

**NOMENCLATURE CHANGES AND CORRECTIONS
FOR MILLIPEDE SPECIES DESCRIBED BY MANUEL
A. GONZÁLEZ-SPONGA FROM VENEZUELA
(MYRIAPODA: DIPLOPODA)**

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ABSTRACT: Nomenclatural discrepancies involving Diplopoda species described by González-Sponga from Venezuela are discussed and corrected. An emendation and subsequent spelling for the species *Stemmiulus deantier* González-Sponga, 2001 (Stemmiulida: Stemmiulidae) is proposed. Nine new combinations for the genus *Mestosoma* Silvestri, 1897 (Polydesmida: Paradoxosomatidae) are herein proposed: *Mestosoma acariguensis* (González-Sponga, 2004) comb. nov., *Mestosoma brionensis* (González-Sponga, 2004) comb. nov., *Mestosoma casimiranus* (González-Sponga, 2004) comb. nov., *Mestosoma minaensis* (González-Sponga, 2004) comb. nov., *Mestosoma mirandensis* (González-Sponga, 2004) comb. nov., *Mestosoma monaguensis* (González-Sponga, 2004) comb. nov., *Mestosoma punctiaguda* (González-Sponga, 2004) comb. nov., *Mestosoma ramosa* (González-Sponga, 2004) comb. nov., *Mestosoma ramosa* (González-Sponga, 2004) comb. nov..

KEY WORDS: Nomenclatural changes, Diplopoda, Stemmiulidae, Paradoxosomatidae, *Stemmiulus*, *Mestosoma*, Venezuela.

During the compilation of a checklist and bibliography of the millipedes from Venezuela, we have found some important nomenclatural discrepancies that should be discussed and corrected before the publication of the checklist. The present article addresses a number of nomenclatural problems that have been discovered with some millipede species described by González-Sponga (2001, 2004) from Venezuela. The problems dealt with in this article are strictly of a nomenclatural nature and we do not intend to validate the taxonomy involved with the current problems.

Order STEMMIULIDA
Family STEMMIULIDAE

The species *Stemmiulus dentier* was described by González-Sponga (2001) from Venezuela. The specific epithet “*dentier*” was used by González-Sponga (2001) in the heading of the description of this new species, but in the text of the description (page 55), captions of illustrations (page 56) and distribution map (page 62), the specific epithet is consistently spelled as “*deantier*” with the letter ‘*a*’ included and forming the ‘*ea*’ hiatus. In the etymology section, González-Sponga (2001) clearly states that the specific epithet assigned to this new species comes from the joining of the two last words in the phrase “Venezuela de antier”. Therefore, it is evident that the misspelled specific epithet “*dentier*” is a typographical error in the original description. This case is well established in

Article 32.5.1 (ICZN, 1999) which states that only clear evidence of an inadvertent error, contained in the original publication itself, allows to emend an original spelling. Therefore, we propose amend the specific epithet to “*deantier*”, thus preserving the original author’s etymological intention and avoid the continuation of this misspelt in future publications. This species has not been cited by other authors since its original description, so that Article 33.3.1 (ICZN, 1999) on prevailing usage does not apply in this case.

Finally, it is important to note that in the same article, González-Sponga (2001) referred the family Stemmiulidae into the order Chordeumida (sic!) as was originally established by Gervais & Goudot (1844). However, Cook (1895) proposed to separate the family Stemmiulidae from the order Chordeumida (currently Chordeumatida) in a new and different order, Stemmiulida. Since then this taxonomic arrangement has not changed and has been widely accepted by the specialists (Silvestri, 1916; Chamberlin, 1920; Loomis, 1964, 1968; Hoffman, 1999; Shelley, 2003; Shear, 2011).

Order POLYDESMIDA

Family PARADOXOSOMATIDAE

The genus *Mestosoma* was created by Silvestri (1897) in the family Strongylosomatidae with the type species *Strongylosoma salvadorii* Silvestri, 1895 from Bolivia. Silvestri (1897) included, along with the type species, another ten South American species. Three of them described by himself as new species (*M. laetum* Silvestri, 1897; *M. luctuosum* Silvestri, 1897 and *M. lugubre* Silvestri, 1897) and other seven transferred from the genus *Strongylosoma* Brandt, 1833 (*S. balzanii* Silvestri, 1895; *S. borelli* Silvestri, 1895; *S. camerani* Silvestri, 1895; *S. derelictum* Silvestri, 1895; *S. montanum* Silvestri, 1895; *S. pseudomorphum* Silvestri, 1895 and *S. semirugosum* Pocock, 1888). Currently, it is a valid genus name in Polydesmida and includes 76 nominal species from the Neotropical region (Jeekel, 1963; Hoffman, 1977, 1999; Golovatch et al., 2003).

Subsequently, Chamberlin (1952) proposed the genus *Nearctoma* in the family Strongylosomatidae for two new South American species, *N. cuzconum* Chamberlin, 1952 from Peru as type species and *N. araguanum* Chamberlin, 1952 from Venezuela.

Later, Jeekel (1963) established the synonymy of the family Strongylosomatidae (also cited as Strongylosomidae) with the family Paradoxosomatidae, and only with some exceptions, referred to the family Paradoxosomatidae all genera included in the family Strongylosomatidae. Jeekel (1963) also established the synonymy of the genus *Nearctoma* Chamberlin, 1952 with the genus *Mestosoma* Silvestri, 1897, since in the original sense both genera were based on the same characters.

