

SUBSTITUTE NAMES FOR EIGHT SPONGE GENUS GROUP NAMES (PORIFERA)

Hüseyin Özdikmen*

* Gazi Üniversitesi, Fen-Edebiyat Fakültesi, Biyoloji Bölümü, 06500 Ankara / TÜRKİYE, e-mail: ozdikmen@gazi.edu.tr

[**Özdikmen, H.** 2009. Substitute names for eight sponge genus group names (Porifera). *Munis Entomology & Zoology*, 4 (1): 212-218]

ABSTRACT: Eight junior homonyms were detected among the sponges genera and the following replacement names are proposed: Class Demospongiae: *Spongonewellia* nom. nov. pro *Newellia* Wood, Reitner & West, 1989 and *Exsuperantia* nom. nov. pro *Rimella* Schmidt, 1879; Class Hexactinellida: *Novocarbonella* nom. nov. pro *Carbonella* Hurcewicz and Czarniecki, 1986; *Maestitia* nom. nov. pro *Napaea* Schrammen, 1912; *Hyalonema (Ijimaonema)* nom. nov. pro *Hyalonema (Pteronema)* Ijima, 1927 and *Rigbykia* nom. nov. pro *Rigbyella* Mostler & Mosleh-Yazdi, 1976; Class Regulares: *Yukonensis* nom. nov. pro *Acanthopyrgus* Handfield, 1967; Class Uncertain: *Mostlerhella* nom. nov. pro *Bengtsonella* Mostler, 1996. Accordingly, new combinations are herein proposed for the type species currently included in these genera respectively: *Spongonewellia mira* (Wood, Reitner & West, 1989) comb. nov.; *Exsuperantia clava* (Schmidt, 1879) comb. nov.; *Novocarbonella rotunda* Hurcewicz and Czarniecki, 1986) comb. nov.; *Maestitia striata* (Schrammen, 1912) comb. nov.; *Hyalonema (Ijimaonema) aculeatum* Schulze, 1894 comb. nov.; *Hyalonema (Ijimaonema) cebuense* Higgin, 1875 comb. nov.; *Hyalonema (Ijimaonema) clavigerum* Schulze, 1886 comb. nov.; *Hyalonema (Ijimaonema) globus* (Schulze, 1886) comb. nov.; *Hyalonema (Ijimaonema) heideri* Schulze, 1894 comb. nov.; *Hyalonema (Ijimaonema) topsenti* Ijima, 1927 comb. nov.; *Rigbykia ruttneri* (Mostler & Mosleh-Yazdi, 1976) comb. nov.; *Yukonensis yukonensis* Handfield, 1967) comb. nov. and *Mostlerhella australiensis* (Mostler, 1996) comb. nov.

KEY WORDS: nomenclatural changes, homonymy, replacement names, sponges, Porifera.

In an effort to reduce the number of homonyms in Porifera, I systematically checked the generic names published. I found eight sponges genera whose names had been previously published for other taxa, making them junior homonyms. In accordance with Article 60 of the International Code of Zoological Nomenclature, I propose replacement names for these genus group names.

TAXONOMY

Phylum PORIFERA

Class DEMOSPONGIAE

Genus *SPONGONEWELLIA* nom. nov.

Newellia Wood, Reitner & West, 1989. *Lethaia* 22 (1): 86. (Porifera: Demospongiae: Haplosclerida). Preoccupied by *Newellia* André, 1962. *Publ. cult. Comp. Diam. Angola* No. 60: 69. (Arachnida: Acari: Acariformes: Actinedida: Parasitengona: Trombidioidea: Johnstonianidae).

Remarks: The genus *Newellia* was erected by André, 1962 with the type species *Newellia glandulosa* André, 1962 in Acari. It is still used as a valid genus name in the family Johnstonianidae. Later, the sponge genus *Newellia* was described by Wood, Reitner & West, 1989 with the type species *Newellia mira* Wood, Reitner & West, 1989 by original designation. It is still used as a valid genus name (e. g. Boury-Esnault, 2006). However, the name *Newellia* Wood, Reitner & West, 1989 is invalid under the law of homonymy, being a junior homonym of *Newellia* André, 1962. I propose to substitute the junior homonym name *Newellia* Wood, Reitner & West, 1989 for the nomen novum *Spongonewellia*. The name is from the word “sponge” + preexisting genus name *Newellia*.

Summary of nomenclatural changes:

Spongonewellia **nom. nov.**

pro *Newellia* Wood, Reitner & West, 1989 (non André, 1962)

Spongonewellia mira (Wood, Reitner & West, 1989) **comb. nov.**

from *Newellia mira* Wood, Reitner & West, 1989

Genus EXSUPERANTIA nom. nov.

