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## NEW AND LITTLE KNOWN NEOTROPICAL COLEOPTERA I. INTRODUCTION AND THE BRAZILIAN SPECIES OF *NOSODENDRON* (NOSODENDRIDAE)

HANS REICHARDT

### ABSTRACT

*A new species of Nosodendridae, Nosodendron angelum (type-locality, Brazil, São Paulo, Barueri) is described and compared to the only other South American species of the family, Nosodendron testudinum Waterhouse, from the Amazonian Region. A species of Nosodendron described by Pic from Paraguay, N. apicale Pic, 1923, is not a nosodendrid, and may possibly belong into Dascillidae. The genus Orychonotus Brèthes does not belong in the family either.*

### INTRODUCTION

In the Neotropical Region some of the smaller families of Coleoptera are still very poorly known. Identification of families is usually carried out by means of Costa Lima's "Insetos do Brasil" (1952, 1953, 1955 and 1956). Due to the fact that some of the families were only known to Costa Lima from the literature, and because the available data often pertain to exotic groups and species, misinterpretations are frequent in this treatise.

In order to bridge these difficulties I have decided to start this series of papers, in which Neotropical representatives of less well known families will be discussed, redescribed (or described in the case of new taxa), and illustrated. When possible and necessary, the systematic position of each group will be discussed in view of the modern concepts of beetle classifications. It is obvious that these papers will be published at irregular intervals, and the groups will not be treated in systematic order.

The work will be mostly based on materials from the collections of the Museu de Zoologia, Universidade de São Paulo (MZSP); the specimens will be found in this collection, unless otherwise mentioned.

### NOSODENDRIDAE

Very little is known on the Neotropical Nosodendridae, and very few species have thus far been described: only 12 are listed by Blackwelder (1944: 270).

Eleven of the Neotropical species are included in the cosmopolitan genus *Nosodendron* Latreille, 1804, but most have been described from Central America. Only 2 have been made known from South America. One of these was described by Pic from "Paraguay". Its brief original description, as most of Pic's descriptions, is useless, but fortunately I was able to borrow the single known specimen from the Paris Museum (through the kindness of Mme. A. Bons, whom I am very grateful). "*Nosodendron apicale*" Pic, 1923 does not belong into this family, and, according to my friend A. Cobos, who also studied the type, may belong into Dascillidae. There is no doubt, however, that it has to be excluded from Nosodendridae.

*Orychonotus* Brèthes, 1922, the second genus of Nosodendridae listed in Blackwelder (1944: 270), is monotypic. Through the kindness of my friend Manoel José Viana from the Museu Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, I was able to borrow the holotype of *Orychonotus excavatus* Brèthes, 1922, and reached the conclusion that it does not belong into Nosodendridae either. Due to its very minute size (about 1 mm length), it has not yet been possible to assign the genus to a family. I hope to be able to publish some notes on the genus in the future.

Thus only *Nosodendron testudinum* Waterhouse, 1876 remains as a valid South American species of Nosodendridae. While sorting some undetermined Coleoptera in the collections of the Museu de Zoologia, I ran across a few specimens which were identified as 2 distinct species of the family. One of these, from the Amazonian Region, fits the description of *Nosodendron testudinum* Waterhouse (1876: 14-15), a species collected by H. H. Smith in the State of Pará, Brazil. The second species seems to be the one illustrated by Costa Lima (1953: 77). It is undescribed, and occurs in the southern part of Brazil and northern Argentina.

Even though Waterhouse's species is well characterized in the original description, I give below a brief redescription of my specimens, as to have it well defined in relation to the new species.

It would have been extremely important to study the aedeagus of *Nosodendron*. The complete absence of external dimorphism, however, hinders easy recognition of males, and the relative scarcity of specimens prevented dissection of more than 2, which turned out not to be males.

No ecological data are available for the 2 species. The Barueri specimens of *Nosodendron angelum* have been collected at light.

