

A revision of the genus *Phytorus* Jacoby, 1884 (Chrysomelidae: Eumolpinae)

Ревизия рода *Phytorus* Jacoby, 1884 (Chrysomelidae: Eumolpinae)

L. N. Medvedev*, A. G. Moseyko**
Л. Н. Медведев*, А. Г. Мосейко**

*Institute for Problems of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospekt 33, Moscow 119071 Russia.

*Институт проблем экологии и эволюции РАН, Ленинский пр-т 33, Москва 119071 Россия.

**Department of Entomology, Faculty of Biology, M. V. Lomonosov Moscow State University, Vorobyovy Gory, Moscow 119899 Russia.

**Кафедра энтомологии Биологического факультета Московского государственного университета им. М. В. Ломоносова, Воробьевы горы, Москва 119899 Россия.

KEY WORDS: Chrysomelidae, Eumolpinae, *Phytorus*, *Phytorellus*, revision, new genus, new species.

КЛЮЧЕВЫЕ СЛОВА: Chrysomelidae, Eumolpinae, *Phytorus*, *Phytorellus*, ревизия, новый род, новые виды.

ABSTRACT. A revision of the genus *Phytorus* is proposed. Genus *Phytorus* is removed from tribe *Typophorini* to tribe *Metachromini*. 2 new species are described: *Ph. antennalis* (Palawan), *Ph. laysi* (Mindanao); *Ph. puncticollis* Lefevre 1885 is a new synonym of *Ph. dilatatus* Jacoby 1884. 8 species are transferred from genus *Phytorus* to genus *Rhyparida*: *Rh. simplex*, *Rh. fervidus*, *Rh. plebejus*, *Rh. leyteana*, *Rh. nigripes*, *Rh. tibiellus*, *Rh. pallidus*, *Rh. assimilis*. *Phytorus lineolatus* Weise 1913 is a new synonym of *Rhyparida simplex* (Lefevre 1885). A new genus *Phytorellus* (*Typophorini*) is proposed for *Phytorus latus* and *Ph. gibbosus*, a new subspecies of *Phytorellus latus* is described.

РЕЗЮМЕ. Предлагается ревизия рода *Phytorus*. Род *Phytorus* переносится из трибы *Typophorini* в трибу *Metachromini*. Описываются 2 новых вида: *Ph. antennalis* (Палаван), *Ph. laysi* (Минданао); *Ph. puncticollis* Lefevre, 1885 сведен в синонимы к *Ph. dilatatus* Jacoby, 1884. 8 видов переносятся из рода *Phytorus* в род *Rhyparida*: *Rh. simplex*, *Rh. fervidus*, *Rh. plebejus*, *Rh. leyteana*, *Rh. nigripes*, *Rh. tibiellus*, *Rh. pallidus*, *Rh. assimilis*. *Phytorus lineolatus* Weise 1913 сводится в синонимы к *Rhyparida simplex* (Lefevre, 1885). Описывается новый род *Phytorellus* (*Typophorini*) для *Phytorus latus* и *Ph. gibbosus*, а также новый подвид *Phytorellus latus*.

Introduction

A genus *Phytorus* was proposed by M. Jacoby [1884] for *Phytorus dilatatus* Jacoby from Singapore. Now this genus included 18 species distributed from Vietnam and Malacca to Malay Archipelago and the Philippines.

We had an opportunity to study large material from Naturhistorisches Museum in Basel, Museum für Naturkunde in Stuttgart, Institute Royal des Sciences

Naturelles de Belgique in Brussels and senior author's collections. A few types of Jacoby, Lefevre and Weise were studied.

The following abbreviations were used for depositary places: IRSNB — Institute Royal des Sciences Naturelles de Belgique, NHMB — Naturhistorisches Museum (Basel), SMNS — Museum für Naturkunde (Stuttgart), LM — L. Medvedev's collection, Moscow.

Main characters of genus are: convex anterior margin of proepisterna, bifid claws and widened elytra with more or less explanate lateral margins, especially in males. Because of these characters the genus was included in tribe *Typophorini*. J. Weise [1922] had published a key for the Philippine's fauna and indicate that structure of proepisterna allows to divide this genus in 3 quite different groups. They are:

Group 1. Anterior margin of proepisterna convex. Anterior margin of prosternum feebly produced anteriorly. Here belongs *Ph. dilatatus* Jac., *Ph. cyclopterus* Lef., *Ph. latus* Wse.

Group 2. Anterior margin of proepisterna straight. Anterior margin of prosternum not produced anteriorly. This group includes *Ph. pallidus* Lef., *Ph. fervidus* Lef., *Ph. assimilis* Lef. and also *Rhyparida costata* Jac.