Recently, González-Sponga (2004) inadvertently overlooked all taxonomic changes proposed by Jeekel (1963), and he described nine new species from Venezuela in the family Strongylosomidae (sic!), under the generic name *Neactoma*, a misspelt of the genus name *Nearctoma* Chamberlin, 1952. As was stated previously, the generic name *Nearctoma* Chamberlin, 1952 is no longer in use since it was synonymized by Jeekel (1963) with the genus *Mestosoma* Silvestri, 1897, therefore it is an invalid genus name. Consequently, all species described by González-Sponga (2004) in the genus *Nearctoma* Chamberlin 1952 (misspelled as *Neactoma*) should be transferred to the Genus *Mestosoma* Silvestri, 1897.

Summary of nomenclatural changes:

Mestosoma acariguensis (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) acariguensis* González-Sponga, 2004.

Mestosoma brionensis (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) brionensis* González-Sponga, 2004.

Mestosoma casimiranus (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) casimiranus* González-Sponga, 2004.

Mestosoma minaensis (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) minaensis* González-Sponga, 2004.

Mestosoma mirandensis (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) mirandensis* González-Sponga, 2004.

Mestosoma monaguensis (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) monaguensis* González-Sponga, 2004.

Mestosoma punctiaguda (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) punctiaguda* González-Sponga, 2004.

Mestosoma ramosa (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) ramosa* González-Sponga, 2004.

Mestosoma ramosa (González-Sponga, 2004) **comb. nov.**
= *Neactoma (sic!) zeaensis* González-Sponga, 2004.

LITERATURE CITED

- Brandt, J. F.** 1833. Tentaminum quorundam monographicorum Insecta Myriapoda Chilognathi Latreilli spectantium prodromus. Bulletin de la Société Impériale des Naturalistes de Moscou, 6: 194-209.
- Chamberlin, R. V.** 1920. The Millipedes of Central America. Proceedings of the United States National Museum, 60 (2403): 1-75.
- Chamberlin, R. V.** 1952. Some American Polydesmid millipeds in the collection of the Chicago Museum of Natural History. Annals of the Entomological Society of America, 45 (4): 553-584.
- Cook, O. F.** 1895. *Stemmatoiulus* as an Ordinal Type. The American Naturalist, 29 (348): 1111-1121.
- Gervais, P & Goudot, J.** 1844. Description des Myriapodes recueillis par J. Goudot en Colombie. Annales de la Société Entomologique de France, Ser. 2, 2: 27-29.
- Golovatch, S. I., Hoffman, R. L., Mármol, A. & Adis, J.** 2003. A new, apparently arboricolous species of the millipede genus *Mestosoma* Silvestri, 1897 from near Iquitos, Peruvian Amazonia (Diplopoda: Polydesmida: Paradoxosomatidae). Amazoniana, 17 (3-4): 343-348.
- González-Sponga, M. A.** 2001. Miriápodos de Venezuela. Nuevas especies de la familia Stemmiulidae. Parte 1. (Diplopoda: Chordeumida). Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales (Caracas), 61 (3): 47-64.
- González-Sponga, M. A.** 2004. Miriápodos de Venezuela. Descripción de nueve especies nuevas del género *Neactoma* Chamberlin, 1952 (Polydesmida: Strongylosomidae). Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales (Caracas), 64 (3-4): 9-27.

- Hoffman, R. L.** 1977. The milliped genus *Mestosoma* in Costa Rica (Polydesmida: Paradoxosomatidae). *Studies on Neotropical Fauna and Environment*, 12 (3): 207-215.
- Hoffman, R. L.** 1999. Checklist of the millipeds of North and Middle America. Virginia Museum of Natural History, Special Publications, 8: 1-581.
- International Commission on Zoological Nomenclature (ICZN).** 1999. International Code of Zoological Nomenclature. 4th Edition. The International Trust for Zoological Nomenclature (London), 306 pp.
- Jeckel, C. A. W.** 1963. Diplopoda of Guiana. In: Geijskes, D. C. & Hummelinck, P. W. (Eds.), *Studies on the Fauna of Suriname and other Guyanas*, 4 (11): 1-157.
- Loomis, H. F.** 1964. The Millipeds of Panama (Diplopoda). *Fieldiana (Zoology)*, 47 (1): 1-136.
- Loomis, H. F.,** 1968. A Checklist of the Millipeds of Mexico and Central America. *United States National Museum Bulletin*, 266: 1-137.
- Pocock, R. I.** 1888. Contributions to our Knowledge of the Myriapoda of Dominica. *The Annals and Magazine of Natural History*, Ser. 6, 2 (12): 472-483 + plate XVI.
- Shear, W. A.** 2011. Class Diplopoda de Blainville in Gervais, 1844. In: Zhang, Z.-Q. (Ed.) *Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness*. *Zootaxa*, 3148: 159-164.
- Shelley, R. M.** 2003. A revised, annotated, family-level classification of the Diplopoda. *Arthropoda Selecta*, 11 (3): 187-207.
- Silvestri, F.** 1895. Viaggio del Dott. Alfredo Borelli nella Repubblica Argentina e nel Paraguay. XIV. Chilopodi e Diplopodi. *Bollettino dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino*, 10 (203): 1-12.
- Silvestri, F.** 1897. Viaggio del Dott. Alfredo Borelli nel Chaco boliviano e nella Repubblica Argentina. IV. Chilopodi e Diplopodi. *Bollettino dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino*, 12 (283): 1-11.
- Silvestri, F.** 1916. Contribuzione alla Conoscenza degli Stemmiuloidea (Diplopoda). *Bollettino del Laboratorio di Zoologia Generale e Agraria della R. Scuola Superiore d'Agricoltura in Portici*, 10: 287-347.