# JUXILYOCYPRIS GEN. NOV. AND REPLACEMENT NAMES FOR HOMONYM SPECIES OR GENERA OF OSTRACODA (ARTHROPODA: CRUSTACEA)

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ABSTRACT: The new genus Juxilyocupris (Ostracoda) is introduced with Ilyocupris schwarzbachi Kempf, 1967 as the type species. In addition, for junior homonyms of ostracod species the following replacement names are proposed: Bairdia raqusana nom. nov. for Bairdia procera Ciampo, 1981; Cytheropteron cuneatissimum nom. nov. for Cytheropteron cuneatum Ayress, 1996; Cytheropteron tesakovae nom. nov. for Cytheropteron laeve Tesakova, 2003; Cytheropteron vricanum nom. nov. for Cytheropteron rectum Colalongo & Pasini, 1980; Eucytherura ninetyeastiana nom. nov. for Eucytherura tumida Ayress, Whatley, Downing & Millson, 1995; Semicytherura aqabana nom. nov. for Semicytherura affinis Bonaduce, Masoli, Minichelli & Pugliese, 1980; Leptocythere istriana nom. nov. for Leptocythere bituberculata Bonaduce, Ciampo & Masoli, 1976: Cutheromorpha crotoneana nom, nov, for Cutheromorpha reticulata Colalongo & Pasini, 1980; Loxoconcha bonaciamma nom, nov, for Loxoconcha concentrica Bonaduce, Ciampo & Masoli, 1976; Loxoconcha ocellifera nom. nov. for Loxoconcha ocellata Ho in Hou et al., 1982; Paradoxostoma navigium nom. nov. for Paradoxostoma navicula Bonaduce, Masoli, Minichelli & Pugliese, 1980; Buntonia calabria nom. nov. for Buntonia parva Colalongo & Pasini, 1980; Curfsina gerardderooi nom. nov. for Curfsina derooi Weaver, 1982; Cythereis coronaweaveri nom. nov. for Cythereis coronata Weaver, 1982; Neocaudites richarddinalei nom. nov. for Neocaudites punctatus Dingle, 1993; Veenia kallankurichchi nom. nov. for Veenia reticulata Sastry & Mamgain, 1972; Polycope delicatulina nom. nov. for Polycope delicata Weaver, 1982; Polycope eilatensis nom. nov. for Polycope ornata Bonaduce, Masoli, Minichelli & Pugliese, 1980; and Libumella robinsoni nom. nov. for Libumella reticulata Robinson, 1978. For junior homonym ostracod genera the following replacement names are proposed: Miraculellum nom. nov. for Miraculum Polenova, 1960; Hadropleuranella nom. nov. for Hadropleura Liebau, 1991; and Patrizianella nom. nov. for Patrizia Bonaduce & Russo, 1990.

KEY WORDS: new genus, nomenclatural changes, junior homonyms, replacement names, Ostracoda.

Class Ostracoda Latreille, 1802 Subclass Podocopa Sars, 1866 Order Podocopida Sars, 1866 Suborder Cypridocopina Jones, 1901 Superfamily Cypridoidea Baird, 1845 Family Ilyocyprididae Kaufmann, 1900

*Juxilyocypris* gen. nov. Type species: *Juxilyocypris schwarzbachi* (Kempf, 1967) comb. nov. Original binomen: *Ilyocypris schwarzbachi* Kempf, 1967. Type locality: Claypit Kaerlich near Koblenz, Germany. Type horizon: Middle Pleistocene loess deposits.

Holotype: A female carapace, transferred from Geological Institute, University at Cologne (GIK 460) to Senckenberg Museum, Frankfurt (Xe 9730).

Paratypes: 14 specimens in Senckenberg Museum, Frankfurt (Xe 9731a-Xe 9731i) and some specimens in British Museum Natural History, Palaeontology Department, London (Fossil and recent ostracod collections). All specimens from the type locality and type horizon.

Diagnosis: A genus of the ostracod family Ilyocyprididae with a general resemblance to the typical genus *Ilyocypris*, but with very distinct sexual dimorphism in shell morphology. Valves of female and male specimens with a prominently raised and bulged ridge along the anterior margin. Accordingly, in dorsal view the anterior end of the carapace is looking similar to the neck of a bottle (Kempf 1967: plate 1, figs. 7-9). That is very different in comparison with the many species of the genus *Ilyocypris* proper, where in dorsal view the anterior end of the carapace looks wedge-shaped. The posterior half of the valves shows a prominent bulged ridge, as well. In female specimens the ridge starts behind the middle near to the dorsal margin and runs in a curve toward the posteroventral corner, with conical spines being developed at both ends. Along the inner side of the ridge impressions of the dorsal margin, runs in a curve toward the posteroventral corner at first, but continues along the posterior and even back along part of the dorsal margin. Conical spines are less well developed. Along the inner side of the ridge impressions of four testes may be visible.

All exterior and interior characters of shell morphology have been documented in stereo-pairs of excellent scanning electron micrographs (Kempf, 1975).