Group 3. Anterior margin of proepisterna straight. Anterior margin of prosternum produced anteriorly. Here are *Ph. nigripes* Lef., *Ph. tibiellus* Wse. and *Ph. lineolatus* Wse.

J. Weise indicates also quite correctly that elytral rows 10 and 11 in group 1 differs distinctly from same in groups 2 and 3.

Our investigation of large material showed that all species of the genus from groups 2 and 3 can not be separated from the genus *Rhyparida* Baly 1861 (tribe *Metachromini*) and have to be united with it. Species of group 1 belong to 2 tribes: *Metachromini* (females with-

out spermatheca) represented with typical *Phytorus* and *Typophorini* (females with spermatheca) represented with a new genus *Phytorellus*. Genus *Phytorus*, which was earlier in tribe Typophorinae is therefore removed in Metachromini, it is very near to *Rhyparida*, but differs well in structure of proepisterna and elytra. Now it is quite clear that form of proepipleura is rather variable in a few genera and not the best character for tribe level. Same situation is known also for *Colaspoides* Laporte, 1883 and *Chrysolampra* Baly, 1859, which also were placed in different tribes, but in reality are very near to each other [L. Medvedev, in print]. A presence or absence of spermatheca is firstly used in the taxonomy of Eumolpinae.

Taxonomy

A KEY TO SPECIES OF *PHYTORUS*

- 1(4) Antennae black with fulvous basal segments. Elytra evenly convex above in lateral view.
- 2(3) Upperside reddish brown with posterior part of elytra much paler. Elytra not strongly widened laterally. All femora with strong tooth *Ph. tonkinensis* Lef.
- 3(2) Upperside pale flavous to dark reddish brown with broad black stripe on elytra between 4th and 11th rows. Elytra strongly widened on sides, especially in male (Fig. 3). Hind femora with very small tooth. Aedeagus — Fig. 6 *Ph. antennalis* sp.n.
- 4(1) Antennae entirely fulvous or slightly darkened apical segments.
- 5(10) Scutellum truncate on apex (Fig. 2). Ocular furrows broadly interrupted in middle. Elytra evenly convex.
- 6(9) Upperside fulvous to dark brown.
- 7(8) Elytra entirely fulvous. Elytral row 13 represented in male with a few punctures near humerus (Fig. 4). Protho-

rax less transverse, 1.6–1.9 times as wide as long, broadest in basal third. Aedeagus more elongate (Fig. 7)

- *Ph. dilatatus* Jac.
- 8(7) Elytral suture (except basal quarter) black. Elytral row 13 absent in male (Fig. 5). Prothorax more transverse, 1.9–2 times as wide as long, broadest in base. Aedeagus (Fig. 8) more short *Ph. cyclopterus* Lef.
- 9(6) Upperside black (sides of elytra more or less fulvous in males). Antennal segment 5 thin, 2.6 times as long as wide. Prothorax 2.1 times as wide as long, broadest in base, with surface shining. Elytral row 13 absent in male. Aedeagus — Fig. 9 *Ph. laysi* sp.n.
- 10(5) Scutellum with acute apex. Ocular furrows connected or almost connected in middle. Elytra microsculptured. Prothorax with strong metallic green sheen. Ocular furrows connected in middle. Male unknown *Ph. sp. A*

