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Four new species and additional records of Lomechusini from Mindanao, Philippines (Coleoptera, Staphylinidae, Aleocharinae)

Volker Assing

A b s t r a c t : *Drusilla bucina* nov.sp., *D. holoserica* nov.sp., *Zyras* (*Zyras*) rasilis nov.sp., and *Z.* (*Z.*) nigrorufus nov.sp. (all Philippines: Mindanao) are described and illustrated. Six additional species, four of them unnamed, are reported from Mindanao. Including the new species, 46 named species of Lomechusini are currently known from the Philippines.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, Lomechusini, *Drusilla*, *Zyras*, Oriental region, Philippines, Mindanao, taxonomy, new species, additional records.

Introduction

According to an unpublished database maintained and continuously updated by Al Newton (Chicago), as well as to ASSING (2017a, b), 35 species of Lomechusini had been recorded from the Philippines, one of the genus *Aenictocleptis* KISTNER & JACOBSON, 1975, one of *Aenictozyras* KISTNER & JACOBSON, 1975, two of *Amaurodera* FAUVEL, 1905, eight of *Drusilla* LEACH, 1819, one of *Leptogenoxenus* KISTNER, 1975, one of *Monobothrus* PACE, 1990, 14 of *Orphnebius* MOTSCHULSKY, 1858, one of *Tetrabothrus* BERNHAUER, 1915, and six of *Zyras* STEPHENS, 1833, two of the latter belonging to the nominal subgenus, one to *Diaulaconia* BERNHAUER, 1928, and three without subgeneric assignment. Very recently, seven additional species, one of *Amaurodera*, four of *Drusilla*, and two of *Zyras* sensu strictu were described from Mindanao by ASSING (2019), based on specimens collected by Alexey Shavrin (Daugavpils) in 2018.

Aleocharinae material collected during a field trip to Mindanao conducted in 2019 and made available to me by Alexey Shavrin included ten species of Lomechusini, one of *Amaurodera*, five of *Drusilla*, one of *Pheidologitonetes* CAMERON, 1939 (first record of the genus from the Philippines), and three of *Zyras* sensu strictu. Examination of this material revealed that probably eight of these species - four Drusilla, one *Pheidologitonetes*, and all the *Zyras* sensu strictu species - are undescribed. Four of them, however, are represented only by females and consequently remain unnamed for the time being. The remainder is described in this contribution.

Material and methods

The material treated in this study is deposited in the author's collection (cAss).

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss), a Discovery V12 microscope (Zeiss), and a Jenalab compound microscope (Carl Zeiss Jena). The images were created using digital cameras (Nikon Coolpix 995, Axiocam ERc 5s) and Picolay stacking software.

Body length was measured from the anterior margin of the labrum to the posterior margin of the abdominal tergite VIII, the length of the forebody from the anterior margin of the labrum to the posterior margin of the elytra, head length from the anterior margin of the clypeus (without ante-clypeus) to the posterior constriction of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

Results

Amaurodera atra Assing, 2019

M a t e r i a l e x a m i n e d: **PHILIPPINES**: 10♂♂, 5♀♀, Mindanao, Araibo, Pantukan, Compostela Valley, Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, leg. Shavrin (cAss); 1♀, Mindanao, Davao province, Mt. Talomo (Apo Mts.), 7°04′41″N, 125°20′08″E, 1200-1300 m, 27-28.IV.2019, leg. Shavrin (cAss).

C o m m e n t: The original description of this recently described species is based on material from two localities in Southeast Mindanao.

Drusilla penicillata Assing, 2019

M a t e r i a l e x a m i n e d : **PHILIPPINES**: 3♂♂, 2♀♀ [partly teneral], Mindanao, Araibo, Pantukan, Compostela Valley, Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, leg. Shavrin (cAss).

C o m m e n t : Drusilla penicillata was previously known only from two localities in Central Mindanao.

Drusilla sp. 1

M a t e r i a l e x a m i n e d : **PHILIPPINES**: 1♀, Mindanao, Araibo, Pantukan, Compostela Valley, Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, leg. Shavrin (cAss).

C o m m e n t: The above female somewhat resembles *D. obliqua* (BERNHAUER, 1916) in size, habitus, and coloration, but is distinguished by a spermatheca and a female tergite VIII of different shapes.

