

PROCEEDINGS
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of
WASHINGTON

Volume 84

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MEMBERSHIP.—Members shall be persons who have demonstrated interest in the science of entomology. Annual dues for members are \$10.00 (U.S. currency) of which \$9.00 is for a subscription to the *Proceedings of the Entomological Society of Washington* for one year.

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Please see p. 183 of the January 1981 issue regarding preparation of manuscripts.

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TWO NEW SPECIES OF *NEPHASPIS* CASEY
(COLEOPTERA: COCCINELLIDAE) FROM
TRINIDAD AND COLOMBIA

ROBERT D. GORDON

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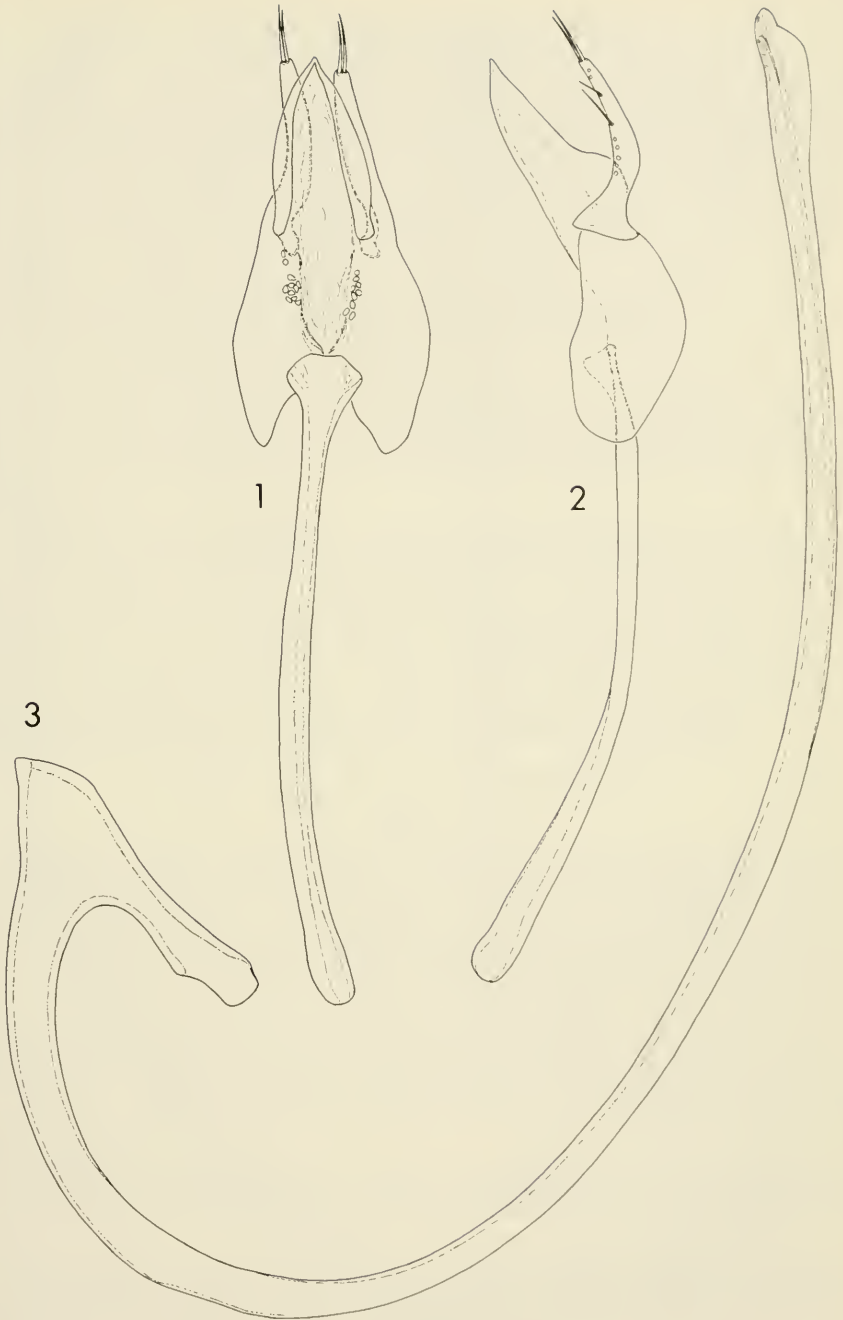
Abstract.—Two new species, *Nephaspis bicolor* and *N. namolica*, are described from Trinidad and Colombia, and reference is made to whitefly predation by members of the genus. *Nephaspis amnicola* Wingo is reported as being established in Hawaii.

