

To the knowledge of the leaf-beetle genera *Rhyparida* and *Tricliona* (Coleoptera: Chrysomelidae: Eumolpinae) from Indochina and Malay Peninsula

К познанию жуков-листоедов родов *Rhyparida* и *Tricliona* (Coleoptera: Chrysomelidae: Eumolpinae) Индокитая и Малайского полуострова

P.V. ROMANTSOV & A.G. MOSEYKO*

П.В. РОМАНЦОВ, А.Г. МОСЕЙКО

P.V. Romantsov, 105-9 Krasnopolitovskaya Str, St Petersburg 196240, Russia. E-mail: pawelr@mail.ru

A.G. Moseyko, Zoological Institute, Russian Academy of Sciences, 1 Universitetskaya Emb., St Petersburg 199034, Russia; All-Russian Institute of Plant Protection, 3 Podbelskogo St, St Petersburg – Pushkin 196608, Russia. E-mail: chrysolesha@mail.ru

Four species (*Rhyparida spiridonovi* sp. nov. from Penang Island and Singapore, *Tricliona trimaculata* sp. nov. from Penang Island and Malay Peninsula, *T. suratthanica* sp. nov. and *T. trangica* sp. nov. from Thailand) are described. A key to the species of the genus *Tricliona* from Indochina and Malay Peninsula is given. *Rhyparida faitsilongi* nom. nov. is the new replacement name for *Rhyparida megalops* (Chen, 1935), comb. n., transferred from the genus *Tricliona*; *Tricliona tonkinensis* (Lefèvre, 1893), comb. nov. and *Tricliona episternalis* (Weise, 1922), comb. nov. transferred from the genera *Phytorus* and *Rhyparida*, accordingly. Lectotypes of *Rhyparida episternalis* Weise, 1922 and *Phytorus tonkinensis* Lefèvre, 1893 are designated.

Описаны четыре новых для науки вида (*Rhyparida spiridonovi* sp. nov. с о. Пенанг и Сингапура, *Tricliona trimaculata* sp. nov. с о. Пенанг и Малайского полуострова, *T. suratthanica* sp. nov. и *T. trangica* sp. nov. из Таиланда). Составлена определительная таблица для рода *Tricliona* Индокитая и Малайского полуострова. *Rhyparida faitsilongi* nom. nov. – новое название для *Rhyparida megalops* (Chen, 1935), comb. nov., который перенесен из рода *Tricliona*; *Tricliona tonkinensis* (Lefèvre, 1893), comb. n. и *Tricliona episternalis* (Weise, 1922), comb. nov. перенесены соответственно из родов *Phytorus* и *Rhyparida*. Выделены лекто-типы *Rhyparida episternalis* Weise, 1922 и *Phytorus tonkinensis* Lefèvre, 1893.

Key words: leaf beetles, Indochina, Malay Peninsula, Malaysia, Thailand, key, Chrysomelidae, Eumolpinae, *Rhyparida*, *Tricliona*, new species

Ключевые слова: жуки-листоеды, Индокитай, Малайский полуостров, Малайзия, Таиланд, определительная таблица, Chrysomelidae, Eumolpinae, *Rhyparida*, *Tricliona*, новые виды

INTRODUCTION

A fauna of the subfamily Eumolpinae of Indo-Malayan Region has been studied for a long time (Lefèvre, 1885, 1904; Chen, 1935; Kimoto & Gressitt, 1982; Kimoto,

1985; Medvedev, 2000, 2001, 2009, 2013; Medvedev & Moseyko, 2003; Mohamedsaid, 2004; Moseyko, 2011, 2014 etc.) but almost all genera are still need to be revised. Both genera, *Rhyparida* Baly, 1861 and *Tricliona* Lefèvre, 1885, considering in this paper, were never revised with examination of a type material. *Rhyparida* from

*Corresponding author.

continental Asia is studied a little bit better and was recently keyed (Medvedev, 2009) whereas *Tricliona* was never keyed using the characters of genitalia. This paper is aimed to compile a key to the genus *Tricliona* from Indochina and Malay Peninsula and describe a new *Rhyparida* species and three new *Tricliona* species.