**Remarks:** Since its first description the species has also been found in Pleistocene sediments of some other places in Europe. In more than fourty years, however, no living specimens could be found.

In a recent publication (Krstic 2006: 128) the possibility has been expressed that *Ilyocypris schwarzbachi* Kempf might belong to the genus *Fosslyocypris* (recte: *Fossilyocypris*) Schornikov & Krstic, 2004, or otherwise, that it is representing a species toward true *Ilyocypris*.

The differences between *Ilyocypris schwarzbachi* Kempf and *Ilyocypris bella* Sharapova, 1961, the type species of the genus *Fossilyocypris*, are manifold. Therefore, the establishment of a new genus seems to be advisable.

Etymology: The new name is composed of *Ilyocypris* and the prefix Jux, honouring Dr. Ulrich Jux, Emeritus Professor of the University at Cologne, in recognition of his many valuable contributions to quite different fields of palaeontology, geology, and history.

Order Podocopida Sars, 1866 Suborder Bairdiocopina Gruendel, 1967 Superfamily Bairdioidea Sars, 1888 Family Bairdiidae Sars, 1888 Genus Bairdia M'Coy, 1844 Bairdia ragusana nom. nov.

*Bairdia procera* Ciampo, 1981. Boll. Soc. Paleont. Ital. 20 (1) 56. Preoccupied by *Bairdia procera* Seebach, 1857. Zeitschr. Deutsch. Geol. Ges. 9 (2) 200.

**Remarks on nomenclatural change:** Since the publication of the first volume of "Index and bibliography of marine Ostracoda" (Kempf, 1986) that case of homonymy is known, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures reveals that the Middle Miocene species *Bairdia procera* Ciampo, 1981 differs considerably from the Triassic species *Bairdia procera* Seebach, 1857 in outline of the carapace (dorsal view) and the left valve (lateral view). In addition there is a great difference in geological age of at least 215 million years.

According to the International Code of Zoological Nomenclature (1999) *Bairdia procera* Ciampo, 1981 represents a junior primary homonym, for which *Bairdia ragusana* nom. nov. is herewith introduced as a substitutional new name.

Etymology: The new name refers to the type locality within the Tellaro Formation of the Ragusa Basin (Sicily).

### Order Podocopida Sars, 1866 Suborder Bairdiocopina Gruendel, 1967 Superfamily Bairdioidea Sars, 1888 Family Pachydomellidae Berdan & Sohn, 1961 Genus *Miraculellum* nom. nov.

*Miraculum* Polenova, 1960. Trudy VNIGRI, novaya seriya, 152: 81 (Crustacea: Ostracoda). Preoccupied by *Miraculum* Bolivar, 1903. Boletin de la Sociedad Española de Historia Natural 3: 306 (Insecta: Orthoptera: Episactidae).

**Remarks on nomenclatural change:** Firstly, the genus *Miraculum* was erected by Bolivar (1903) which is still widely used as an available valid genus name in Orthoptera. Subsequently, a genus *Miraculum* was erected by Polenova (1960) for fossil ostracods. Thus the genus name *Miraculum* Polenova, 1960 is a primary junior homonym of the valid genus name *Miraculum* Bolivar, 1903. Herewith I propose to replace *Miraculum* Polenova, 1960 with the new substitutional name *Miraculellum*.

Type species: Miraculellum tuberculatum (Polenova, 1960) comb. nov., Original binomen: Miraculum tuberculatus (recte: tuberculatum) Polenova, 1960. Other species: Miraculellum tuberculatum tuberculatum (Polenova, 1960) comb. nov. Miraculellum tuberculatum simplex (Polenova, 1960) comb. nov. *Miraculellum omraense* (Polenova in Rozhdestvenskava, 1962) **comb. nov.** (= nomen nudum, see nomenclatural remarks) Miraculellum tuberculatum elongatum (Polenova, 1968) comb. nov. Miraculellum tuberculatum laeve (Polenova, 1974) comb. nov. Miraculellum unituberculatum (Zhang & Zhao, 1983) comb. nov. Miraculellum ornatum (Bakharev, 1985) comb. nov. *Miraculellum biclivosum* (Bakharev in Bakharev & Bazarova, 2004) **comb. nov.** Miraculellum bisulcatum (Bakharev in Bakharev & Bazarova, 2004) comb. nov. Miraculellum sellidorsatum (Bakharev in Bakharev & Bazarova, 2004) comb. nov. Miraculellum vernaculum (Bazarova in Bakharev & Bazarova, 2004) comb. nov. Miraculellum omraense (Bakharev & Bazarova, 2004) comb. nov.

Nomenclatural remarks concerning Miraculellum omraense:

For the first time that species was cited in the publication of Rozhdestvenskaya 1962 as *Miraculum omraensis* (recte: *omraense*) Polenova (in litt.). It was not mentioned in the systematic part, but on page 278 in the chapter on the stratigraphic distribution of ostracods and on page 308 in the explanations of plate 8, where the species was documented in figures 4 a, b, and v. No diagnosis, description or holotype designation was given so that this species name has to be regarded as a nomen nudum. In her publications of 1968 and 1974 as well as in all her earlier and later publications Polenova did not mention *Miraculum omraense*.

