

## SHORT NOTE

**On the identity of *Serica elongata* Nonfried from Honduras (Coleoptera: Scarabaeidae: Sericinae)**Thaynara L. PACHECO<sup>1,2)</sup>, Paul LAGO<sup>3)</sup> & Dirk AHRENS<sup>1,4)</sup><sup>1)</sup>Museum Koenig Bonn, Leibniz Institute for the Analysis of Biodiversity Change, Adenauerallee 127, 53113 Bonn, Germany<sup>2)</sup>e-mail: thay.lpacheco@gmail.com; ORCID: <https://orcid.org/0000-0001-9503-7751><sup>3)</sup>Department of Biology, University of Mississippi, P.O. Box 1848 University, MS 38677, USA; email: [plago@olemiss.edu](mailto:plago@olemiss.edu); ORCID: <https://orcid.org/0000-0002-1062-0700><sup>4)</sup>e-mail: [ahrens.dirk\\_col@gmx.de](mailto:ahrens.dirk_col@gmx.de); ORCID: <https://orcid.org/0000-0003-3524-7153>Accepted:  
10<sup>th</sup> June 2025Published online:  
10<sup>th</sup> August 2025

**Abstract.** The previously doubtful taxon *Serica elongata* Nonfried, 1892, originally described from Honduras, is here redescribed and recognized as a senior synonym of *Serica delicata* Dawson, 1922, syn. nov., which was originally described from Florida (U.S.A.). Honduras, the type locality of *S. elongata*, is assumed to be erroneous. The synonymy of *Serica elongata* with *Serica uniformis* Nonfried, 1892 is confirmed. Lectotype specimens of both Nonfried's taxa, housed at the National Museum of the Czech Republic, Prague, are designated. The specimens, including their labels, are illustrated and the status of the species is discussed.

**Key words.** Coleoptera, Scarabaeidae, Sericinae, *Serica*, *Stilbolema*, chafers, lectotype designation, new synonymy, Honduras, Central America

**Zoobank:** <http://zoobank.org/urn:lsid:zoobank.org:pub:B3A4617F-6CE7-4115-8501-F14B6A4BBA1D>

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**Introduction**

In a recent revision of the central American species of the genus *Astaena* Erichson, 1847, LAGO (2021) raised concerns regarding the doubtful identity of *Serica elongata* Nonfried, 1892, which was described from Honduras together with *Serica uniformis* Nonfried, 1892. He suggested that due to the long distance of the hypothetical type locality from the distribution range of all other North American *Serica* Macleay, 1819, this species might be a member of the genus *Astaena*. During our (TLP & DA) research for a monograph on the South American species of *Astaena*, we visited several European museums in search of unidentified material, including the National Museum of the Czech Republic, Prague, which is known to house type material of some of Nonfried's taxa (see BEZDĚK & HÁJEK 2010a,b). Here, we examined the specimens of Nonfried's *Serica* species, previously examined by Brenske, and we were able to identify them as syntypes of both doubtful species: *Serica elongata* and *S. uniformis*. We confirm the synonymy of both species, as established by BRENSKE (1902), but we have also discovered that *S. elongata* is identical with *Serica delicata* Dawson, 1922 from Florida

(U.S.A.). Therefore, we also establish a new synonymy between both above-mentioned species. Given the lack of a modern revision of the northern and central American *Serica* species, we redescribe and illustrate here the type specimens of both Nonfried's taxa.

This study is part of a comprehensive revision of the South American Sericini (see PACHECO et al. 2020, 2021, 2022a,b,c,d, 2023; PACHECO & AHRENS 2023).

**Material and methods**

Data from specimens examined are cited in the text with original label contents given in quotation marks, multiple labels are separated by a '/'. Measurements refer to the maximum extension of the specimen or the named structure. Genitalia and habitus of type specimens were photographed using a Leica M125 stereomicroscope with a Leica DC420C digital camera. Image stacking used the Automontage software as implemented in Leica Application Suite (v.3.3.0). The resulting images were subsequently digitally edited to eliminate the background in Adobe Photoshop CS3.