MATERIAL AND METHODS

The following abbreviations are used for the depositories of the specimens examined: HMNH – Hungarian Museum of Natural History, Budapest, Hungary; IRSNB – Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium; LM – Lev Medvedev's private collection, Moscow, Russia; MNHN – Muséum National d'Histoire Naturelle, Paris, France; NHRM – Naturhistoriska Riksmuseet, Stockholm, Sweden; NMEG – Naturkundemuseum Erfurt, Germany; PR – Pavel Romantsov's private collection, St Petersburg, Russia; USNM – National Museum of Natural History, Smithsonian Institution, Washington, USA; ZIN – Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia.

Pavel Romantsov's material was collected in Malaysia and Thailand in 2014–2015. Meromictic Lake in National Park of Penang Island (Fig. 13) in Malaysia is of particular interest. This temporary lake exists during six months per year only and has two immiscible layers of the water: warm salt water from the sea and cold fresh water from streams. Exploring the bushes on the lakeside (*Lumnitzera* sp., of the family Combrétaceae, Fig. 13–15), two new species of the genera *Tricliona* and *Rhyparida* were collected. Curiously that both species are very similar to each other in body shape and general appearance (Figs 1, 10). In Thailand the material was collected in environs of Khao Sok National Park which contains well preserved evergreen rainforest.

Measurements were made using an ocular grid mounted on MBS-20 or MBS-10 stereomicroscopes. Photographs

of the beetles were taken with a Canon EOS 500D digital camera combined with Canon EF 70–200 mm f/4.0L IS USM and inverted Helios 50 mm objectives. Photographs of aedeagi and some spermathecae were made with a Canon EOS 500D digital camera combined with Canon EF 70–200 mm f/4.0L IS USM and inverted EFS 18–55 mm f/3.5–5.6 objectives. Original images were stacked using Helicon Focus 4.60.3 Pro software. Photographs of a few spermathecae were made with Leica DFC-290 camera mounted on the microscope Leica DME.

Using of some terms. The term 'propleuron'/'propleura' means the fore edge of lateral arms of prosternum. True propleura are absent in Chrysomelidae, but this term was common in old literature on Eumolpinae and obvious for the specialists. The full number of elytral puncture rows in the tribe Typophorini is 13 (Moseyko, 2011). But in some cases some rows can be reduced or fused, and punctuation seems like 12-rowed. In these cases we anyway use numeration as in 13-rowed elytra because fused rows are irregular and can be easily recognized whereas uniform terminology makes comparisons more suitable.

Labeling. Exact text of the labels is cited in quotes ('...') for the type material and partly for other specimens. A slash (/) separates different lines on the same label.

TAXONOMY

Order COLEOPTERA

Family CHRYSOMELIDAE

Subfamily EUMOLPINAE

The genera *Rhyparida* Baly, 1861 and *Tricliona* Lefèvre, 1885 belong to the tribe Typophorini Baly, 1861. Both they have bifid claws and differs by two formal characters: convex 'propleura' and large tooth on fore femora in *Tricliona* compared to straight or concave 'propleura' and small or missing tooth on fore femora in *Rhyparida*.

Both used characters are gradually variable in different species, the genera seems to be artificial and system of the tribe needs of hard revision. However, in most cases these genera can be easily separated. *Tricliona* is Indo-Malayan genera containing about 70 species, whereas *Rhyparida* occurs in both Australian and Indo-Malayan regions and contains about 500 species.

Genus *Rhyparida* Baly, 1861

Rhyparida spiridonovi sp. nov.

(Figs 1, 16, 17, 26)

