

Asimos, a new genus of Xanthopygina from Central and South America (Coleoptera: Staphylinidae: Staphylininae)

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Abstract

A new genus of Xanthopygina (Coleoptera: Staphylinidae) is described here as *Asimos* gen.n. The new genus includes two species: *A. barclayi* sp.n. from Nicaragua, Costa Rica, Panama, Colombia, Guyana, Peru, and Bolivia, and *A. brasiliensis* (SAHLBERG, 1847) comb.n. from Brazil. *Gastrisus nitidus* BERNHAUER, 1906 is recognized as a junior synonym of the latter. Lectotypes are designated for *Staphylinus brasiliensis* and *Gastrisus nitidus*. Photographs and illustrations are provided for the identification of species.

Key words: Coleoptera, Staphylinini, *Gastrisus*, new genus, new species, lectotype designation, taxonomy.

Introduction

In recent years, several new genera of Xanthopygina have been described as a result of the extensive phylogenetic work within the subtribe (CHATZIMANOLIS & BRUNKE 2019, 2021) These new genera included *Peripus* CHATZIMANOLIS & HIGHTOWER, 2019 (CHATZIMANOLIS & HIGHTOWER 2019), *Lendatus* CHATZIMANOLIS, 2019 (CHATZIMANOLIS 2019) and *Ikaros* CHATZIMANOLIS & BRUNKE, 2021 (CHATZIMANOLIS & BRUNKE 2021).

Despite all this progress, there are still a few genera within Xanthopygina that contain taxa with uncertain generic affinities, mainly focused on the genera *Gastrisus* SHARP, 1876, *Oligotergus* BIERIG, 1937 and *Styngetus* SHARP, 1884. *Gastrisus* is perhaps the most problematic of these three, and in recent years, multiple species have been transferred to other genera (e.g., *G. cribrum* FAUVEL, 1891 and *G. punctatus* SHARP, 1876 to *Xenopygus* BERNHAUER, 1906 (CHATZIMANOLIS & CARON 2016), *G. modestus* (BERNHAUER, 1912) to *Dysanellus* BERNHAUER, 1911 (CHATZIMANOLIS 2020), and *G. nobilis* (WENDELER, 1956) to *Terataki* CHATZIMANOLIS, 2013 (CHATZIMANOLIS 2013).

One particular species within *Gastrisus*, *G. brasiliensis* SAHLBERG, 1847, along with the taxon previously identified as “Genus 1” by CHATZIMANOLIS & BRUNKE (2019) is fairly distinct and does not belong with other species currently in *Gastrisus*. The goal of this paper is to describe this lineage as a new genus within Xanthopygina.

Material and methods

Specimens were examined using an Olympus ZX10 stereomicroscope and photographs were taken using a Canon 40D camera equipped with a MP-E 65 mm macro lens on a Cognisys StackShot 3X macro rail and controller (<https://www.cognisys-inc.com/products/stackshot/stackshot.php>). SEM photographs were taken using a Neoscope JEOL desktop SEM with gold-coated specimens. All images were automontaged using Helicon Focus Pro 7.7.4 (<http://www.heliconsoft.com/heliconsoft-products/helicon-focus/>). The following measurements were taken HL: head length, at middle, from the anterior margin of frons to the nuchal ridge; HW: head width, the greatest width, including the eyes; PL: pronotum length, at middle; PW:

pronotum width, greatest width; EL: elytra length, measured in lateral view from the anterolateral angle of the elytra to the apex of the elytra; FL: forebody length, as a surrogate of total body length, measured by adding HL+PL+EL. Holotype and lectotype labels were included in quotes and separated by a slash '/'. Explanatory text was included within brackets []. GPS coordinates for all localities were standardized to decimal format. Date format was standardized as day/month[roman numerals]/year. The generic description was based on the morphological data matrices presented in CHATZIMANOLIS & BRUNKE (2021) and CHATZIMANOLIS (2021), and with data from this paper. The map was produced using the online program SimpleMapp (SHORTHOUSE 2010). The phylogenetic species concept of WHEELER & PLATNICK (2000) was used to delimit different species.

