Mecinus linnavuori (Korotyaev) (Coleoptera: Curculionidae: Curculioninae: Mecinini), an Iraqi Weevil Species New to Southwestern North America

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In 2017, leaf litter samples from various localities on Mount Lemmon, Pima County, Arizona, RSA collected a large number of adult specimens of a small (1.4–1.8 mm), unidentified species of Mecinus Germar (Figs. 1–2). The specimens were of similar size and form to the well-known and widespread Mecinus pascuorum (Gyllenhal) (Figs. 4–5) but had much coarser and whiter scale-like body vestiture (Figs. 1–2) and an oddly formed antennal club with the inner half regularly convex but completely glabrous and the outer half flattened and setose towards the apex but with the club segments visible underneath (Fig. 3). Concurrently, SSA and colleagues at Arizona State University collected this same species at various localities in central Arizona during summer fieldwork. Consultation of the recent revision of Mecinus by Caldara and Fogato (2013) showed this species to be a member of the Mecinus paratychioides group, three species characterized by this odd structure of the antennal club. Specimens were subsequently sent to and examined by RC who identified the species as Mecinus linnavuori (Korotyaev), an Iraqi species (type locality Nasiriyah, Dhi Qar) recently described from four specimens collected at various Iraqi localities, by comparison with a male paratype.

Collection codens for depositories of specimens are as follows: ASUHIC, Arizona State University Hasbrouck Insect Collection, Tempe, AZ; CMNC, Canadian Museum of Nature, Ottawa, Canada; CWOB, Charles W. O’Brien Collection, Green Valley, AZ; FSCA, Florida State Collection of Arthropods, Gainesville, FL; SSAC, Salvatore S. Anzaldo Collection, Tempe, AZ; TAMU, Texas A&M University, College Station, TX; UAIC, University of Arizona Insect Collection, Tucson, AZ; USNM, United States National Museum, Washington, DC.


Maricopa County, Seven Springs, on *Nicotiana obtusifolia*, 33.9661 -111.8661, 14.iv.2017, Brian Reily (SSAC); Chandler, 1345 West Gila Lane, 33.3296 -111.8663, 18-22.iv.2017, W.B. Warner, flight intercept trap (CMNC, CWOB); Mohave County, 17 Mile Rd near US93, barrier pitfall, 34.4979 -113.4271, 725 m 15.iv.-24.vi.2017, M.A. Johnston (SSAC); Pima County, Santa Catalina
Mountains, Mount Lemmon, 2,760 m, 32.44101 -110.78493, 27.iv.2017, R.S. Anderson, sifting dry litter under aspen/shrubs (ASUHIC, CMNC, CWOB, FSCA, TAMU, UAIC, USNM); Santa Catalina Mountains, Bear Wallow, 2,400 m, 32.4230 -110.7334, 16.v.2017, R.S. Anderson et al., sifting litter under maple trees (CMNC, UAIC); Pinal County, 6 mi. S Superior, barrier pitfall, 33.2162 -111.0655, 990m 20.iii.-28.iv.2017, M.A. Johnston (SSAC); 21 mi. S.W. Florence, barrier pitfall, 32.7765 -111.1629, 780 m 13.iii.-27.iv.2017, M.A. Johnston (SSAC); Yuma County, N of Yuma on Highway 95, 103 m, 32.83696 -114.36986, 12.iv.2017, R.S. Anderson, C.W. O’Brien, on creosote (CMNC). Online images of the species are at bugguide.net/node/view/1357518 (San Diego County, California) and bugguide.net/node/view/1366347 (San Bernardino County, California); no voucher specimens for these records were collected. A single specimen was also collected on celery at Yuma, Arizona in a shipment from Mexico as a specimen intercepted at San Luis, Arizona, also from Mexico. A map prepared using SimpleMappr (Shorthouse 2010) showing the distribution of the collection localities is included (Fig. 6). It is interesting and somewhat unexpected that specimens of this presumably low elevation desert species would occur in such numbers at high elevations in mixed conifer forest on Mount Lemmon as well as occur in the low desert in Arizona and into southeastern California. The mode of introduction of the species is unknown, but these records bring to mind the recent introduction of the Iraqi/Caucasus hyperine weevil Coniatus splendidulus (Fabricius) on tamarisk (Tamarix spp., Tamaricaceae) (Bright et al. 2013) first reported in the southwestern USA in 2011 (Eckberg and Foster 2011).

Whereas the host plant for M. pascuorum in North America is Plantago lanceolata L. (Plantaginaceae), we were unable to determine a host plant for M. linnavuori within the areas where specimens were collected. Like many species of Mecinus, the three taxa belonging to the M. paratychioides group seem to live on species of the cosmopolitan genus Plantago L. Whereas Mecinus paratychioides (Hoffmann) and Mecinus desertorum (Korotyaev) were reported to live on Plantago ciliata Desf. and Plantago minuta Pall., respectively (Caldara and Fogato 2013), no data on host plants are known for M. linnavuori (the 14.iv.2017 record cited above on Nicotiana obtusifolia M. Martens and Galeotti (Solanaceae) is an unlikely host association). It is noteworthy that 11 species of Plantago (two naturalized from Europe) are reported in Arizona (Kearney and Peebles 1960), so there are plenty of candidate host species available.

Two additional species of Mecinus, Mecinus pyraster (Herbst) and Mecinus janthinus Germar, also occur in North America as deliberate introductions for the biological control of Plantago and toadflax (Linaria Mill., Plantaginaceae), respectively (Caldara and Fogato 2013). These species are much larger and more elongate than M. pascuorum and M. linnavuori and are generally not confused with them.

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