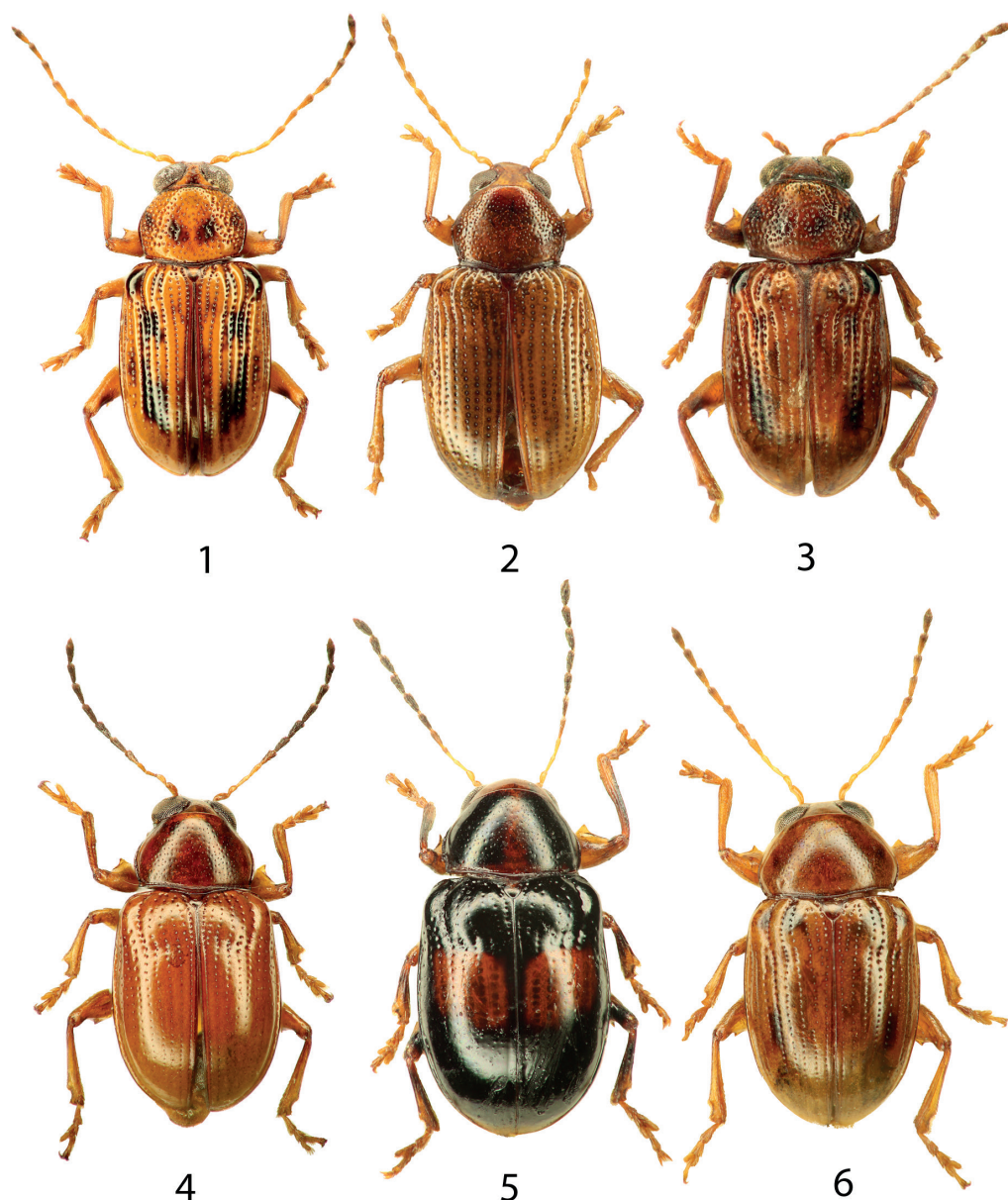
Holotype. Male, 'MALAYSIA, NW N Penang Island, / near Teluk Bahang vill., National Park, / Meromictic lake, 05°27'8''N, 100°11'4''E, h~15m, / 19. II.2014 P. Romantsov leg.' (ZIN).

Paratypes. 3 males, 3 females, same data as holotype (PR, 1 male and 1 female in ZIN); 1 male, 2 females, 'Island of / Penang / Baker' (USNM, 1 female in ZIN); 1 female, 'Coll. I.R.Sc.N.B. / SINGAPORE Sungei / Buloh Mal Trap 1 / Station 25272 / 27-VII-05 swamp forest / Leg P. Grootaert' (IRSNB).