In their publication of 2004 Bakharev and Bazarova for the first time designated a holotype for *Miraculum omraensis* (recte: *omraense*) and provided both, a diagnosis and a detailed description. In this way they satisfied the criteria of availability and became authors of *Miraculum omraense*.

Etymology: The new name has no special meaning. It is an extension of the original name by inserting a few letters so that a similarity and the neuter ending could be maintained.

Order Podocopida Sars, 1866 Suborder Cytherocopina Baird, 1850 Superfamily Cytheroidea Baird, 1850 Family Cytheruridae G. W. Müller, 1894 Genus Cytheropteron Sars, 1866 Cytheropteron cuneatissimum nom. nov.

*Cytheropteron cuneatum* Ayress, 1996. Revista Espanola de Micropaleontologia 28 (3) 15. Preoccupied by *Cytheropteron cuneatum* Dingle, 1993. Annals of the South African Museum 103: 71.

**Remarks on nomenclatural change:** Since the publication of volumes 6 (Kempf, 1995) and 11 (Kempf, 2008) of "Index and bibliography of marine Ostracoda" that case of homonymy is known, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of *Cytheropteron cuneatum* Dingle, 1993 from Quaternary sea-floor sediments off south-western Africa with those of *Cytheropteron cuneatum* Ayress, 1996 from Late Eocene deposits of New Zealand reveals several differences. *Cytheropteron cuneatum* Ayress, 1996 with a length of 0.4 mm is somewhat smaller, but differs above all in lateral and dorsal outline as well as in surface ornamentation. In addition, there is a difference in geological age of about 40 million years.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Cytheropteron cuneatum* Ayress, 1996 represents a junior primary homonym, for which *Cytheropteron cuneatissimum* nom. nov. is herewith introduced as a necessary new name.

Etymology: The species name represents the superlative of the Latin word cuneatus (= wedge-shaped) in its neuter form, referring to the wedge-shaped lateral outline of the valves.

#### Cytheropteron tesakovae nom. nov.

*Cytheropteron laeve* Tesakova, 2003. Paleontological Journal 37 (suppl. 2) 181. Preoccupied by *Cytheropteron laevis* (recte: *laeve*) Seguenza, 1880. Atti della Reale Accademia Nazionale dei Lincei, Serie 3, 6: 292. In addition, it is preoccupied by *Cytheropteron laeve* Brady & Norman, 1889. Sci. Trans. R. Dublin Soc., Series 2, 4 (2) 210.

**Remarks on nomenclatural change:** With the publication of volumes 1 and 11 from my database of marine Ostracoda (Kempf, 1986 and 2008) that case of homonymy has been made evident. Until now I could not register any replacement name.

Comparison of the published descriptions and figures of the Recent and well documented *Cytheropteron laeve* Brady & Norman, 1889 with those of the Jurassic *Cytheropteron laeve* Tesakova, 2003 reveals that besides of the great difference in geological age of at least 155 million years there are also distinct differences in size and morphology of the valves.

A comparison with *Cytheropteron laeve* Seguenza, 1880 from the Tertiary of Italy is more difficult, as that species was only described but not figured. However, with a shell length of 0.8 mm and a height of 0.5 mm it is more than double the size of the tiny *Cytheropteron laeve* Tesakova, 2003.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Cytheropteron laeve* Tesakova, 2003 represents a junior primary homonym, for which *Cytheropteron tesakovae* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name is honouring Dr. Ekaterina Mikhaylovna Tesakova in recognition of her valuable contributions to ostracodology and biostratigraphy.

# Cytheropteron vricanum nom. nov.

*Cytheropteron rectum* Colalongo & Pasini, 1980. Boll. Soc. Paleont. Ital. 19 (1) 94. Preoccupied by *Cytheropteron rectum* Brady, 1868. Transact. Linn. Soc. London 26 (2) 476.

**Remarks on nomenclatural change:** In November 1984 I informed Dr. Colalongo of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the description and figures of the well documented *Cytheropteron rectum* Colalongo & Pasini with the published description of *Cytheropteron rectum* Brady from the Shetland Islands reveals that the size of them is similar, but that there are distinct differences in the morphology of the valves.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Cytheropteron rectum* Colalongo & Pasini, 1980 represents a junior primary homonym, for which *Cytheropteron vricanum* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name refers to the type locality, the Vrica section in Calabria (Southern Italy), where this species occurs from the earliest Pleistocene layers onward.

### Genus Eucytherura G. W. Müller, 1894 Eucytherura ninetyeastiana nom. nov.

*Eucytherura tumida* Ayress, Whatley, Downing & Millson, 1995. Records Australian Museum 47: 217. Preoccupied by *Eucytherura tumida* Bonnema, 1941. Natuurhistorisch Maandblad 30: 23.