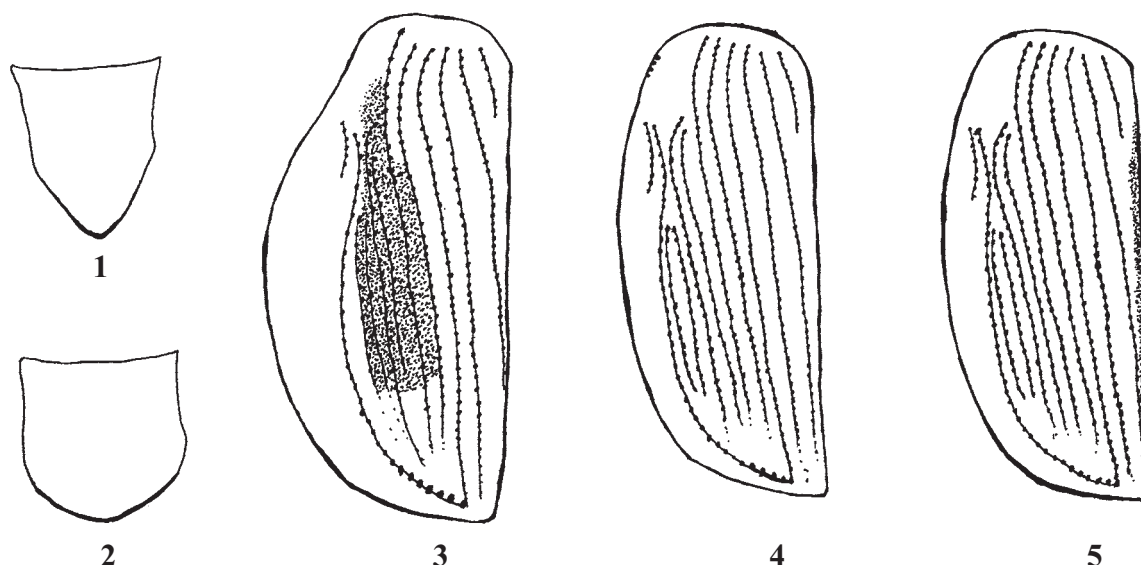
Phytorus tonkinensis Lefevre, 1893

DESCRIPTION. Reddish brown, posterior half of elytra much paler, antennae black with 3 basal segments fulvous.

Body oblong ovate. Head and prothorax smooth, impunctate. Scutellum with acute apex. Elytra almost parallelsided, not distinctly widened on sides, with feeble transverse postbasal impression, interspaces of rows smooth and convex. All femora with strong acute tooth. Length 6–6.5 mm, width 2.7–3 mm.

DISTRIBUTION. Vietnam.

REMARK. A generic position of this species is not clear. Only type series is known. We had not opportunity to study type, which is in Paris museum, but it was studied and illustrated by Kimoto and Gressitt [1982]. These authors placed it in *Phytorus* and indicated that anterior margin of proepisterna is convex. However a few its characters (strong tooth on all femora, almost parallel-sided elytra with postbasal depression) are non typical for *Phytorus*, but corresponds well to genus *Tricliona* Lefevre, 1885.



Figs 1–5. Scutellum and elytra of *Phytorus* spp. and *Phytorellus* spp.: 1, 2 — scutellum, *Phytorellus latus* (1), *Phytorus dilatatus* (2); 3–5 — left elytron of male, *Ph. antennalis* (3), *Ph. dilatatus* (4), *Ph. cyclopterus* (5).

Рис. 1–5. Щиток и надкрылья *Phytorus* и *Phytorellus*: 1, 2 — щиток, *Phytorellus latus* (1), *Phytorus dilatatus* (2); 3–5 — правое надкрылье самца, *Ph. antennalis* (3), *Ph. dilatatus* (4), *Ph. cyclopterus* (5).

Phytorus antennalis L. Medvedev & Moseyko, **sp.n.**
Figs 3, 6.

MATERIAL. **Holotype** (♂): PHILIPPINES, N Palawan, Bahile, 50m, 22. XII. 1992, leg Bolm. (NHMB). **Paratypes:** PALAWAN I. 300 m. CLEOPATRA Needle N. P. TANABANK Riv. Val. 20–22. 12. 1990, leg. Bolm, 35 ♀, 31 ? (NHMB, 6 ex — LM).

DESCRIPTION. Pale flavous to dark brown, without metallic reflection; antennal segments 5–11 and broad stripe on elytra between 4th and 11th rows black.

Male. Body broadly ovate, evenly convex above, broadest in middle of elytra.

Head microsculptured, with rather small and sparse punctures. Ocular grooves not connected with each other.

Proportion of antennal segments 2–5 are as 1.5–2.4–2.2–2.4. Second segment 1.9 times, fifth segment 2.4 times as long as wide.

Prothorax not broad, 1.9–2 times as wide as long, broadest in basal third. Surface more or less microsculptured, with large punctures, more sparse on sides. Interspaces much larger than punctures.

Scutellum obtuse on apex, microsculptured, with a few punctures.

Elytra flattened and strongly widened on sides (Fig. 3), as long as wide, with 11 entire rows of punctures. Row 12 broadly interrupted in middle, on apex represented only with a few punctures, row 13 absent. Outermost interspace about 5–6 times as wide as preceding one. Epipleurae very broad, longitudinally concave, reach apex of elytra. Femora widened, hind ones with small tooth. Antennal grooves on prosternum wide and deep. Aedeagus — Fig. 6. Length 4–6 mm, width 3–4.8 mm.

Female. Body more narrow, elytra not widened on sides. Rows 12 and 13 developed, the latter became weak posteriorly. Interspaces between 11th row and side of elytra 1, 25 times as wide as preceding interspace. Interspace between front parts of rows 11 and 12 strongly convex. Epipleurae more narrow, disappear in apical third. Length 4–6 mm, width 2.5–3.5 mm.

Variability. Black elytral stripe absent or feebly developed in not fully matured specimens.

DISTRIBUTION. Philippines (Palawan).

Phytorus dilatatus Jacoby, 1884
Figs 2, 7.

= *Ph. puncticollis* Lefevre, 1885, **syn.n.**

DESCRIPTION. Pale flavous to dark brown, without metallic reflection.

Male. Body ovate, evenly convex above, broadest in middle of elytra.

Clypeus and frons microsculptured, with moderately dense small punctures. Ocular grooves not connected with each other.