Rimella Schmidt, 1879. Spong. Mex., 21. (Porifera: Demispongiae: Lithistida: Phymaraphiniidae). Preoccupied by *Rimella* Agassiz, 1840. Conch. Min., 137. (Mollusca: Gastropoda: Stromboidea: Strombidae).

Remarks: Firstly, the genus *Rimella* was established by Agassiz, 1840 for a gastropod genus with the type species *Rostellaria fissurella* Lamarck, 1799 by subsequent designation. It is still used as a valid genus name. Subsequently, the name *Rimella* was proposed by Schmidt, 1879 for a sponge genus with the type species *Rimella clava* Schmidt, 1879 from gulf of Mexico. Also, it is still used as a valid genus name (Pisera & Lévi, 2002). However, the name *Rimella* Schmidt, 1879 is invalid under the law of homonymy, being a junior homonym of *Rimella* Agassiz, 1840. I propose to substitute the junior homonym name *Rimella* Schmidt, 1879 for the nomen novum *Exsuperantia*. The name is from the Latin word “exsuperantia” (meaning “superiority” in English).

Summary of nomenclatural changes:

Exsuperantia **nom. nov.**

pro *Rimella* Schmidt, 1879 (non Agassiz, 1840)

Exsuperantia clava (Schmidt, 1879) **comb. nov.**

from *Rimella clava* Schmidt, 1879

Class HEXACTINELLIDA

Genus NOVOCARBONELLA nom. nov.

Carbonella Hurcewicz & Czarniecki, 1986. Annales Soc. geol. Pol. 55 (3-4): 341. (Porifera: Hexactinellida). Preoccupied by *Carbonella* Dain, 1953. Trudy vses. nef. nauchno-issled. geol.-razv. Inst. 74: 36. (Protozoa: Rhizopoda: Foraminifera: Fusulinida: Fusulinida: Tournayellidae).

Remarks: The protozoon genus *Carbonella* was erected by Dain, 1953 with the type species *Carbonella spectabilis* Dain, 1953. It is not extant. It was assigned to Foraminiferida by Sepkoski (2002). It is still used as a valid genus name. Later, the genus *Carbonella* was described by Hurcewicz & Czarniecki, 1986 with the type species *Carbonella rotunda* Hurcewicz and Czarniecki, 1986 from the Carboniferous of Poland. It is still used as a valid genus name (e. g. Rigby & Bell, 2006). However, the name *Carbonella* Hurcewicz and Czarniecki, 1986 is invalid under the law of homonymy, being a junior homonym of *Carbonella* Dain, 1953. I propose to substitute the junior homonym name *Carbonella* Hurcewicz and Czarniecki, 1986 for the nomen novum *Novocarbonella*. The name is from the Latin word “nova” (meaning “new” in English) + the preexisting genus *Carbonella*.

Summary of nomenclatural changes:

Novocarbonella **nom. nov.**

pro *Carbonella* Hurcewicz and Czarniecki, 1986 (non Dain, 1953)

Novocarbonella rotunda Hurcewicz and Czarniecki, 1986) **comb. nov.**

from *Carbonella rotunda* Hurcewicz and Czarniecki, 1986

Genus MAESTITIA nom. nov.

Napaea Schrammen, 1912. Palaeontogr., Suppl. 5, no. 3, 273. (Porifera: Hexactinellida: Lychniscosida: Ventriculitidae: Ventriculitinae). Preoccupied by *Napaea* Hübner, [1819]. Samml. Exot. Schmett., 1 pl. (34). (Insecta: Lepidoptera: Papilionoidea: Riodinidae: Riodiniinae: Mesosemiini: Napaeina).

Remarks: The name *Napaea* was initially introduced by Hübner, [1819] for a butterfly genus (with the type species *Cremna eucharila* Bates, 1867 by subsequent designation) in Lepidoptera. *Cremna eucharila* Bates, 1867 was designated as the type-species of *Napaea* Hübner, [1819] under the plenary powers of the Commission and was placed on the Official List of Specific Names in Zoology, (Opinion 820), The Bulletin of Zoological Nomenclature, 24: 212. *Napaea* was placed on the Official List of Generic Names in Zoology after the designation of *Cremna eucharila*, (Opinion 820). It is still used as a valid genus name. The genus is the type genus of the family group name Napaeina. Subsequently, Schrammen, 1912 described a new sponge genus (with the type species *Napaea striata* Schrammen, 1912) under the same generic name. It is a valid genus name (e. g. Jahnke & Gasse, 1993). Thus, the genus *Napaea* Schrammen, 1912 is a junior homonym of the genus *Napaea* Hübner, [1819]. So I propose a new replacement name *Maestitia* **nom. nov.** for *Napaea* Schrammen, 1912. The name is from the Latin word “maestitia” (meaning “melancholy, sorrow” in English).

