

Pachystigmus Hellén, 1927, a substitute name for
Noserus Foerster, 1863 (Hymenoptera: Braconidae),
not *Noserus* LeConte, 1862 (Coleoptera: Zopheridae)

Ian A. Foley
and

Michael A. Ivie
Department of Entomology
Montana State University
Bozeman, MT 59717 USA

Martin Spies

Zoologische Staatssammlung Muenchen
Muenchhausenstr. 21D-81247
Muenchen, Germany

Abstract. By establishing the date of its first publication, *Noserus* Foerster, 1863 (Hymenoptera, Braconidae) is shown to be a junior primary homonym of *Noserus* LeConte, 1862 (Coleoptera, Zopheridae). The substitute name for *Noserus* Foerster is that of its subjective synonym, *Pachystigmus* Hellén, 1927 [type species: *Pachystigmus nitidulus* Hellén, 1927]. Other described species in the genus are: *Pachystigmus facialis* (Foerster, 1863) New Combination; *P. similis* (Szépligeti, 1896) New Combination, *P. nitidulus* Hellén, 1927, *P. gigas* (Tobias, 1964) New Combination, *P. occipitalis* (Belokobylskij, 1986) New Combination, *P. olgensis* (Belokobylskij, 1994) New Combination, and *P. sculpturator* (Belokobylskij, 1999) New Combination.

Introduction

In 1862, LeConte described *Noserus* (type species *Nosoderma plicatum* LeConte (1859), by original designation and monotypy) for a North American Zopherini (Coleoptera: Zopheridae). According to a statement on page 286 of LeConte (1862), page 216, on which *Noserus* was established, was first published in March of 1862. Hardy *et al.* (1984) discuss the rather confusing method of publication for this paper, and support this dating. Therefore, and in the absence of any evidence to the contrary, under the provisions of ICZN (1999) Art. 21.3.1, the date of availability for this name is 31 March 1862. The genus was subsequently synonymized with *Phloeodes* LeConte by Slipinski and Lawrence (1999), but was resurrected by Garcia Paris *et al.* (2001).

Foerster (1863) proposed another genus *Noserus* (type species *Noserus facialis* Foerster, 1863, by original designation and monotypy) for a Rogadinae/Exothecinae (Hymenoptera: Braconidae). Neave (1940) noted the homonymy with *Noserus* LeConte, but did not act on it. However, ICZN (1999) Arts. 52, 53.2 and 60 require correction of the situation. Foerster's paper was published in the volume for the year 1862 of the "Verhandlungen des naturhistorischen Vereines der preussischen Rheinlande und Westphalens" (hereaf-

ter: "Prussian Verhandlungen"). This paper seems to be universally cited as having been published in 1862 (e.g. Dalla Torre 1898, Szépligeti 1904, Neave 1940, Hedqvist 1963, Shenefelt 1975, Marsh 1979, Whitfield and van Achterberg 1987). The fact that the two homonyms were both carrying the date 1862 required us to determine a more precise date for Foerster's paper, in order to establish priority.

Results

The only applicable date given anywhere in volume 19 of the "Prussian Verhandlungen" is the year "1862" printed on the cover. The entire volume appears to have been issued at one time, there are no dividing covers to indicate separate printing installments. Proceedings of the two meetings per year of the natural history society that published the "Prussian Verhandlungen" were regularly included in each volume of the latter, as "Correspondenzblätter" with separate pagination. Each year, the "Correspondenzblatt" for the spring meeting contains a note on the production of the journal volume for the preceding calendar year. In the case at hand, this note is found on p. 42 of "Correspondenzblatt" No. 2 in volume 20 of the "Prussian Verhandlungen", reporting on the society's twentieth general meeting on 26-27 May 1863.

This does not give an actual date of publication for volume 19, but confirms that it was published, as one comprehensive volume, at some time in between the society's preceding fall meeting (on 13 October 1862 according to "Correspondenzblatt" No. 2, page 76, in volume 19 of the "Prussian Verhandlungen") and the May meeting of 1863.

In our first attempt to find an actual date of publication for Foerster's paper, we inquired about library receipt stamps. However, the copies of volume 19 of the "Prussian Verhandlungen" in the libraries of the Field Museum of Natural History (Chicago), Zoologische Staatssammlung (Munich), Zoologisches Forschungsinstitut und Museum Alexander Koenig (Bonn), and in The Natural History Museum (London) do not carry any stamp indicating a specific date of receipt.