Specimens are deposited in the following collections:

CNC	Canadian National Collection, Ottawa, ON, Canada (A. Brunke)
FMNH	Field Museum of Natural History, Chicago, USA (M. Turcatel, J. Wadleigh)
MZH	Finnish Museum of Natural History, Helsinki, Finland (J. Mattila)
NHMD	Natural History Museum of Denmark, University of Copenhagen, Denmark (A. Solodovnikov)
NHMUK	Natural History Museum, London, UK (M. Barclay)
NMW	Naturhistorisches Museum Wien, Austria (H. Schillhammer)
SEMC	Snow Entomological Collection, Biodiversity Institute, University of Kansas, Lawrence, USA (Z. Falin)
UTCI	University of Tennessee at Chattanooga, USA (S. Chatzimanolis)
ZMUN	Natural History Museum, University of Oslo, Norway (V. Gusarov)

Asimos gen.n.

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TYPE SPECIES: *Asimos barclayi* sp.n., here designated.

DIAGNOSIS: *Asimos* can be distinguished from all other Xanthopygina genera based on the combination of the following characteristics: 1) Eye large (more than 2/3 length of head); 2) labrum with broad U-shaped emargination of lobes; 3) neck disc with moderately coarse punctures; 4) pronotum longer than wide, flat; 5) pronotal microsculpture with transverse lines; 6) pronotal procoxal process present; 7) pronotal hypomeron with superior marginal line not continuous to anterior margin; 8) elytra without contiguous polygon-shaped meshed microsculpture (elytra appearing shiny); 9) mesocoxae contiguous, intercoxal area distinctly recessed compared to mesoventral and metaventral processes; 10) abdominal tergites 3–4 with curved carina (arch-like) on disc; 11) abdominal sternite 7 in males without strong emargination on posterior margin. Characters 1–3, 5, 9–11 can distinguish *Asimos* from species currently in *Gastrisus*, although it should be noted that *Gastrisus* has not been revised and its generic limits are not clearly established.

DESCRIPTION: Habitus as in Figs. 8, 17. Body medium-sized, forebody 4.6–6.7 mm, without long bristle-like setae. Head shape rectangular; head length, in comparison to pronotum, shorter, head width, in comparison to pronotum, narrower to subequal. Eye size large, more than 2/3 length of head. Postclypeus, in comparison to frons, not deflexed; anterior margin more or less straight. Middle of epicranium impunctate but with microsculpture. Postmandibular ridge laterally; with deep punctures demarcating raised postmandibular ridge present. Gular sutures not joined before neck, extended close to each other at base of head capsule. Posterior margin of head more or less at same level with neck border. Nuchal ridge incomplete dorsally. Neck disc with moderately coarse punctures.

Antennae (Fig. 3): relative width of antennomere 1 equal or slightly wider than 2; antennomere 1 twice as long as antennomere 2; third antennomere 2.5 times as long as wide; antennomere 4 with tomentose pubescence present; antennomeres 4–10 cylindrical in shape; antennomeres 5–10

without club; antennomeres 7–10 symmetrical; antennomere 6 with curved subapical setae, distinctly longer and thicker than other macrosetae, forming circlet; antennomere 11 in males subequal to 10.



Figs. 1–7: *Asimos barclayi*: 1) Ventral view of left mandible; 2) dorsal view of right mandible; 3) antennae; 4) maxilla; 5) prosternum; 6) meso- and metaventrите; 7) hypopharynx and labial palps. Scale bars: 1–2 (0.6 mm), 3 (1.5 mm), 4 (0.4 mm), 5 (1.1 mm), 6 (1.7 mm), 7 (0.3 mm).

Labrum with broadly U-shaped emargination, lobes strongly separated. Mandibles (Figs. 1–2) with relative length typical (i.e., closed mandible not extending beyond lateral margin of head); without asymmetrical torsion. Mandibles in dorsal view curved from apical half; in lateral aspect straight; left mandible with one bicuspid tooth; right mandible with one tooth. Maxilla (Fig. 4) with galea much shorter than palpus; maxillary palpomere 3 shorter than 2; palpomere 4 longer than 3; palpomere 4 not dilated (parallel-sided). Labial palpomere 3 (Fig. 7) widest before apex, without long dense setae on entire lateral sides. Ligula small, entire. Mentum with alpha seta; hypostomal cavity present; moderately delimited.

