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A NEW SPECIES OF *ACTENODES* FROM THE
UNITED STATES WITH A KEY TO THE SPECIES
(COLEOPTERA: BUPRESTIDAE)¹

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ABSTRACT

A new species, *Actenodes davidi*, from Missouri, Mississippi, and Texas is described, and a key to the species of *Actenodes* found in North America north of Mexico is included.

A reexamination of *Actenodes* specimens associated with *Gleditsia triacanthos* Linnaeus indicates that they are not conspecific with *A. mendax* Horn, as assumed by Nelson and Westcott (1976), but are a new species known now from Missouri, Texas, and Mississippi. *A. mendax* is found in Texas, New Mexico, Arizona, and northern Mexico, associated primarily with *Prosopis* spp.

Appreciation is extended to the following individuals for the loan of specimens: W. F. Barr, Univ. of Idaho [WFBC]; D. H. Kavanaugh, Calif. Acad. Sci. [CASC]; J. M. Kingsolver, U. S. Nat. Mus. Natur. Hist.; G. V. Manley, La Ceiba, Honduras [GVMC]; S. G. Wellso, Michigan St. Univ.; and especially to W. F. Barr and the publications committee of the Florida Div. of Plant Ind. for their helpful comments concerning the manuscript.

Actenodes davidi Nelson, **new species**
(Figs. 1-3)

Diagnosis. Moderately robust, convex above and below, elytra narrowing from near middle; moderately shiny, greenish, bronzy brown above and below, front of head in male with faint aeneo-cupreous tint; eyes separated on vertex by not more than combined lengths of antennal segments 3 and 4; metatibia with area of condensed setae at middle of outer border.

Description, holotype female (Fig. 1). Greenish, bronzy brown above and below, with more vivid greenish hue on head and tarsi and, when viewed in different lights, purplish-rose tints on antennal sockets, base of antennae, scutellum, and some areas of thoracic sternites.

Head with front flat, glabrous; punctations moderately coarse and dense, becoming less dense on upper front and less coarse on vertex; oblique carina above antennal sockets; surface with smooth areas at midline on vertex and as chevron on upper front; clypeus with sinuate margin; antennae short, serrate from fourth seg-

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ment apically, segment 1 twice as long as 2, 3 is 1.5 as long as 2, 4 subequal to 2, from 5 to 11 shorter; eyes separated on vertex by about 0.66 their greatest width.

Pronotal width twice the length, distinctly wider at base than at apex; lateral margins divergent at base and converging toward narrowest at anterior angles; basal margin bisinuate with broadly rounded median lobe; anterior margin straight; disk convex, glabrous, densely punctate and finely transversely rugose toward sides becoming impunctate toward midline. Scutellum triangular, acuminate at apex, surface convex, finely alutaceous.

Elytra slightly wider than pronotum, length slightly more than twice the width; sides parallel from humeral angles to apical half, then serrate and obliquely converging to apex; disk convex with slight basal depressions and with vague longitudinal costae; surface glabrous, shiny, rather uniformly densely punctate, weakly rugose basally and laterally.

Ventral surface nearly glabrous, densely finely punctate, with weak sinuate raised lines on thoracic sternites and longitudinally on last visible abdominal sternite, impunctate areas apparent along posterior and anterior margins of contiguous abdominal sternites; prosternum with anterior margin truncate; protibiae slightly arcuate, meso- and metatibiae straight, all unarmed, metatibiae with moderately dense brush of setae at middle of outer margin; lateral margin of last visible abdominal sternite with strong tooth midway to apex, apex truncate.

Length 13.0 mm; width 5.4 mm.

Allotype male (Fig. 2). Similar to female, but differs as follows: head with aeneo-cupreous tint; pro-, meso- and metatibiae with row of small teeth on inner margin.

Length 14.0 mm; width 5.6 mm.

Male genitalia (Fig. 3). Similar to *A. mendax* but lateral lobes more dilated toward apex.

Type locality. MISSOURI: Jackson Co., Lee's Summit.

Type material. 4 females, 1 male. Holotype female, type locality, 18-VII-47, B. E. White, on foliage *Gleditsia triacanthos* L. [CASC]; allotype and 1 paratype female, MISSOURI: Jackson Co., Raytown, 24-VI-75, D. E. Nelson, in swimming pool under *G. triacanthos* tree [GHNC]; 1 paratype female, MISSISSIPPI: Grenada Co., Grenada, 9-VI-70, Charles Bryson [WFBC]; 1 paratype female, TEXAS: Brazos Co., College Station, 10-VI-64, S. G. Wellso, on *G. triacanthos* [GVMC].