**Remarks on nomenclatural change:** In June 1996 I informed Michael Ayress of that case of homonymy, but until now for the Kempf Database Ostracoda I could not register a replacement name.

Comparison of the published descriptions and figures of *Eucytherura tumida* Bonnema, 1941 from the Cretaceous of The Netherlands with those of *Eucytherura tumida* Ayress, Whatley, Downing & Millson, 1995 from Pleistocene deposits of the East Indian Ocean reveals several differences. Above all, there is the great difference in geological age of at least 65 million years. In addition, besides of the generic characters in common, the valves of *Eucytherura tumida* Bonnema, 1941 show a weakly developed median furrow, distinct eye tubercles and, in well preserved specimens, small spinelets on the reticulate surface.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Eucytherura tumida* Ayress, Whatley, Downing & Millson, 1995 represents a junior primary homonym, for which *Eucytherura ninetyeastiana* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name refers to the type locality of this species in the East Indian Ocean at the southern limit of Ninetyeast Ridge. There it occurs in DSDP site 254 at a present water depth of about 1250 m.

# Genus Semicytherura Wagner, 1957 Semicytherura aqabana nom. nov.

Semicytherura affinis Bonaduce, Masoli, Minichelli & Pugliese, 1980. Boll. Soc. Paleont. Italiana 19: 158. Preoccupied by Semicytherura affinis (Sars, 1866) Neale & Howe, 1975. Bull. Amer. Paleontology 65: 426.

**Remarks on nomenclatural change:** Since the publication of the first volume of "Index and bibliography of marine Ostracoda" (Kempf, 1986) that case of homonymy is known, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

The high latitude species *Semicytherura affinis* (Sars, 1866) Neale & Howe, 1975 had originally been described as *Cytherura affinis* Sars, 1866. According to the comparison of the published descriptions and figures, *Semicytherura affinis* Bonaduce & al., 1980 shows besides of a general similarity distinct differences. It differs above all in the ornamentation of the valves which is composed of longitudinal ridges linked by short perpendicular ridges to form a kind of reticulation. On the contrary, the valves of *Semicytherura affinis* (Sars, 1866) show a pitted surface ornamentation with a mainly faintly developed reticulation which becomes stronger only in the range of anterior and ventral margin. Additional differences are connected with the caudal process.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Semicytherura affinis* Bonaduce & al., 1980 represents a junior primary homonym, for which *Semicytherura aqabana* nom. nov. is herewith introduced as a new name.

Mostafawi (2003) identified *Semicytherura favorum* Bonaduce, Masoli & Pugliese, 1978 in a collection of Recent ostracods from the Persian Gulf and considered *Semicytherura affinis* Bonaduce, Masoli, Minichelli & Pugliese, 1980 to be a junior synonym. Those authors, however, had already mentioned that these two species show the same type of shape and ornamentation, but differ in size, dorsal outline and some details in the reticulation.

Etymology: The new name refers to the type locality of this species within a coral reef environment near to the northern end of the Gulf of Aqaba.

# Family Hemicytheridae Puri, 1953 Genus *Hadropleuranella* nom. nov.

*Hadropleura* Liebau, 1991. Geologie Paläontologie Westfalen 13: 132 (Crustacea: Ostracoda). Preoccupied by *Hadropleura* Carus, 1890. Prodromus Faunae Mediterraneae, vol. 2: 414 (Mollusca: Gastropoda).

**Remarks on nomenclatural change:** Firstly, the genus name *Hadropleura* was introduced by Carus (1890) pro *Haedropleura* Monterosato in Bucquoy, Dautzenberg & Dollfus, 1883. It is still widely used parallel to *Haedropleura* as a genus name in Gastropoda, Turridae. Subsequently, *Hadropleura* was erected by Liebau (1991) for a genus of Ostracoda.

Thus, the genus name *Hadropleura* Liebau, 1991 is a primary junior homonym of *Hadropleura* Carus, 1890. Herewith I propose to replace *Hadropleura* Liebau, 1991 with the new substitutional name *Hadropleuranella*.

Type species: *Hadropleuranella hadropleura* (Hazel, 1968) **comb. nov.** Original binomen: *Hermanites hadropleura* Hazel, 1968 Other species: *Hadropleuranella gibsoni* (Hazel, 1968) **comb. nov.** *Hadropleuranella plusculmensis* (Schmidt, 1948) **comb. nov.** 

Etymology: The new name is composed of *Hadropleura* and the ending -nella. Gender feminin.

# Family Leptocytheridae Hanai, 1957 Genus Leptocythere Sars, 1925 Leptocythere istriana nom. nov.

*Leptocythere bituberculata* Bonaduce, Ciampo & Masoli, 1976. Pubblicazioni della Stazione Zoologica di Napoli 40: 29. Preoccupied by *Leptocythere bituberculata* Scheremeta, 1961. Paleontologicheskiy Sbornik Lvovskogo Universiteta, 1: 116.