### *Nosodendron angelum*, sp. n.

(Figs. 1-13)

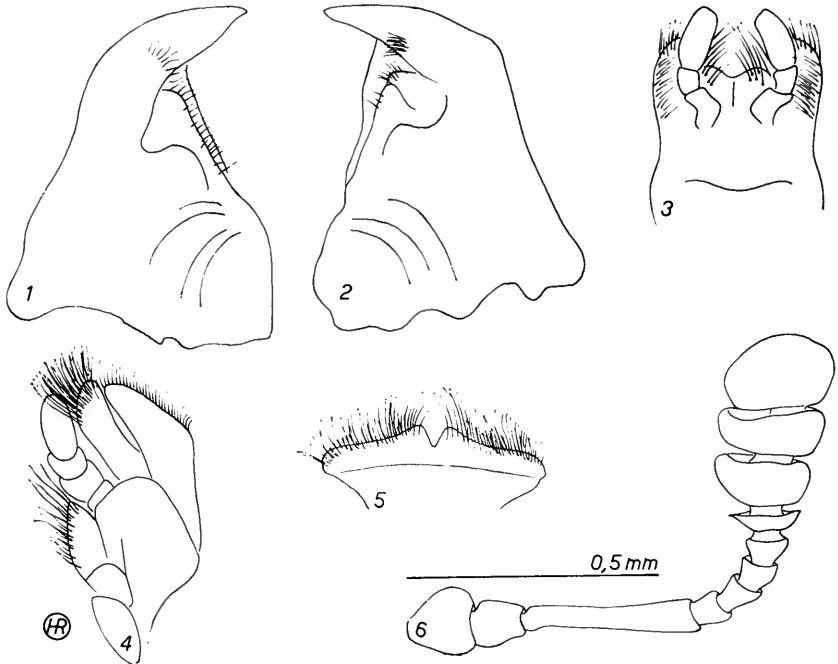
Holotype: BRAZIL, *São Paulo*: Barueri, 15.X.1960 (K. Lenko; MZSP).

Paratypes: BRAZIL, *idem, ibidem*, 15.XII.1961, X., XI.1965, 8., 12., 14.X.1966 (K. Lenko; 12 exs., 1 on slides; MZSP, BMNH, MNHN). *Santa Catarina*: Nova Teutônia, X.1939 (F. Plaumann; 1 ex., MZSP).

ARGENTINA. *Misiones*: Leandro N. Alem, X.1958 (A. Martinez; 2 exs., MZSP and Mus. Argent. Ci. Nat., Buenos Aires).

Black and very shiny, sometimes with somewhat brownish legs.

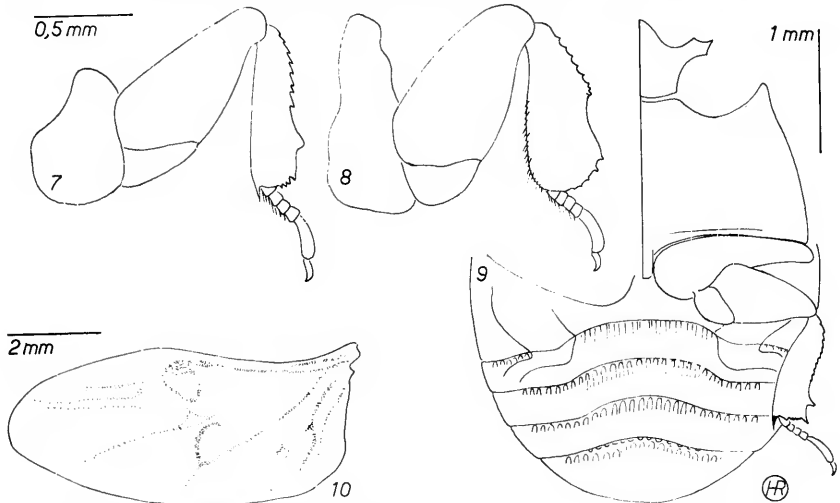
*Head* finely and densely punctate; eyes large, only partially visible from above (in part hidden under the latero-anterior angles of the pronotum), almost imperceptibly faceted. Antennae and mouthparts ventrally placed. Antennae (fig. 6) inserted just in front of the eyes, and normally kept hidden under the head, around the inner margin of the eye; with 11 segments, globose scape, very long segment III, and three-segmented club; the segment immediately preceding the club somewhat cupuliform. Mouthparts completely hidden under the large and well developed mentum, which is coarsely and densely punctate (much more coarsely punctate than the dorsal part of the head). Labrum (fig. 5) very small, not visible from the outside; mandibles (figs. 1, 2) relatively large, with a very sharp and pointed apex; maxillae (fig. 4) with small, four-segmented palpi and well developed galea and lacinia; labium (fig. 3) with small, three-segmented palpi, glossae and paraglossae



