 ..... Vol. 4. Pl. 1129.
Clementia papyracea (Gmelin, 1791) ..... Vol. 4. Pl. 1150.

CHANGE OF GENUS

The genus *Veremolpa* is now a synonym *Timoclea*.

Callista glandula Gould, 1861	Was in the genus *Pitar*.
Costellipitar chordatus (Römer, 1867)	Was in the genus *Pitar* (as "*chordatum*")
Globivenus toreuma (Gould, 1850)	Was in the genus *Venus*.
Hyphantosoma nancyae (Lamprell & Whitehead, 1990)	Was in the genus *Pitar*.
Lioconcha philippinarum (Hanley, 1844)	Was in the genus *Callista*.
Periglypta clathrata (Deshayes, 1853)	Was in the genus *Antigona*.
Periglypta corbis (Lamarck, 1818)	Was in the genus *Antigona*.
Periglypta puerpera (Linnaeus, 1771)	Was in the genus *Antigona*.
Timoclea mindanensis (E. A. Smith, 1885)	Was in the genus *Veremolpa*.

CHANGES AND REMARKS

***Aphrodora kurodai* (Matsubara, 2007)**

The new name for the former *Pitar japonicum* Kuroda & Kawamota, 1956. Studying the references given in WORMS, we found in an article of 2007 in Venus 66 :75-83 that this name is a homonym of a fossil Venerid which is referred to another genus because of the dentition of the hinges. Therefore, the recent shells, called Usu-hamaguri have been renamed as *Pitar kurodai* by Matsubara. We do not know where the genus name *Aphorodora* comes from… but follow for that WORMS.

***Callista glandula* Gould, 1861**

WORMS Accepts this species as a synonym of *Marcia hiantina* (Lamarck, 1818). This seems us quite impossible. The type of *Callista glandula* Gould has been shown by Johnson (1964) and comes from the "China Seas". We think this is the shell most closest to our "*glandula*" as figured in Volume 4.

***Callista* cf. *C. roscida* Gould, 1861**

In the meantime the type of *C. roscida* is online on the Smithsonian National Museum of Natural History website. It has also been published by Higo, Callomon & Goto (2001). This is a very small 12.3 mm shell of a *Callista*, which is most likely a juvenile of "something". Our *C. roscida* of 28 and 44 mm, figured in the book resemble this shell but are plausibly another species. We therefore now put "cf. *C. roscida*". WORMS thinks C. roscida is a synonym of *C. chinensis*, a much larger species, but mot *C. chinensis* shown in the literature have a very different shape and are unlikely the adults of the young holotype of *roscida.*

***Clementia vatheleti* Mabille, 1901**

WORMS follows Huber (2010) and puts *C. vatheleti (*wrongly spelled as "*vatheliti*") in synonymy of *C. papyracea* (Gmelin, 1791). We continue to distinguish the two species, and follow in this classic literature.

***Costellipitar knudseni* Poutiers, 1981**

WORMS follows Huber and puts this in the synonymy of as *Costellipitar manillae* (Sowerby II, 1851)? We do not agree, unless we can study the type of *knudseni* Poutiers, 1981 and see real *C. manillae.* The *C. manillae* in the literature concerns now 3 different VENERIDAE at first sight: the two shells drawn in Sowerby, 1855 in the Thesaurus, which we think are the type figures. They are very different from the *C. manillae* sensus Huber (2010) and Poppe (2011) shows still another species. Our determination of "*C. knudseni*" is based on Fengshan & Suping (2008) which shows another knudseni, the same as our Philippine species, but from the China Sea.

***Dosinia lenticularis* G. B. Sowerby II, 1852**

WORMS accepts this species as a synonym of the much larger and much heavier sculptured *Dosinia histrio* (Gmelin, 1791). We based our determination on the fine drawing of the Philippine shell in Sowerby 1855 in the Thesaurus 2 (parts 1-2). This is eventually the most common of the *Dosinia* in the central Visayans on sand bottoms with some content of mud.

***Dosinia variegata* Gray, 1838**

WORMS accepts this species as D. histrio (Gmelin, 1791) but we think both species are different, the D. histrio having a much rougher concentric sculpture with more pronounced ribs compared to the D. variegata, which is almost smooth. To wait for further studies before we are convinced these are the same species. Our D. variegata fit perfectly the shells from Reeve (1851) in the genus Artemis in the Iconica, Vol. 6.