Proportions of antennal segments 2–5 are as 1.2–2.2–2.2–2.2. Second segment 1.7 times, fifth segment twice as long as wide.

Prothorax 1.6–1.9 times as wide as long, broadest in basal third. Surface more or less microsculptured, with rather large punctures, more sparse on sides, interspaces much larger than punctures.

Scutellum obtuse on apex (Fig. 2), microsculptured, impunctate or with a few punctures.

Elytra 1.1–1.25 times as long as wide, flattened and widened on sides (Fig. 4), with 11 entire rows of punctures; row 12 broadly interrupted in middle, row 13 represented only with a few punctures near humerus. Outermost interspace about 3 times as wide as preceding one. Epipleurae broad, longitudinally concave, reach to apex of elytra. Femora wid-

ened, hind ones with small tooth. Antennal grooves on prosternum wide and deep. Aedeagus — Fig. 7. Length 4.5–5.4 mm, width 3.1–3.6 mm.

Female. Body more narrow, elytra not widened on sides. Rows 12 and 13 developed, the latter became weak posteriorly. Interspace between 11 row and edge of elytra 1, 7 times as wide as preceding interspace. Interspace between front parts of rows 11 and 12 moderately or strongly convex. Epipleurae more narrow, disappear in apical third. Length 4, 6–5, 1 mm, width 2.9–3.3 mm.

DISTRIBUTION. Malacca, Java, Sumatra, Kalimantan, Philippines (Palawan, Luzon, Mindanao, Leyte)

REMARK. type specimen of *Ph. puncticollis* Lef. (female) from coll. Chapius (IRSNB) was studied.

Phytorus cyclopterus Lefevre, 1885
Figs 5, 8.

DESCRIPTION. Pale flavous to dark brown, without metallic reflection, elytral suture black except basal third.

Male. Body ovate, evenly convex above, broadest in middle of elytra.

Head microsculptured, with rather small and sparse punctures. Ocular grooves not connected with each other.

Proportion of antennal segments 2–5 are as 1.2–1.8–2–2.2. Second segment twice, fifth segment 2.2 times as long as wide.

Prothorax 1.9–2 times as wide as long, broadest at base. Surface mostly shining, sometimes with feeble microsculpture, rather strongly punctate, especially anteriorly; interspaces much larger than punctures.

Scutellum obtuse on apex, microsculptured, impunctate or with a few punctures.

Elytra 1, 1 times as long as wide, flattened and widened on sides (Fig. 5), with 11 entire rows of punctures. Row 12 broadly interrupted in middle, row 13 absent. Outermost interspace about 3 times as wide as preceding one. Epipleurae broad, longitudinally concave, reach to apex of elytra. Hind femora with small tooth. Antennal grooves on prosternum wide and deep. Aedeagus — Fig. 8. Length 4.3–4.4 mm, width 3.1 mm.

Female. Body more narrow, elytra not widened on sides. Rows 12 and 13 developed, the latter became weak posteriorly. Interspace between 11 row and edge of elytra 1.7 times as wide as preceding interspace. Interspace between front parts of rows 11 and 12 strongly convex. Epipleurae more narrow, disappear in apical third. Length 4.4–4.8 mm, width 2.8–3.2 mm.

DISTRIBUTION. Philippines (Mindanao, Basilian).

Phytorus laysi L. Medvedev & Moseyko, **sp.n.**
Fig. 9.