*Nosodendron angelum*: 1, 2, mandibles; 3, labium; 4, maxilla; 5, labrum; 6, antenna.

apparently fused. *Pronotum* about three times as wide at base as long; surface very finely and almost imperceptibly punctate (punctures much finer than those of head), especially on disc; on sides punctures about as coarse as on head. *Scutellum* triangular, about as finely punctate as the disc of the pronotum. Each *elytron* with 11 more or less coarsely punctate striae, punctures very sparse, and only organized in striae at base and disc (fig. 13); near apex

the striae are very confused; interstices very finely and sparsely punctate, on disc more or less as finely as disc of pronotum, near sides and apex more densely punctate, about as densely as on sides of pronotum. *Prosternum* very small, with an elongate and triangular prosternal process, which separates a little the front coxae and fits into a small excavation of the mesosternum; front coxal cavities widely open behind. *Mesosternum* (fig. 9) also relatively small (even though larger than prosternum), densely and coarsely punctate; middle coxal cavities also separated from each other. *Metasternum* (fig. 9) large, as punctate as mesosternum; hind coxae only very slightly separated from each other. *Legs* (figs. 7-9) pentamerous, the 4 basal tarsal segments short, the fifth about as long as the 4 basal ones together; tarsal claws simple and equally well developed. Front coxae large, transverse; middle coxae more or less spherical; hind coxae very transverse, excavate to receive