Description. Dorsal side fulvous, seven last antennal segments slightly darkened at the apex, pronotum with a transverse row of four blurred black spots and narrowly darkened anterior and posterior margins; elytral pattern consists of several irregular black spots occasionally merging into longitudinal strips (Fig. 1). Ventral side fulvous to brown with blackened propleurae. Legs mostly fulvous, only hind femora narrowly darkened at apical part from below. Head with large eyes narrowly notched near antennal base. Labrum shagreened, with weakly convex anterior margin, bearing two short setae medially and two long setae laterally; frontoclypeus indistinctly separated from frons, covered with sparse small punctures at anterior third and large punctures at remaining part; frons very narrow, interocular space 0.35 times as wide as transverse diameter of eye, ratio of maximum width of head including eyes to minimum width of frons is 4.9. with longitudinal groove in the middle, vertex sparsely and deeply punctuate in central part with

small carina in the middle, punctures at upper part of head form a triangle broad on vertex and converging between the eyes, while area along the margins of the eyes convex and impunctate. Ocular grooves absent. Antennae filiform, reaching humeral tubercles, proportions of segments are as 10-6-7-8-10-10-12-11-10-10-12 (scales: 1: 0.25 mm), segments one and two slightly curved, segments three and four cylindrical, last seven segments slightly thickened apically. Prothorax moderately convex, 1.35 times as wide as long with rounded sides, and slightly convex posterior and straight anterior margins. Punctuation deep medially and coarse on sides, irregular, intervals between punctures as wide as 1-3 diameter of puncture. Anterior angles obtuse, posterior angles blunt, slightly prominent, each bears single long seta. Anterior margin unbordered, lateral and posterior margins bordered. Anterior margin of propisterna (anterior margin of lateral arms of prosternum) straight; propleurae (pronotal hypomera) seldom but distinctly punctate. Scutellum conical with rounded apex, impunctate. Elytra parallel-sided with well developed humeral calli and without basal elytral convexity, 1.5 times as long as wide, with twelve (1-8, mixed and reduced 9-10 and well developed 11-13 ones) regular rows of punctures distinct throughout the length, interspaces of rows convex and impunctate. Pygidium with microsculpture and thin adpressed hairs. Mid- and hind tibiae emarginate on external side near apex. Fore femora with large tooth; tooth on hind femora about twice shorter; middle femora with very small, poorly visible tooth. Claws bifid. Length of body 3.9 mm. Aedeagus almost parallel-sided, with obtuse-angled tip, slightly deflected upwards (Figs 16, 17), length of aedeagus 1.2 mm.