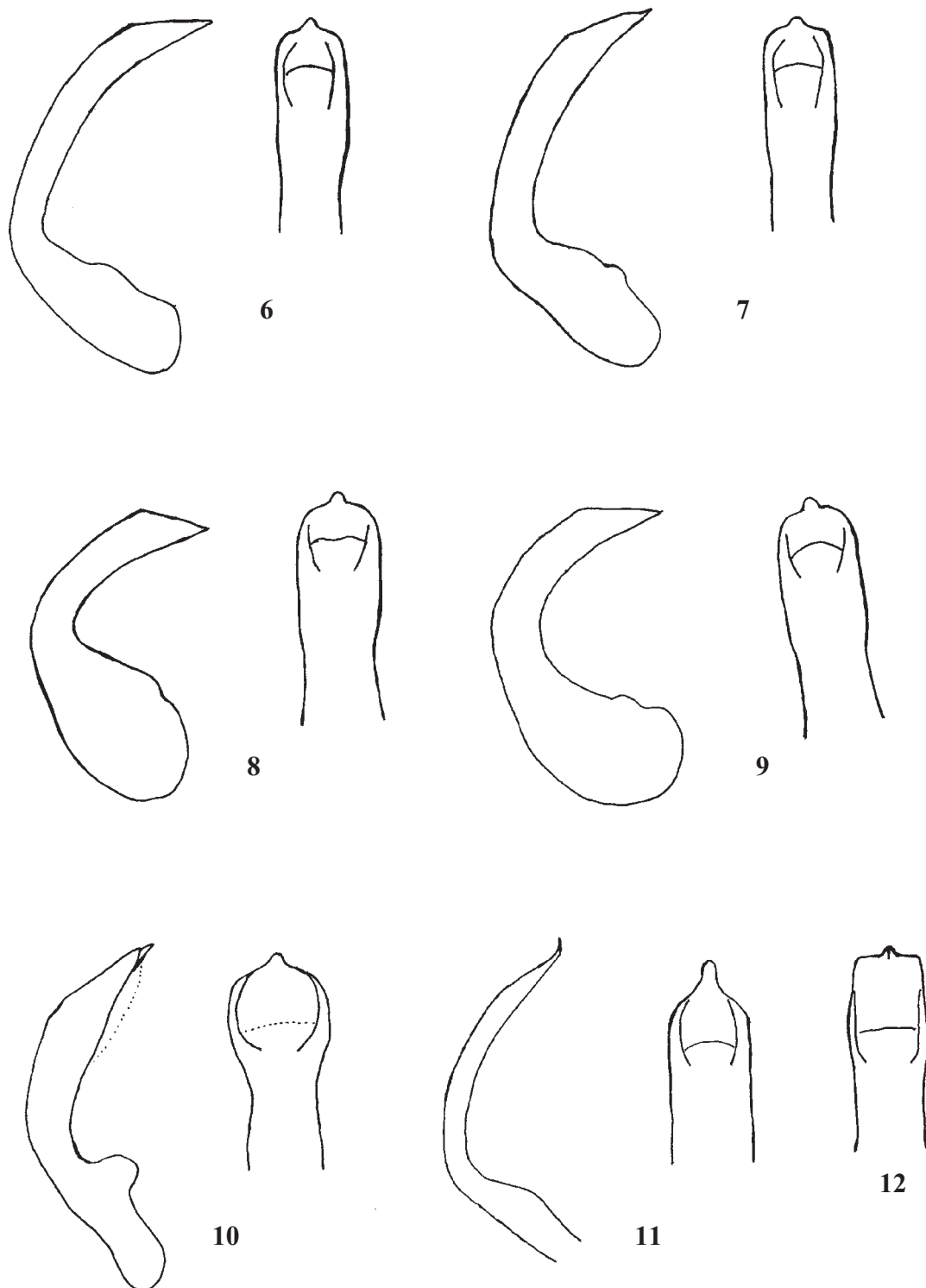
MATERIAL. **Holotype:** ♂; Mindanao, S. Cotabato Prov., Manobo Tasaday Forest Reserve. Mt. Tasaday (124°32' E. — 6°18' N), 3. II–10. III. 1991, Pascal Lays leg. (coll L. N. Medvedev). **Paratypes:** same locality; 24. IX. 1993 secondary vegetation, on flowers of *Psidium* sp., 1000–1100 m., leg P. Lays, 2 ? (LM).

DESCRIPTION. **Male.** Head and prothorax flavous to dark brown. Elytrae black except flavous outermost interspace and epipleurae. Underside black except flavous propleurae and lateral parts of abdominal sternites. Antennae and legs flavous.

Body ovate, evenly convex above, broadest in middle of elytra.

Head microsculptured, frons with obliterated, clypeus with small and sparse punctures. Ocular grooves not connected with each other.

Proportion of antennal segments 2–5 are as 1.2–1.9–1.7–2.1. Second segment twice, fifth segment 2.6 times as long as wide.



Figs 6-12. Aedeagus of *Phytorus* and *Rhyparida*: 6-9 — aedeagus, dorsal and lateral, *Ph. antennalis* (6), *Ph. dilatatus* (7), *Ph. cyclopterus* (8), *Ph. laysi* (9); 10-12 — aedeagus of the species transferred to *Rhyparida*, *Rh. fervidus*, dorsal and lateral (10), *Rh. simplex*, the same (11), *Rh. plebejus*, dorsal (12).

Рис. 6-12. Эдеагусы *Phytorus* и *Rhyparida*: 6-9 — эдеагус, сверху и сбоку, *Ph. antennalis* (6), *Ph. dilatatus* (7), *Ph. cyclopterus* (8), *Ph. laysi* (9); 10-12 — эдеагусы видов, перенесенных в *Rhyparida*, *Rh. fervidus*, сверху и сбоку (10), *Rh. simplex*, то же (11), *Rh. plebejus*, сверху (12).

Prothorax 2.1 times as wide as long, broadest at base. Surface shining, rather strongly punctate, especially anteriorly. Interspaces much larger than punctures.

Scutellum obtuse on apex, microsculptured, impunctate.