Summary of nomenclatural changes:

Maestitia **nom. nov.**

pro *Napaea* Schrammen, 1912 (non Hübner, [1819])

Maestitia striata (Schrammen, 1912) **comb. nov.**

from *Napaea striata* Schrammen, 1912

Genus *HYALONEMA* Gray, 1832
Subgenus *IJIMAONEMA* nom. nov.

Pteronema Ijima, 1927. Siboga Exped. Rep., 6, 61. (Porifera: Hexactinellida: Amphidiscophora: Amphidiscosida: Hyalonematidae: *Hyalonema*). Preoccupied by *Pteronema* Haeckel, 1879. Syst. der Medusen, 1, 101. (Cnidaria: Hydrozoa: Hydroidomedusa: Anthomedusae: Capitata).

Remarks: Firstly, the generic name *Pteronema* was established by Haeckel, 1879 as an hydrozoon genus with the type species *Pteronema darwini* Haeckel, 1879 from Australia. It is still used as a valid genus name. Later, the generic name *Pteronema* was described by Ijima, 1927 for a new sponge genus group with the type species *Hyalonema (Pteronema) topsenti* Ijima, 1927. It is stil used as a valid genus name (e. g. Hooper & Van Soest, 2002). However, the generic name *Pteronema* Ijima, 1927 is invalid under the law of homonymy, being a junior homonym of *Pteronema* Haeckel, 1879. So I propose a new replacement name *Ijimaonema* **nom. nov.** for *Pteronema* Ijima, 1927. The name is dedicated to Ijima who is current author of the preexisting subgenus *Pteronema*.

Summary of nomenclatural changes:

Genus *Hyalonema* Gray, 1832

Subgenus *Ijimaonema* **nom. nov.**

pro *Pteronema* Ijima, 1927 (non Haeckel, 1879)

Hyalonema (Ijimaonema) aculeatum Schulze, 1894 **comb. nov.**
 from *Hyalonema (Pteronema) aculeatum* Schulze, 1894

Hyalonema (Ijimaonema) cebuense Higgin, 1875 **comb. nov.**
 from *Hyalonema (Pteronema) cebuense* Higgin, 1875

Hyalonema (Ijimaonema) clavigerum Schulze, 1886 **comb. nov.**
 from *Hyalonema (Pteronema) clavigerum* Schulze, 1886

Hyalonema (Ijimaonema) globus (Schulze, 1886) **comb. nov.**
 from *Hyalonema (Pteronema) globus* (Schulze, 1886)

Hyalonema (Ijimaonema) heideri Schulze, 1894 **comb. nov.**
 from *Hyalonema (Pteronema) heideri* Schulze, 1894

Hyalonema (Ijimaonema) topsenti Ijima, 1927 **comb. nov.**
 from *Hyalonema (Pteronema) topsenti* Ijima, 1927

Genus *RIGBYKIA* nom. nov.

Rigbyella Mostler & Mosleh-Yazdi, 1976. Geol.-Palaont. Mitt. 5 (1): 19. (Porifera: Hexactinellida). Preoccupied by *Rigbyella* Stehli, 1956. J. Paleont. 30: 310. (Brachiopoda: Strophomenata: Productida: Lyttonioidina: Lyttonioidea: Rigbyellidae).

Remarks: Mostler & Mosleh-Yazdi (1976) established a cambrian spiculate sponge genus *Rigbyella* with the type species *Rigbyella ruttneri* Mostler & Mosleh-Yazdi, 1976 from Iran. It is still used as a valid genus name (e. g. Carrera & Botting, 2008). Unfortunately, the generic name was already preoccupied by Stehli (1956),

who had described the genus *Rigbyella* with the type species *Paralyttonia girtyi* Wanner & Sieverts, 1935 in Brachiopoda. It is still used as a valid genus name. It is the type genus of the family Rigbyellidae Williams et al., 2000. Thus, the genus *Rigbyella* Mostler & Mosleh-Yazdi, 1976 is a junior homonym of the generic name *Rigbyella* Stehli, 1956. So I propose a new replacement name *Rigbykia* **nom. nov.** for *Rigbyella* Mostler & Mosleh-Yazdi, 1976. The name is dedicated to J. K. Rigby.