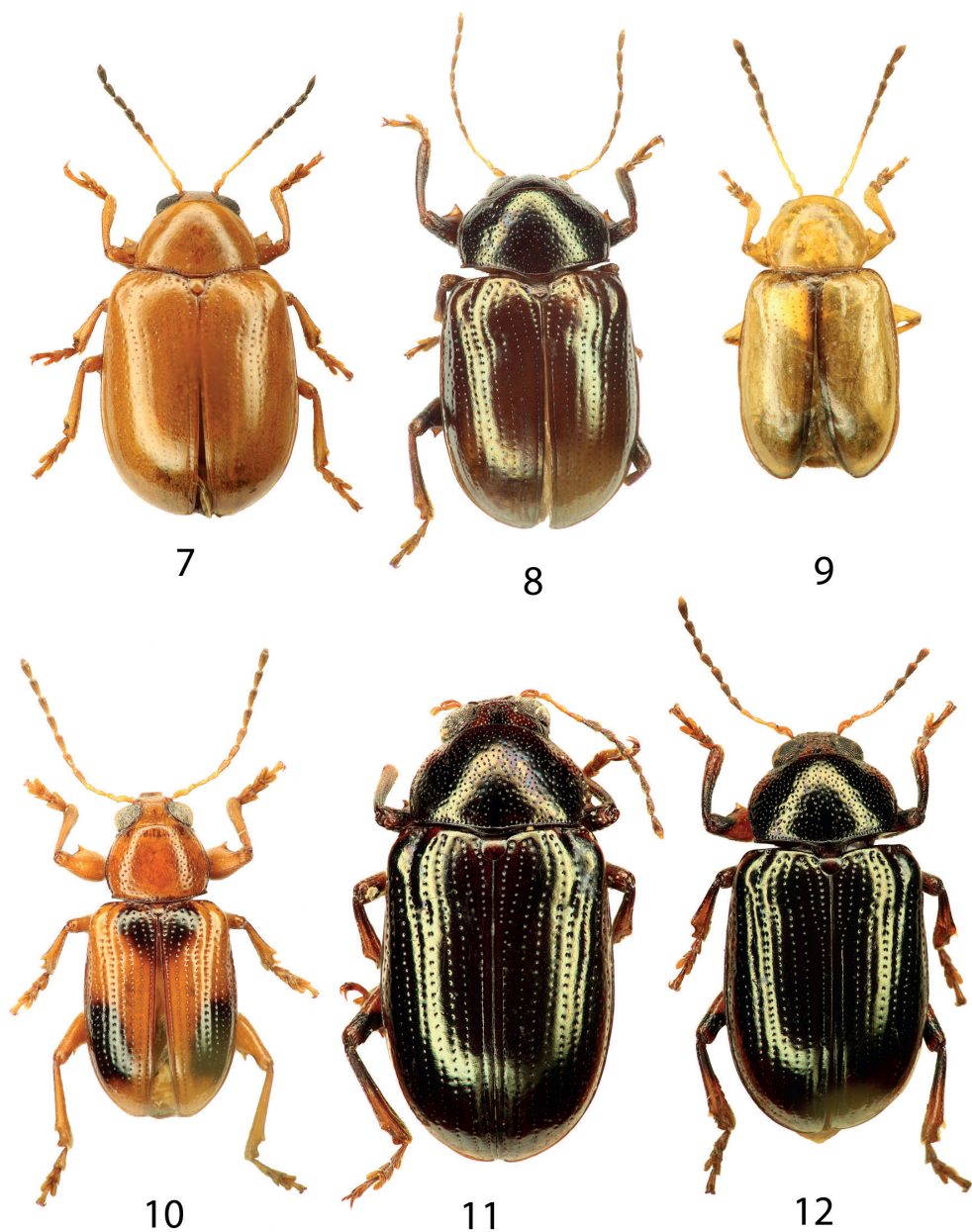
Variability. Length of body of paratypes 3.7-4.1 mm in male, 4.2-4.7 mm in female, spermatheca as on Fig. 26, length of spermatheca 0.22 mm. Ratio of maximum width of head including eyes to minimum width of frons is 4.9-5.25 in males and 3.8-4.0



Figs 1–6. *Rhyparida* spp. and *Tricliona* spp., dorsal view. 1, *Rhyparida spiridonovi* sp. nov. (holotype); 2, *Rh. condaoensis* (holotype); 3, *T. episternalis* (lectotype); 4, *Tricliona suratthanica* sp. nov. (holotype); 5, *T. suratthanica* sp. nov. (paratype, dark form of female); 6, *T. trangica* sp. nov. (holotype).

in females. Colouration is rather variable: all most completely sclerotised specimens have pattern of elytra in the form of black blurred spots sometimes merging into longitudinal strips, but black pattern on pro-

notum is absent in most cases. Almost all of them have a narrow black ring-shaped spot on the apex of hind femora. Moreover, several specimens (including not completely sclerotised) entirely fulvous.



Figs 7–12. *Tricliona* spp., dorsal view. **7,** *Tricliona laotica* (paratype); **8,** *T. melanura*; **9,** *T. suturalis*; **10,** *T. trimaculata* **sp. nov.** (holotype); **11,** *Tricliona tristis* (holotype); **12,** *Tricliona tristis* (North Thailand).



13



14 15



Figs 13–15. Type location and host plant. **13**, *Lumnitzera* sp. against a background of type location for *Rhyparida spiridonovi* sp. nov. and *T. trimaculata* sp. nov.; **14, 15**, *Lumnitzera* sp. (Combretaceae), a host plant of *Rh. spiridonovi* sp. nov. and *T. trimaculata* sp. nov.

Distribution. Malaysia (Penang Island), Singapore.

Host plant. *Lumnitzera* sp., fam. Combretaceae (Figs 13–15).

