

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Insecta Mundi

Center for Systematic Entomology, Gainesville,
Florida

December 2000

***Myosides seriehispidus* Roelofs, an Asian weevil new to the United States (Coleoptera, Curculionidae)**

Charles W. O'Brien

Florida A&M University, Tallahassee, FL

Follow this and additional works at: <https://digitalcommons.unl.edu/insectamundi>



Part of the [Entomology Commons](#)

O'Brien, Charles W., "*Myosides seriehispidus* Roelofs, an Asian weevil new to the United States (Coleoptera, Curculionidae)" (2000). *Insecta Mundi*. 312.

<https://digitalcommons.unl.edu/insectamundi/312>

This Article is brought to you for free and open access by the Center for Systematic Entomology, Gainesville, Florida at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Insecta Mundi by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Myosides seriehispidus Roelofs, an Asian weevil
new to the United States
(Coleoptera, Curculionidae)

Charles W. O'Brien

Center for Biological Control

College of Engineering Sciences, Technology and Agriculture

Florida A&M University

Tallahassee, FL 32307-4100 USA

charles.obrien@famuc.edu

Abstract: *Myosides seriehispidus* Roelofs, a small cryptic broadnosed weevil from Japan, is reported as established in the eastern U.S. since at least 1973. This nocturnal weevil has been collected most often from leaf litter using berleses. The genus and species are redescribed and placement in Kissinger's key to genera of North American weevils is indicated. Dorsal and lateral habitus photographs of this species are included.

Introduction

The Asian genus *Myosides* has been in the USA for several decades. It has languished unidentified or misidentified in collections (usually as a species of *Trachyphloeus* or *Cercopeus*). Recently Dr. Boris Korotyaev suggested to me that my specimens might belong in the genus *Myosides* and I verified this identification and determined the identity of the species to be *M. seriehispidus* Roelofs using the revision of the genus by Morimoto and Lee (1993). The genus includes 12 species distributed from the Russian Far East, south through Korea and the Islands of Japan to Taiwan.

In Kissinger's (1964) key to genera of subfamily 2, Brachyrhinae (now Otorhynchinae), *Myosides* keys to couplet 8, the tribe Ptochini. It can be distinguished from *Myllocerus*, which also keys to the same couplet by the following: *Myllocerus* has well-developed humeri, a visible scutellum, and is fully winged; *Myosides* lacks humeri, has a concealed scutellum, and is apterous.

Although bisexual and parthenogenetic populations of *M. seriehispidus* are known from Japan, no males have been found among the 54 U.S. specimens on hand. Morimoto indicated his plan to study further the four forms (based on spermathecal differences in this species), which according to him may represent species or subspecies. More specimens, including males are needed by him to complete such a revision. (Morimoto and Lee, 1993)

A careful examination of the spermatheca indicates that the U.S. specimens (all females) are morphologically the same as those from southeastern and north central Honshu Island [Mie and

Niigata Prefectures respectively], see Figures 94-96 in Morimoto and Lee (1993).

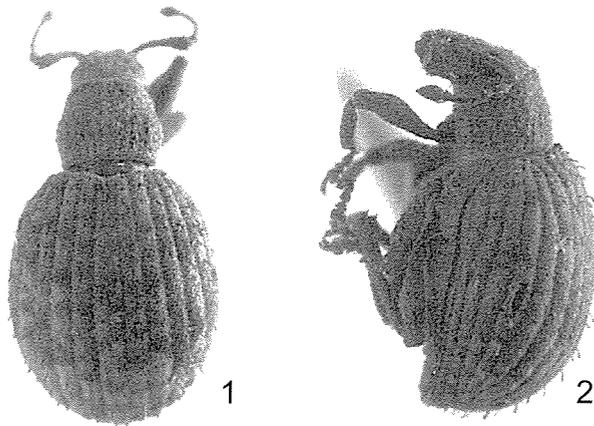
The spermatheca of the U.S. specimens also were compared with 2 populations of *M. seriehispidus* from Japan and five other species on hand: *M. formosanus* Morimoto and Lee, *M. kiiensis* Morimoto and Lee, *M. marshalli* (Heller), *M. okinawanus* Morimoto and Lee, and *M. pyrus* Sharp.