The material examined is deposited in the collection of the National Museum of the Czech Republic, Prague (NMPC).

### Taxonomy

#### *Serica elongata* Nonfried, 1892

(Figs 1–2)

*Serica elongata* Nonfried, 1892: 261; BRENSKE (1902: 35); LAGO (2021: 209).

*Serica uniformis* Nonfried, 1892: 260; synonymized by BRENSKE (1902: 35).

*Serica delicata* Dawson, 1922: 161, **syn. nov.**

**Type material.** *Serica elongata*. LECTOTYPE: ♂ (here designated; Figs 1A–F, I, 2A), labelled: “Coll. Nonfried Honduras / Brsk. vid. ♂ / *Serica elongata*” (NMPC).

*Serica uniformis*. LECTOTYPE: ♀ (here designated; Figs 1G–H, J, 2B), labelled: “Coll. Nonfried Honduras / Brsk. vid. ♀ / *Serica uniformis*” (NMPC).

**Redescription** (male, lectotype of *S. elongata*). Length: 6.9 mm, length of elytra: 5.0 mm, width: 3.6 mm. Body oblong, dark reddish brown, antenna yellow, dorsal surface dull and densely setose on head, otherwise almost glabrous.

Labroclypeus subtrapezoidal and wide, widest at base, lateral margins straight and strongly convergent to weakly rounded anterior angles, lateral margin and ocular canthus producing a distinct blunt angle, margins weakly reflexed, anterior margin distinctly emarginate medially; surface weakly convex medially and moderately shiny, coarsely and densely punctate, distance between punctures less than their diameter, with a few short setae anteriorly; fronto-clypeal suture indistinctly incised and medially curved; smooth area in front of eye 2.5 times as wide as long; ocular canthus long and slender, impunctate (1/3 of ocular diameter), without terminal seta. Frons dull, with fine and dense punctures, almost glabrous, with single and short seta anteriorly beside each eye. Eyes moderately large, ratio of diameter / interocular width: 0.69. Antenna yellow, with nine antennomeres; club with three thick lamellae, 1.2 times as long as remaining antennomeres combined. Mentum convexly elevated anteriorly.

Pronotum moderately wide, widest at base, lateral margins in basal half straight and weakly narrowed anteriorly, in anterior half weakly convex and more strongly convergent, anterior angles weakly produced and rectangular, posterior angles blunt and weakly rounded at tip, anterior margin weakly convexly produced medially, with fine but distinct marginal line, basal margin without marginal line; surface with dense and robust punctures, with microscopic setae in punctures only; anterior and lateral margins sparsely setose; hypomeron distinctly carinate at base, but not produced ventrally. Scutellum moderately narrow and long, sharp at apex, with evenly scattered, robust, and dense punctures, with microscopic setae in punctures.

Elytra narrow and oblong, widest in posterior quarter, striae distinctly impressed and finely and densely punctate, intervals convex and moderately densely punctate, punctures concentrated along striae, glabrous, penultimate

interval with some single fine setae; epipleural margin robust, ending at strongly curved external apical angle of elytra, epipleura sparsely setose, apical border chitinous, without rim of short microtrichomes.

Ventral surface dull, with large and dense punctures, sparsely and shortly setose, setae partly adpressed. Metacoxa glabrous, laterally with a few fine setae. Each abdominal ventrite with indistinct transversal row of coarse punctures bearing short setae between fine and moderately dense punctation. Mesoventrite between mesocoxae almost half as wide as mesofemur, with irregularly scattered fine setae. Ratio of length of metepisternum / metacoxa: 1 / 1.3. Pygidium weakly convex, coarsely and densely punctate, without smooth mid-line, glabrous, with a few short setae at apex.