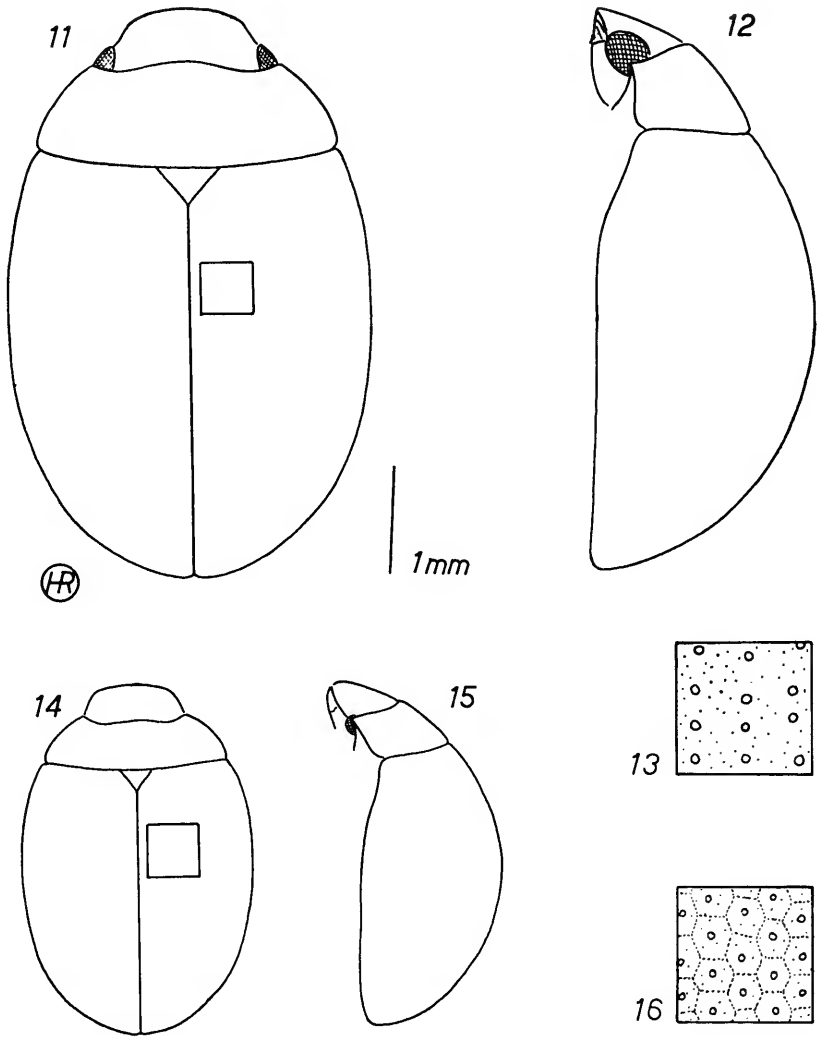


*Nosodendron angelum*: 7, front leg; 8, middle leg; 9, ventral view of thorax and abdomen; 10, hind wing.

femora; tibiae very flattened, with dentate or serrate outer margin; in the resting position the legs are hidden under the body, in excavations of the thoracic and abdominal (fig. 9) segments. *Wings* (fig. 10) with venation as in *N. unicolor* (Forbes, 1922, fig. 52). *Abdomen* (fig. 9) with 5 visible segments, all sutures clearly marked; hind margin of segments curved; sternites I and II with depression for reception of legs. *Measurements*: length, 4.0-5.3 mm; maximum width, 2.8-3.4 mm.

#### Discussion

*Nosodendron angelum* is easily distinguished from the other South American species of *Nosodendron* by several characters, notably its much larger size, the completely different elytral sculp-



*Nosodendron angelum*: 11, dorsal view; 12, lateral view; 13, detail of elytral sculpture. *Nosodendron testudinum*: 14, dorsal view; 15, lateral view; 16, detail of elytral sculpture.

ture, the different sculpture of the mentum, and by the eyes, which are well visible from above and the sides (figs. 11, 12).

The species is named in memory of Angelo M. da Costa Lima.

**Nosodendron testudinum** Waterhouse, 1876

(Figs. 14-16)

*Nosodendron testudinum* Waterhouse, 1876: 14-15 (Holotype, from Brazil, "Pará", BMNH, not seen).

Very dark brownish, somewhat reddish underneath; very shiny.

Head and pronotum very finely and sparsely punctate, less visibly on disc of pronotum. Eyes not visible from above, and barely visible from the sides. Scutellum and surface of elytra also covered with about the same, fine punctures. Each elytron with 11 striae of large and widely spaced punctures (distance between punctures of the same stria slightly less than the distance between striae), and each of these punctures encircled by an irregular hexagon formed by punctures intermediate in size between those of the elytral surface and the striae (fig. 16); near the suture these hexagons are incomplete. Measurements: length, 2.6-3.0 mm; maximum width, 1.9-2.0 mm.

Material examined

BRAZIL. Amazonas: Rio Negro, Tapuruquara, 4-5. II.1963 (J. Bechyné; 2 exs., MZSP).

Discussion

*Nosodendron testudinum* is extremely well characterized by its elytral sculpture (fig. 16), as well as by the mentum, with two deep, parallel grooves. Two Central American species, *Nosodendron championi* Sharp (from Guatemala) and *Nosodendron chiriquense* Sharp (from Panama) are also characterized by the same elytral sculpture and the grooved mentum, and may well represent one and the same species, but it is necessary to study the types of all species involved for a final decision.

In *Nosodendron testudinum* the eyes are almost completely hidden under the pronotum (figs. 14, 15).

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