***Gafrarium barandae* (Hidalgo, 1885)**

Indeed a valid older name for the former *Gafrarium yukitai* Habe, 1977.

***Irus macrophyllus* (Deshayes, 1853)**

We maintain the name *I. macrophyllus* for Indo-Pacific Irus, in contrast with *I. irus* (Linnaeus, 1758) for eastern Atlantic shells. We wait adequate molecular studies to prove the contrary.

***Lioconcha lorenziana* Dillwyn, 1817**

WORMS follows Huber (2010) and accepts this species as *L. castrensis* (Linnaeus, 1758). However, modern authors base their concept of the *lorenziana* on the figure of Chemnitz in Tryonia and figure a completely different species than *L. castrensis* – except Abbott & Dance (1982) who show a castrensis – not a *lorenziana*. We maintain our status "as is" until adequate studies of types appear.

***Periglypta clathrata* (Deshayes, 1853)**

WORMS accepts this as a synonym of *Periglypta albocancellata* (M. Huber, 2010). We based our determination on the book of Higo, Callomon & Goto (2001) in which an Undetermined type from the British Museum of Natural History is shown. As the authors pointed out, with undetermined type they mean shells used as type of which the whereabouts as true types are in fact not yet completely researched. This kind of type is abundant in museum collections. We stick to *Periglypta* clathrata which is an older name than *P. albocancellata.* We change the genus into *Periglypta*.

***Periglypta* cf. *clathrata* (Deshayes, 1853)**

This is the shell shown on Pl. 1126 in Vol. 4, fig. 1 as *Antigona compressa.* According to WORMS, following Huber (2010), this is a synonym of *Periglypta corbis* (Lamarck, 1818). We researched all and do not agree on this synonymy, but also stated that our former determination was not very accurate. We could not find this species in our present literature. It may concern an undescribed *Periglypta*.

***Pitar variegatum* Kuroda & Habe in Kuroda & al., 1971**

WORMS follows Huber and puts this species in synonymy of *P. inflatus* (G. B. Sowerby II, 1851).
The inflatus from Huber corresponds to the *Cytheraea* from Sowerby (1855) in the Thesaurus 2 (part 1-2) but the type of *Pitar variegatum* is shown by Higo, Callomon & Higo, 2001 and is another species. Our shells correspond more to the Japanese material, so we keep the name as valid.

***Placamen isabellina* (Philippi, 1849)**

Correct spelling for our former "*isabellinum*".

***Placamen calophyllum* (Philippi, 1836)**

We could not trace anywhere the Röding shell of *Placamen lamellatum* (Röding, 1798) after which a whole series of synonyms seems to have been named. We maintain our *Placamen calophyllum* corresponding perfectly to the classic literature.

***Placamen* cf. *P. tiara* (Dillwyn, 1817)**

WORMS does not accept the name, and puts *P. tiara* in synonymy of *P. lamellatum* (Rödig, 1798). The holotype of "*Venus tiara*" Dillwyn, 1817 is in the meantime online on the website of the National Museum of Wales. It is a Philippine shell with a very elongate shape, and looks more like a *Callanaites* than a *Placamen*. The shell corresponding to that name in Huber (2010) is not that species, and the shell does also not correspond to our "*tiara*".

***Protapes sinuosa* Lamarck, 1818**

WORMS follows Huber and puts this species as a junior homonym of *Venus sinuosa* Pennant, 1777, which we could not retrace anywhere. *Paphia sinuosa, Protapes sinuosa* and *Tapes sinuosa,* all the same Lamarckian species from 1818 are declared synonyms. We maintain the name for our shell as such until this is clarified.

***Timoclea subnodulosa* (Hanley, 1845)**

An older name for our former *T. recognita.*

***Venerupis aspera* (Quoy & Gaimard, 1835)**

An older name for our former *Ruditapes variegates* (G.B. Sowerby II, 1852)

VERMETIDAE Rafinesque, 1815

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

CHANGE OF GENUS

The genus *Serpulorbis* is now a synonym of *Thylacodes*.