Elytra 1, 1 times as long as wide, flattened and widened on sides, with 11 entire rows of punctures. Row 12 broadly interrupted in middle, row 13 absent. Outermost interspace 3.7 times as wide as preceding one. Epipleurae broad, longitudinally concave, reach to apex of elytra. Hind femora with small tooth. Antennal grooves on prosternum wide and deep. Aedeagus — Fig. 9. Length 4.4 mm, width 3.3 mm.

Female. Body black, frons, clypeus, labrum, antennae, front part of prothorax, propleurae, epipleurae, tarsus, and lateral parts of abdominal sternites flavous.

Elytra not widened on sides. Rows 12 and 13 developed, the latter became weak to behind. Interspaces between 11 row and edge of elytra 1.5 times as wide as preceding interspace. Interspace between front parts of rows 11 and 12 strongly convex. Epipleurae more narrow, disappear in apical third. Length 4.6–4.8 mm, width 3.2 mm.

DISTRIBUTION. Philippines (Mindanao).

Phytorus sp. A.

MATERIAL. 2 ex (IRSNB): 1 ♀ with label: Philippines, coll Chapuis, 1 ♀ with label: Philippines, coll Duviver. These specimens were erroneously included in type series of *Ph.* (now *Rhyparida*) *fervidus* Lefevre.

DESCRIPTION. Female. Pale flavous to dark brown with distinct metallic glance, especially on prothorax.

Body ovate, about 1.5 times as long as wide.

Head microsculptured, clypeus finely punctate. Ocular grooves connected in middle.

Proportion of antennal segments 2–5 are as 1.5–3.5–3.5–3.7. Second segment 2.1 times, fifth segment 3.4 times as long as wide.

Prothorax 1.9 times as wide as long, microsculptured, feebly punctate, punctures sparse on sides.

Scutellum pointed on apex, feebly microsculptured, without punctures. Elytra not widened, 1.2 times as long as wide. All rows developed, interspaces feebly prominent.

Femora widened, hind ones with small tooth. Antennal grooves on prosternum very narrow. Length 6.1–6.4 mm, width 4.4 mm.

DISTRIBUTION. Philippines.

Phytorellus L. Medvedev & Moseyko, **gen.n.**

Figs 13, 14, 17.

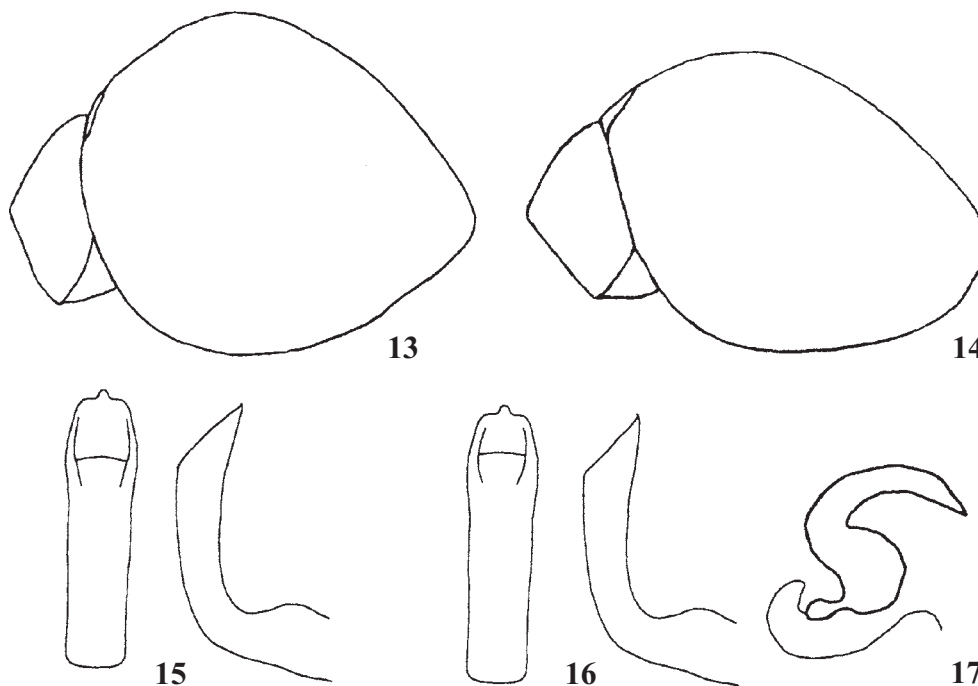
Type of genus — *Phytorus latus* Ws.

DESCRIPTION. Body broadly rounded. Clypeus sharply divided from frons. Antennae nitidiform, with all segments elongate. Sides of prothorax margined. Elytra with regular rows of punctures, including short scutellar row. Anterior margin of prosternum feebly convex. Proepisterna divided from sternum with sharp suture. Mid and hind tibia deeply emarginated before apex on outside. Claws split.

