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NEW STATUS FOR HESIONID POLYCHAETES (ANNELIDA, POLYCHAETA)

DIMITRI DE ARAUJO COSTA¹ & MARTIN LINDSEY CHRISTOFFERSEN^{1*}

¹ Universidade Federal da Paraíba. Centro de Ciências Exatas e da Natureza. Departamento de Sistemática e Ecologia. João Pessoa, Paraíba, Brasil.

* E-mail para correspondência: mlchrist@dse.ufpb.br

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ABSTRACT – Nomenclatural observations of the family Hesionidae Grube, 1850 (Annelida, Polychaeta), and according to the “Principle of Priority”, International Code of Zoological Nomenclature, demonstrate that some current names present in this family are invalid. Firstly, the name of the subfamily Ophiodrominae, which is based on genus *Ophiodromus* Sars, 1862, should be replaced. This is because the genus was synonymized to *Oxydromus* Grube, 1855, which corresponds the oldest genus of this group. In 1998, Pleijel established the tribe Psamathini, based on type genus *Psamathe* Johnston, 1838; later, in 2015, Summers, Pleijel & Rouse redefined the status this tribe for subfamily Psamathiniae. However, the oldest genus of this hesionid group is *Nereimyra* Blainville, 1828. Finally, in 2012, Pleijel, Rouse, Sundkvist & Nygren erected the tribe Amphidurini, based on genus *Amphidurus* Hartman, 1959. On the other hand, the oldest genus is *Parahesione* Pettibone, 1956. According with the Principle of Priority, these hesionid taxa must be replaced by the next oldest available name from among its synonyms, including the names of the taxa contained within the same group. Therefore, we here are establishing the subfamily **Oxydrominae nomen novum**, the subfamily **Nereimyrinae nomen novum**, the tribe **Oxydromini nomen novum** and the tribe **Parahesionini nomen novum**.

KEY WORDS: NEW NAMES; PRINCIPLE OF PRIORITY; SUBFAMILIES; TRIBES.

NOVOS STATUS PARA POLIQUITAS HESIÓNÍDEOS (ANNELIDA, POLYCHAETA)

RESUMO – Observações nomenclaturais da família Hesionidae Grube, 1850 (Annelida, Polychaeta), e de acordo com o “Princípio da Prioridade”, do Código Internacional de Nomenclatura Zoológica, demonstram que alguns nomes atuais presentes nesta família são inválidos. Primeiramente, o nome da subfamília Ophiodrominae, que é baseado no gênero *Ophiodromus* Sars, 1862, deve ser substituído. Isto porque, esse gênero foi sinonimizado para *Oxydromus* Grube, 1855, o qual corresponde o gênero mais antigo deste grupo. Em 1998, Pleijel estabeleceu a tribo Psamathini, com base no gênero tipo *Psamathe* Johnston, 1838; posteriormente, em 2015, Summers, Pleijel & Rouse redefiniram o status dessa tribo para subfamília Psamathiniae. No entanto, o gênero mais antigo deste grupo de hesionídeos é *Nereimyra* Blainville, 1828. Finalmente, em 2012, Pleijel, Rouse, Sundkvist & Nygren erigiram a tribo Amphidurini, com base no gênero *Amphidurus* Hartman, 1959. Por outro lado, o gênero mais antigo é *Parahesione* Pettibone, 1956. De acordo com o Princípio da Prioridade, estes táxons de hesionídeos devem ser substituídos pelo próximo nome mais antigo disponível dentre os seus sinônimos, incluindo os nomes dos táxons contidos dentro do mesmo grupo. Deste modo, nós estamos estabelecendo aqui a subfamília **Oxydrominae nomen novum**, a subfamília **Nereimyrinae nomen novum**, a tribo **Oxydromini nomen novum** e a tribo **Parahesionini nomen novum**.

PALAVRAS-CHAVE: NOVOS NOMES; PRINCÍPIO DA PRIORIDADE; SUBFAMÍLIAS; TRIBOS.