Etymology. The new species is named after Dmitrii Spiridonov (Saint Petersburg), who accompanied us during field work in Malaysia in 2014.

Remarks. In the Catalogue of Malaysian Chrysomelidae (Mohamedsaid, 2004) only two species of the genus *Rhyparida* were listed: *Rh. submetallica* Baly, 1867 and *Rh. sumptuosa* Baly, 1867. Both of them have wider body, black coloured with metallic iridescence. All known species from continental Asia were keyed by Medvedev (2009). *Mouhotina rufa* (Clark, 1865) and *Basilepta atripennis* (Clark, 1865) were described from Penang Island in the genus *Rhyparida* and have colouration similar to the new species, but later they were correctly transferred to other genera. An undescribed specimens from Mindanao (Philippines), placed in the type series of *Rh. episternalis* Weise, 1922 are most similar to the new species.

Comparison. Only *Rh. condaoensis* L. Medvedev, 2009 (Fig. 2) from Con Dao Lake (Vietnam) and *Rh. faitsilongi* **nom. nov.** from Fai Tsi Long Archipelago (Vietnam) seems to be close to the species described herein among continental species. Both these species can be easily separated from the new species by flat interstices on elytra and wider frons between the eyes. Among the Indonesian genera, *Rh. subcostata* Jacoby, 1884 from Java and *Rh. nigrosignata* Jacoby, 1884 from Sumatra seems to be similar to the new species but first of them has femora without tooth, finely punctate pronotum and impunctate head, and *Rh. nigrosignata* has dense but fine punctation of pronotum and obliterated punctation of elytra in hind half. Undescribed specimens from type series of *Rh. episternalis* Weise, 1922 with labels 'Dapitan / Mindanao / Baker', are the most similar to the new species by outer morphology and have almost identical aedeagus. But these specimens

are different because have smaller prothorax comparatively to the elytra, legs and head: in males ratio of maximum width of pronotum to width of elytra on humeri is 1.25–1.3 in *Rh. spiridonovi* **sp. nov.** and 1.39–1.4 in specimens from Mindanao; the same to length of fore tibia is 0.79–0.82 in *Rh. spiridonovi* and 0.91–0.92 in specimens from Mindanao; the same to maximal width of head with the eyes is 1.29–1.39 in *Rh. spiridonovi* and 1.2–1.21 in specimens from Mindanao. We consider these differences as enough for establishing the species, taking into consideration large distance between the areas. The species from Mindanao will be described later. Comments on *Rh. episternalis* Weise, 1922 see below.

Rhyparida faitsilongi **nom. nov.**

Rhyparida megalops (Chen, 1935), **comb. nov.**
Tricliona megalops Chen, 1935: 294; Gressitt & Kimoto, 1961: 202; Kimoto & Gressitt, 1982: 102.

Syntype, unsexed, 'Ile des Biches / (Fai Tsi Long) / L. Blaise', 'Museum Paris / Coll. Ph. Francois, / L. Bedel 1922' (MNHN).

We have no additional material.

Discussion. Straight 'propleura' reveal that *Tricliona megalops* should to be transferred to the genus *Rhyparida*. Among *Rhyparida*, it is extremely close to *Rh. condaoensis* L. Medvedev, 2009, but differs by larger (length 5.5 mm) body and narrower interocular space. Taking into consideration that the only known specimen of *Rh. condaoensis* is female whereas type specimen of *Rh. megalops* was not prepared (sex unknown), it possible that they are the male and female of the same species. But resolving of this question needs for a study of additional material. Since *Rh. megalops* (Chen, 1935) is a secondary junior homonym of *Rh. megalops* Lea, 1915, a replacement name, *Rh. faitsilongi* **nom. nov.** is proposed here.

Distribution. North Vietnam.

Etymology. The new name is derived from type locality, Fai Tsi Long Archipelago.

A synopsis of the genus *Tricliona* in Indochina, with comment on *T. episternalis*, comb. nov.

Genus *Tricliona* Lefèvre, 1885

***Tricliona episternalis* (Weise, 1922), comb. nov.**
(Figs 3, 18, 19)

Rhyparida episternalis Weise, 1922: 459.