**Remarks on nomenclatural change:** With the publication of the first volume from my database of marine Ostracoda (Kempf, 1986) that case of homonymy has been made evident. Until now I could not register any replacement name.

According to the comparison of the published descriptions and figures of single valves, the Recent *Leptocythere bituberculata* Bonaduce, Ciampo & Masoli, 1976 differs from the Lower Pannonian *Leptocythere bituberculata* Scheremeta, 1961 in size and outline of the valves, in the position of the two characteristic tubercles, and in other details of surface ornamentation.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Leptocythere bituberculata* Bonaduce, Ciampo & Masoli, 1976 represents a junior primary homonym, for which *Leptocythere istriana* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name refers to the type locality of this species which is situated on the Adriatic Sea floor, nearest to the coast of Istria, Croatia.

## Family Loxoconchidae Sars, 1925 Genus *Cytheromorpha* Hirschmann, 1909 *Cytheromorpha* crotoneana nom. nov.

*Cytheromorpha reticulata* Colalongo & Pasini, 1980. Boll. Soc. Paleont. Ital. 19 (1) 80. Preoccupied by *Cytheromorpha reticulata* Smith, 1978. Transact. Gulf Coast Ass. Geol. Soc. 28: 557.

**Remarks on nomenclatural change:** In November 1984 I informed Dr. Colalongo of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of the two species reveals several differences. With 0.55 mm the valves of male specimens of *Cytheromorpha reticulata* Colalongo & Pasini from the Pliocene and Pleistocene of the Vrica section are about 30%

longer and with an L/H ratio of 2.29 more elongated than those of the Paleocene *Cytheromorpha reticulata* Smith with an L/H ratio of 2.05. Further they differ in the outline in lateral view and the kind of surface reticulation. In addition, there is a difference in geological age of more than 50 million years.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Cytheromorpha reticulata* Colalongo & Pasini, 1980 represents a junior primary homonym, for which *Cytheromorpha crotoneana* nom. nov. is herewith introduced as a necessary new name.

Mostafawi (1986) described the new genus *Ionicythere* within the family Leptocytheridae and mentioned *Ionicythere reticulata* (Colalongo & Pasini, 1980) as a new combination. Consequently, the combination should be changed to *Ionicythere crotoneana* (Kempf, 2011) **nov. comb.** now, if that classification should generally be accepted.

Etymology: The new name refers to the type locality near to the town Crotone in the region Calabria (Southern Italy).

## Genus Loxoconcha Sars, 1866 Loxoconcha bonaciamma nom. nov.

*Loxoconcha concentrica* Bonaduce, Ciampo & Masoli, 1976. Pubblicazioni della Stazione Zoologica di Napoli 40: 105. Preoccupied by *Loxoconcha concentrica* Krutak, 1961. Journal of Paleontology 35: 775.

**Remarks on nomenclatural change:** With the publication of the first volume from my database of marine Ostracoda (Kempf, 1986) that case of homonymy has been made evident. Until now I could not register any replacement name.

According to the comparison of the published descriptions and figures, the Recent *Loxoconcha concentrica* Bonaduce, Ciampo & Masoli, 1976 differs from the Eocene *Loxoconcha concentrica* Krutak, 1961 by its smaller size, the outline of the valves, and its well developed eye tubercles. In addition, there is a difference in geological age of about 40 million years.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Loxoconcha concentrica* Bonaduce, Ciampo & Masoli, 1976 represents a junior primary homonym, for which *Loxoconcha bonaciamma* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name is composed of the initial syllables of Bonaduce, Ciampo and Masoli.

# Loxoconcha ocellifera nom. nov.

*Loxoconcha ocellata* Ho in Hou et al., 1982. Cretaceous-Quaternary ostracode fauna from Jiangsu: 210. Preoccupied by *Loxoconcha ocellata* Bold, 1973. Micropaleontology 18 (1972) (4) 430.

**Remarks on nomenclatural change:** Since the publication of the first volume of "Index and bibliography of marine Ostracoda" (Kempf, 1986) that case of homonymy is known, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

The comparison of the published descriptions and figures is not easy, but the Quaternary *Loxoconcha ocellata* Ho seams to differ from the Lower Miocene *Loxoconcha ocellata* Bold by its somewhat larger size and the outline of the valves. In addition, there is a difference in geological age of more than 12 million years.

According to the International Code of Zoological Nomenclature (1999) *Loxoconcha ocellata* Ho in Hou et al., 1982 represents a junior primary homonym, for which *Loxoconcha ocellifera* nom. nov. is herewith introduced as the necessary new name.

Hu & Tao (2008) introduced *Hanaiconcha* as a new subgenus within the genus *Loxoconcha*, with *Loxoconcha* (*Hanaiconcha*) *mitoui* Hu & Tao, 2008 as the type species. They also created the new combination *Loxoconcha* (*Hanaiconcha*) *ocellata* (Ho in Hou et al., 1982). The nomenclatural change to *Loxoconcha* (*Hanaiconcha*) *ocellifera* (Kempf, 2011) **nov. comb.** is necessary, if that subgenus will generally be accepted as valid.