Drusilla sp. 2

M a t e r i a l e x a m i n e d : **PHILIPPINES**: 1♀, Mindanao, Davao province, Mt. Talomo (Apo Mts.), 7°04′41″N, 125°20′08″E, 1200-1300 m, 27-28.IV.2019, leg. Shavrin (cAss).

C o m m e n t: The above female is similar to *D. penicillata*, but distinguished by different coloration, punctation, and an unmodified head.

Drusilla bucina nov.sp. (Figs 1-5, 18-20, 26, 33-34)

T y p e m a t e r i a 1 : Holotype \circlearrowleft : "PHILIPPINES - Mindanao, Araibo, Pantukan, Compostela V., Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, Shavrin / Holotypus \circlearrowleft *Drusilla bucina* sp. n. det. V. Assing 2019″ (cAss). Paratype \hookrightarrow : "PHILIPPINES - Mindanao, Davao prov., Mt. Talomo, Catigan, 800-1000 m, 7°01′21″N, 125°22′31″E, 30.IV.-1.V.2019, Shavrin″ (cAss).

 $E\ t\ y\ m\ o\ l\ o\ g\ y:$ The specific epithet (Latin, noun in apposition: trumpeter) alludes to trumpet-shaped distal portion of the spermatheca.

Description: Body length 5.1-5.6 mm; length of forebody 2.4-2.6 mm. Habitus as in Fig. 1. Coloration: black with the humeral angles of the elytra, the antero-lateral portions of abdominal tergites III-VI, and the anterior halves of paratergites III-VI yellow; legs yellow with the apical halves of the femora infuscate; antennae blackish with the apical 2-3 antennomeres dark-yellow; maxillary palpi blackish with the apical palpomere pale-yellow.

Head (Fig. 2) approximately 1.15 times as broad as long; dorsal surface nearly impunctate and without distinct microsculpture, between eyes with an inversely V-shaped impression between eyes, in the middle somewhat elevated. Eyes large and bulging, longer than postocular portion in dorsal view. Antenna (Fig. 4) 2.3-2.6 mm long; antennomeres I strongly dilated apically (club-shaped), IV-X distinctly oblong, of gradually decreasing length, and XI elongate, three times as long as broad, and approximately as long as the combined length of IX and X.

Pronotum (Figs 2-3) 1.06-1.08 times as long as broad and 0.91-0.93 times as broad as head, broadest anteriorly; lateral margins sinuate in dorsal view; dorsal surface anteriorly with transverse glossy impression with very sparse punctation, and with narrow, but deep median sulcus posteriorly reaching a transverse and flatly C-shaped impression; punctation coarse and dense (except in antero-median portion), subject to sexual dimorphism.

Elytra (Fig. 2) 0.85-0.90 times as long as pronotum; punctation very dense, coarse, and partly rugose; interstices reduced to narrow ridges. Hind wings fully developed.

Abdomen (Fig. 5) without microsculpture, glossy; tergites III-VI with a transverse row of punctures across middle and one at posterior margin, otherwise impunctate; posterior margin of tergite VII with palisade fringe.

- 3: pronotum with predominantly coarsely granulose punctation (Fig. 2); tergite VIII without evident modifications, posterior margin weakly convex; posterior margin of sternite VIII moderately convex; median lobe of aedeagus 0.55 mm long and shaped as in Figs 18-19; paramere 0.5 mm long, without evident modifications.
- $\$: pronotum (Fig. 3) predominantly with coarse and somewhat umbilicate punctation, granulose punctures present only in antero-lateral portions; tergite VIII (Fig. 26) without evident modifications, posterior margin convex, in the middle weakly concave; sternite VIII strongly transverse, with weakly convex posterior margin; spermatheca (Fig. 20) with trumpet-shaped distal portion and with long and coiled proximal portion.

C o m p a r a t i v e n o t e s: *Drusilla bucina* is characterized particularly by the punctation pattern and by the primary sexual characters. It is distinguished from other congeners previously recorded from the Philippines as follows:

from *D. bernhaueri* (SCHEERPELTZ, 1934) (Luzon) by completely different coloration (*D. bernhaueri*: body yellow with dark head), different head shape (*D. bernhaueri*: temples acutely produced), and numerous other characters;

from *D. butuanensis* (BERNHAUER, 1916) (Mindanao) by larger size (*D. butuanensis*: 3 mm), completely different coloration (*D. butuanensis*: forebody reddish), much coarser and denser punctation of the elytra, and other characters;