It was the custom of some societies of the day to maintain their own library, and regularly report receipt of new publications somewhere in their journal. We therefore searched for such records pertaining to volume 19 of the "Prussian Verhandlungen", and have found the following. Volume 13 (1863), issue 1-2, of the "Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien" (hereafter: "Vienna Verhandlungen") contains "Sitzungsberichte" (meeting reports; published with pagination separate from the research paper section) for six meetings of the society that had taken place between 1 January and 6 May 1863. On page 23 of this "Sitzungsberichte" section, it is recorded for the 1 April 1863 meeting that volume 19 of the "Prussian Verhandlungen" had been received since the previous meeting (4 March 1863). A search of adjacent volumes of the "Vienna Verhandlungen" showed that the "Prussian Verhandlungen" volumes were regularly received in Vienna at about the same time (late March to early April) in the calendar year following the one printed on the cover of the respective "Prussian Verhandlungen". In addition, we have found an entry in "Correspondenz-Blatt des zoologisch-mineralogischen Vereines in Regensburg," issue 5-6 of volume 17 (May and June, 1863), that records the receipt of volume 19 of the "Prussian Verhandlungen" (not all issues of this "Correspondenz-Blatt" contain lists of publications received, thus the period during which volume 19 of the "Prussian Verhandlungen" arrived at Regensburg cannot be narrowed down as much as with the "Vienna Verhandlungen").

Finally, the current editor-in-chief of "Decheniana," the successor journal to the "Prussian Verhandlungen," has confirmed (B. Moeseler, Univ. Bonn, pers. comm. to MS) that the "Prussian Verhandlungen"

for a given calendar year were always issued in the following year. Thus, volume 19 was published not IN 1862, but FOR 1862, and IN 1863.

While we have been unable to establish the precise date on which the name *Noserus* Foerster was first published, it is clear that it lies within the year 1863. Under the provisions of ICZN (1999) Art. 21.3, "the earliest day on which the work is demonstrated to be in existence as a published work is to be adopted as" its date of availability. At present, the earliest date that we can verify is 01 April 1863, the day of the meeting reported in the "Vienna Verhandlungen," making *Noserus* Foerster the junior primary homonym to *Noserus* LeConte. Even if volume 19 of the "Prussian Verhandlungen" had been published in 1862, its inclusion of records from a meeting in October of that year establishes without doubt that LeConte's work, published in March of 1862, must have priority over Foerster's paper.

Reversal of precedence under ICZN (1999) Art. 23.9 is out of the question here, because *Noserus* LeConte has been in use as a valid name after 1899 (and is still valid today). A substitute name is thus required for *Noserus* Foerster. In 1927 Hellén described the genus *Pachystigmus* (type species *Pachystigmus nitidulus* Hellén, 1927, by monotypy). Whitfield and van Achterberg (1987) have placed *Pachystigmus* as a junior subjective synonym of *Noserus* Foerster. Following ICZN (1999) Arts. 23.3.5 and 60.1, *Pachystigmus* Hellén, 1927, becomes the valid substitute name for *Noserus* Foerster, 1863 [not LeConte, 1862]. Thus, the current status of this genus is as follows:

***Pachystigmus* Hellén, 1927**

Noserus Foerster, 1863: 241. Invalid name, preoccupied by LeConte, 1862. Type species *Noserus facialis* Foerster, 1863: 241. Dalla Torre, 1898: 249. Szépligeti, 1904: 78. Neave, 1940: 346. Hedqvist, 1963: 33, 39. Shenefelt, 1975: 1150. Marsh, 1979: 176. Whitfield and Achterberg, 1987: 516.

Pachystigmus Hellén, 1927: 54. Type species: *Pachystigmus nitidulus* Hellén, 1927: 54. Neave, 1940: 517. Whitfield and Achterberg, 1987: 516.

Described species of *Pachystigmus* include:

Pachystigmus facialis (Foerster) NEW COMBINATION.
Noserus facialis Foerster, 1863.

Pachystigmus similis (Szépligeti) NEW COMBINATION.
Discoletes similis Szépligeti, 1896.

Noserus similis (Szépligeti), generic assignment by Papp, 1983.

Pachystigmus nitidulus Hellén, 1927.

Pachystigmus gigas (Tobias) NEW COMBINATION
Rhysipolis gigas Tobias, 1964.

Noserus gigas (Tobias), generic assignment by Papp, 1975.

Pachystigmus occipitalis (Belokobylskij) NEW COMBINATION.

Noserus occipitalis Belokobylskij, 1986.

Pachystigmus olgensis (Belokobylskij) NEW COMBINATION.

Noserus olgensis Belokobylskij, 1994.

Pachystigmus sculpturator (Belokobylskij) NEW COMBINATION.

Noserus sculpturator Belokobylskij, 1999.

Acknowledgments

We thank Alfred Newton and Margaret Thayer (Field Museum of Natural History, Chicago), Bradley J. Sinclair and Lasse Hubweber (Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn), Max Barclay (The Natural History Museum, London), Neal Evenhuis (Bishop Museum, Honolulu) and Bob Carlson (Systematic Entomology Laboratory, USDA, Washington, D.C.) for their efforts to help with dating Foerster (1863). Richard Hurley, James Whitfield and Bob Carlson reviewed earlier versions of the manuscript. This is a contribution of the Montana Agricultural Experiment Station.