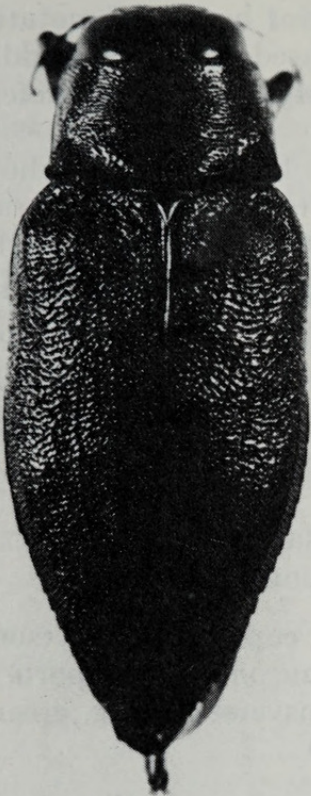
One atypical female, not designated a paratype, was collected in TEXAS: Brazos Co., College Station, 11-VII-64, S. G. Wellso, emerged from *G. triacanthos*. In general shape it looks like *A. mendax*, but its sculpture is more like *A. davidi* and since its host was honey locust, it is possibly the latter, but might be a hybrid of the 2. This specimen and the paratype from Texas were recorded as *Actenodes mendax* by Wellso (1973).

Variation. Not much variation was seen in the 5 specimens of the type series. The front of the head in 1 female has aeneo-cupreous tints, as in the male. The 4 females vary from 13.0 to 15.5 mm long and from 5.4 to 6.0 mm wide.

Comparisons. This species is similar to *A. mendax* Horn and *A. arizonica* Knoll. They differ as follows: in general shape, *A. mendax* and *A. arizonica* appear slightly more robust with the elytra beginning to converge near apical third (Fig. 4), in *A. davidi* the elytra begin converging near midpoint (Figs. 1, 2); male with front of head bright cupreous in *A. mendax*, bright-green behind clypeus in *A. arizonica*, but in *A. davidi* front has only faint aeneo-cupreous tint; surface less chagreened, therefore more shiny than

Figs. 1-3, *Actenodes davidi*, new species. 1) holotype female, dorsal view; 2) allotype male, dorsal view; 3) male genitalia, dorsal view (left), ventral view (right). (line = 2 mm for Fig. 3).

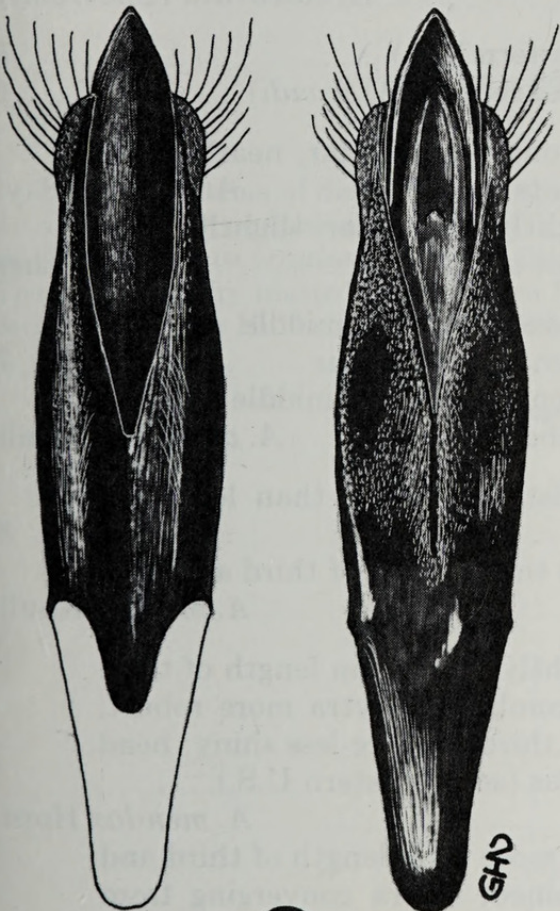
Fig. 4, *Actenodes mendax* Horn, female, dorsal view (15.2 mm). Photographs by W. W. Glosser, Kansas City College of Osteopathic Med.