from *D. impressicollis* (Kraatz, 1857) (widespread in the Oriental region) by larger size (*D. impressicollis*: 3 mm), different coloration (*D. impressicollis*: pronotum reddishbrown and elytra yellowish to yellowish-brown), a differently shaped head, and other characters:

from *D. laevicauda* (BERNHAUER, 1903) (widespread in the Oriental region) by larger size (*D. laevicauda*: 3 mm), the coloration (*D. laevicauda*: pronotum and elytra brown), coarser and denser punctation of the pronotum and the elytra, and other characters;

from *D. luzonica* (BERNHAUER, 1915) (Luzon) by larger size (*D. luzonica*: 3.5 mm), the coloration of the legs (*D. luzonica*: legs uniformly yellow), a pronotum without a large impression on either side of the middle, and much denser punctation of the elytra;

from *D. philippina* (BERNHAUER, 1915) (Luzon) by larger size (*D. philippina*: 3 mm), the coloration of the elytra (*D. philippina*: elytra yellowish-brown), and coarse and dense punctation of the pronotum (*D. philippina*: pronotum with fine and moderately dense punctation);

from *D. plicipennis* (BERNHAUER, 1915) (Luzon) by larger size (*D. plicipennis*: 3 mm), completely different coloration (*D. plicipennis*: forebody reddish), much denser punctation of the elytra, the absence of tubercles on tergites IV-VII, and other characters;

from *D. schawalleri* KISTNER, 1994 (Leyte) by different coloration (*D. schawalleri*: body reddish-brown), a more slender pronotum (*D. kistneri*: pronotum broader than long), and by the shapes of the aedeagus and the spermatheca (see KISTNER 1994);

from the recently described *D. shavrini* ASSING, 2019, *D. penicillata* ASSING, 2019, *D. spiniventris* ASSING, 2019, and *D. breviuter* ASSING, 2019 (all Mindanao) by the punctation pattern, the coloration, and the sexual characters. For illustrations of external and the sexual characters, as well as detailed descriptions of these species see ASSING (2019).

D is tribution: The type specimens were collected in two localities in East Mindanao by sifting wet litter near running water in a secondary forest and in a stream valley at altitudes between 800-1000 m (Figs 33-34).

Drusilla holoserica nov.sp. (Figs 6-9, 21-25, 33)

Type material: <u>Holotype ♂</u>: "PHILIPPINES - Mindanao, Araibo, Pantukan, Compostela V., Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, Shavrin / Holotypus ♂ *Drusilla holoserica* sp. n. det. V. Assing 2019″ (cAss). <u>Paratypes</u>: 2♂♂: same data as holotype (cAss).

E t y m o l o g y : The specific epithet (Latin, adjective: silky) alludes to silky shine of the abdomen.

Description: Body length 5.3-5.6 mm; length of forebody 2.3-2.4 mm. Habitus slender (Fig. 6). Coloration: head and pronotum blackish; elytra blackish or brown with the postero-lateral portions extensively infuscate; abdomen blackish with the posterior half of tergites III and IV, all of paratergites III, the posterior half of paratergites IV, the posterior portions of tergites, and paratergites V-VII yellowish; legs with the basal halves of the metafemora, the meso- and metatibiae, and the tarsi yellow, and with the profemora, the protibiae, the mesofemora, and the apical halves of the metafemora infuscate; antennae pale reddish-brown; maxillary palpi blackish-brown to blackish.

Head (Fig. 7) nearly 1.2 times as broad as long, posterior angles marked; dorsal surface without distinct impressions or elevation, with dense and distinct punctation, along middle with an impunctate band; interstices with shallow microsculpture. Eyes large and bulging, longer than postocular portion in dorsal view. Antenna (Fig. 8) 2.1-2.2 mm long; antennomeres IV approximately twice as long as broad, V-X of gradually decreasing length, increasing width, and decreasingly oblong, X weakly oblong, and XI elongate, slightly longer than the combined length of IX and X.

Pronotum (Fig. 7) indistinctly oblong and nearly 1.1 times as broad as head, broadest anteriorly; lateral margins weakly sinuate in posterior half in dorsal view; disc with narrow, but distinct median sulcus and with dense and distinct punctation; interstices with distinct microreticulation.

Elytra (Fig. 7) approximately 0.95 times as long as pronotum; punctation dense and somewhat asperate; interstices with distinct microreticulation. Hind wings fully developed.