NUEVOS ESTATUS PARA POLIQUITOS HESIÓNIDOS (ANNELIDA, POLYCHAETA)

RESUMEN – Observaciones de nomenclatura de la familia Hesionidae Grube, 1850 (Annelida, Polychaeta), y de acuerdo con el “Principio de Prioridad”, del Código Internacional de Nomenclatura Zoológica, demuestran que algunos nombres actuales presentes en esta familia no son válidos. En primer lugar, el nombre de la subfamilia Ophiodrominae, que se basa en el género *Ophiodromus* Sars, 1862, debe ser reemplazado. Esto se debe a que el género se sinonimia a *Oxydromus* Grube, 1855, que corresponde al género más antiguo de este grupo. En 1998, Pleijel estableció la tribo Psamathini, basado en el género tipo *Psamathe* Johnston, 1838; posteriormente, en 2015, Summers, Pleijel y Rouse redefinió el estatus de esa tribu a la subfamilia Psamathiniae. Sin embargo, el género más antiguo de este grupo de hesiónidos es *Nereimyra* Blainville, 1828. Finalmente, en 2012, Pleijel, Rouse, Sundkvist y Nygren erigieron la tribu Amphidurini, basado en el género *Amphidurus* Hartman, 1959. Por otro lado, el género más antiguo es *Parahesione* Pettibone, 1956. De acuerdo con el Principio de Prioridad, estos taxones de hesiónidos deben ser sustituidos por el siguiente nombre más antiguo disponible de entre sus sinónimos, incluyendo los nombres de los taxones contenidos dentro del mismo grupo. Por lo tanto, estamos estableciendo aquí la subfamilia **Oxydrominae nomen novum**, la subfamilia **Nereimyrinae nomen novum**, la tribu **Oxydromini nomen novum** y la tribu **Parahesionini nomen novum**.

PALABRAS CLAVE: NUEVOS NOMBRES; PRINCIPIO DE PRIORIDAD; SUBFAMILIAS; TRIBUS.

INTRODUCTION

In 1998, Fredrik Pleijel reviewed the family Hesionidae, including diagnosis of all supraespecific taxa. As a result, a more consistent taxonomy of this group was provided. This author erected the subfamily Ophiodrominae, which currently groups the tribes Amphidurini, Gyptini and Ophiodromini (Pleijel 1998, Pleijel et al. 2012, Read 2015). The group Gyptini includes the taxa *Gyptis* Marion & Bobretzky in Marion, 1874, *Hesiobranchia* Ruta & Pleijel, 2006, *Hesiodeira* Blake & Hilbig, 1990 (Blake & Hilbig, 1990, Pleijel 1993, 1998, 2001, Ruta & Pleijel 2006, Read 2015). The tribe Ophiodromini groups the taxa *Heteropodarke* Hartmann-Schröder, 1962, *Mahesia* Westheide, 2000, *Oxydromus* Grube, 1855, *Podarkeopsis* Laubier, 1961, and *Sinohesione* Westheide, Purschke & Mangerich, 1994, (Westheide et al. 1994, Pleijel 1998, 1999, Westheide 2000, Villalobos-Guerrero & Harris 2012, Read 2015). Finally, Pleijel, Rouse, Sundkvist & Nygren (2012) established the tribe Amphidurini, that includes the genera *Amphiduopsis* Pleijel, 2001, *Amphiduros* Hartman, 1959, *Neogyptis* Pleijel, Rouse, Sundkvist & Nygren, 2012, and *Parahesione* Pettibone, 1956 (Pleijel 2001, Pleijel et al. 2012, Read 2015).

Pleijel (1998) also established the tribe Psamathini, based on type genus *Psamathe* Johnston, 1838. Subsequently, in 2015, Summers, Pleijel & Rouse concluded that the subfamily Hesioninae Grube, 1850, as traditionally delineated, was paraphyletic. They thus restrict Hesioninae to include only Hesionini Grube, 1850; therefore, the status of the tribe Psamathini has been modified to subfamily Psamathinae (Read 2015, Summers et al. 2015). This subfamily includes the genus *Bonuania* Pillai, 1965, *Hesiospina* Imajima & Hartman, 1964, *Micropodarke* Okuda, 1938, *Nereimyra* Blainville, 1828, *Psamathe* Johnston, 1836, *Sirsoe* Pleijel, 1998, *Syllidia* Quatrefages, 1865, *Vrijenhoekia* Pleijel, Rouse, Ruta, Wiklund & Nygren, 2008 (Pleijel 1998, Pleijel et al. 2008, Read 2015).

In accordance with the “Principle of Priority”, International Code of Zoological Nomenclature (1999), we herein rename subfamily Ophiodrominae as **Oxydrominae nomen novum**, Psamathinae as **Nereimyrinae nomen novum**, tribe Ophiodromini as **Oxydromini nomen novum**, and Amphidurini as **Parahesionini nomen novum**.