Myosides Roelofs

(Figures 1,2)

Myosides Roelofs 1873:164; Type species: *Myosides seriehispidus* Roelofs by monotypy.

Redescription: Body clothed with dense scales concealing reddish brown to reddish black cuticle. Head and rostrum with multiple longitudinal sulci; frons between eyes slightly narrower than base of rostrum. Eyes lateral, evenly moderately convex. Rostrum not as long as wide, dorsally in same plane as frons, margins slightly narrowed to distinct pterygia, there distinctly narrowed to apex. Epistome bare, with hind margin sharply defined as V- or U-shaped carina. Antennae stout, scape reaching apical margin of prothorax; funicle 7-segmented, club oval. Prementum with 3-4 pairs of setae, external pair often indistinct. Prothorax transverse; at most with indistinct, scarcely evident ocular lobes; lateral margins weakly to strongly rounded; basal margin truncate, subequal in width to slightly wider than apical margin. Scutellum minute or lacking, concealed by scales if present. Elytra lacking humeri, broadly rounded, widest at or near apical



Figures 1-2. *Myosides seriehispidus* Roelofs. 1. dorsal view; 2. lateral view.

third, striae evident, narrower than intervals, stria 9 complete. Apterous. Prosternum with broadly contiguous coxae. Mesosternum with median process narrow and parallel-sided. Metasternum short, as long as abdominal sternite 3 between meso- and metacoxae. Metepisternum visible for entire length. Abdominal sternum 1 sinuate on posterior margin, behind coxae subequal in length to sternum 2, and as long as 3 and 4 together. Legs moderately long, stout; femora moderately to strongly clavate, each with one small to minute sharp tooth; tibiae nearly straight, mucronate; tarsi stout, segment 1 as long as 2 and 3 together, 2 transverse, 3 much wider and strongly bilobed; claws simple, free. Length, pronotum and elytron: 2.40-4.00 mm.

***Myosides seriehispidus* Roelofs**
(Figures 1, 2)

Myosides seriehispidus Roelofs 1873: 165

Redescription: Body clothed mainly with recumbent, imbricate scales and with suberect to erect, clavate, round to subtruncate, scalelike setae; scales often concealed by earthen coating. Rostrum with hind margin of epistome V-shaped, sharply angulate; with sharp, narrow, median carina visible in bare area behind epistome; frons with lateral longitudinal row of suberect scalelike setae (occasionally connected medially with transverse row of similar setae) between eyes; longitudinal sulci of head and rostrum concealed by scales and/or earthen coating. Antennae with scape and funicle clothed with recumbent, round to oval scales and coarse, suberect, bristlelike setae; funicular segment 1 stout,

as long as 2 and 3 together, 2-4 narrower and sublinear, 5-7 submoniliform. Prothorax with disc rough to undulate (visible when lacking earthen coating), punctures usually visible, at times concealed by scales or earthen coating; scales of freshly emerged specimen distinctly pitted (rarely seen), disc moderately strongly constricted at apical third. Scutellum lacking. Elytra with base strongly sinuate, with sutural area basally strongly emarginate; intervals broad, moderately convex, interval 3 nearly flat, all with row of suberect broadly clavate scalelike setae. Setae separated by 1X-3 X own length; striae narrow, with large round punctures concealed by scales (visible only on denuded specimens), scales dark brown, tan, and whitish tan, forming various patterns from tessellate to unevenly transversely banded. Femora moderately clavate, femoral tooth minute, tibiae straight on outer margin, moderately to strongly sinuate on inner margin. Length, pronotum and elytron: 2.60-3.40 mm.