Male. Elytra gibbose (Figs 13, 14), side margin of elytra moderately or widely explanate. epipleurae distinctly concave.

Femal. Elytra not gibbose, side margin explanate, but not so broad as in male. Spermatheca presents (Fig. 17).

Very alike at *Phytorus*, but differs in having very distinct pleurosternal suture, gibbose elytra of male and presence of spermatheca in female. All these characters, especially presence of spermatheca, are typical for *Typophorini*. In *Metachromini* spermatheca absent.



Figs 13–17. *Phytorus* spp.: 13–14 — lateral view of body, *Ph. latus* (13), *Ph. latus mindorensis* (14); 15–16 — aedeagus dorsal and lateral, *Ph. latus* (15), *Ph. latus mindorensis* (16); 17 — spermatheca of *Ph. latus mindorensis*.

Figs 13–17. *Phytorus* spp.: 13–14 — общий вид тела сбоку, *Ph. latus* (13), *Ph. latus mindorensis* (14); 15–16 — эдеагус сверху и сбоку, *Ph. latus* (15), *Ph. latus mindorensis* (16); 17 — сперматека *Ph. latus mindorensis*.

From other genera of *Typhorini* it differs as follows:

A KEY TO SPECIES AND SUBSPECIES OF *PHYTORELLUS*

- 1(4) Elytra of male very broadly explanate. Head finely punctate. Hind femora with small tooth.
- 2(3) Upperside strongly convex (Fig. 13) Aedeagus with orifice more long (Fig. 15) *Ph. latus latus* Ws.
- 3(2) Upperside moderately convex (Fig. 14) Aedeagus with orifice more short, not longer than wide (Fig. 16)
..... *Ph. latus mindorensis* ssp.n.
- 4(1) Elytra of male very feebly explanate. Head very densely and roughly punctate. Hind femora without tooth.....
..... *Ph. gibbosus* Lef.

Phytorellus latus Weise, 1923

DESCRIPTION. Male. Pale flavous to dark brown, without metallic reflection.

Body broadly ovate, in width more than in length, with hump in middle of elytra, broadest in middle of elytra.

Clypeus and frons microsculptured, with moderately dense small punctures. Ocular grooves nearly connected with each other.

Proportion of antennal segments 2–5 are as 1.6–3.6–3.7–3.9. Second segment 1.6 times, fifth segment 3.25 times as long as wide.

Prothorax 2.15 times as wide as long, broadest in basal third. Surface shining, feebly microsculptured, with dense punctures, except front edge.

Scutellum pointed on apex, microsculptured, with a small punctures.

Elytra strongly widened on sides, with hump in middle and straight slopes, 1.56 times as wide as long. Outermost interspace with large, dense and confused punctures, forming in front and behind row 13; row 12 developed. Interspaces between 11 row and edge of elytra 10.75 times as wide as preceding interspace.

Femora widened, hind ones with very small tooth. Antennal grooves on prosternum wide and deep. Length 6.3 mm, width 7.1 mm.

DISTRIBUTION. Philippines (Romblon, Luzon).

Phytorellus latus mindorensis L. Medvedev & Moseyko ssp.n.

Figs 16, 17.

MATERIAL. **Holotype**: ♂. Philippines; W. Mindoro. Amnay river valley, 25 km SE Santa Cruz (120°56' E. — 12°57' N), 17. IV. 2000; L. Dembicky leg. (NHMB). **Paratypes**. Same locality, 3 ? and 2 ? (NHMB, 2 ex. — LM).

DESCRIPTION. Pale flavous to dark brown, without metallic reflection.

Male. Body broadly ovate, in width more than in length, with hump in middle of elytra, less convex than at *Ph. latus* (Fig. 14), broadest in middle of elytra.

Clypeus and frons microsculptured, with moderately dense small punctures. Ocular grooves nearly connected with each other.

Proportion of antennal segments 2–5 are as 1.6–3.6–3.7–3.9. Second segment 1.6 times, fifth segment 3.25 times as long as wide.

Prothorax 2.0 times as wide as long, broadest in basal third. Surface shining, feebly microsculptured, with dense punctures, except front edge. Scutellum pointed on apex, microsculptured, with a small punctures.

Elytra strongly widened on sides, with hump in middle and straight slopes, 1.5 times as wide as long. Outermost interspace with large, dense and confused punctures, forming in front and behind row 13; row 12 developed. Interspaces between 11 row and edge of elytra 10.75 times as wide as preceding interspace.

Femora widened, hind ones with very small tooth. Antennal grooves on prosternum wide and deep. Aedeagus — Fig. 16. Length 5.3–6.3 mm, width 5.6–7.1 mm.