Nephaspis is a Western Hemisphere genus first recognized by Casey (1899). Gordon (1972) discussed the generic affinities and provided a key to the four species recognized at that time. One additional species was later described from Trinidad and a revised key to the species prepared (Gordon, 1978). Since then, two more undescribed species have been discovered, and they are added to the classification herein. One of these species is native to Trinidad, but has been introduced into Hawaii in an effort to control the spiraling whitefly, *Aleurodicus dispersus* Russell. A request from S. Higa, Plant Pest Control Branch, Department of Agriculture, Honolulu, Hawaii, for a determination of this species of *Nephaspis* led to the realization that it was undescribed. Another undescribed species of *Nephaspis* was received from Fred Bennett of the Commonwealth Institute of Biological Control, Curepe, Trinidad. These specimens were collected in Colombia feeding on a species of whitefly on guava.

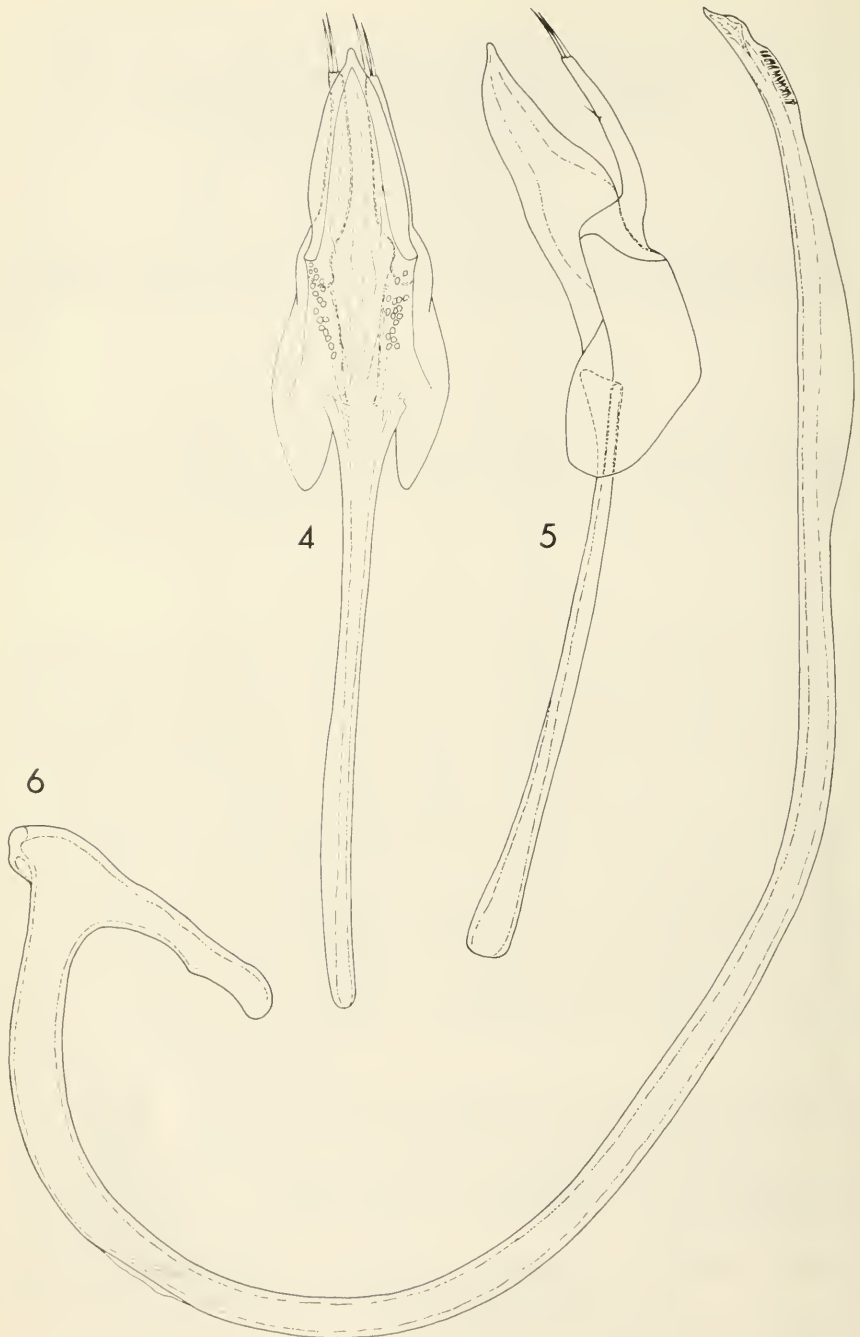
In addition to the new species now being released in Hawaii, *Nephaspis amnicola* Wingo now occurs there, having been introduced into Hawaii from Honduras and Trinidad in 1979 for control of the spiraling whitefly.

