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Systematics, Morphology and Biogeography

Additional records and male description of *Nordus stomachoponos* Chatzimanolis (Coleoptera, Staphylinidae, Staphylininae)

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ABSTRACT

Nordus stomachoponos Chatzimanolis, 2004 is a Neotropical species previously known only by the female. The male of *N. stomachoponos* is described, and additional records on its distribution are provided.

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Introduction

Nordus Blackwelder (Staphylinidae, Staphylininae, Staphylinini, Xanthopygina) is a Neotropical genus that contains thirty-nine species (Chatzimanolis, 2004; Navarrete-Heredia et al., 2006). Chatzimanolis (2004) revised Nordus and described the species N. stomachoponos based on female specimens. Here, we describe for the first time the male of Nordus stomachoponos from material collected in Pará, Brazil, and provide additional distributional records.

Material and methods

The male of *Nordus stomachoponos* was identified and was associated with the female based on the diagnosis and description provided by Chatzimanolis (2004) and with photograph of the female type material. The methodology used here is the same adopted by Chatzimanolis (2004), in which dried specimens were first relaxed in warm, soapy water, then apical abdominal segments containing the aedeagus were dissected from the abdomen. The apical abdominal segments were cleared using 10% KOH, and the aedeagus removed from the inside of the abdomen. The morphological terminology adopted follows Smetana and Davies (2000) and Chatzimanolis (2004).

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The features were observed from dried pinned specimens in a stereomicroscope Nikon SMZ 2000, and drawings were made on the same equipment. Labels from examined material are organized in sequence, from top to bottom. Data from each label are enclosed within double quotes (""), a forward slash (/) and separates lines, and information enclosed by square brackets ([]) provides added details about the labels.

Taxonomy

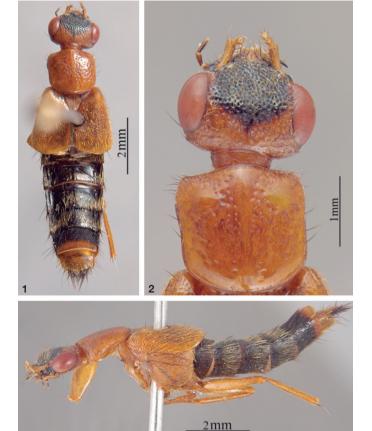
Nordus stomachoponos Chatzimanolis, 2004

Male description. Body length (from anterior margin of head to posterior margin of tergite VIII): 9-11 mm; elytral width (maximum): 2.1 mm.

Coloration. Head golden-orange with anterior two-thirds of epicranium shining black; mandibles and labrum dark brown; antennomeres light yellow. Pronotum, mesoscutellum, and elytra golden-orange. Abdominal segments III-VI black; segment VII dark with apical one-third golden-orange; segments VIII-XI yellowish (except for sternite IX apical part black). Appendices slightly lighter than other parts of the body (Figs. 1-3).

Head. Epicranium continuously covered with large punctures on anterior part, punctures smaller, very dense and uniformly distributed, larger and less dense on posterior part, macrosetae brown. Anteclypeus very small. Eyes three times as long as temples, distance

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Figures 1-3. *Nordus stomachoponos* Chatzimanolis, habitus. 1, dorsal view; 2, dorsal view of head and pronotum: 3. lateral view.

between eyes about twice longer than antennomere I. Middle of epicranium convex; epicranium without microsculpture of transverse microlines and micropunctures. Neck without punctures (Fig. 2). Gula narrower on the middle of the gena, gular sulci widely separated on anterior part of the gena and contiguous on the posterior. Antennomere I as long as II, or III and IV combined; V longer than wide; VII longer and wider than VI; VIII-X wider than long; XI longer than wide, acuminated on apex (Fig. 4); VI-XI covered by microtrichia; IV-X with a single circumferential row of prominent macrosetae near middle; I-III with irregularly scattered macrosetae (Fig. 4).

Thorax. Pronotum subquadrate; broadest in apical one-third; anterior margin slightly sinuate; posterior broadly rounded; antero-lateral angles somewhat obtusely rounded, curved downwards; surface of pronotum slightly flat; punctures large and shallow, distributed mainly near the middle, forming somewhat two patches of punctures; lateral margin without punctures. Pronotum with brown microsetae (Fig. 2). Metepimeron with few sparse punctures anteriorly, not in rows. Metepisternum with punctures forming more than two rows. Mesoscutellum without arch-like carina, with yellow setae and punctures covering entire surface (Fig. 2). Elytra not depressed near mesoscutellum, with large punctures, and with yellow setae and punctures covering entire surface. Legs with yellow macrosetae.