Summary of nomenclatural changes:

Rigbykia **nom. nov.**

pro *Rigbyella* Mostler & Mosleh-Yazdi, 1976 (non Stehli, 1956)

Rigbykia ruttneri (Mostler & Mosleh-Yazdi, 1976) **comb. nov.**

from *Rigbyella ruttneri* Mostler & Mosleh-Yazdi, 1976

Class REGULARES

Genus YUKONENSIS nom. nov.

Acanthopyrgus Handfield, 1967. J. Paleont. 41: 209. (Porifera: Regulares: Capsulocyathida). Preoccupied by *Acanthopyrgus* Descamps & Wintrebert, 1966. Bull.Soc.ent.Fr. 71: 28. (Insecta: Orthoptera: Caelifera: Acrididea: Pyrgomorphae: Pyrgomorphidae: Orthacridinae: Sagittacridini).

Remarks: Handfield (1967) proposed the generic name *Acanthopyrgus* as a fossil genus of sponges with the type species *Acanthopyrgus yukonensis* Handfield, 1967 from Mackenzie Mountains, Yukon territory (Yukon, Canada, North America). It is a valid genus name. It is not extant. It was assigned to Capsulocyathida by Sepkoski (2002). Unfortunately, the generic name was already preoccupied by Descamps & Wintrebert (1966), who had proposed the genus name *Acanthopyrgus* as an orthopteran genus with the type species *Geloius finoti* Bolivar, 1905 in Caelifera. Thus, the genus group name *Acanthopyrgus* Handfield, 1967 is a junior homonym of the generic name *Acanthopyrgus* Descamps & Wintrebert, 1966. I propose a new replacement name *Yukonensis* **nom. nov.** for *Acanthopyrgus* Handfield, 1967. The name is from the type locality Yukon for tautonymy.

Summary of nomenclatural changes:

Yukonensis **nom. nov.**

pro *Acanthopyrgus* Handfield, 1967 (non Descamps & Wintrebert, 1966)

Yukonensis yukonensis Handfield, 1967) **comb. nov.**

from *Acanthopyrgus yukonensis* Handfield, 1967

Class UNCERTAIN

Genus MOSTLERHELLA nom. nov.

Bengtsonella Mostler, 1996. Geol.-Palaeontol. Mitt. 21: 228. (Porifera: Uncertain). Preoccupied by *Bengtsonella* Müller & Hinz, 1991. Fossils Strata No. 28: 15. (Chordata: Vertebrata: Conodonta).

Remarks: The name *Bengtsonella* was initially introduced by Müller & Hinz, 1991 for a fossil conodont genus (with the type species *Bengtsonella triangularis* Müller & Hinz, 1991 from Sweden) in Conoconta. It is still used as a valid genus name. Subsequently, Mostler, 1996 described a new Cambrian spiculate sponge genus with the type species *Bengtsonella australiensis* Mostler, 1996 from Australia under the same generic name. It is a valid genus name and it is endemic to Australia (e. g. Carrera & Botting, 2008). Thus, the genus *Bengtsonella* Mostler, 1996 is a junior homonym of the genus *Bengtsonella* Müller & Hinz, 1991. I propose a new replacement name *Mostlerhella* **nom. nov.** for *Bengtsonella* Mostler, 1996. The name is dedicated to H. Mostler who is the current author of the preexisting genus *Bengtsonella*.

Summary of nomenclatural changes:

Mostlerhella **nom. nov.**

pro *Bengtsonella* Mostler, 1996 (non Müller & Hinz, 1991)