Female. Body round, without hump in middle of elytra. Prothorax 2.0 times as wide as long, broadest in basal third. Surface shining, feebly microsculptured, with dense punctures, except front edge.

Scutellum pointed on apex, microsculptured, with a small punctures.

Elytra strongly widened on sides, without hump, 1.1 times as wide as long. Outermost interspace with large, dense and confused punctures, forming in front and behind row 13; row 12 developed. Interspaces between 11th row and edge of elytra 6.5 times as wide as preceding interspace. Femora widened, tooth on high ones almost imperceptible. Antennal grooves on prosternum wide and deep. Spermatheca — Fig. 17. Length 5.0–5.4 mm, width 4.1–4.5 mm.

DISTRIBUTION. Philippines (Mindoro).

Phytorellus gibbosus Lefevre, 1885

MATERIAL. type specimen: 1 ex. with label: Philippines from coll. Chapuis (IRSNB) was studied. This exemplar is designated out than lectotype.

DESCRIPTION. Male. Pale flavous to dark brown, sometimes with green — metallic reflection (Weise, 1922), except black stains on lateral parts of abdominal sternites.

Body rectangular — ovate, with hump in middle of elytra. Broadest behind humerus.

Head large, frons and clypeus with dense large punctures. Ocular grooves nearly connected with each other.

Proportion of antennal segments 2–5 are as 1.8–4.2–4–4.3. Second segment 1.8 times, fifth segment 3.6 times as long as wide.

Prothorax twice as wide as long, broadest in basal third. Surface with large dense punctures, interspaces nearly equal with punctures.

Scutellum pointed on apex, shining, with feeble microsculpture and small punctures.

Elytra with hump in middle and straight slopes, 1.1 times as long as wide. 12th and 13th rows developed, the latter grow weak to back. 7th and 8th rows reach to base of elytra. Interspaces between 11 row and edge of elytra 1.6 times as wide as preceding interspace. Epipleurae broad.

Femora widened, without tooth. Antennal grooves on prosternum narrow. Aedeagus in this not matured specimen is very soft and not good for figuring. Length 8 mm, width 5.7 mm.

Distribution. Philippines (? Luzon).

Species insertae sedis

Rhyparida simplex (Lefevre, 1885), **comb.n.**

Fig. 11.

Phytorus lineolatus Weise 1913 is a new synonym of this species.

Type series from coll. Chapuis (IRSNB) was studied and species is transferred to genus *Rhyparida*, lectotype (male) is designated. Aedeagus — Fig. 11.

Rhyparida fervidus (Lefevre, 1885), **comb.n.**

Fig. 10.

Type series from coll. Chapuis (IRSNB) included 1 male with label "type" and two females. We designate a male as a lectotype of this species and transfer it to genus *Rhyparida*. Aedeagus — Fig. 10. Females belong to typical *Phytorus*, but so far as we have no male of this species, we mean it as *Phytorus* sp. A (see above).

Rhyparida plebejus (Lefevre, 1885), **comb.n.**

Fig. 12.

Type series from coll. Chapuis and Duviver (IRSNB) was studied and species is transferred to genus *Rhyparida*, lectotype (male) is designated. Aedeagus — Fig. 12.

Rhyparida leyteana (L. Medvedev, 1995), **comb.n.**

Holotype of this species was studied and species is transferred to genus *Rhyparida*.

Rhyparida nigripes (Lefevre, 1885), **comb.n.**

Type specimen from coll. Chapuis (IRSNB) was studied and species is transferred to genus *Rhyparida*, lectotype (female) is designated.

Besides, we transfer to the genus *Rhyparida* Baly, 1861 all other species with straight anterior margin of proepisterna. They are *Phytorus pallidus* Lefevre, 1890, *Ph. assimilis* Lefevre, 1890, and *Ph. tibiellus* Weise, 1922.

ACKNOWLEDGEMENTS. We are grateful to Dr. M. Brancucci (NHMB), Dr. D. Drugmand (IRSNB) and Dr. W. Schawaller (SMNS) for possibility to study material under their care.

References

- Jacoby M. 1884. Descriptions of new Genera and Species of Phytophagous Coleoptera from the Indo-Malayan and Austro-Malayan subregions, contained in the Genoa Civic Museum // Ann. Mus. Civ. Genova. Vol.20. P.188–233.
- Kimoto S., Gressitt J.L. 1982. Chrysomelidae of Thailand, Cambodia, Laos and Vietnam. III. Eumolpinae // Esakia. Vol.18. P.1–141.
- Medvedev L. N. Revision of the genus *Colaspoides* Laporte 1833 (Chrysomelidae, Eumolpinae) from the continental Asia // Stuttgarter Beitrage zur Naturkunde [in print].
- Weise J. 1922. Chrysomeliden der Philippinen. III // Philippine J. Sci. Vol.21. No.5. P.423–490.