Legs slender and with shiny surface; femora with two longitudinal rows of setae, finely and moderately densely punctate; metafemur ventrally dull, sharply margined anteriorly and without submarginal serrated line, posterior ventral margin straight, with a few strong setae basally, only weakly widened externally and not serrated in apical half. Metatibia moderately slender and long, widest at apex, ratio width / length: 1 / 3.4, dorsal margin moderately carinate, with two groups of spines, basal group of spines at basal quarter, apical one at two thirds of metatibial length, basally with a few single fine spines in punctures; lateral face almost flat, with a few coarse punctures; ventral margin finely serrated, with four fine, equidistant spines, medial face very sparsely punctate, apex interiorly near tarsal articulation concave. Tarsomeres dorsally robustly but not densely impunctate, ventrally with sparse, short setae; metatarsomeres dorsally without longitudinal impressions, ventrally glabrous and with strongly serrated ridge, with subventral, longitudinal carina immediately beside it, first metatarsomere little longer than subsequent tarsomere and slightly longer than dorsal tibial spur. Protibia moderately long, bidentate, protarsal claws symmetrical, basal tooth of inner protarsal claw apically bluntly truncated.

Aedeagus: Figs 1A–D. Habitus: Figs 1E–J.

**Variation.** Female (lectotype of *S. uniformis*): Length: 8.0 mm, length of elytra: 5.9 mm, width: 4.1 mm. Antennal club distinctly shorter than remaining antennomeres combined, eyes smaller, ratio of diameter / interocular width: 0.55.

**Comments to classification.** Since NONFRIED’S (1892) original description of both taxa did not include information on how many specimens the description was based, we designated here a lectotype for *Serica elongata* Nonfried, 1892 and *Serica uniformis* Nonfried, 1892 from the only available single specimen for each taxon. Based on our examination, these two specimens represent different sexes of the same species: *S. elongata* is a male, *S. uniformis* is a female. *Serica elongata* Nonfried, 1892 is synonymous with *Serica delicata* Dawson, 1922, **syn. nov.**, from Florida. The male genitalia of both taxa are perfectly identical in shape of parameres and phallobase. The name *Serica elongata* Nonfried has priority over Dawson’s name.

### Discussion

Since *Serica elongata* Nonfried, 1892 was recognized as synonymous with *Serica delicata* Dawson, 1922 from Florida, we assume that the locality labels of *Serica elongata* and of *S. uniformis* are erroneous, although there is a small chance that the specimens were accidentally transported from Florida to Honduras. The occurrence of

erroneous locality labels is not uncommon, and it has been reported several times among Sericini (e.g., AHRENS 2000, 2003, 2004a,b,c; AHRENS & FABRIZI 2016). *Serica delicata* occurs in coastal areas of Florida, but there are also isolated records from Georgia and South Carolina.

The North American *Serica* species form a monophyletic lineage according to EBERLE et al. (2017) for which a