Abdomen (Fig. 9) with tergites III-V nearly impunctate (except few punctures at posterior margins) and with tergites VI-VII very sparsely and finely punctured; all tergites with fine and shallow microsculpture giving the abdomen a silky shine; posterior margin of tergite VII with palisade fringe.

3: posterior margin of tergite VIII distinctly concave in the middle (Fig. 21); posterior margin of sternite VIII obtusely produced (Fig. 22); median lobe of aedeagus (Figs 23-24) 0.48-0.50 mm long, with ventral process of rather simple shape; paramere (Fig. 25) 0.45 mm long and with rather large apical lobe.

♀: unknown.

C o m p a r a t i v e n o t e s: *Drusilla holoserica* is characterized particularly by the slender habitus, the shape of the head (marked posterior angles), distinct microsculpture on the whole body, and by the shape of the aedeagus. It is distinguished from other congeners previously recorded from the Philippines as follows:

from *D. bernhaueri* (Luzon) by completely different coloration (*D. bernhaueri*: body yellow with dark head), different head shape (*D. bernhaueri*: temples acutely produced), and numerous other characters;

from *D. butuanensis* (Mindanao) by larger size (*D. butuanensis*: 3 mm), completely different coloration (*D. butuanensis*: forebody reddish), much denser punctation of the elytra, and other characters;

from *D. impressicollis* (widespread in the Oriental region) by larger size (*D. impressicollis*: 3 mm), different coloration (*D. impressicollis*: pronotum reddish-brown and elytra yellowish to yellowish-brown), a differently shaped head, the presence of microsculpture on the pronotum and elytra (absent in *D. impressicollis*), and other characters;

from *D. laevicauda* (widespread in the Oriental region) by larger size (*D. laevicauda*: 3 mm), the coloration (*D. laevicauda*: pronotum and elytra brown), coarser and denser punctation of the pronotum and the elytra, matt elytra and pronotum, and other characters:

from *D. luzonica* (Luzon) by larger size (*D. luzonica*: 3.5 mm), the coloration of the legs (*D. luzonica*: legs uniformly yellow), a pronotum without a large impression on either side of the middle, and much denser punctation of the elytra;

from *D. philippina* (Luzon) by larger size (*D. philippina*: 3 mm), the coloration of the elytra and the legs (*D. philippina*: elytra yellowish-brown; protibiae and basal half of mesofemora yellow), and a matt pronotum with dense punctation (*D. philippina*: pronotum glossy with fine and moderately dense punctation);

from *D. plicipennis* (Luzon) by larger size (*D. plicipennis*: 3 mm), completely different coloration (*D. plicipennis*: forebody reddish), much denser punctation of the elytra, the absence of tubercles on tergites IV-VII, and other characters;

from *D. schawalleri* (Leyte) by different coloration (*D. schawalleri*: body reddishbrown), a more slender pronotum (*D. kistneri*: pronotum broader than long), and by the shapes of the aedeagus and the spermatheca (see KISTNER 1994);

from *D. shavrini*, *D. penicillata*, *D. spiniventris*, and *D. breviuter* (all Mindanao) by the punctation pattern, the coloration, and the sexual characters. For illustrations of external and the sexual characters, as well as detailed descriptions of these species see ASSING (2019).

D is tribution: The type locality (Fig. 33) is situated in the very east of Mindanao. The specimens were sifted from wet litter near a river in a secondary forest at an altitude of 900 m.

Pheidologitonetes sp.

M a t e r i a l e x a m i n e d : **PHILIPPINES**: 1♀, Mindanao, Araibo, Pantukan, Compostela Valley, Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, leg. Shavrin (cAss).

C o m m e n t: The above female represents an undescribed species distinguished from other representatives of the genus by much larger eyes alone. The genus was previously unknown from the Philippines.

Zyras (Zyras) sp.

M a t e r i a l e x a m i n e d : **PHILIPPINES**: 1♀, Mindanao, Araibo, Pantukan, Compostela Valley, Candalaga Mts., 7°16′35″N, 126°10′13″E, 900 m, 4.V.2019, leg. Shavrin (cAss).

C o m m e n t: The above female belongs to the Z. hirtus group and most likely represents an undescribed species. A male would be needed for an adequate description.