Lectotype. Male, 'P.Princesa / Palawan / Baker', '4760', 'Rh. episternalis Ws.' (USNM).

The type series of this species consists of eight syntypes. Five of them are keeping in USNM and three in NHRM. The types are from Palawan and from Mindanao whereas in the description only Palawan was mentioned. Probably, it is a mistake of Weise, because an individual number of one specimen from Mindanao is in the list. No one of the specimens belonging to the genus *Rhyparida* can be selected as the lectotype because all of them are yellow, without pattern on pronotum and elytra, or with pattern on elytra only, which corresponds to Var. b and Var. a, distinguished in the same place, accordingly. Only the specimen belonging to the genus *Tricliona* completely corresponds to the description of colour pattern of typical form. We designate this specimen as the lectotype. Other specimens from the type series belong to two different species of *Rhyparida*, one from Palawan and another from Mindanao. They both need of description.

Distribution. Philippines: Palawan Island.

***Tricliona consobrina* Chen, 1935**

Tricliona consobrina Chen, 1935: 291; Gressitt & Kimoto, 1961: 202; Kimoto & Gressitt, 1982: 102.

Material. Not examined.

Distribution. North Vietnam.

***Tricliona costipennis* Chen, 1935**

Tricliona costipennis Chen, 1935: 292; Gressitt & Kimoto, 1961: 202; Kimoto & Gressitt, 1982: 102.

Holotype. Unsexed specimen, 'Yen-Luu / (Tonkin) / L. Blaise', 'Museum Paris / Coll. Ph. Francois, / L. Bedel 1922' (MNHN).

We have no additional material.

Distribution. North Vietnam.

***Tricliona laotica* L. Medvedev, 2000**
(Figs 7, 39, 40, 41)

Tricliona laotica L. Medvedev, 2000: 164.

Holotype. Male, 'LAOS, Bolikhamsay Prov., / Phou Khao Khouay NBCA, / Tad Leuk Waterfall, 280 m' and 'swept & beaten, N 49. / 11–12 April 1998, / leg. Merkl & G. Csorba' (HMNH)

Paratypes. 7 unsexed specimens, same data as holotype, not dissected (HMNH); 1 female, same data as holotype (LM)

Distribution. Laos.

***Tricliona melanura* Lefèvre, 1890**
(Figs 8, 36)

Tricliona melanura Lefèvre, 1890: 197; 1904: 153; Gressitt & Kimoto, 1961: 202; Kimoto & Gressitt, 1982: 102.

Syntype. Unsexed, not dissected, 'Cambodge'. (MNHN).

Additional material. 1 female: 'THAILAND, / pr. Trang. / Khao Phu Khao Ya, / National Park, / Wat Tham Iso.', 'swept at office NP, / 30 IX 2003, № 42, / A. Orosz & Gy. Sziráki' (HMNH); 1 female: 'THAI 10–16.5.1991 / Chiang Dao, 600 m. / 19°24'N 98°55'E / David Král lgt.', 'Thailand'91 / Thanon Thong Chai / D. Král & V. Kubán' (LM).

Distribution. Cambodia, Laos, Vietnam, Thailand.

***Tricliona minuta* L. Medvedev, 2000**

Tricliona minuta L. Medvedev, 2000: 165.