Thylacodes colubrinus (Röding, 1798)	Was in the genus *Serpulorbis*.
Thylacodes daidai (Scheuwimmer & Nishiwaki, 1982)	Was in the genus *Serpulorbis*.
Thylacodes dentiferus (Lamarck, 1818)	Was in the genus *Serpulorbis*.
Thylacodes adamsii (Mörch, 1859)	Was in the genus *Serpulorbis*.
Thylacodes roussaei (Vaillant, 1871)	Was in the genus *Serpulorbis*.
Ceraesignum maximum (G.B. Sowerby I, 1825)	Was in the genus *Dendropoma.*

CHANGES AND REMARKS

Thylacodes adamsii (Mörch, 1859)

The correct name for the former *Serpulorbis imbricatus* (Dunker, 1860). The "*imbricatus*" is a junior homonym, subjective synonym.

VERTICORDIIDAE Stoliczka, 1870

Author: Vol. 4 – Guido Poppe & Takashi Okutani.

MOVES BETWEEN FAMILIES

In WORMS, Bouchet revives this 1895 Dall family, the EUCIROIDAE. Apparently Dall used materials from the Miocene and Pliocene western American fossil beds to create this fascinating family of carnivore bivalves.

The following species are moved to EUCIROIDAE:

Acreuciroa rostrata (Thiele & Jaeckel, 1931)
Acreuciroa teramachii Kuroda, 1952
Euciroa crassa Thiele & Jaeckel, 1931
Euciroa eburnea (Wood-Mason & Alcock, 1891)
Euciroa millegemmata Kuroda & Habe in Kuroda, 1952
Euciroa spinosa Thiele & Jaeckel, 1931

Moved to the family VESICOMYIDAE:

Wareniconcha guineensis (Thiele,1931)

CHANGE OF GENUS

Wareniconcha guineensis (Thiele,1931)
According to WORMS more correct for the former *Lyonsiella guineensis* (Thiele & Jaeckel, 1931)

VESICOMYIDAE Dall & Simpson, 1901

Wareniconcha guineensis (Thiele, 1931) ..... Vol. 4. Pl. 1057.

THE FAMILY VESICOMYIDAE

Followed in this case are Bieler, Carter & Coan (2010) with their famous Classification of the Bivalve families, published in Malacologia 52(2). This family contains about two dozen genera of maily deep water and very deep water families, some of them specialized in particular biotopes such as the Vents. The most famous genus is undoubtedly the large *Calyptogena* Dall, 1891. When deep water Philippine bivalves get studied we expect more species in the VESICOMYIDAE.

MOVES BETWEEN FAMILIES

The single Philippine species, for the moment in this family, is the *Wareniconcha guineensis* (Thiele, 1931), formerly in our VERTICORDIIDAE as *Lyonsiella guineensis* (Thiele & Jaeckel, 1931).

VOLUTIDAE Rafinesque, 1815

Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Calliotectum barneli Bail, 2006 ..... Vol. 2. Pl. 530.
Calliotectum dalli dalli (Bartsch, 1942) ..... Vol. 2. Pl. 530.
Calliotectum johnsoni (Bartsch, 1942) ..... Vol. 2. Pl. 530.
Calliotectum smithi (Bartsch, 1942) ..... Vol. 2. Pl. 530.
Cymbiola aulica (Sowerby I, 1825) ..... Vol. 2. Pl. 516.
Cymbiola cathcartiae (Reeve, 1856) ..... Vol. 5. Pl. 1597.
Cymbiola imperialis (Lightfoot, 1786) ..... Vol. 2. Pl. 523 & 524.
Cymbiola imperialis forma *robinsona* (Burch, 1954) ..... Vol. 2. Pl. 524.
Cymbiola laminusa Poppe, Tagaro & Bail, 2011 .....
..... Vol. 2. Pl. 518. & Vol. 5. Pl. 1597 & 1598.
Cymbiola malayensis Douté & Bail, 2000 ..... Vol. 2. Pl. 518.
Cymbiola nobilis nobilis (Lightfoot, 1786) ..... Vol. 2. Pl. 524 & Vol. 5. Pl. 1598.
Cymbiola nobilis nobilis forma *parva* (G. B. Sowerby I, 1845) ..... Vol. 5. Pl. 1598.
Cymbiola palawanica Douté & Bail, 2000 ..... Vol. 2. Pl. 517.
Cymbiola vespertilio Linnaeus, 1758 ..... Vol. 2. Pl. 519-522.
Lyria boholensis Poppe, 1987 ..... Vol. 2. Pl. 515.

