

*ACANTHOSCELIDES JOHNIQUE*, NEW SPECIES  
(COLEOPTERA: BRUCHIDAE) FROM THE  
WEST INDIES<sup>1</sup>

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ABSTRACT

*Acanthoscelides johnique*, a new species from the West Indies, is described and the dorsal aspect, antenna, hind leg, and male genitalia are figured. The species has no known hosts.

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Because of studies currently under way by Dr. Michael Ivie on the insect fauna of the Virgin Islands and my studies on the evolutionary biology of the Bruchidae, a name is needed for a new species of *Acanthoscelides* for papers in preparation on these subjects. This new species is described below.

*Acanthoscelides johnique* Johnson, new species

(Figs. 1-6)

Length (pronotum-elytra) 1.7-2.7 mm. Width 1.0-1.8 mm. Maximum thoracic depth 1.0-1.6 mm.

**MALE. INTEGUMENT COLOR:** Head, body and appendages usually red orange, sometimes head and dorsal surfaces of prothorax and elytra reddish brown.

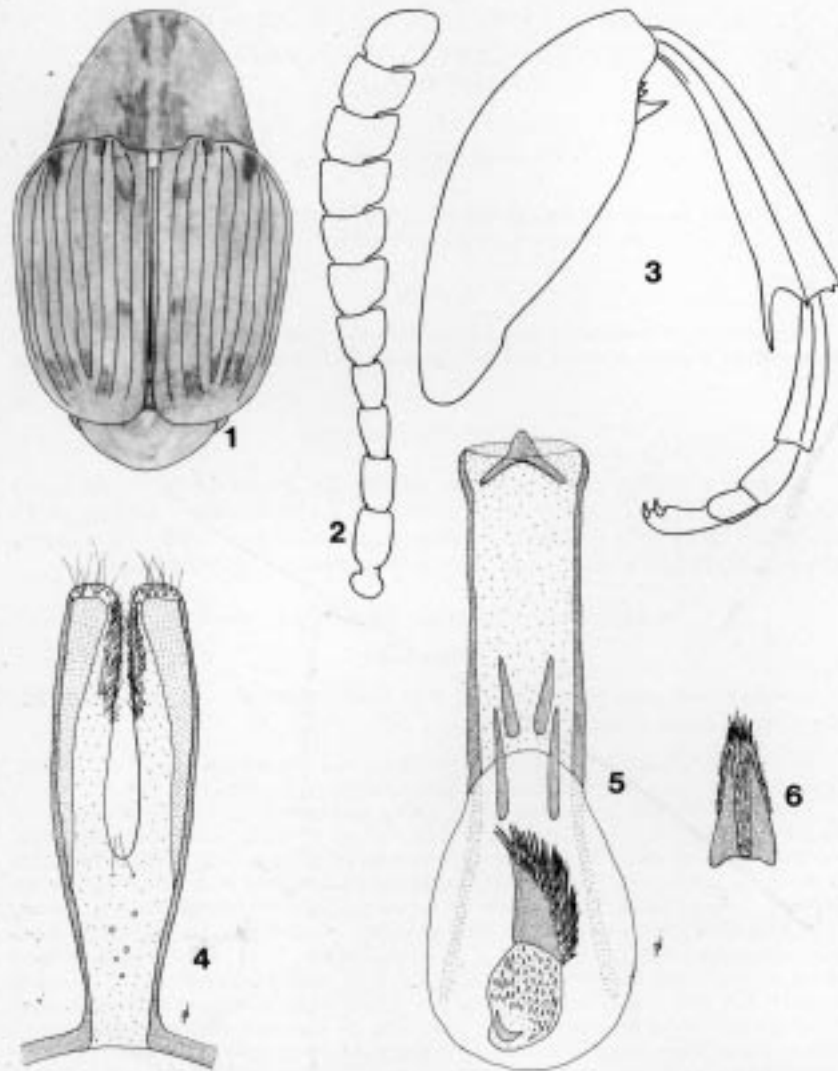
**VESTITURE:** With recumbent white, golden and brown hairs as follows: Eye with medial fringe of white hairs; postocular lobe with short white hairs; dense postocular patch of white to yellow hairs; remainder of head with moderately dense white hairs; body, elytra, pronotum, pygidium and appendages sometimes with moderately dense, uniform, intermixed white and golden hairs without pattern on dorsal surfaces; usually pronotum with dense white hairs on lateral margins, but with vague slightly glabrous patches on either side of midline (Fig. 1); elytron usually with patches of brown hairs about 0.3 from base between striae 2 & 3, 4 & 5; at middle between striae 2 & 3, 5 & 6, and 8 & 9 and at apex between striae 3 & 5, remainder of elytron with moderately dense intermixed white and yellowish hairs (Fig. 1); humerus often brown; pygidium with uniform dense white hairs varying to one glabrous spot on either side of midline near middle.

**STRUCTURE: Head:** Moderate in length, densely punctulate; frons usually with median, slightly raised line, glabrous line extending from frontoclypeal suture to vertex; vague transverse sulcus between upper limits of eyes; width of eye equal to width of frons; ocular sinus about 0.5 times as long as eye; posterior margin of eye protruding from adjacent surfaces; postocular lobe rounded; distance from base of antenna to apex of labrum about half distance from upper limits of eyes to apex of labrum; antennal segments 1-4 filiform to moniliform, 4 shorter than any other segment, 5-10 slightly broader than long, 11 about as long as broad and subacute apically (Fig. 2); antenna reaching to base of elytron or slightly beyond.