Abdomen. Tergites III and IV almost glabrous anteriorly (Fig. 1), V-VI covered with yellow setae, and VII and VIII with dark setae. Tergites III and IV with subbasal arch-like carina (Fig. 1); V without subbasal carina; paratergites III-VI covered with whitish-yellow microsetae on posterior half. Sterna III-VII densely punctuate and with

yellow setae; sternite VII with distal margin slightly emarginated (Fig. 5); sternite VIII with deeply U-shaped emargination medially at apex (Fig. 6); lateral tergal sclerites of abdominal tergite IX slightly curved, densely pubescent on apical two-third (Fig. 7); tergite X subtrapezoidal, sparsely pubescent on apical half, apex weakly sclerotized, with posterior margin not emarginate (Fig. 7); sternite IX sparsely pubescent on apical half, posterior margin deeply emarginate medially (Fig. 8).

Aedeagus. Slightly curved ventrally in lateral view. Median lobe with bulbous base; broad rounded apex (Fig.9). Median lobe with apical two-thirds slightly curved dorsally in lateral view; a large hook-like tooth apically on the dorsal surface (Fig.10). Parameres reaching apex of median lobe; apex acute, with peg setae forming two somewhat irregular rows in ventral view (Fig. 11).

Female (described in Chatzimanolis, 2004): similar to the male, except for sternite VII with distal margin truncate; sternite VIII with distal margin not deeply emarginate; sternite IX as ovipositor consisting of a pair of hemisternite, a pair of more apical coxites, and conspicuous stylus.

Diagnosis (adapted from Chatzimanolis [2004] and Navarrete-Heredia et al. [2006]). *Nordus stomachoponos* is more similar to *Nordus amphivolos* Chatzimanolis, 2004, *Nordus longipes* (Sharp, 1876), and *Nordus predator* Navarrete-Heredia et al., 2006, only these species are golden-orange with the anterior three-quarters of the head shining black. *Nordus stomachoponos* can be distinguished from *N. predator* by the convex middle of epicranium (flat in *N. predator*); from *N. amphivolos* by the emargination on sternite VIII deeply V-shape (slightly in *N. amphivolos*) and by the form of aedeagus (Figs. 9-11) (to *N. amphivolos* see Chatzimanolis 2004, figs. 130-133), and from *N. longipes* by the form of antennomere VII longer than wide (quadrate in *N. longipes*).

Additional distribution record. The distribution records of this species were previously known from Panama and Colombia; here, the distribution range of this species is extended to the state of Pará, Brazil.

Examined material. Four specimens deposited in INPA (Instituto Nacional de Pesquisas da Amazônia), three males labeled as "5738 [white label printed]", "Brasil-Pará/Jatobal/Ilha Mª Muriti/17-III-81 [white label printed]", "INPA [green label printed]"; one female labeled as "Brasil-Pará/R. Tocantins/próx.cid.muru/26-III-81 [white label printed]" "INPA [green label printed]".

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Conflicts of interest

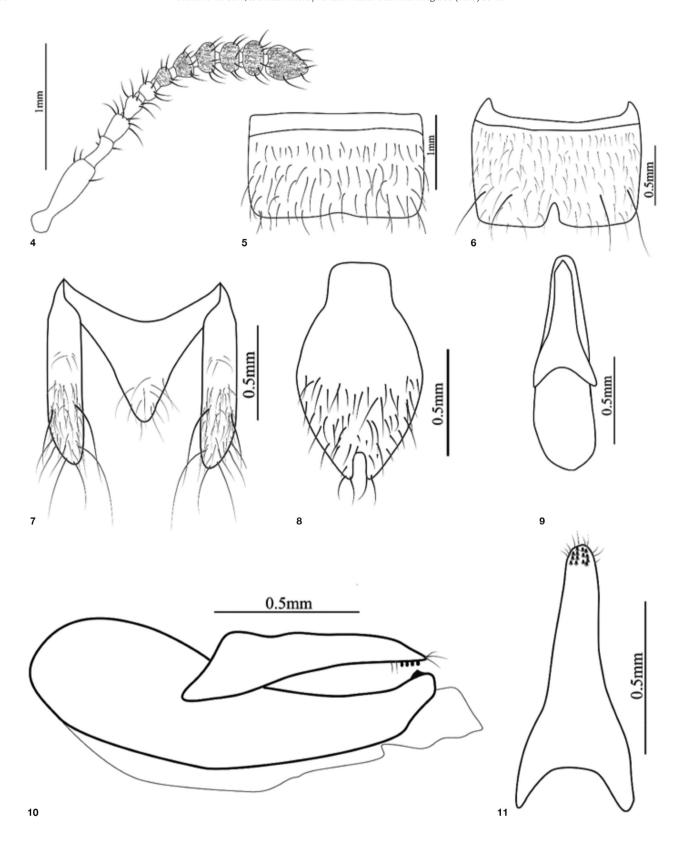
The authors declare no conflicts of interest.

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Figures 4-11. Nordus stomachoponos Chatzimanolis. 4, left antenna dorsal view; 5, sternite VII; 6, sternite VIII; 7, lateral tergal sclerites of abdominal tergite IX and tergite X; 8, sternite IX; 9, aedeagus in lateral view; 10, aedeagus in dorsal view; 11, paramere in ventral view.