Pronotum (Fig. 9) with shape of lateral margins in dorsal view posteriad of midpoint straight to sinuate; anterior angles in dorsal view not strongly acuminate and produced laterad. Pronotum near anterolateral angles without raised impunctate spots; anterolateral corners with punctation; disc of pronotum with punctation beyond midlength; with large impunctate areas between punctures; pronotum with transverse lines of microsculpture; without coarse punctures impressed in flange at posterior angle of pronotum. Hypomerone with superior marginal line not continuous

to anterior margin; superior marginal line without distinct deflection under anterior angles in ventral view; inferior marginal line of hypomeron continued as separate entity beyond anterior pronotal angles and curving around them. Superior and inferior marginal lines produce anterolateral angles parallel to one other (CHATZIMANOLIS 2021). Postcoxal process present. Basisternum (Fig. 5) slightly longer than furcasternum; basisternum with pair of macrosetae, situated far from anterior margin of prosternum.

Elytra well developed, longer than pronotum; hind wings present, veins CuA and MP4 fused in one vein. Elytral setae not reduced, easily seen at low magnification; without patches of white setae. Elytra without contiguous polygon-shaped meshed microsculpture (elytra appearing shiny). Mesoscutellum uniformly punctate, with dense micropunctures. Mesoventrite (Fig. 6) with apex of intercoxal process narrow and pointed. Metepisternum with dorsal impunctate area less than 1/3 of total length. Metepimeron subequal or slightly wider than metepisternum near posterior border.

Legs 5-5-5; profemora without lateroventral apical spines; protarsi with modified pale (adhesive) setae ventrally; protarsomeres 1–4 dorsoventrally flattened. Mesocoxae contiguous, intercoxal area distinctly recessed compared to mesoventral and metaventral processes. Metacoxae without coxal shield; with less than four spines on posterior surface. Mesotibia with multiple rows of spines. Metafemora without crenulate upper posterior margin. Metatibia without thick and long apical spurs but smaller spurs present; with spines. Meso- and metatarsi with symmetrically lobed tarsomeres 1–4; tarsomeres 3–5 of metatarsi with chaetotaxy developed only at margins of dorsal surface; dorsal surface of tarsomeres glabrous along midline. Pretarsal claws with empodial setae.

Abdomen with lateral sides in dorsal view more or less parallel-sided; protergal glands with well-developed acetabula. Anterior basal transverse carina on tergites 3 and 4 without pair of accessory ridges; tergite 3 without posterior basal transverse carina; tergites 3–4 with curved carina (arch-like) on disc; tergite 5 without pair of accessory ridges on anterior basal transverse carina; tergite 3 punctated medially; center of tergite 5 with punctation; posterior half of tergite 5 in lateral view not appearing bulged. Sternite 3 with straight to arcuate basal transverse carina medially; basal transverse carina laterally not sinuate. Sternite 4 without basal transverse carina medially. Sternite 5 with dense, meshed microsculpture anterolaterally, appearing different in texture to posterior portion; sternite 6 without two anterior transverse lines. Males with secondary sexual structures (strong medial emargination or porose structure) absent on sternite 7; shallow medial emargination present on sternite 8. Aedeagus with long median lobe and single paramere; the latter with sensory peg setae; median lobe with single apical tooth, without subapical tooth, carina or paired apex. Spermatheca not sclerotized.

ETYMOLOGY: The name is derived from the Greek word ἀσημος (literally: without a mark; metaphorically: unknown, not found). The gender is masculine.

Asimos barclayi sp.n.

