

ADDITIONS TO THE GENUS *NEPHASPIS* CASEY
COLEOPTERA: COCCINELLIDAE

por
ROBERT D. GORDON*

RESUMEN

Un nuevo aporte al género *Nephaspis* Casey. Coleóptera: Coccinellidae.- El género *Nephaspis* se registra por primera vez para la Argentina. Dos especies, *N. cocois* Gordon y *N. picturata* sp. n., se mencionan como depredadores de "moscas blancas" de los géneros *Paraleyrodes* y *Aleurothrixus*. *Nephaspis magnopunctata* sp. n. se describe de Puerto Rico y las Islas Vírgenes.

The species of *Nephaspis* Casey were reviewed, and the genus compared with its Old World counterpart, *Clitostethus* Weise, by Gordon (1972). With the addition of 4 more species by Gordon (1978, 1982) and Duverger (1986), *Nephaspis* now contains a total of 8 species. None of these were known to occur in Argentina, but A. Terán, Miguel Lillo Institute, Tucumán, has sent me examples of 2 species, *N. cocois* Gordon and an undescribed species, that were collected in the vicinity of Tucumán. Both species were taken feeding on members of the whitefly genera *Aleurothrixus* and *Paraleyrodes*. In addition, examples of an undescribed species from Puerto Rico and the Virgin Islands were found in the collections of the U. S. National Museum and the Illinois Natural History Survey.

All species whose prey are known feed on whiteflies and thus have obvious biological control potential; Dr. Teran is studying the biology of the 2 Argentine species, one of which is described here for the first time. Type material is deposited in the Miguel Lillo Institute, Tucumán,

Argentina; Illinois Natural History Survey, Urbana, Illinois; and U.S. National Museum, Washington, D. C.

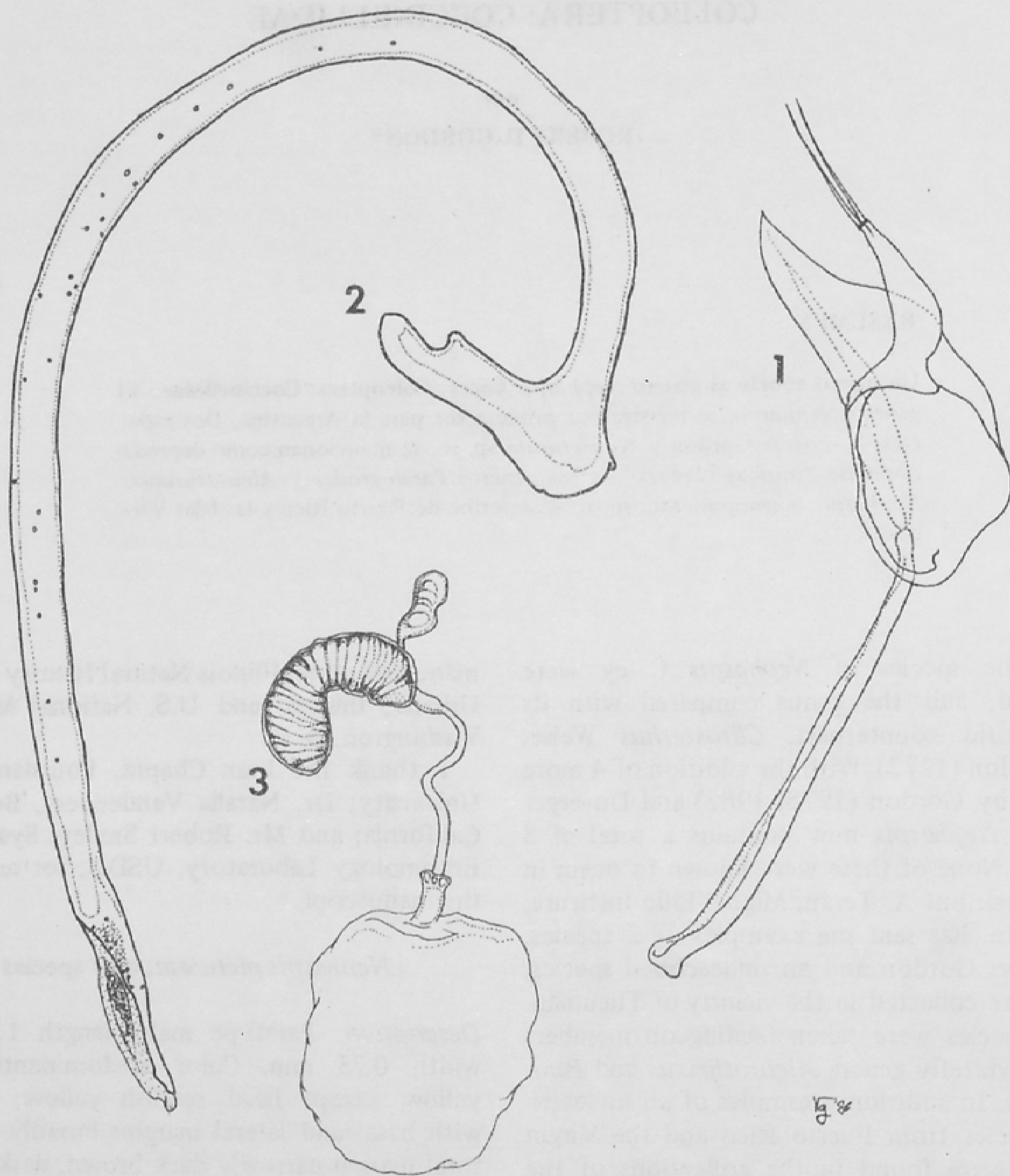
I thank Dr. Joan Chapin, Louisiana State University; Dr. Natalia Vandenberg, Berkeley, California; and Mr. Robert Smiley, Systematic Entomology Laboratory, USDA, for reviewing the manuscript.