1

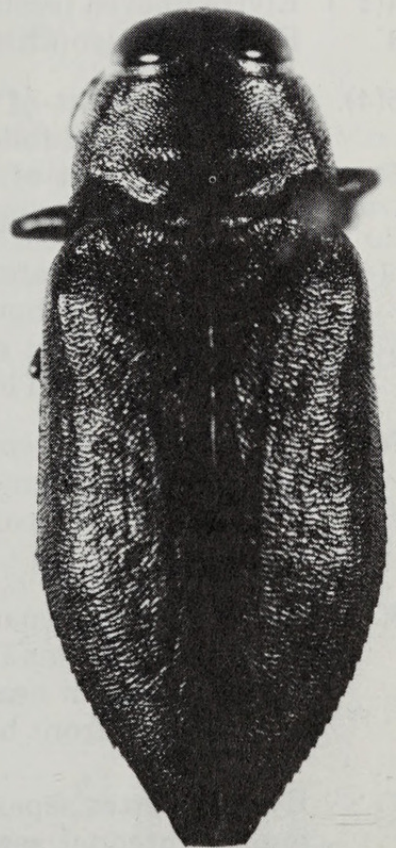


2



3

GHD



4

in either *A. mendax* or *A. arizonica*. Posterior border of metatibiae in *A. mendax* and *A. davidi* with an area of condensed setae near middle which is lacking in *A. arizonica*. Both *A. mendax* and *A. arizonica* prefer *Prosopis* while *A. davidi* prefers *Gleditsia*.

This species is named in honor of my son, David Nelson, who has spent many hours collecting with me and who collected 2 of the type series.

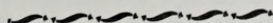
The following key to the species of *Actenodes* found in North America north of Mexico includes some features from keys in Fisher (1942) and Knull (1964).

KEY TO THE SPECIES OF *Actenodes*

1. Elytra with green or cupreous spots or fasciae 2
- 1'. Elytra without green or cupreous markings..... 4
- 2(1). Elytra with distinct, round, green or cupreous spots (southeastern U.S.) *A. auronotata* (Laporte and Gory)
- 2'. Elytra with more or less distinct, transverse, zigzag, greenish or cupreous fasciae (southwestern U.S.) 3
- 3(2'). Posterior angles of pronotum converging, smaller species (usually less than 12 mm long) *A. flexicaulis* Schaeffer
- 3'. Posterior angles of pronotum diverging, larger species (usually more than 12 mm long)..... *A. calcarata* (Chevrolat)
- 4(1'). Elytra uneven (eastern to midwestern U.S.) 5
- 4'. Elytra even (southwestern U.S., except for *A. davidi*)..... 6
- 5(4). Fourth segment of antenna strongly triangular, nearly twice as wide as third, following segments transverse..... *A. acornis* (Say)
- 5'. Fourth segment of antenna slightly triangular, slightly wider than third, following segments not transverse..... *A. simi* Fisher
- 6(4'). Metatibia with area of condensed setae at middle of outer border, males without bright green above clypeus 7
- 6'. Metatibia without area of condensed setae at middle of outer border, males with bright green above clypeus *A. arizonica* Knull
- 7(6). Eyes on vertex separated by distinctly more than length of third antennal segment 8
- 7'. Eyes on vertex separated by less than length of third antennal segment *A. mimica* Knull
- 8(7). Eyes on vertex separated by slightly more than length of third and fourth antennal segments combined; elytra more robust, converging from near apical one third, surface less shiny; head of male with front bright cupreous (southwestern U.S.).....
..... *A. mendax* Horn
- 8'. Eyes on vertex separated by not more than length of third and fourth antennal segments combined; elytra converging from near middle, surface more shiny; head of male without bright cupreous (midwestern and southern U.S. and Texas) *A. davidi* sp.n.

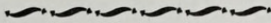
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ADULT BEETLES AS FOOD

Two minor items of diet of Tzeltal-speaking Mayan inhabitants of Chiapas, Mexico are the adults of the giant buprestid, *Euchroma gigantea* (L.) and the cerambycid *Plagiohammus ornator* Bates. The first is a common species, the second quite rare. They are both dry-roasted over an open flame. Only adults are eaten as far as I can determine.—Peter Hubbell, P.O. Box 40905, University Station, Tucson, AZ 85704.





Nelson, G H. 1979. "A New Species of Actenodes from the United States with a Key to the Species (Coleoptera: Buprestidae)." *The Coleopterists' Bulletin* 33(1), 87–91.

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