(Figs. 1–13, 18)

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TYPE MATERIAL: **Holotype** ♂ (NHMUK): “Bolivia: Santa Cruz, Amboro National Park, Los Volcanes, c.1000m, S18° 06', W 63° 36' [-18.1° -63.6°], 20.xi–12.xii.2004” / “Flight intercept trap, Mendel, H. & Barclay, M. V. L., BMNH(E)2004-280” / “Holotype *Asimos barclayi* Chatzimanolis, des. 2022”. – **Paratypes** (44 exs.): **BOLIVIA: Santa Cruz:** same data as the holotype (6 ♂♂, 6 ♀♀ NHMUK); same data as the holotype, UTCI000032588, UTCI000032574 (1 ♂, 1 ♀ UTCI); 3.7 km SSE Buena Vista Hotel Flora y Fauna [-17.483° -63.550°], 28.IV.–2.V.2004, FIT, A. Cline leg., SM0779709, SM0779419, SM0779409 (2 ♂♂, 1 ♀ SEMC); same locality and collector, 3.–9.XI.2002, SM0480705, SM0480707 (1 ♂, 1 ♀ SEMC); **COLOMBIA: Meta:** PPN Sumapaz Cabaña Las Mirlas [3.800° -73.866°], 710 m, 19.X.2003–5.XI.2005, Malaise trap, A. Torrijos leg., UTCI000000698 (1 ♂

UTCI); **COSTA RICA: Guanacaste:** Maritza Biological Station, [10.958° -85.495°], 550 m, 22.V.1993, FIT, J.S. & A.K. Ashe leg., SM0080026 (1 ♀ SEMC); **Heredia:** La Selva Biological Research Station, 3 km S Puerto Viejo [10.416° -84.000°], 80 m, 26.VI.-2.VII.2001, FIT, S. Chatzimanolis, SM0265612, SM0265609, UTCI000000236 (2 ♂ SEMC, 1 ♀ UTCI); same locality and collector, 11.-14.VI.2001, SM0265606 (1 ♀ SEMC); **Limón:** R.B. Hitoy Cerere [9.643° -83.081°], 300 m, 17.VI.2000, Malaise trap, W. Arana leg., INB0003313185 (1 ♂ NHMD); **Puntarenas:** P.N. Corcovado Cerro Puma [8.56° -83.57°], 100-300 m, 19.VI.-8.VII.2003, M. Moraga, A. Azofeifa, K. Caballero leg., INB0003734227, INB0003734195 (2 ♂ SEMC); Corcovado National Park, Sirena Station, upper Ollas trail [8.485° -83.577°], 140 m, 24.-28.VI.2000, FIT, Z.H. Falin leg., SM0203841, SM0203845 (1 ♂, 1 ♀ SEMC); Pen. de Osa, Area de Conservacion Osa [8.5° -83.5°], 200 m, 4.-25.V.1994, A. Marin leg., INBIOCRI001986781 (1 ♂ NHMD); Est. Aguas [8.553° -83.449°], 300 m, 26.X.1997, A. Azofeifa leg., INBIOCRI002593738 (1 ♀ NHMD); San Vito de C. B. [Coto Brus], Las Cruces [8.784° -82.958°], 1200 m, VII.1982, FIT, B. Gill leg. (1 ♂ CNC); same locality and collector, 22.II.-3.III.1983 (1 ♂ CNC); **GUYANA: Region 8:** Iwokrama Forest, Kabocalli Field Station [4.284° -58.510°], 60 m, 3.-5.VI.2001, FIT, R. Brooks & Z. Falin leg., SM0253427 (1 ♂ SEMC); **NICARAGUA: Río San Juan:** 60 km SE San Carlos, Refugio Bartola [10.973° -84.338°], 100 m, 25.-28.V.2002, FIT, R. Brooks, Z. Falin & S. Chatzimanolis leg., SM0556330, SM0556332 (1 ♂, 1 ♀ SEMC); **PANAMA: Panama:** Barro Colorado Island [9.183° -79.850°], 40 m, 23.-27.VII.2000, FIT, S. Chatzimanolis leg., SM0269725 (1 ♂ SEMC); same locality and collector, 14.-18.VI.2000, SM0269833 (1 ♂ SEMC); **PERU: Madre de Dios:** CICRA Field Station, Exp. Plot, South Transect [-12.553° -70.110°], 295 m, 11.-13.VII.2010, blue pan trap, Chaboo Team leg., SEMC0956369 (1 ♂ SEMC); CICRA Field Station, ~2 km NW of cafeteria, research plot [-12.552° -70.109°], 295 m, 7.-9.VI.2011, FIT, Chaboo Team leg., SEMC0956718 (1 ♂ SEMC); Pantiacolla Lodge, Alto Madre de Dios R. [-12.655° -71.232°], 420 m, 14.-19.XI.2007, FIT, D. Brzoska leg., SEMC0874622 (1 ♂ SEMC); Pantiacolla Lodge, El Mirador trail, Alto Madre de Dios R. [-12.653° -71.257°], 450-700 m, 23.-26.X.2000, FIT, R. Brooks leg., SM0210958 (1 ♂ SEMC); Cocha Cashu Biological Station, Manu National Park [-11.895° -71.406°], 350 m, 17.-19.X.2000, FIT, R. Brooks leg., SM0210574 (1 ♂ SEMC). All paratypes with label: "Paratype *Asimos barclayi* Chatzimanolis, des. Chatzimanolis 2022".