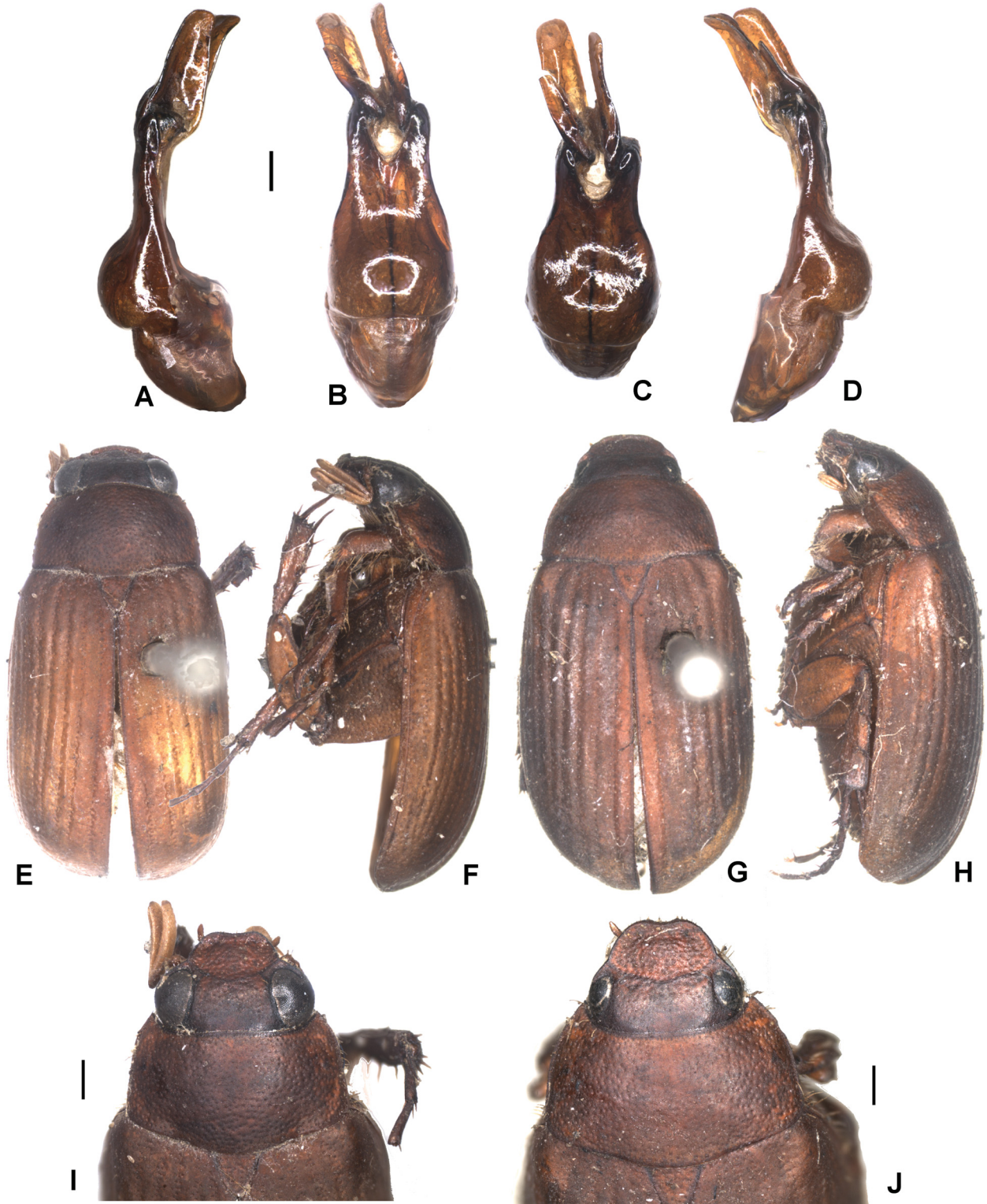


Fig. 1. Lectotypes of *Serica elongata* Nonfried, 1892 (A–F, I) and *Serica uniformis* Nonfried, 1892 (G, H, J). A – aedeagus, left side lateral view. B – aedeagus, dorsal view. C – parameres, dorsal view. D – aedeagus, right side lateral view. E, G – habitus, dorsal view. F, H – habitus, lateral view. I, J – head and pronotum, dorsal view. Scale bars = 0.5 mm. E–H not to scale.