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Etymology: The new species name is composed of the Latin words ocelli (little eyes) and fera (bearing, carrying).

# Family Paradoxostomatidae Brady & Norman, 1889 Genus Paradoxostoma Fischer, 1855 Paradoxostoma navigium nom. nov.

*Paradoxostoma navicula* Bonaduce, Masoli, Minichelli & Pugliese, 1980. Boll. Soc. Paleont. Italiana 19: 174. Preoccupied by *Paradoxostoma navicula* Schornikov, 1965. Bentos, Biologiya Morya: 115.

**Remarks on nomenclatural change:** Since the publication of the first volume of "Index and bibliography of marine Ostracoda" (Kempf, 1986) that case of homonymy is known, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of the two species reveals that the valves of *Paradoxostoma navicula* Bonaduce & al., 1980 are very different in appearance: in length they are more than 30 % longer, have an almost straight dorsal margin with weak concavities near both ends, while the ventral margin is very evenly rounded. In detail there are additional differences.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Paradoxostoma navicula* Bonaduce & al., 1980 represents a junior primary homonym, for which *Paradoxostoma navigium* nom. nov. is herewith introduced as a necessary new name.

Etymology: The new Latin species name has the same meaning as navicula, namely small boat, and is used as a noun in apposition.

#### Family Trachyleberididae Sylvester-Bradley, 1948 Genus Buntonia Howe in Howe & Chambers, 1935 Buntonia calabria nom. nov.

Buntonia parva Colalongo & Pasini, 1980. Boll. Soc. Paleont. Ital. 19 (1) 68. Preoccupied by Buntonia parva Apostolescu, 1963. Revue Inst. Franc. Petrole 18 (12) 1685.

**Remarks on nomenclatural change:** In November 1984 I informed Dr. Colalongo and in August 1986 Dr. Ciampo of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and illustrations of the two species reveals that besides of a difference in geological age of at least 65 million years the valves of *Buntonia parva* Colalongo & Pasini differ in several aspects. With a length/height ratio of 2.20 they are more elongated than those of *Buntonia parva* Apostolescu from the Senonian of Gambia (L/H = 1.43). There are also differences in the outline of the posterior and ventral margins and in surface ornamentation.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Buntonia parva* Colalongo & Pasini, 1980 represents a junior primary homonym, for which *Buntonia calabria* nom. nov. is herewith introduced as the necessary new name.

With some hesitation Colalongo & Pasini had assigned their species to the genus *Buntonia*. In 1986 Ciampo established the genus *Flexuocythere* and designated *Buntonia parva* Colalongo & Pasini, 1980 as the type species and *Flexuocythere colalongoae* Ciampo, 1986 as the only additional species. Now the type species should read *Flexuocythere calabria* (Kempf, 2011) **nov. comb.**, if *Flexuocythere* will generally be accepted as valid.

On the contrary, Ayress & Correge (1993) considered the genera *Heinia* Bold, 1985 as well as *Flexuocythere* Ciampo, 1986 to be junior synonyms of *Nipponocythere* Ishizaki, 1971, a genus of the family Loxoconchidae. Consequently, they created the new combination *Nipponocythere parva* (Colalongo & Pasini, 1980) which should read *Nipponocythere* calabria (Kempf, 2011) **nov. comb.** now. This has an additional advantage, as otherwise *Nipponocythere parva* Liu, 1989 would represent a homonym. Also in 1993 the new combination *Nipponocythere colalongoae* (Ciampo, 1986) has been introduced by Drapala & Ayress.

Etymology: The new name is used as a noun in apposition and refers to the type locality in the region Calabria (Southern Italy), where this species occurs in the Vrica section from the early Pleistocene layers onward.

#### Genus Curfsina Deroo, 1966 Curfsina gerardderooi nom. nov.

*Curfsina derooi* Weaver, 1982. Monograph Palaeontographical Society 135: 62. Preoccupied by *Curfsina derooi* Jain, 1975. Geophytology 5: 205.

**Remarks on nomenclatural change:** In May 1986 I informed Dr. Weaver of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of the two species reveals that the valves of *Curfsina derooi* Jain, 1975 differ in possessing a rib between strongly developed eye spot and muscle node. In addition, they have more and finer denticles along anterior and posterior margin.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Curfsina derooi* Weaver, 1982 represents a junior primary homonym, for which *Curfsina gerardderooi* nom. nov. is herewith introduced as the necessary new name.

Etymology: As originally intended, the new name is honouring Dr. Gerard Deroo in recognition of his contributions to ostracodology.

#### Genus Cythereis Jones 1849 Cythereis coronaweaveri nom. nov.

*Cythereis coronata* Weaver, 1982. Monograph Palaeontographical Society 135: 63. Preoccupied by *Cythereis coronata* Esker, 1968. Micropaleontology 14: 323.