Intraspecific Variation: This is a relatively uniform species. Most apparent diversity is the result of the earthen coating, which changes the shape of the body, conceals the scales and punctures, and at times covers some, to most, of the suberect clavate scalelike setae.

Material Examined: USA: CT: New London Co. Ledyard, 3-V-1973, L. E. Watrous (1, CWOB); Prospect 16 VIII-1976, at night C. W. O'Brien (5, CWOB), G. J. Wibmer (1, CWOB); Storrs, Univ. Farm VI-1986 on *Rumex crispus* R. Degregorio (1, CWOB); DC: Washington, 11-VIII-1993 in soil in garden (1, CWOB), 12-VIII-1992 (1, ABS), M. Deyrup; MD: Montgomery Co., Plummer's Is. 30-X-1977, berlese hardwood litter base talus, T. Gruenwald (2, CWOB); NC: Swain Co., just N. Cherokee, (6-7)-VI-1994, C. R. Bartlett (1, CWOB); NJ: Morris Co. Green Pond, 19-VIII-1982, Maple Tree hole with *Camponotus*, W. Suter (1, CWOB); NY: Bronx, Van Cortlandt Park, 3-XI-1993, leaf litter, Vince Golia (2, CWOB, 1, VGPC); Westchester Co., Yonkers, Untermyer Park, 30-XII-1996, "pine litter", Vince Golia (1, CWOB, 1, VGPC); OH: Franklin Co., Columbus, 7-X-1980, W. Campus OSU, M. Archangelsky (4, CWOB, 1, FSCA); Franklin Co., Columbus, 15-IV-1989, leaf litter, P. W. Kovarik (6, CWOB), Rav. Arsenal, S. Patrol Rd., 8-5-99, M. Hysell (2, CWOB; 2 OSU); PA: Westmoreland Co., Chestnut Ridge, 18-VII-1975, Compost Berlese (2, CWOB), 29-IX-1978, litter at log (1, CWOB), stump buttress

(2, CWOB), W. Suter; **RI: Washington Co.**, Block Island, SE corner uv light 19 SEP 1998, S. Comings (1, CWOB, 1, UCS); Block Island, Clayhead, 17 JUL 1999, Field Ent. colrs. (1, CWOB; 1, UCS); Block Island, Great Swamp, 10 AUG 1995, T. Cozine (1, UCS); **Providence Co.**, Providence, Roger Williams Park & Zoo, uv light & hand, 9-10 JUN 2000 D. Sikes (1, CWOB; 1 UCS); Cranston, suburbia 16-20 JUNE 1995, D. S. Sikes (1, UCS); **WV: Harrison Co.**, Dog Run Nature Reserve near Salem, 16 June 1994, S. M. Clark (1, CWOB); **Jefferson Co.**, Bloomery, 14-V-1992, S. M. Clark (1, CWOB); **Kanawha Co.**, Coonskin Park, near Charleston, 8 August 2000, R. L. Turner (1, CWOB); **Preston Co.**, Erwin, 18 June 1992, S. M. Clark (1, CWOB). **Summers Co.**, Bluestone River, 1 mi. abv. Little Bluestone R. 25 VII to 8-VIII-1987, pitfall trap, A. Rodgers (1, CWOB).

Acknowledgements

I wish to express my sincere thanks to Dr. Boris Korotyaev who suggested I check the genus *Myosides* as the probable placement for the species studied herein. Also I thank Dr. Paul Skelley who took the habitus photographs. This research was supported in part by a grant FLAX 97007 from CSREES (Cooperative State Research, Education, and Extension Service, USDA).

References

- Kissinger, D. G.** 1964. Curculionidae of America north of Mexico. A key to the genera. Taxonomic Publications, South Lancaster, MA. v + 143 pp., illus.
- Morimoto, K., and C. E. Lee.** 1993. Revision of the genus *Myosides* Roelofs (Coleoptera: Curculionidae). *Esakia* (33): 59-86, illus.