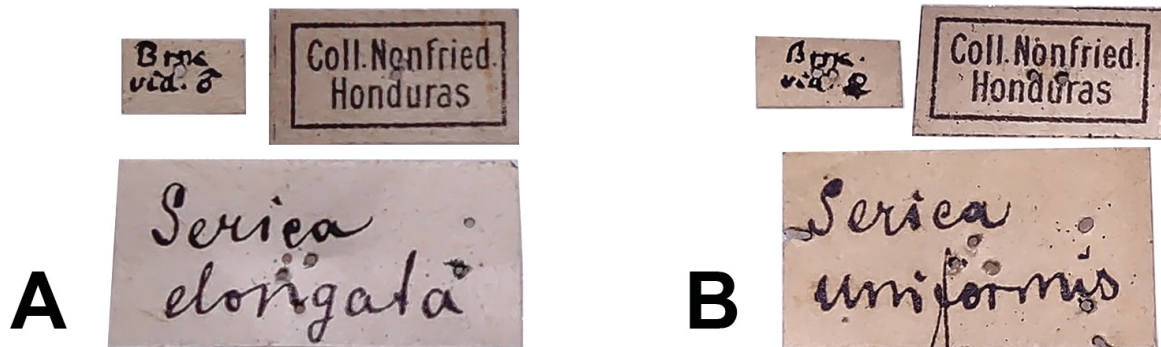


Fig. 2. Labels. A – lectotype of *Serica elongata* Nonfried, 1892, B – lectotype of *Serica uniformis* Nonfried, 1892.

genus group name is available, which could be applicable as a subgenus: *Stilbolemma* Harris, 1826 (AHRENS 2007). However, this group needs comprehensive, modern taxonomic revision. The best approach would probably be to update the generic classification with a better molecular phylogeny of Sericini, as many of the large genera are still polyphyletic, the branch support of many nodes is weak due to the limited amount of DNA data (EBERLE et al. 2017) and sampling with phylogenomic data is still quite limited (DIETZ et al. 2023).

### Acknowledgements

We thank Jiří Hájek for his hospitality at the NMPC during our visit in December 2024, his helpful comments on the manuscript, and for his kind and continued support for our research over the years. We also thank Ales Bezděk for his helpful comments, particularly for the hint on the publication date of Nonfried's work.

