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A new species of *Acmaeodera* Eschscholtz, 1829
(Coleoptera: Buprestidae) from southern Nevada, USA

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A new species of *Acmaeodera* Eschscholtz, 1829 (Coleoptera: Buprestidae) from southern Nevada, USA

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Abstract. A new species of *Acmaeodera* Eschscholtz, 1829, *A. raschkoi* Westcott (Coleoptera: Buprestidae), is described from southern Nevada, USA, and compared to four other species in the genus. Its habitat and means of capture are discussed in detail.

Key words. Polycestinae, Acmaeoderini, jewel beetle, taxonomy, North America.

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Introduction

A new species of *Acmaeodera* Eschscholtz, 1829 from Nevada is described herein and figured. Its habitat and means of capture are described. According to Nelson et al. (2008), there were 145 valid species of *Acmaeodera* in the USA. Since that time, only one more has been added (MacRae 2014), and one has been synonymized (Hansen and Westcott 2023), leaving 146 species of the genus in the USA. The addition of the species described herein brings to 34 the total for the state of Nevada. Only one other species, *Acmaeodera condita* Barr, has not been reported from another state (Nelson et al. 2008). In my opinion, both species will be found to inhabit one or more adjacent states.

Materials and Methods

Bottle traps were used to capture specimens. They were constructed from two-liter clear seltzer bottles with the upper half painted white or yellow. One-third was cut from the top of each bottle, inverted into its base and clipped to the side of the bottle, then the bottles were buried leaving 2" of the painted portion exposed. Anti-freeze was used to preserve insects that dropped in (Mike Raschko, personal communication). A slash indicates separate lines on labels, and two slashes indicate a separate label. Collection abbreviations used herein are CAS (California Academy of Sciences, San Francisco), MLRC (Mike L. Raschko Collection, Wilsonville, Oregon), and RLWE (Richard L. Westcott Collection, Salem, Oregon). Plant names were obtained from WFO (2023).

Results

Acmaeodera raschkoi Westcott, new species

(Fig. 1–2)

Description. Holotype female (Fig. 1–2): Length 4.20 mm, width 1.40 mm, widest across umbones, pronotum at middle and $\frac{3}{5}$ of elytra almost equally wide, except sides of elytra slightly sinuate beyond humeri; head, pronotum, ventral surface and appendages shining black, trochanters partly brown; pronotum with a small lateral spot on each side at basal third; each elytron dark brown with a single straw-yellow marking extending from near base almost to apex, marking unbroken medially, but with three dark lobes encroaching laterally upon the yellow, one at humerus, one at midline, one anteriorly oblique from apical third, median and apical lobes narrowly connected on right side; setae white. **Head:** Convex, surface coarsely shallowly punctate, setae moderately densely placed,



Figures 1–2. Adult habitus of *Acmaeodera raschkoi*, holotype. 1) Dorsal habitus. 2) Lateral habitus.

subrecumbent; clypeus deeply depressed at base, ventral margin broadly, arcuately emarginate; antennae reaching to mesotrochanter. **Pronotum:** Broadly, steeply evenly convex, shallowly depressed medially at base; punctures large, coarse and close, reticulate laterally, except smaller and more widely spaced on basal-medial depression; anterior margin scarcely produced medially, anterior angles quadrate; posterior margin truncate; posterior angles quadrate; lateral margins shallowly arcuate, obscure on apical half, weakly defined basally, not visible from above; setae subrecumbent, longer and thicker than on head, moderately densely placed. **Elytra:** Moderately convex, distinctly striatopunctate, the punctures on first two striae placed closer together; with prominent punctured umbones; humeral angles scarcely projecting to apex of hind angles of pronotum; lateral margins weakly serrate on about apical third; suture not elevated, the intervals confusedly punctate, remaining intervals indistinctly punctate; setae moderately dense, suberect, distinctly finer than elsewhere on body. **Underside:** With setae as on pronotum, punctures rather uniformly deep and densely placed, becoming larger and reticulate laterally, except larger, shallower, and less densely placed on propleuron; prosternum with anterior margin broadly, very shallowly emarginate, attaining front angles of pronotum; propleuron evenly flattened except slightly depressed behind; ventrite 5 with apical margin broadly evenly rounded, with no trace of a subapical plate.

Material examined. Holotype female (CAS) labeled “NEVADA, Clark Co./Spring Mts., NV-157/Kyle Cyn., 36°16.886’/–115°26.848’, 4526’//14–19-VI-2021/White bottle trap/M. L. Raschko//♀.” Three paratypes with same data except one male is from a yellow bottle trap. Paratypes are deposited in MLRC and RLWE.

Variation. The female paratype is 5.03 mm long, and both of the two male paratypes measure 4.39 mm. Two paratypes have yellow elytral markings very similar to the holotype, while one male paratype has the elytra almost entirely yellow.

Comparison and discussion. I have not been able to satisfactorily relate *A. raschkoi* closely to any species known to me. Superficially it resembles the following four species: 1) *Acmaeodera ligulata* Cazier is almost always larger and has a vaguely similar elytral pattern, though only the smallest specimens might be confused with *A. raschkoi* in this regard. The pronotum of the latter is wider at the base, the overall punctation is coarser, and the setation is much more distinct. 2) *Acmaeodera quadrivittata* Horn is a more compact species, with each elytron having two yellow vittae that are separated by black, and the elytral surface is much more coarsely punctate. Large numbers of this species were found in the same traps with *A. raschkoi*, some of the latter being overlooked at first sort (Mike Raschko, personal communication). 3) *Acmaeodera quadrivittatoides* Nelson and Westcott, a species which is not able to be satisfactorily separated from *A. quadrivittata* except by distribution (usually) and the female ovipositor,

has forms where the expanded yellow on the elytra is similar to that of the male paratype of *A. raschkoi* with expanded yellow on its elytra. 4) *Acmaeodera sabinae* Knull appears most similar in form and elytral pattern, though is distinctly more narrowly rounded apically. Although the form and punctuation of the pronotum is similar to that of *A. raschkoi*, it is distinctly less convex. Should any doubt remain, the squamose setae on the venter of *A. sabinae* separates it immediately.

Habitat. An excellent view of the collecting site can be obtained via street view on Google Earth. The vegetation type is Mojave Desert Scrub. Plants obvious from this view are many *Yucca brevifolia* Engelm. (Joshua tree) (Asparagaceae), and a few *Yucca schidigera* Roezel ex Ortgies (Mohave yucca). According to Mike Raschko (in litt.), *Coleogyne ramosissima* Torr. (blackbrush) (Rosaceae) was common, and a species of *Gutierrezia* Lag. (Asteraceae) also was present. The presence of yuccas accounts for the large number of the aforementioned *A. quadrivittata*, though of those at the collecting site only *Y. schidigera* is a recorded host (Nelson and Westcott 1995).

Etymology. It is my pleasure to dedicate this cryptic species to my friend and fellow “buprestiphile,” Mike Raschko, the enthusiastic and indefatigable collector who discovered it.

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