**Remarks on nomenclatural change:** In May 1986 I informed Dr. Weaver of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of *Cythereis coronata* Weaver, 1982 from the Lower Cenomanian of England with those of *Cythereis coronata* Esker, 1968 from Danian deposits of Tunisia reveals several differences. With about 1.1 mm the length of the valves of *Cythereis coronata* Weaver, 1982 is about one third larger. They exhibit also a larger flattened region following the rib along the anterior margin, while the posterior margin is more distinctly triangular. In addition, there is a difference in geological age of about 30 million years.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Cythereis coronata* Weaver, 1982 represents a junior primary homonym, for which *Cythereis coronaweaveri* nom. nov. is herewith introduced as a necessary new name.

Etymology: The species name is composed of the Latin word corona (= crown), referring to the crown-like muscle node of the valves, and weaveri, by this honouring Dr. Philip P. E. Weaver for his contributions to ostracodology.

# Genus *Neocaudites* Puri, 1960

## Neocaudites richarddinglei nom. nov.

*Neocaudites punctatus* Dingle, 1993. Annals of the South African Museum, 103 (1) 39. Preoccupied by *Neocaudites punctatus* Hu, 1986. Petroleum Geology of Taiwan, 22: 105.

**Remarks on nomenclatural change:** In July 1995 I informed Dr. Dingle of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of the two species reveals that the valves of *Neocaudites punctatus* Dingle, 1993 are of similar size, but differ in outline and especially in surface ornamentation.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Neocaudites punctatus* Dingle, 1993 represents a junior primary homonym, for which *Neocaudites richarddinglei* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name is honouring Dr. Richard Vernon Dingle in recognition of his many significant contributions to ostracodology.

# Genus Veenia Butler & Jones, 1957 Veenia kallankurichchi nom. nov.

*Veenia reticulata* Sastry & Mamgain in Sastry, Mamgain & Jagannatha Rao, 1972. Palaeontologia Indica, n.s., 40: 36. Preoccupied by *Veenia reticulata* Hazel & Paulson, 1964. Journ. Paleontology 38 (6) 1055.

**Remarks on nomenclatural change:** Since the publication of the first volume of "Index and bibliography of marine Ostracoda" (Kempf, 1986) that case of homonymy is known, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of *Veenia reticulata* Sastry & Mamgain, 1972 with those of *Veenia reticulata* Hazel & Paulson, 1964 reveals that both species are of similar size, but in lateral view of the valves there are remarkable differences in outline, especially as far as posterior and ventral margin are concerned.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Veenia reticulata* Sastry & Mamgain, 1972 represents a junior primary homonym, for which *Veenia kallankurichchi* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name refers to the type horizon of this species in sediments of the Kallankurichchi Formation, Ariyalur Group, Upper Cretaceous, India. The name is used as a noun in apposition.

## Family (?) Trachyleberididae Sylvester-Bradley, 1948 Genus *Patrizianella* nom. nov.

*Patrizia* Bonaduce & Russo, 1990. Boll. Soc. Paleont. Ital. 29 (3) 273 (Crustacea: Ostracoda). Preoccupied by *Patrizia* Alluaud, 1931. Afra 3: 123 (Insecta: Coleoptera).

**Remarks on nomenclatural change:** Firstly, the genus *Patrizia* was erected by Alluaud (1931) which is still widely used as an available valid genus name in Coleoptera. Bouchard et al. (2011) regard that genus as the type of subtribe Patriziina Basilewsky, 1953 within the subfamily Brachininae Bonelli, 1810 and family Carabidae Latreille, 1802.

Subsequently, the genus *Patrizia* was erected by Bonaduce & Russo (1990) for recent Ostracoda.

Thus the genus name *Patrizia* Bonaduce & Russo, 1990 is a primary junior homonym of the valid genus name *Patrizia* Alluaud, 1931. Herewith I propose to replace *Patrizia* Bonaduce & Russo, 1990 with the new substitutional name *Patrizianella*.

Type species: Patrizianella mascellaroae (Bonaduce & Russo, 1990) comb. nov.

Original binomen: *Patrizia mascellaroi* (recte: *mascellaroae*) Bonaduce & Russo, 1990 Other species: *Patrizianella bonaducei* (Jellinek, 1993) **comb. nov.** 

Patrizianella nucleuspersici (Jellinek, 1993) comb. nov.

Patrizianella opaca (Jellinek, 1993) comb. nov.

Patrizianella russoi (Jellinek, 1993) comb. nov.

Patrizianella simulatecaeca (Jellinek, 1993) comb. nov.

Patrizianella indopacifica (Whatley & Zhao, 1988) comb. nov.