### References

- AHRENS D. 2000: Neue Erkenntnisse zur Herkunft von *Autoserica cajfensis* Brenske, 1897 (Insecta: Coleoptera: Melolonthidae). *Linzer Biologische Beiträge* **32**: 71–74.
- AHRENS D. 2003: Zur Identität der aus Madagaskar beschriebenen *Autoserica stupida* Brenske, 1900. (Coleoptera, Scarabaeidae, Sericini). *Beiträge zur Entomologie* **53**: 231–238.
- AHRENS D. 2004a: On occurrence and synonymy of *Maladera rubida* (Moser, 1915) comb. n. (Coleoptera, Scarabaeidae, Sericini). *Journal of East African Natural History* **92** [2003]: 97–105.
- AHRENS D. 2004b: Revisional notes on Sericinae: The taxonomic status of the “Neotropical” genus *Rhynchosymmela* Frey, 1974 (Coleoptera, Scarabaeidae). *Beiträge zur Entomologie* **54**: 31–35.
- AHRENS D. 2004c: *Monographie der Sericini des Himalaya* (Coleoptera, Scarabaeidae). Dissertation.de – Verlag im Internet GmbH, Berlin, 534 pp.
- AHRENS D. 2007: Beetle evolution in the Asian highlands: insight from a phylogeny of the scarabaeid subgenus *Serica* (Coleoptera, Scarabaeidae). *Systematic Entomology* **32**: 450–476.
- AHRENS D. & FABRIZI S. 2016: A monograph of the Sericini of India (Coleoptera: Scarabaeidae). *Bonn Zoological Bulletin* **65**: 1–355.
- BEZDĚK A. & HÁJEK J. 2010a: Catalogue of type specimens of beetles (Coleoptera) deposited in the National Museum, Prague, Czech Republic. Scarabaeidae: Dynamopodinae, Dynastinae, Melolonthinae and Rutelinae. *Acta Entomologica Musei Nationalis Pragae* **50**: 279–320.
- BEZDĚK A. & HÁJEK J. 2010b: Catalogue of type specimens of beetles (Coleoptera) deposited in the National Museum, Prague, Czech Republic. Scarabaeidae: Cetoniinae (including Trichiini) and Valginae. *Acta Entomologica Musei Nationalis Pragae* **50**: 629–655.
- BRENSKE E. 1902: Die *Serica*-Arten der Erde. VII. *Berliner Entomologische Zeitschrift* **47**: 1–70.
- DAWSON R.W. 1922: New species of *Serica* (Scarabaeidae). V. *Journal of the New York Entomological Society* **30**: 154–168.
- DIETZ L., SEIDEL M., EBERLE J., MISOF B., PACHECO T. L., PODSIADLOWSKI L., RANASINGHE S., GUNTER N. L., NIEHUIS O., MAYER C. & AHRENS D. 2023: A transcriptome-based phylogeny of Scarabaeoidea confirms the sister group relationship of dung beetles and phytophagous pleurostict scarabs (Coleoptera). *Systematic Entomology* **48**: 672–686.
- EBERLE J., FABRIZI S., LAGO P. K. & AHRENS D. 2017: A historical biogeography of megadiverse Sericini – another story “out of Africa”? *Cladistics* **33**: 183–197.
- LAGO P. K. 2021: A review of central American *Astaena* (Coleoptera: Scarabaeidae: Melolonthinae: Sericini), with descriptions of new species. *Transactions of the American Entomological Society* **147**: 209–471.
- NONFRIED A. F. 1892: Beiträge zur Kenntnis einiger neuen exotischen Coleopteren spezie. *Deutsche Entomologische Zeitschrift* **1891** (Heft II): 257–276.
- PACHECO T. L. & AHRENS D. 2023: Addendum to the revision of the South American genus *Symmela* Erichson, 1835 (Coleoptera: Scarabaeidae: Melolonthinae: Sericini): a further new species from Brazil. *Zootaxa* **5263**: 297–300.
- PACHECO T. L., MONNÉ M. L., VAZ-DE-MELLO F. Z. & AHRENS D. 2020: Notes on the taxonomy of some “*Astaena*” species described by Burmeister, 1855 (Coleoptera, Scarabaeidae, Melolonthinae). *Zootaxa* **4885**: 143–145.
- PACHECO T. L., MONNÉ M. L., VAZ-DE-MELLO F. Z. & AHRENS D. 2021: Revision of type specimens of *Astaena* (Coleoptera: Scarabaeidae: Sericini) described by L.W. Saylor. *European Journal of Taxonomy* **750**: 94–123.
- PACHECO T. L., MONNÉ M. L. & AHRENS D. 2022a: Comparative analysis of morphospace of Neotropical Sericini (Coleoptera: Scarabaeidae): disparity in the light of species diversity and activity patterns. *Organisms Diversity & Evolution* **22**: 177–188.
- PACHECO T. L., WIPFLER B., MONNÉ M. L. & AHRENS D. 2022b: The genus *Raysymmela* Saylor, 1947 (Coleoptera, Scarabaeidae, Melolonthinae, Sericini): taxonomy and phylogenetic analysis. *Insect Systematics & Evolution* **53**: 400–441.
- PACHECO T. L., MONNÉ M. L., VAZ-DE-MELLO F. Z. & AHRENS D. 2022c: First non-feeding Sericini beetles (Coleoptera, Scarabaeidae): new genus from Amazon and phylogeny. *Organisms Diversity & Evolution* **22**: 733–748.
- PACHECO T. L., WIPFLER B., MONNÉ M. L. & AHRENS D. 2022d: The genus *Symmela* Erichson, 1847 (Coleoptera, Scarabaeidae, Sericini): taxonomy and phylogenetic analysis. *Journal of Natural History* **56**: 607–705.
- PACHECO T. L., MONNÉ M. L. & AHRENS D. 2023: Morphology-based phylogenetic analysis of South American Sericini chafers (Coleoptera, Scarabaeidae) contrasts patterns of morphological disparity and current classification. *Zoologischer Anzeiger* **302**: 43–57.