Zyras (Zyras) rasilis nov.sp. (Figs 10-13, 27-29, 33)

T y p e m a t e r i a 1 : <u>Holotype 3</u>: "PHILIPPINES - Mindanao, Araibo, Pantukan, Compostela V., Candalaga Mts., $7^{\circ}16^{\circ}35^{\circ}$ "N, $126^{\circ}10^{\circ}13^{\circ}$ "E, 900 m, 4.V.2019, Shavrin / Holotypus 3 Zyras rasilis sp. n. det. V. Assing 2019" (cAss).

E t y m o l o g y: The specific epithet (Latin, adjective: smooth) alludes to the nearly impunctate head, pronotum, and abdomen.

Description: Body length 8.4 mm; length of forebody 3.7 mm. Habitus as in Fig. 10. Coloration: head and pronotum dark-reddish; elytra pale-reddish; abdomen dark-reddish with the posterior margins of the segments somewhat paler; legs pale-yellow with the apices of the mesofemora weakly and narrowly and the apical halves of the metafemora more distinctly infuscate; antennae blackish with antennomeres I-II and the base of III dark-reddish and with antennomere XI brown.

Head (Fig. 11) approximately 1.3 times as broad as long; posterior margin concave in the middle; dorsal surface impunctate except for few punctures near dorsal margins of eyes. Eyes large and bulging, longer than postocular portion in dorsal view. Antenna (Fig. 12) 2.4 mm long; antennomeres IV weakly transverse, V-X of gradually increasing width and increasingly transverse, X approximately 1.5 times as broad as long, and XI short, weakly oblong, and of conical shape.

Pronotum (Fig. 11) 1.15 times as broad as long and 1.15 times as broad as head, broadest anteriorly, weakly convex in cross-section; lateral margins sinuate in dorsal view; disc with a cluster of few punctures on either side of midline anteriorly and with a cluster of few punctures on either side of midline posteriorly, otherwise impunctate; microsculpture absent.

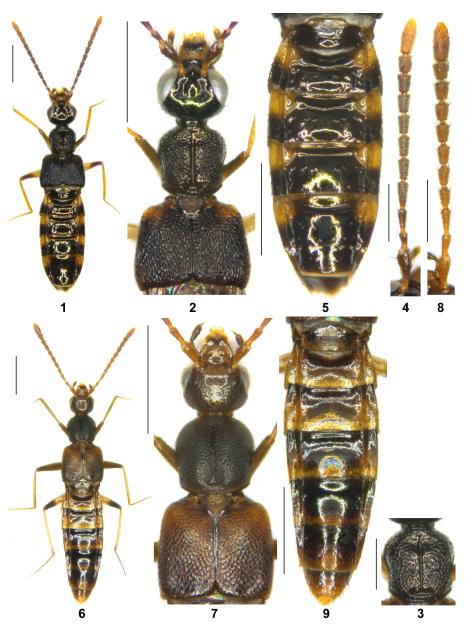
Elytra (Fig. 11) 0.75 times as long as, and much broader than pronotum, strongly widened posteriorly; punctation moderately sparse, relatively fine, and nearly regularly distributed. Hind wings fully developed.

Abdomen (Fig. 13): tergites III-V anteriorly with shallow impression; these impressions with indistinct and fine transverse row of sparse non-setiferous punctation; discs of tergites III-V with a lateral setiferous puncture on either side and with four fine setiferous punctures at posterior margin, otherwise impunctate; tergite VI with a transverse row of few fine non-setiferous punctures at anterior margin, with a lateral setiferous puncture on either side and with four fine setiferous punctures at posterior margin, otherwise impunctate; tergite VII with a narrow band of fine non-setiferous punctures anteriorly, with a lateral setiferous puncture on either side, and with several minute setiferous punctures at posterior margin, posterior margin with palisade fringe; tergite VIII with fine setiferous punctures confined to posterior margin and its vicinity, otherwise impunctate.