DIAGNOSIS: *Asimos barclayi* can be easily distinguished from *A. brasiliensis* due to the color of elytra and abdominal segment 7, which is orange in *A. barclayi* and brown in *A. brasiliensis*. Additionally, the paramere of *A. brasiliensis* is asymmetrical in contrast to the symmetrical paramere of *A. barclayi*.

DESCRIPTION: Forebody length 5.6-6.7 mm. Coloration of head and pronotum brown with light metallic green overtones. Antennomeres 1-3 orange, 4-11 appearing darker due to brown setae; mouthparts orange. Legs, elytra, prosternum, meso- and metaventrite, and abdominal segments 7-8 orange; abdominal segments 3-6 brown, although occasionally segments 3-5 orange to brown.

Head transverse HW/HL ratio = 1.25-1.26. Epicranium with medium-sized punctures (Fig. 8), except impunctate center; distance between punctures varies. Antennomeres 4-5 subquadrate; antennomeres 6-10 transverse. Pronotum longer than wide; PW/PL ratio = 0.87-0.9. Pronotum with median impunctate area as wide as 5-6 punctures; rows flanking impunctate area with 4-5 medium-sized punctures (Fig. 9) roughly equidistant; with additional 1-2 rows of 3-5 punctures each. Elytra longer than pronotum EL/PL ratio = 1.32; elytra with uniform punctation, distance between punctures 1-2 width of punctures.

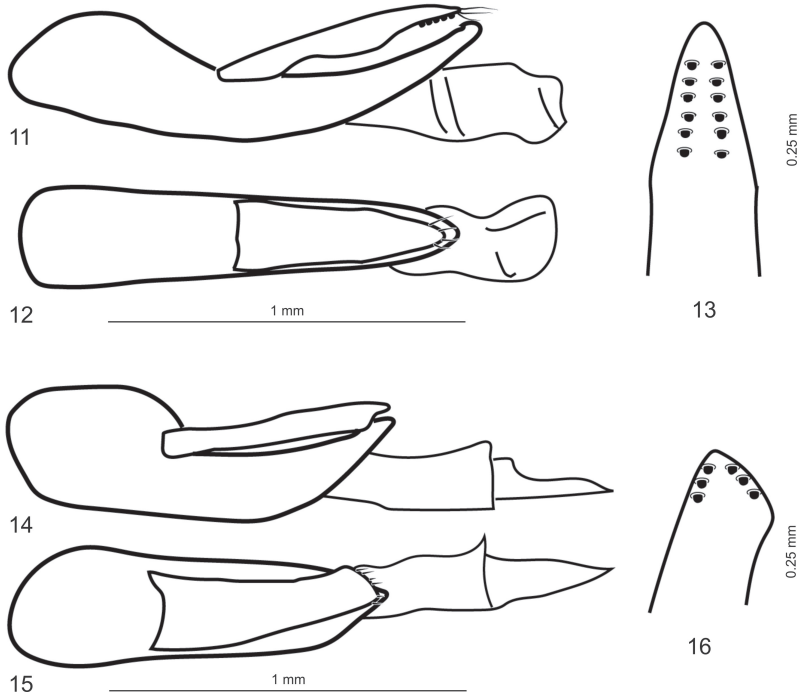
Aedeagus as in Figs. 11-13; in dorsal view, paramere slightly shorter and narrower than median lobe; paramere broad, converging to rounded tip; in lateral view, paramere wider medially. Median lobe in lateral view broad, narrowing to rounded tip, slightly asymmetrical near apex; in lateral view, median lobe becoming narrower near apex; with single small apical tooth.