Type-materials of the two new species are deposited in the collection of the National Museum of Natural History, Washington, D.C. (USNM) and that of Fred Bennett, CIBC.

I thank Linda Lawrence, Systematic Entomology Laboratory, USDA, staff artist, for preparing the illustrations used herein.



Figs. 1-3. Male genitalia of *Nephaspis bicolor*.



Figs. 4-6. Male genitalia of *Nephaspis namolica*.

Nephaspis bicolor Gordon, NEW SPECIES

Figs. 1-3

Holotype.—Male, length 1.40 mm, width 1.0 mm. Black; head, pronotum, mouthparts, legs, and apical 2 abdominal sterna yellow. Head finely punctured, punctures separated by 1-3× a diameter; pronotal punctures equal in size to head punctures, separated by a diameter or less. Ventral surface coarsely punctured, punctures separated by a diameter or less medially, contiguous laterally. Genitalia as in Figs. 1-3.

Allotype.—Female, length 1.45 mm, width 1.05 mm. Similar to male except head black, pronotum black except lateral 1/3 yellow.

Variation.—Length 1.40 to 1.50 mm, width 1.0 to 1.10 mm. Head of female often entirely yellow with vertex black.

Type-material.—Holotype (USNM 100004) and 10 paratypes; Trinidad, St. Joseph, Apr 16, 1980, R. Burkhart, on guava. Allotype and 5 paratypes; Trinidad, Curepe, May 28, 1980, R. Burkhart, *A. dispersus* on Guava and Candlestick.

Comments.—This species has male genitalia most similar to those of *N. annicola* Wingo, and it will key to that species in Gordon (1978). However, the siphon of *N. bicolor* is straight before the apex, not sinuate as in *N. annicola*. The male color pattern is not diagnostic for this species in any way, but the female pronotum with the wide yellow area on each side is unique and will separate that sex from females of all other species. The specific epithet refers to the pronotal color pattern of the female.

Nephaspis namolica Gordon, NEW SPECIES

Figs. 4-6

Holotype.—Male, length 1.40 mm, width 0.95 mm. Black; pronotum yellow with median black spot at base; head, mouthparts, legs, and apical 3 abdominal sterna yellow. Head finely punctured, punctures separated by 1-3× a diameter; pronotal punctures slightly larger than on head, separated by 1 or 2 times a diameter; punctures on elytron coarse, separated by less than a diameter to twice a diameter. Ventral surface coarsely punctured, punctures separated by less than a diameter. Genitalia as in Figs. 4-6.

Allotype.—Female, length 1.35 mm, width 0.95 mm. Similar to male except vertex of head black, pronotum black except anterolateral angle narrowly yellow.

Variation.—Length 1.35 to 1.45 mm, width 0.95 to 1.0 mm. Black spot on male pronotum confined to basal 1/2, or extending to midpoint of pronotum.

Type-material.—Holotype (USNM 100005), allotype, and 10 paratypes; Colombia, Palmira (V), IV-79, F. Garcia, hojas guayabo (leaves of guava), predator mosca blanca (whitefly predators).

Comments.—*Nephaspis namolica* has male genitalia very similar to those

of *N. annicola* and will key to that species in Gordon (1978). The dorsal surface of the basal lobe in *N. namolica* is strongly sinuate in lateral view, and the shape of the basal lobe in ventral view is broader and more abruptly tapered before the apex. In *N. annicola*, the dorsal surface of the basal lobe is feebly sinuate, and the shape of the basal lobe in ventral view is slender and tapered to the apex. The specific epithet is an anagram.

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