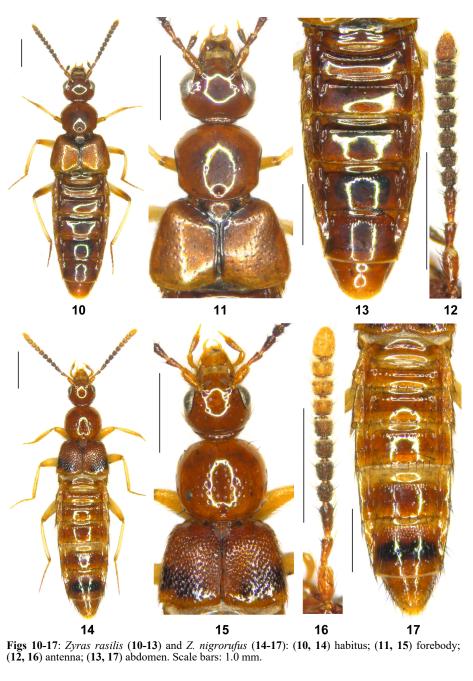
3: posterior margin of tergite VIII concave in the middle; posterior margin of sternite VIII convex; median lobe of aedeagus (Figs 27-28) 0.9 mm long and of robust shape; paramere (Fig. 29) 0.95 mm long, apical lobe of paramere small and flattened.

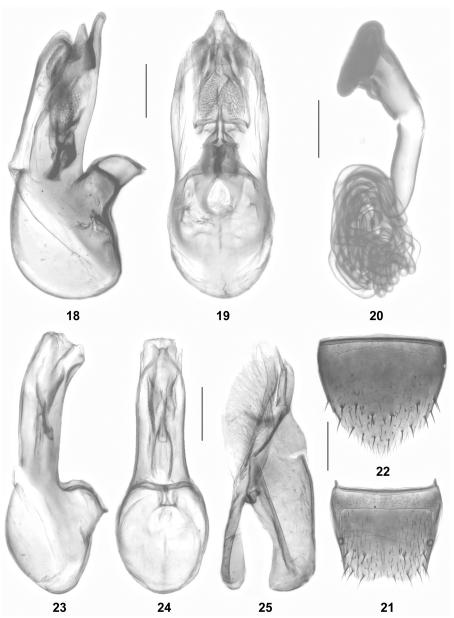
C o m p a r a t i v e n o t e s: Based on the habitus, the short and conical antennomere XI, and the small and flattened apical lobe of the paramere, *Z. rasilis* belongs to the *Z. hirtus* group. It is distinguished from all other known species of this group by conspicuously sparse punctation and short pubescence of the head, pronotum, and abdomen alone.

Distribution: The type locality (Fig. 33) is situated in East Mindanao, Philippines. The holotype was collected from wet leaf litter in a secondary forest near a river at an altitude of 900 m.

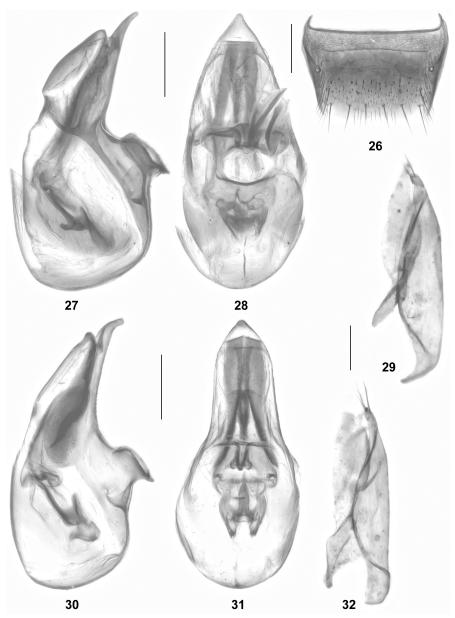


Figs 1-9: *Drusilla bucina* **(1-5)** and *D. holoserica* **(6-9)**: **(1, 6)** habitus; **(2, 7)** male forebody; **(3)** female pronotum; **(4, 8)** antenna; **(5, 9)** abdomen. Scale bars: 1-2, 5-7, 9: 1.0 mm; 3-4, 8: 0.5 mm.





Figs 18-25: Drusilla bucina (18-20) and D. holoserica (21-25): (18-19, 23-24) median lobe of aedeagus in lateral and in ventral view; (20) spermatheca; (21) male tergite VIII; (22) male sternite VIII; (25) paramere. Scale bars: 21-22: 0.2 mm; 18-20, 23-25: 0.1 mm.



Figs 26-32: Drusilla bucina (26), Zyras rasilis (27-29), and Z. nigrorufus (30-32): (26) female tergite VIII; (27-28, 30-31) median lobe of aedeagus in lateral and in ventral view; (29, 32) paramere. Scale bars: 0.2 mm.



Fig. 33: Locality Compostela Valley (photo: A. Shavrin).



Fig. 34: Locality Catigan (photo: A. Shavrin).