REMARKS: Specimens from Bolivia have slightly more peg setae on the paramere than specimens from Central America, but no other differences exist between them.

DISTRIBUTION: The species is at present known from Bolivia, Brazil, Colombia, Costa Rica, Guyana, Nicaragua, Panama, and Peru.



Figs. 8–10: *Asimos barclayi*: 8) habitus; 9) pronotum; 10) abdominal sternites 6–8. Scale bars: 8 (2.0 mm), 9 (3.4 mm), 10 (1.6 mm).



Figs. 11–13: *Asimos barclayi*, aedeagus: 11) lateral view; 12) dorsal view; 13) detail of paramere, ventral view.

Figs. 14–16: *Asimos brasiliensis*, aedeagus: 14) lateral view (of the left side); 15) dorsal view; 16) detail of paramere, ventral view.

HABITAT: The species has been collected in lowland and medium-elevation tropical rainforests.

ETYMOLOGY: The species is named in honor of Dr. Maxwell V.L. Barclay, who collected the type specimen, for his continuous support of rove beetle taxonomists around the world.

***Asimos brasiliensis* (SAHLBERG, 1847) comb.n.**

(Figs. 14–18)

Staphylinus brasiliensis SAHLBERG 1847: 787.

Gastrisus nitidus BERNHAUER 1906: 198. **Syn.n.**

Gastrisus brasiliensis (SAHLBERG, 1847): BERNHAUER & SCHUBERT 1914: 405.

TYPE MATERIAL:

Lectotype ♀, of *Staphylinus brasiliensis*, by present designation (MZH): “♀” / “Brasil” / “7” / “*Philothalpus*” / “Mus. Zool. Hifors Spec. typ. No. 1130 *Staphylinus brasiliensis* R. Sbg” / “*Staphylinus brasiliensis* Sahl.” / “<http://id.luomus.fi/GAC.7906> *Gastrisus brasiliensis* R. F. SAHLBERG 1864 [erroneous date]” / “Lectotype *Staphylinus brasiliensis*. R. SAHLBERG des. Chatzimanolis 2022”.

Lectotype ♀, of *Gastrisus nitidus*, by present designation (NMW): “São Paulo [sic] [-23.55° -46.63°], Brasilia” / “c· Eppplsh. [sic] [coll. Eppelsheim] Steind. [Steindachner] d. [donavit]” / “*Gastrisus nitidus* Bernh. det. Bernhauer” / “co-Typus” / “Lectotype *Gastrisus nitidus* BERNHAUER des. Chatzimanolis 2022”. – **Paralectotype** ♀ (FMNH): “*Gastrisus nitidus* Brh. Typ. São Paulo [-23.55° -46.63°] det. Bernhauer” / “Gastr. nitidus Bernh. Typus Brasilien.” / “sehr aehnlich dem *St. brasiliensis* Sahlb[erg] ex Typ. jedoch hat dieser am Kopf vorn 2 Längsreih[en] von 3 Punkten die einander genähert sind.” [similar to typical *Staphylinus brasiliensis* Sahlberg, but this one has two lon-

gitudinal rows of three punctures anteriorly on the head which are close to each other.] / “Chicago NHMus M. Bernhauer Collection” / “SYNTYPE teste A. Westrich 2015 GDI Imaging Project” / “PHOTOGRAPHED Kelsey Keaton 2015 Emu Catalog” / “FMNHINS3047814” / “Paralectotype *Gastrisus nitidus* BERNHAUER des. Chatzimanolis 2022”. A photo of this specimen can be found at: <https://collections-zoology.fieldmuseum.org/catalogue/3047814>.