MATERIALS AND METHODS

All descriptive information was obtained in the literature available at the library of Dr. Martin Lindsey Christoffersen, Departamento de Sistemática e Ecologia, Centro de Ciências Exatas e da Natureza, Universidade Federal da Paraíba, João Pessoa, Paraíba, Brazil.

RESULTS AND DISCUSSION

Pleijel (1998) affirmed that *Oxydromus* has seniority with *Ophiodromus*, but the author concluded that *Oxydromus* is preoccupied in Aves (Gruiformes, Rallidae) (Pleijel 1998). In contrast, *Oxydromus* Schlegel, 1854 is an incorrect spelling of *Ocydromus* Wagler, 1830, and this Wagler's name was replaced to *Gallirallus* Lafresnaye, 1841, because it is a junior homonym of *Ocydromus* Clairville, 1806 (Insecta, Carabidae). Therefore, Schlegel's name is not available for the avian group (Brodkorb 1967, Viéitez et al. 2004, Villalobos-Guerrero and Harris 2012). In 2012,

Villalobos-Guerrero and Harris reinstated *Oxydromus* Grube, 1855 over *Ophiodromus* Sars, 1862 in accordance with article 23 of International Code of Zoological Nomenclature (1999) (Villalobos-Guerrero & Harris 2012). Thus, the name *Oxydromus* is correctly applied to this polychaete genus. In this way, the name of the subfamily Ophiodrominae must be replaced to ***Oxydrominae nomen novum***, as well as the tribe Ophiodromini to ***Oxydromini nomen novum***.

In 1998, Pleijel established the tribe Psamathini based on type genus *Psamathe* Johnston, 1838 (Pleijel 1998). Later, in 2015, Summers, Pleijel & Rouse redefined the status this tribe for subfamily Psamathinae. However, the oldest genus of this hesionid group is *Nereimyra* Blainville, 1828. Thus, this subfamily must be modified to ***Nereimyrinae nomen novum***.

Finally, Pleijel et al. (2012) erected the tribe Amphidurini based on genus *Amphiduros* Hartman, 1959. On the other hand, the oldest genus is *Parahesione* Pettibone, 1956. Therefore, this tribe must be replaced to ***Parahesionini nomen novum***.

According to the “Principle of Priority”, when the name of the type genus, which defines the suprageneric-group name, is found to be a junior homonym, then this group name becomes invalid. It must be replaced by the next oldest available name from among its synonyms, including the names of the taxa contained within this group (articles 23, 39 and 55 – ICZN 1999). We have provided new status for the following taxa of Hesionidae – subfamily ***Oxydrominae nomen novum***, subfamily ***Nereimyrinae nomen novum***, tribe ***Oxydromini nomen novum*** and tribe ***Parahesionini nomen novum***.

SYSTEMATIZATION OF ACCEPTED TAXA OF FAMILY HESIONIDAE (modified of Read, 2015)