**Prothorax:** Dorsal surface with pronounced convexity extending from base to apex;

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<sup>1</sup> Immediate publication guaranteed by payment of full page charges.



Figs. 1-6. *Acanthoscelides johnique* Johnson, n. sp. 1, dorsal aspect. 2, antenna. 3, hind leg. Figs. 4-6. Male genitalia, ventral view. 4, lateral lobes. 5, median lobe with lateral view of large pubescent structure at apex. 6, large pubescent structure at apex of median lobe.

disk subcampanulate with moderately dense punctulations in no apparent pattern; cervical sulcus moderately deep, extending from near coxal cavity to about 0.6 distance to pronotal midline; lateral prothoracic carina extending from base to about 0.3 distance to coxal cavity; short median impressed line on median basal lobe; prosternum separating procoxae for about 0.8 their length.

*Mesothorax and Metathorax:* Scutellum moderate in size, bifurcate at posterior margin, elongate (Fig. 1); clothed with dense white pubescence; elytron about twice as long as broad; striae moderately impressed, punctate, strial intervals smooth; striae 3 & 4

and 5 & 6 closer to one another at base than to adjacent striae, others subequal at base, striae 2, 3, 4, 5, 6, often with small pits at base (Fig. 1); humerus rugulose; undersurfaces punctate; all of hind coxa punctate; hind femur constricted basally and apically, expanded medially to about width of coxa (Fig. 3); undersurface of femur with carina on inner margin, sometimes with about 3 spinules about one-half way from base to apex; femur armed on inner edge with subapical acuminate spine about 2 times as long as width of tibial base, followed by 1 or 2 spines about 0.3 times as long as first spine (Fig. 3); tibia with ventral, lateroventral, lateral and dorsomesal glabrous longitudinal carinae; dorsal surface of tibia without fossa; tibial corona with 3 spinules; mucro about 0.3 times as long as first tarsomere, with slight sinus at base of mucro; without elongated dorsal coronal spine as in *flavescens*; first tarsomere with ventral, lateral and mesal glabrous longitudinal carinae.

**Abdomen:** Sterna not flattened medially; sternum 1 about 0.6 times as long as abdomen, posterior margin straight; sterna 2-4 unmodified; sternum 5 deeply emarginate; pygidium punctulate, convex in lateral view.

**Genitalia** (Figs. 4-6): Median lobe moderate in length; in ventral view, ventral valve short, sides concave, apex a median narrow nipple, base of ventral valve about 0.7 times as wide as apex of median lobe, slightly arcuate in lateral view; armature of internal sac with 2 pairs of elongate spines near middle, pair nearer base more heavily sclerotized; large, elongate, slightly pubescent structure with paired sclerotized rods near apex attached to smaller amorphous mass at apex (Figs. 5, 6). Lateral lobes expanded at apex, cleft to about 0.5 their length (Fig. 4).

**FEMALE.** Similar to male except fifth abdominal sternum only slightly emarginate at apex and dorsal surfaces more often dark brown than males.

#### HOST PLANTS. Unknown.

**TYPE SERIES.** Holotype male and one paratype: **Puerto Rico:** San Juan, November 7, 1966, fruit fly traps, P. R. 23302, J. Hatchett, Coll., USNM# 76844. Allotype female and eight paratypes: **Puerto Rico:** Isla Maguay, Parguera, December 19, 1962, Paul Spangler, Collected at black light. Paratypes: **Virgin Islands.** St. John: Cinnamon Bay, 30 July 1976, at light, C. E. Miller 616; Francis Bay, 25 March 1958, JFG Clarke; Estate Carolina, NW of Coral Bay, 4 & 6 June 1982, 250', at uv light, W. B. Muchmore; Lameshur Bay-VIERS, 12 March 1984, at uv light, W. B. Muchmore, collr. St. Thomas: 2236 trap, 13 August 1959, 60-619. **Puerto Rico:** Rio Piedra, Acc. #378-1922; Yauce, 15 June 1934, R. Goakley, S. J. #5652; Ponce, 24 August 1933 & 1933-'34, R. G. Oakley, S. J. 4474; Mayaguez, January 1936, Coll: J. A. Ramos; San Juan, December 2, 1966, fruit fly trap, San Juan 23411, 67-190; Manabo, February 4. **Guadalupe:** Grande Terre, July 1963, J. Maldonado C. **Tobago Lt.:** 13-15 July 1962, J. Maldonado C. **Trinidad:** G. E. Bryant, March 1903. **Dominican Republic:** San Jose de las Matas, 1,000-2,000 ft., June 1938, Darl.; Mt. Diego de Ocampo, 3-4,000 ft., July 1938, Darlington; Samana, Samana, 29 July 1978, R. O. Schuster & R. S. Rominger, Colrs. **Grenada:** St. Georges, August 1910, Allen & Brues.

Holotype, allotype and several paratypes deposited in the U.S. National Museum of Natural History, Washington, D.C. Paratypes deposited in the collections of M. Ivie, Montana State University; The British Museum (Natural History), London; Museum of Comparative Zoology, Cambridge, Massachusetts; University of California, Davis; and the C. D. Johnson Collection, Flagstaff, Arizona.

#### DISCUSSION

*A. johnique* is in the *Flavescens* species group of Johnson (1983:5). It is easily distinguished from other *Acanthoscelides* because its body and append-

ages are usually all red orange and its prothorax has a dorsal convexity which extends from base to apex. Its male genitalia with two pairs of elongate spines near the middle also distinguish this species from any other. It keys to couplet 86 (page 20) of Johnson (1983).

*A. johnique* is a noun in apposition to *Acanthoscelides*.

#### ACKNOWLEDGMENTS

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