DIAGNOSIS: *Asimos brasiliensis* can be easily distinguished from *A. barclayi* due to the color of elytra and abdominal segment 7, which is brown in *A. brasiliensis* and orange in *A. barclayi*. Additionally, the paramere of *A. brasiliensis* is asymmetrical in contrast to the symmetrical paramere of *A. barclayi*.

DESCRIPTION Forebody length 4.6–4.9 mm. Coloration of head and pronotum brown with dark metallic green overtones. Antennomeres 1–3 light brown, 4–11 brown; mouthparts light brown. Legs, elytra, prosternum, meso- and metaventrite, and abdominal segments 3–7 brown; abdominal segment 8 brown medially and orange laterally (in some specimens completely brown).

Head transverse HW/HL ratio = 1.36–1.4. Epicranium with large punctures (Fig. 17), except impunctate center; distance between punctures varies. Antennomeres 4–5 longer than wide; antennomeres 6–10 subquadrate. Pronotum longer than wide; PW/PL ratio = 0.87–0.88. Pronotum with median impunctate area as wide as 4–5 punctures; rows flanking impunctate area with 3–4 large punctures (Fig. 17) roughly equidistant; with additional 1–2 rows, each with 2–3 punctures. Elytra longer than pronotum EL/PL ratio = 1.24–1.25; elytra with uniform punctation, distance between punctures 0.5–1.0 width of punctures.

Aedeagus as in Figs. 14–16; in dorsal view, paramere asymmetrical, wider on the left side; paramere slightly shorter and narrower than median lobe; paramere broad, converging to rounded tip; in lateral view, paramere different depending on point of view, when on one lateral side paramere wide and on other side paramere narrow. Median lobe in lateral view broad, narrowing to pointed tip; in lateral view, median lobe becoming narrower near apex; with single small apical tooth. Endophallus clearly visible and everted in all specimens examined.

ADDITIONAL MATERIAL EXAMINED:

BRAZIL: Minas Gerais: Paq. [sic] Estalado [sic] Itacolomi [Parque Estadual do Itacolomi] [-20.429° -43.507°], 9.–10.II.2014, FIT, A. Tishechkin leg. (2 ♀♀ ZMUN); **Rio de Janeiro:** Corcovado, Guanabara [-22.952° -43.211°], VIII.1966, flying, M. Alvarenga leg. (1 ♂, 2 ♀♀ NMW); same locality and collector, VI.1966 (1 ♀ NMW); same locality and collector, VII.1966 (1 ♀ NMW); same locality and collector, XI.1966 (1 ♂, 5 ♀♀ NMW); Rio de Janeiro [-22.91° -43.20°] (1 ♂ FMNH); **São Paulo:** Ypiranga [Ipiranga] [-23.591° -46.608°], XII.1906, Hering [Hering] leg. (1 ♂ FMNH); Represa do Rio Grande [-23.78° -46.62°], VI.1966, Malaise trap, M. Alvarenga leg., UTCI000032591 (1 ♂ UTCI); São Paulo [-23.55° -46.63°] (1 ♀ FMNH).

DISTRIBUTION: The species is known from the states of Minas Gerais, Rio de Janeiro and São Paulo in Brazil.

HABITAT: Unknown, presumably lowland tropical rainforests.

REMARKS: According to the label data of *G. nitidus* (given above), Bernhauer compared *G. nitidus* and *G. brasiliensis* and argued that they could be adequately differentiated based on the punctures on the head. However, based on my examination of the type material and additional specimens, this is not the case, and the number of punctures on the head is variable. Consequently, this is not a reliable character to differentiate these two species. *Gastrisus nitidus* and *G. brasiliensis* are identical in all respects and thus I am treating *G. nitidus* as a junior synonym of *G. brasiliensis*.



Fig. 17: Habitus of *Asimos brasiliensis*. Scale bar: 1.2 mm.



Fig. 18: Distribution map of *Asimos barclayi* (circles) and *A. brasiliensis* (squares).

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