Family Hesionidae Grube, 1850

Subfamily Hesiolyrinae Pleijel, 1998

Genus *Hesiolyra* Blake, 1985

Subfamily Hesioninae Grube, 1850

Tribe Hesionini Grube, 1850

Genus *Dalhousiella* McIntosh, 1901

Genus *Hesione* Savigny in Lamarck, 1818

Genus *Leocrates* Kinberg, 1866

Genus *Leocratides* Ehlers, 1908

Genus *Wesenbergia* Hartman, 1955

Genus *Lizardia* Pleijel & Rouse, 2005

Genus *Pleijelius* Salazar-Vallejo & Orensanz, 2006

Subfamily Oxydrominae *nomen novum*

Tribe Gyptini Pleijel, 1998

Genus *Gyptis* Marion & Bobretzky in Marion, 1874

Genus *Hesiobranchia* Ruta & Pleijel, 2006

Genus *Hesiodeira* Blake & Hilbig, 1990

Tribe Oxydromini *nomen novum*

Genus *Heteropodarke* Hartmann-Schröder, 1962

Genus *Mahesia* Westheide, 2000

Genus *Oxydromus* Grube, 1855

Genus *Podarkeopsis* Laubier, 1961

Genus *Sinohesione* Westheide, Purschke & Mangerich, 1994

Tribe Parahesionini *nomen novum*

Genus *Amphiduropsis* Pleijel, 2001

Genus *Amphiduros* Hartman, 1959

Genus *Neogyptis* Pleijel, Rouse, Sundkvist & Nygren, 2012

Genus *Parahesione* Pettibone, 1956

Subfamily Nereimyrinae *nomen novum*

Genus *Bonuania* Pillai, 1965

Genus *Hesiospina* Imajima & Hartman, 1964

Genus *Micropodarke* Okuda, 1938

Genus *Nereimyra* Blainville, 1828

Genus *Psamathe* Johnston, 1836

Genus *Sirsoe* Pleijel, 1998

Genus *Syllidia* Quatrefages, 1865

Genus *Vrijenhoekia* Pleijel, Rouse, Ruta, Wiklund & Nygren, 2008

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REFERENCES

- Blake JA, Hilbig B. 1990. Polychaeta from the vicinity of deep-sea hydrothermal vents in the Eastern Pacific. II. New species and records from the Juan de Fuca and Explorer Ridge Systems. **Pacific Science**, 44(3): 219–253.
- Brodkorb P. 1967. Catalogue of fossil birds: Part 3 (Ralliformes, Ichthyornithiformes, Charadriiformes). **Bulletin of the Florida State Museum, Biological Sciences Series**. 11: 99–220.
- International Commission on Zoological Nomenclature. 1999. **International Code of Zoological Nomenclature**. 4th ed., London: The International Trust for Zoological Nomenclature. Available at: <<http://www.nhm.ac.uk/hosted-sites/iczn/code/>>. Accessed: Aug 30, 2015.
- Pleijel F. 1993. Taxonomy of European species of *Amphiduros* and *Gyptis* (Polychaeta: Hesionidae). **Proceedings of the Biological Society of Washington**. 106(1): 158–181.
- Pleijel F. 1998. Phylogenetic and classification of Hesionidae (Polychaeta). **Zoologica Scripta**. 27(2): 89–163.
- Pleijel F. 1999. Phylogenetic taxonomy, a farewell to species, and a revision of *Heteropodarke* (Hesionidae, Polychaeta, Annelida). **Systematic Biology**. 48(4): 755–789.
- Pleijel F. 2001. Revision of *Amphiduros* Hartman, 1959 (Polychaeta, Hesionidae, Gyptini). **Ophelia**. 54(1): 15–27.
- Pleijel F, Rouse GW, Ruta C, Wiklund H, Nygren A. 2008. *Vrijenhoekia balaenophila*, a new hesionid polychaete from a whale fall off California. **Zoological Journal of the Linnean Society**. 152: 625–634.
- Pleijel F, Rouse GW, Sundkvist T, Nygren A. 2012. A partial revision of *Gyptis* (Gyptini, Ophiodynaminae, Hesionidae, Aciculata, Annelida), with descriptions of a new tribe, a new genus and five new species. **Zoological Journal of the Linnean Society**. 165: 471–494.
- Read G. 2015. Hesionidae Grube, 1850. In: Read G, Fauchald K. (Eds). **World Polychaeta Database**. World Register of Marine Species. Available at: <<http://www.marinespecies.org/aphia.php?p=taxdetails&id=946>>. Accessed: Aug 13, 2015.
- Ruta C, Pleijel F. 2006. A new branchiate hesionid polychaete (Annelida, Hesionidae) from New Caledonia. **Zoosysterna**. 28(3): 655–667.
- Summers M, Pleijel F, Rouse GW. 2015. Whale falls, multiple colonisations of the deep, and the

phylogeny of Hesionidae (Annelida). **Invertebrate Systematics**. 29: 105–123.

Viéitez JM, Alós C, Parapar J, Besteiro C, Moreira J, Núñez J, Laborda AJ, San Martín G. 2004. Annelida Polychaeta I. In: Ramos MA et al. (Eds), **Fauna Ibérica**, vol. 25, Madrid: Museo Nacional de Ciencias Naturales, CSIC, Madrid, p. 210–267.

Villalobos-Guerrero TF, Harris LH. 2012. *Oxydromus* Grube, 1855 reinstated over *Ophiodromus* Sars, 1862 (Polychaeta, Hesionidae). **ZooKeys**. 241: 21–31.

Westheide W. 2000. *Mahesia ammophila*, a new genus and species of interstitial hesionid (Annelida: Polychaeta) from the Indian Ocean. **Proceedings of the Biological Society of Washington**. 113(3): 644–651.

Westheide W, Purschke G, Mangerich W. 1994. *Sinohesione genitaliphora* gen. et sp. n. (Polychaeta, Hesionidae), an interstitial annelid with unique dimorphous external genital organs. **Zoologica Scripta**. 23(2): 95–105.