Lyria mallicki mallicki Ladd, 1975 ..... Vol. 2. Pl. 515.
Lyria mallicki mallicki forma *vicdani* Kosuge, 1981 ..... Vol. 2. Pl. 515.
Lyria mallicki jessicae Bail & Poppe, 2004 ..... Vol. 2. Pl. 515.
Lyria mikoi Kosuge, 1985..... Vol. 2. Pl. 515.
Lyria planicostata (G. B. Sowerby III, 1903)..... Vol. 2. Pl. 515.
Lyria suduirauti Bozzetti, 1997 ..... Vol. 2. Pl. 515.
Melo broderipii (Gray in Griffith & Pidgeon, 1833)..... Vol. 2. Pl. 525-528.
Melo melo (Lightfoot, 1786)..... Vol. 2. Pl. 528.
Melo nauticus Lamarck, 1822 ..... Vol. 2. Pl. 529.
Melo umbilicatus Broderip in G. B. Sowerby I, 1826 ..... Vol. 2. Pl. 529.

NOT FOUND IN WORMS

Melo nauticus Lamarck, 1822

CHANGES AND REMARKS

***Calliotectum barneli* Bail, 2006**

Because *Calliotectum barneli* and *C. johnsoni* are dredged together around Aliguay Island, and because there are no intermediaries between these two species, we conclude that these are valid species and not forms or subspecies of *C. tibiaeforme*, as suggestd by authors.

***Calliotectum johnsoni* (Bartsch, 1942)**

Because *Calliotectum barneli* and *C. johnsoni* are dredged together around Aliguay Island, and because there are no intermediaries between these two species, we conclude that these are valid species and not forms or subspecies of *C. tibiaeforme*, as suggestd by authors.

Cymbiola imperialis forma ***robinsona* (Burch, 1954)**

This form, as other forms, is not shown in WORMS. It concerns *C. imperialis* without spiral bands in the patterns, leaving a pattern of fine irregular axial lines on an orange-cream background. Nobody knows if the name "*robinsona*" stands for a real subspecies or for unusual forms occurring between typical shells. The subspecies thesis is more likely than the form thesis, but up till now nobody could document the real situation in the field because of geopolitical difficulties.

***Cymbiola cathcartiae* (Reeve, 1856)**

C. cathcartiae as described by Reeve is a rather small *Cymbiola* living on the remote island called Kagayan de Sulu, in the northern part of the Sulu Sea, about half way between southern Palawan and Zamboanga. The large shells called *C. cathcartiae* since Weaver & DuPont are a different species and have been described since as *C. laminusa.* The *C. cathcartiae* on Pl. 518 in Vol. 2 are true *C. laminusa.*

***Lyria kuniene* Bouchet, 1979**

In the Volume 4 we included *Lyria kuniene* as a shell of this species was retrieved from a batch of material from Aliguay Island. Many tens of thousands of Aliguay shells have been sorted out since by Conchology, Inc., and no further material was found. We therefore believe that a New Caledonian *Lyria kuniene* was joined by local dealers in the Aliguay material to make the lot more interesting for selling. We remove the species from the present listing of recent Philippine mollusks.

***Lyria mallicki* Ladd, 1975**

An older name for *Lyria habei* Okutani, 1979. Probably described on a fossil, but now widely accepted.

***Lyria suduirauti* Bozzetti, 1997**

This species was described as *Eumitra suduirauti* in the family MITRIDAE and is still as such in WORMS. The conchological characteristics such as the deep subsutural channel and the absence of columellar plicae refer this species to the Indo-Pacific group of Lyria, rather than to MITRIDAE. We therefore leave this species in the genus *Lyria*. The animal of *L. suduirauti* is still unkown.

VOLVATELLIDAE Pilsbry, 1895

Volvatella kawamurai Habe, 1946..... Vol. 5. Pl. 1599.
Volvatella pyriformis Pease, 1868 ..... Vol. 5. Pl. 1599.
Volvatella viridis Hamatani, 1976 ..... Vol. 5. Pl. 1599.

XENOPHORIDAE Troschel, 1852 (1840)

Author: Vol. 1 – Kurt Kreipl.
Author: Vol. 4 Addendum I – Guido Poppe & Sheila Tagaro.