Patrizianella ? lagaghiroboensis (Apostolescu, 1961) comb. nov. (in the sense of Colin & al., 1998)

Remarks on the subfamily Patriziainae Bonaduce & Russo, 1990

In 1990 Bonaduce & Russo also established, doubtfully within the family Trachyleberididae, the subfamily Patriziainae, with the ostracod genus *Patrizia* as the type. In 1993 Jellinek emended the name, as the stem to be used according to the IRZN is Patrizi-,

Patrizianella grandis (Jellinek, 1993) comb. nov.

to Patriziinae. That caused a case of homonymy within the family group names, as Patriziini or Patriziina Basilewsky, 1953 are already used as names for a tribe respectively subtribe within the family Carabidae of the Coleoptera. As a consequence that would require Patrizianellinae as a replacement name, with Patrizianella as the type genus. However, Article 29.5 and Recommendation 29A of the IRZN allow not correctly formed names of the family group, even when created with intention, if homonymy can be avoided in this way. Patrizianae Bonaduce & Russo, 1990 is therefore still to be treated as a valid name of a subfamily within the Ostracoda, with Patrizianella as the type genus.

Etymology: As originally intended, the new name is honouring Dra. Patrizia Mascellaro (1958-1988), who studied Ostracoda for several years and tragically died on December 15, 1988 in a storm in the Bay of Naples, when on duty on Stazione Zoologica di Napoli research vessel Posillipo.

Subclass Myodocopa Sars, 1866 Order Halocyprida Dana, 1852 Suborder Cladocopina Sars, 1866 Superfamily Cladocopoidea Sars, 1866 Family Polycopidae Sars, 1866 Genus Polycope Sars, 1866 Polycope delicatulina nom. nov.

*Polycope delicata* Weaver, 1982. Monograph Palaeontographical Society 135: 99. Preoccupied by *Polycope delicata* Sissingh, 1972. Utrecht Micropaleontological Bulletins 6: 66.

**Remarks on nomenclatural change:** In August 1986 I informed Dr. Weaver of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

Comparison of the published descriptions and figures of the two species reveals that the valves of *Polycope delicata* Weaver, 1982 are somewhat larger and show a completely different surface ornamentation.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Polycope delicata* Weaver, 1982 represents a junior primary homonym, for which *Polycope delicatulina* nom. nov. is herewith introduced as a necessary new name.

Etymology: The new name has no special meaning. It is an extension of the original name by inserting a few letters so that a similarity could be maintained.

## Polycope eilatensis nom. nov.

*Polycope ornata* Bonaduce, Masoli, Minichelli & Pugliese, 1980. Bollettino Societa Paleontologica Italiana 19: 145. Preoccupied by *Polycope ornata* Kotschetkova in Kotschetkova & Gusseva, 1972. Rannepermskie ostrakody: 20 (The name of the authoress may also be cited as Kochetkova).

**Remarks on nomenclatural change:** In August 1986 I informed Dr. Bonaduce of that case of homonymy, but until now there is not registered a replacement name in the Kempf Database Ostracoda.

The two species in question cannot be synonymous, as there is an extraordinary difference in geological age of about 275 million years between the Recent *Polycope ornata* Bonaduce & al. and the Lower Permian *Polycope ornata* Kotschetkova. In addition, the Recent species with a length of 0.26 mm is about one third smaller and shows a different surface ornamentation of the valves.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Polycope ornata* Bonaduce & al., 1980 represents a junior primary homonym, for which *Polycope eilatensis* nom. nov. is herewith introduced as a necessary new name.

In his literature review, Chavtur (1991: 163) included *Polycope ornata* Bonaduce & al., 1980 in his genus *Micropolycope*. If this change of combination should generally be accepted, it will necessarily lead to *Micropolycope eilatensis* (Kempf, 2011) **comb. nov.** 

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Etymology: The new name refers to the type locality of this species within the coral reef complex south of Eilat.

## Order Leiocopida Schallreuter, 1973 Suborder Leiocopina Schallreuter, 1973 Superfamily Aparchitoidea Jones, 1901 Family Aparchitidae Jones, 1901 Genus Libumella Rozhdestvenskaya, 1959 Libumella robinsoni nom. nov.

*Libumella reticulata* Robinson, 1978. Stratigraphical index of British Ostracoda: 130. Preoccupied by *Libumella reticulata* Copeland, 1962. Bulletin Geological Survey Canada 91: 44.

**Remarks on nomenclatural change:** In November 1984 I informed Dr. Eric Robinson of that case of homonymy, but until now for the Kempf Database Ostracoda I could not register a replacement name.

Comparison of the published descriptions and figures of the two species reveals that the valves of the Upper Visean *Libumella reticulata* Robinson with a length of about 0.9 mm are distinctly smaller than those of the Lower Devonian *Libumella reticulata* Copeland with a length of 1.2 mm. As Copeland's illustrations are very small light micrographs, other shell characteristics cannot be compared with Robinson's scanning electron micrographs. In geological age there is a difference of at least 50 million years. A synonymy can certainly be excluded.

Consequently, according to the International Code of Zoological Nomenclature (1999) *Libumella reticulata* Robinson, 1978 represents a junior primary homonym, for which *Libumella robinsoni* nom. nov. is herewith introduced as the necessary new name.

Etymology: The new name is honouring Dr. Eric Robinson in recognition of his valuable contributions to ostracodology and biostratigraphy.

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