Nephaspis picturata, new species

Description: Paratype male, length 1,0 mm, width 0,75 mm. Color predominantly pale yellow except head reddish yellow; elytron with basal and lateral margins broadly and sutural margin narrowly dark brown, dark brown postmedian spot present, spot obviously connected to sutural and lateral margins as in Fig. 5; mesosternum, metasternum, and 1st 4 abdominal sterna brown except lateral border of abdomen yellow. Punctuation on head and pronotum extremely fine, nearly invisible; punctures on elytron coarse, separated by a diameter or slightly less; metasternum with nearly contiguous punctures; 1st abdominal sternum coarsely, densely punctured except area within postcoxal line, remaining 5 abdominal sterna coarsely, less densely punctured. Genitalia as in figs. 1 2.

Paratype female: Similar to male except pronotum with 2 obscurely connected median vittae. Spermathecal capsule as in Fig. 3.

* Systematic Entomology Laboratory, BBH, Agricultural Research Service, USDA, c/o U.S. National Museum of Natural History Washington, D.C. 20560.



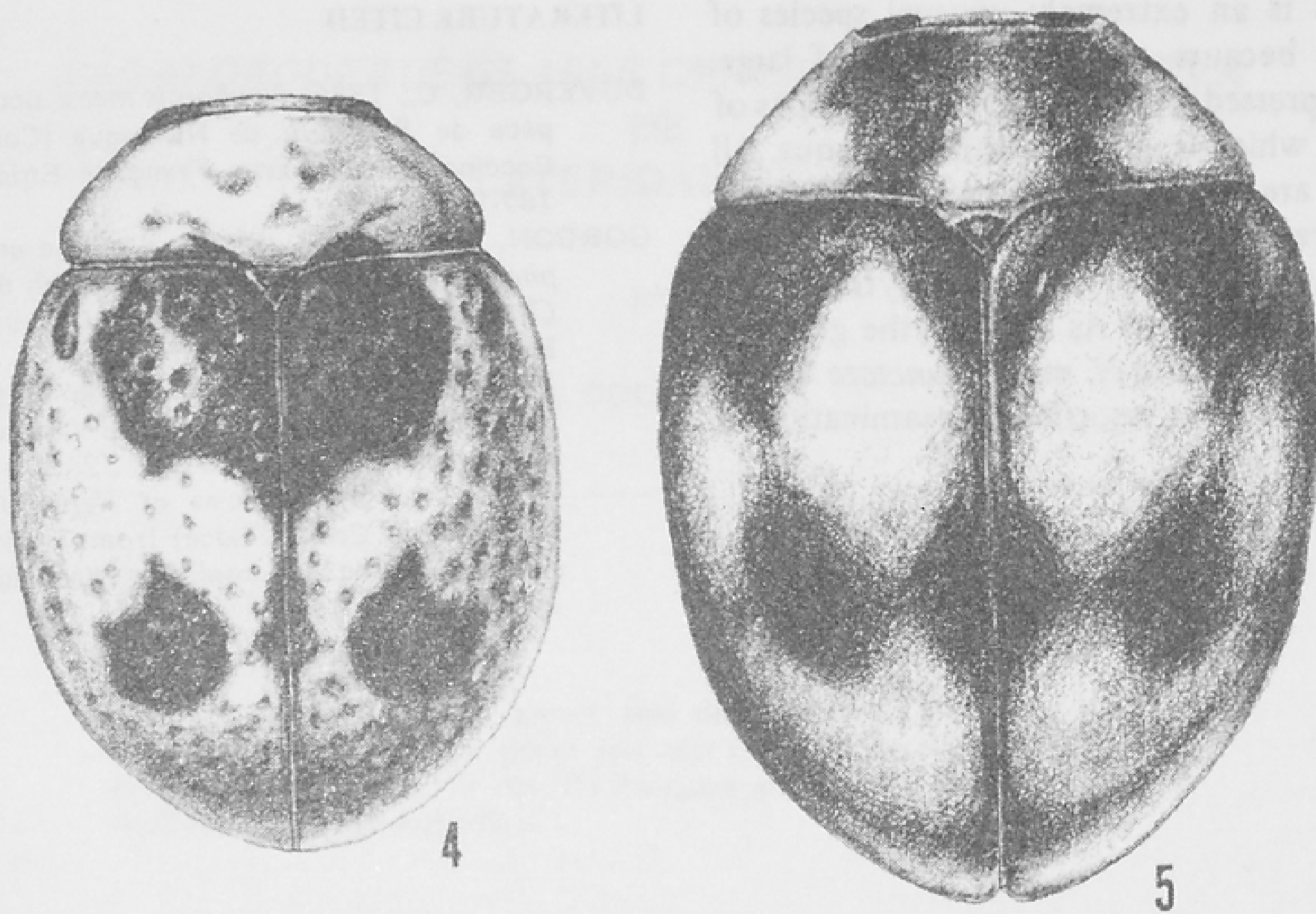
Figs. 1 - 3.- Genitalia, *N. picturata*, n. sp.; 1, 2: phallobase and siphus, respectively; 3: female genitalia.