Literature cited

- Belokobylskij, S. A.** 1986. [New species of braconids of the supertribe Exothecidii (Hymenoptera, Braconidae) from the south of the Soviet Far East]. Pp. 58-69 in Lehr, P. A. Kupyanskaya, A. N. [Eds]. *Sistematika i ekologiya nasekomykh dalnego vostoka*. [Systematics and ecology of insects of the Soviet Far East.] Academy of Science of the USSR, Far East Science Center, Vladivostok. 154 pp. [in Russian]
- Belokobylskij, S. A.** 1994. [A review of parasitic wasps of the subfamilies Doryctinae and Exothecinae (Hymenoptera, Braconidae) of the Far East (Eastern Siberia and neighboring territories)]. Pp. 5-77 in Kotenko, A. G. [Ed.]. *Pereponchatokrylye Sibiri i Dalnego Vostoka: sbornik nauchnykh trudov zapovednika "Daurskii"*. Vypusk 3. [Hymenopteran insects of Siberia and Far East: memoirs of the Daursky Nature Reserve, no. 3]. Institut Zoologii NAN Ukrainy, Kiev. 1994: 1-147. [in Russian]
- Belokobylskij, S. A.** 1999. [New taxa of the braconid subfamily Exothecinae (Hymenoptera, Braconidae) from tropical and subtropical regions of the Old World]. *Entomologicheskoe Obozrenie* [Entomological Review] 78: 674-693. [in Russian]
- Dalla Torre, G. C.** 1898. Braconidae. *Catalogus Hymenopterorum* 4: 10323. G. Englemann. Leipzig.
- Foerster, A.** 1863. Synopsis der Familien und Gattungen der Braconen. *Verhandlungen des Naturhistorischen Vereines der Preussischen Rheinlande und Westphalens* [1862]: 19: 225-288.
- Garcia Paris, M., M. Coca Abia, and G. Parra Olea.** 2001. A new species of *Noserus* (Coleoptera: Zopheridae) from Mexico. *Pan-Pacific Entomologist* 77: 144-155.
- Hardy, A. R., F. G. Andrews and D. H. Kavanaugh.** 1984. *The Collected LeConte Papers on Entomology, Volume 3, 1855-1862* Scarabaeus Associates, Sacramento. vii + 552 pp.
- Hedqvist, K. J.** 1963. Notes on Hormiini with description of new genera and species (Hym., Ichneumonoidea, Braconidae). *Entomologisk Tidsskrift* 84: 30-61.
- Hellén, W.** 1927. Zur Kenntnis der Braconiden (Hym.) Finnlands vol.1, Subfamm. Braconinae (Part.), Rhogadinae und Spathiinae. *Acta Societatis Pro Fauna et Flora Fennica* 56: 1-59.
- ICZN (International Commission on Zoological Nomenclature).** 1999. *International Code of Zoological Nomenclature*, 4th ed. The International Trust for Zoological Nomenclature, London, U.K. 306pp.
- LeConte, J. L.** 1859. *Catalog of the Coleoptera of Fort Tejon, California*. *Proceedings of the Academy of Natural Sciences of Philadelphia* 1859: 69-90.
- LeConte, J. L.** 1862. *Classification of the Coleoptera of North America, Part I*. *Smithsonian Miscellaneous Collections* 3: 209-286.
- Marsh, P. M.** 1979. Family Braconidae. Pp. 144-295 in Krombein, K.V., et al. [Eds.] *Catalog of Hymenoptera in America North of Mexico Vol. 1*. Smithsonian Institution Press. Washington, D.C.
- Neave, S. A.** 1940. *Nomenclator zoologicus*. Vol. 3, M-P. Pp. 1-1065. Zoological Society of London.
- Papp, J.** 1975. Three new European species of *Colastes* Hal., with taxonomic remarks (Hymenoptera: Braconidae: Exothecinae). *Acta Zoologica Academiae Scientiarum Hungaricae* 21: 411-423.
- Papp, J.** 1983. Survey of the braconid fauna of the Hortobagy National Park (Hymenoptera, Braconidae), 2. *Natural History of the National Parks of Hungary* 3: 315-337.
- Shenefelt, R. D.** 1975. Braconidae 8. Exothecinae, Ragodinae. *Hymenopterorum Catalogus, Pars* 12: 1115-1262. W. Junk, The Hague.
- Slipinski, S. A., and J. F. Lawrence.** 1999. Phylogeny and classification of Zopheridae *sensu*

- novo* (Coleoptera: Tenebrionoidea) with a review of the genera of Zopherinae (excluding Monommatini). *Annales Zoologici* (Warszawa) 49: 1-53.
- Szépligeti, G. V.** 1896. Adatok a magyar fauna Braconidainak ismeretehez. *Termes Füzetek* 19: 145-149, 165-186.
- Szépligeti, G. V.** 1904. Hymenoptera Family Braconidae, 22. Pp. 78-79 in Wytsman, P. [Ed.] *Genera Insectorum*. V. Verteneuil and L. Desmet. Bruxelles.
- Tobias, V. I.** 1964. A new species and genus of braconids (Hymenoptera: Braconidae) from Kazakhstan. *Trudy Zoologicheskogo Instituta Leningrad* 34: 177-234. [in Russian]
- Whitfield, J. B., and C. van Achterberg.** 1987. Clarification of the taxonomic status of the genera *Cantharoctonus* Viereck, *Noserus* Foerster and *Pseudavga* Tobias (Hymenoptera: Braconidae). *Systematic Entomology* 12: 509-518.