Onustus exutus (Reeve, 1842) ..... Vol. 1. Pl. 290.
Onustus indicus (Gmelin, 1791) ..... Vol. 1. Pl. 290.
Stellaria chinensis chinensis (Philippi, 1841)..... Vol. 1. Pl. 291.
Stellaria gigantea (Schepman, 1909) ..... Vol. 1. Pl. 291.
Stellaria lamberti (Souverbie, 1871) ..... Vol. 4. Pl. 1315., Add. 1.
Stellaria solaris (Linnaeus, 1764) ..... Vol. 1. Pl. 291.
Xenophora cerea (Reeve, 1845) ..... Vol. 1. Pl. 287.
Xenophora cerea forma *torrida* Kuroda & Ito, 1961 ..... Vol. 1. Pl. 287.
Xenophora granulosa Ponder, 1983 ..... Vol. 1. Pl. 287 & 288.
Xenophora japonica Kuroda & Habe, 1971 ..... Vol. 1. Pl. 288.
Xenophora mekranensis konoi Habe, 1953 ..... Vol. 1. Pl. 288 & 289.
Xenophora pallidula (Reeve, 1842)..... Vol. 1. Pl. 289.
Xenophora solarioides solarioides (Reeve, 1845) ..... Vol. 1. Pl. 289.

CHANGES AND REMARKS

***Xenophora cerea* forma *torrida* Kuroda & Ito, 1961**

We maintain this curious form. The name "torrida" stands for shells with a dark brown base. Many X. cerea have a light brown base. Between the dark brown and the pale brown intermediaries are known, but they are rather scarce. The species has a huge bathymetry: shells from 8 to 20 meters deep ware often pale brown. In deep water – down to 200 m - one collects more dark brown shells than pale brown ones.

XYLOPHAGIDAE Purchon, 1941

Author: Vol. 4 – Takuma Haga.

Xylophaga indica E. A. Smith, 1904 ..... Vol. 4. Pl. 1195.
Xylophaga supplicata (Is. Taki & Habe, 1950)..... Vol. 4. Pl. 1195.
Xylophaga teramachii (Is. Taki & Habe, 1950) ..... Vol. 4. Pl. 1195.

CHANGE OF GENUS

***Xylophaga teramachii* (Is. Taki & Habe, 1950)**

Changed genus from *Xyloredo* to *Xylophaga*.

YOLDIIDAE Dall, 1908

Orthoyoldia lepidula (A. Adams, 1856)..... Vol. 3. Pl. 924.

ZEBINIDAE Coan, 1964

Microstelma daedalum A. Adams, 1863 ..... Vol. 4. Pl. 1306., Add. 1.
Microstelma japonicum (A. Adams, 1860) ..... Vol. 1. Pl. 197.
Microstelma oshikatai Lan, 2003 ..... Vol. 1. Pl. 197.
Schwartziella ephamilla (Watson, 1886)..... Vol. 1. Pl. 197 & 198.
Stosicia bourguignati (Issel, 1869)..... Vol. 5. Pl. 1600.
Stosicia mirabilis (Weinkauff, 1881)..... Vol. 1. Pl. 198.
Tomlinella lamellata (Kuroda, 1960) ..... Vol. 5. Pl. 1600.

THE FAMILY ZEBINIDAE

This family has recently been revived. The members of this family were for a long time most often in RISSOINIDAE. Among the Philippine genera, the following genera moved to ZEBINIDAE: *Microstelma, Schwartziella, Stosicia, Tomlinella* and *Zebina.*

CHANGE OF GENUS

***Schwartziella ephamilla* (Watson, 1886)**

Changed genus from *Rissoina* to *Schwartziella*.

CHANGES AND REMARKS

***Microstelma daedalum* A. Adams, 1863**

Is the correct name for *Microstelma daedala*.

***Microstelma japonicum* (A. Adams, 1860).**

Figured as *Microstelma japonica* (A. Adams, 1863). According to M. Faber the year is (A. Adams, 1860). In the modern literature is mentioned 1863 (Okutani, 2000; Lee, 2003) or 1867 (Ponder, 1985).

***Microstelma oshikatai* Lan, 2003**

The year should be "2003": pers. comm. M. Faber, confirmed by WORMS.

***Stosicia mirabilis* (Weinkauff, 1881)**

The author in brackets because described as *Rissoina*.

***Zebina pupiniformis* (Preston, 1908)**

Zebina lis Tomlin, 1918 is a later synonym.

***Zebina tridentata* (Michaud, 1830)**

The author is correct, but should be in brackets.

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