Mostlerhella australiensis (Mostler, 1996) **comb. nov.**

from *Bengtsonella australiensis* Mostler, 1996

LITERATURE CITED

- Agassiz, L.** 1840. Conchyliologie mineralogique de la Grande Bretagne. pp. 125-286.
- André, M.** 1962. Acariens Thrombidions (adultes) de l'Angola (2ème note). Publ. cult. Comp. Diam. Angola (Diamang) 60: 57-112.
- Boury-Esnault, N.** 2006. Systematics and evolution of Demospongiae. Can. J. Zool., 84 (2): 205-224.
- Carrera, M. G. & Botting, J. P.** 2008. Evolutionary history of cambrian spiculate sponges: Implications for the cambrian evolutionary fauna. Palaios, 23 (3): 124-138.
- Dain, L. G. & Grozdilova, L. P.** 1953 Fossil foraminifera of the U. S. S. R., Tournayellidae and Archaeodiscidae. Vses. Neft. Nauchno-Issled. Geol.- Razved. Inst., Trudy, 74: 36.
- Descamps, M. & Wintrebert, D.** 1966. Revue et diagnose preliminaire de quelques Pyrgomorphidae et Acrididae de madagascar (Orth. Acridoidea). Bulletin de la Société Entomologique de France, 71: 24-34.
- Haeckel, E.** 1879. Das System der Medusen. Erster Teil einer Monographie der Medusen. Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena, 1: 1-360.
- Handfield, R. C.** 1967. A new Lower Cambrian Archaeocyatha. Journal of Paleontology, 41: 209-212.
- Hooper, J. N. A. & Van Soest, R. W. M.** (Ed.) 2002. Systema Porifera: a guide to the classification of Sponges. Kluwer Academic/Plenum Publishers: New York, NY (USA). xix, 1-1101, 1103-1706 pp. (2 volumes).
- Hurcewicz, H. & Czarniecki, S.** 1986. Lyssakidae sponges from the Carboniferous limestone and the Culm of southern Poland and their environmental differentiation. Annales Societatis Geologorum Poloniae, 55: 333-354.
- Hübner, J.** [1819]. Sammlung exotischer Schmetterlinge. 1 pl. (34).

Ijima, I. 1927. The Hexactinellida of the Siboga Expedition. Siboga Expedition Reports 6: 383 pp.

International Commission of Zoological Nomenclature. 1999. International Code of Zoological Nomenclature. Fourth Edition. The International Trust for Zoological Nomenclature, London.

Jahnke, H. & Gasse, W. 1993. Bestandskatalog der Kreideschwamm-Originale im Institut und Museum für Geologie und Paläontologie, Göttingen, und im Roemer Museum, Hildesheim. Mitteilungen des Roemer Museums, Neue Folge, Heft 4: p. 62.

Mostler, H. & Mosleh-Yazdi, A. 1976. Neue Poriferen aus oberkambrischen Gesteinen der Milaformation im Elburzgebirge (Iran). Geol.-Paläont. Mitt. Innsbruck, 5 (1): 1-36.

Müller, K. J. & Hinz, I. 1991. Upper Cambrian conodonts from Sweden. Fossils and Strata, 28: 1-153.

Pisera, A. & Lévi, C. 2002. Family Phymaraphiniidae Schrammen, 1910. In Hooper, J. N. A. & Van Soest, R. W. M. (ed.) Systema Porifera. A guide to the classification of sponges. 1. Pp. 380-383.

Rigby, J. K. & Bell, G. L. Jr. 2006. Sponges from the Reef Trail Member of the Upper Guadalupian (Permian) Bell Canyon Formation, Guadalupe Mountains National Park, Texas. Journal of Paleontology, 80 (5): 1-42.

Schmidt, O. 1879. Die Spongien des Meerbusen von Mexico (Und des caraischen Meeres). Abtheilung I. Heft I. Pp. 1-32.

Schrammen, A. 1910-1912. Die Kieselspongien der oberen Kreide von Nordwestdeutschland. I. Teil: Tetraxonia, Monaxonia und Silicea incert. sedis. II. Teil: Triaxonia (Hexactinellida). Palaeontographica Supplementband V, 1-175; 176-385, Stuttgart (Schweizerbart).

Sepkoski, J. J. 2002. A compendium of fossil marine animal genera. Bulletins of American Paleontology, 363: 1-560.

Stehli, F. G. 1956. Notes on oldhaminid brachiopods. Journal of Paleontology, 30 (2): 305-313.

Sepkoski, J. J. 2002. A compendium of fossil marine animal genera. Bulletins of American Paleontology, 363: 1-560.

Williams, A., Carlson, S. J., Brunton, C. H. C., Holmer, L. E., Popov, L. E., Mergl, M., Laurie, J. R., Bassett, M. G., Cocks, L. R. M., Rong, J.-Y., Lazarev, S. S., Grant, R. E., Racheboeuf, P. R., Jin, Y.-G., Wardlaw, B. R., Harper, D. A. T. & Wright, A. D. M. 2000. Part H Brachiopoda (revised): Volumes 2 & 3, Linguliformea, Craniiformea, Rhynchonelliformea (part). Treatise on Invertebrate Paleontology, 1-919.

Wood, R., Reitner, J. & West, R. 1989. Systematics and phylogenetic implications of the haplosclerid stromatoporoid *Newellia mira* nov. gen. Lethaia, 22: 85-93.