Zyras (Zyras) nigrorufus nov.sp. (Figs 14-17, 30-34)

Type material: Holotype 3: "PHILIPPINES - Mindanao, Araibo, Pantukan, Compostela V., Candalaga Mts., 7°16'35"N, 126°10'13"E, 900 m, 4.V.2019, Shavrin / Holotypus 3 Zyras nigrorufus sp. n. det. V. Assing 2019" (cAss). Paratypes: 333: same data as holotype (cAss); 13: "PHILIPPINES - Mindanao, Davao prov., Mt. Talomo, Catigan, 800-1000 m, 7°01'21"N, 125°22'31"E, 30.IV.-1.V.2019, Shavrin" (cAss).

E t y m o l o g y: The specific epithet (Latin, adjective) alludes to the reddish-black coloration of the body.

Description: Body length 6.5-8.5 mm; length of forebody 2.8-3.6 mm. Habitus as in Fig. 14. Coloration: head and pronotum reddish; elytra reddish with a more or less extensive postero-lateral spot not reaching posterior margins and suture; abdomen reddish with a transverse blackish band on tergite VII and sometimes also on tergite VI; legs pale-yellow; antennae reddish to blackish with the apical 3-5 antennomeres yellowish and the basal two antennomeres reddish.

Head (Fig. 15) weakly transverse; dorsal surface with rather sparse and moderately coarse punctures on either side of middle. Eyes large and moderately bulging, longer than postocular portion in dorsal view. Antenna (Fig. 16) 2.1-2.5 mm long; antennomeres IV approximately as long as broad, V as long as broad or weakly transverse, VI-X of gradually increasing width and increasingly transverse, X approximately 1.5 times as broad as long, and XI short, 1.5 times as long as broad, and of conical shape.

Pronotum (Fig. 15) approximately 1.1 times as broad as long and 1.3 times as broad as head, broadest anteriorly; lateral margins not sinuate in dorsal view; disc with moderately sparse and distinct punctation; microsculpture absent.

Elytra (Fig. 15) 0.75-0.80 times as long as pronotum; punctation very dense and rather coarse. Hind wings fully developed.

Abdomen (Fig. 17): tergites III-V anteriorly with shallow impression; these impressions with a transverse row of more or less distinct and more or less dense non-setiferous punctation; discs of tergites III-V with a lateral setiferous puncture on either side, with a median pair of setiferous punctures and with eight (tergites III-IV) or ten (tergite V) setiferous punctures bearing long black setae at posterior margins; tergite VI with a narrow transverse band of fine non-setiferous punctures at anterior margin, with a transverse row of 6-8 setiferous punctures, and with eight setiferous punctures bearing long black setae at posterior margin; tergite VII with a transverse band of numerous non-setiferous punctures anteriorly, with a transverse series of setiferous punctures across middle, and a transverse series of setiferous punctures near posterior margin, setiferous punctures bearing long and thin yellowish setae, posterior margin with palisade fringe; tergite VIII with long black setae across posterior fourth.

3: posterior margin of tergite VIII truncate or convex in the middle; posterior margin of sternite VIII convex; median lobe of aedeagus (Figs 30-31) approximately 0.9 mm long; ventral process apically abruptly bent ventrad in lateral view; paramere (Fig. 32) 0.9-1.0 mm long, apical lobe of paramere small and flattened.

C o m p a r a t i v e n o t e s: Based on the habitus, the short and conical antennomere XI, and the small and flattened apical lobe of the paramere, *Z. nigrorufus* belongs to the *Z. hirtus* group. It is distinguished from other species of this group by the coloration, by densely punctate elytra contrasting with a sparsely punctate head and pronotum, by the chaetotaxy of the abdomen, and by the shape of the aedeagus.

D i s t r i b u t i o n : The type specimens were collected in two localities (Figs 33-34) in East Mindanao by sifting wet litter near running water in a secondary forest and in a stream valley at altitudes between 800 and 1000 m.

Acknowledgements

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Zusammenfassung

Drusilla bucina nov.sp., D. holoserica nov.sp., Zyras (Zyras) rasilis nov.sp., and Z. (Z.) nigrorufus nov.sp. (alle von Mindanao, Philippinen) werden beschrieben und abgebildet. Nachweise von sechs weiteren Arten, vier davon unbenannt, werden von Mindanao gemeldet. Einschließlich der neuen Arten sind derzeit 46 beschriebene Arten der Tribus Lomechusini von den Philippinen bekannt.

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