Variation: Length 1.0 to 1.4 mm, width 0.75 to 1.0 mm. Female head varies from yellow to yellowish brown; female pronotum varies from having the discal area entirely dark brown to having the vittae abbreviated and completely separated; elytron with postmedian spot entirely free or broadly, solidly connected to sutural and lateral borders.

Type material: Holotype male; Argentina, Tucumán IV-81, A. Terán, ex. *Paraleyrodes* (Lillo Institute). Allotype (Lillo Institute) and 6

paratypes (Lillo Institute and U.S. National Museum); Argentina, S.M. de Tucumán, 12.I.17.IV. 1982 col. J. Ricci, on *Aleurothrixus* and *Paraleyrodes* sp.

This species is completely unlike any other presently known species of *Nephaspis* in terms of elytral coloration. The others have unicolorous elytra except *N. oculata* (Blatchley) (formerly *N. amnicola* Wingo) which may have a pale discal spot on the suture, and *N. magnopunctata*, new species, which is distinguished



Figs. 4 - 5.- Habitus views. 4: paratype, *N. magnopunctata*, *N. picturata*, n. sp.

by the large elytral punctures. *Nephaspis picturata* exhibits the sexual dimorphism in pronotal coloration characteristic of most members of the genus in having the male pronotum without maculation and the female pronotum maculate, but the elytral pattern is not dimorphic. *Nephaspis oculata* was originally described in the genus *Scymnus* which is masculine in gender. Reassignment to *Nephaspis* (feminine) (Gordon, 1985) required changing the specific name from *S. oculatus* to *N. oculata*.

Nephaspis magnopunctata, new species

Description: Paratype female, length 1.25 mm, width 0.90 mm. Color pale yellow except pronotum with basal black spot on each side of middle; elytron with humeral callus brown, large black spot on sutural margin at base, spot narrowly extended posteriorly along suture, becoming slightly enlarged behind middle, small, irregular black spot present on near middle of apical 1/2 (Fig. 4); meso- and metasternum, median area of 1st abdominal sternum

brownish yellow. Punctation on head and pronotum extremely fine, nearly invisible; elytron with extremely large punctures and fine punctures, large punctures present throughout except lacking on small, elongate area on disc, on humerus, along lateral margin and apical margin, these areas bear fine punctures; meso- and metasternum with moderately coarse punctures; 1st abdominal sternum moderately coarsely punctured except area within postcoxal line.

Variation: The black dorsal pattern is variable; one specimen has the pronotum with only the basal black pronotal spots, and the elytral spots are connected along the suture or not.

Type material: Holotype (gender unknown); Puerto Rico, San Juan, No. 6494, A. A. Mills, 6.1.36 (U.S. National Museum). Paratypes; Illinois Natural History Survey and U.S. National Museum: 1, Puerto Rico, Adjuntas, III-6-33, RG Oakley, SJ No. 3794; 1, Puerto Rico, Ponce, III-10-33, EG Oakley, on *Diphysa robinoides* SJ No 3800; 1, Virgin Islands, St. Thomas, Charlotte Amalie, 06 Jul 1958, M. W. Sanderson.

This is an extremely unusual species of *Nephaspis* because of the presence of large, deeply impressed punctures present on parts of the elytra, which is unique within the genus. All paratypes are females, 3 are damaged and the 4th is extremely teneral; the holotype lacks the abdomen and apical 1/3 of the elytra so the gender is in question. As a result, the genitalia are not illustrated but *N. magnopunctata* can be recognized without resorting to examination of genitalia.

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