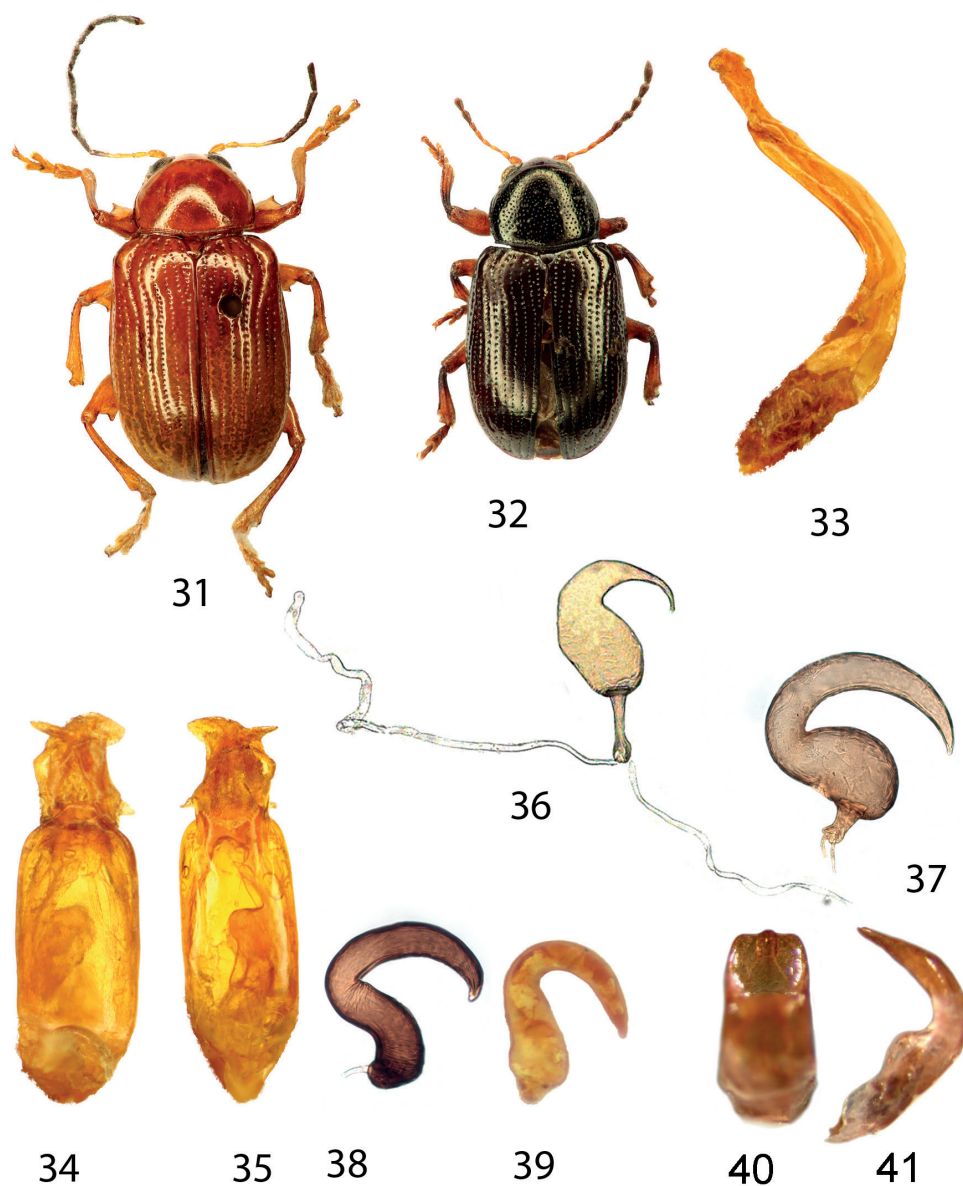
Holotype. Unsexed specimen, 'LAOS, Bolikhamsay Prov., / Phou Khao Khouay NBCA, / Tad Leuk Waterfall, 280 m' and 'swept & beaten, N 49. / 11–12 April 1998, / leg. Merkl & G. Csorba' (HMNH).

Paratypes. 3 unsexed specimens, same data as holotype (HMNH). Type specimens are teneral and were not dissected.

Distribution. Laos.



Figs 16–30. *Rhyparida* spp. and *Tricliona* spp., aedeagus, dorsal (16, 18, 20, 22, 24) and lateral (17, 19, 21, 23, 25) views; spermatheca (26–30). **16, 17,** *Rh. spiridonovi* **sp. nov.** (holotype); **18, 19,** *T. episternalis* (lectotype); **20, 21,** *T. trimaculata* **sp. nov.** (holotype); **22, 23,** *T. trangica* **sp. nov.** (holotype); **24, 25,** *Tricliona suratthanica* **sp. nov.** (holotype); **26,** *Rh. spiridonovi* **sp. nov.** (paratype); **27,** *T. trimaculata* **sp. nov.** (paratype); **28,** *Tricliona tristis* (holotype); **29,** *T. suratthanica* **sp. nov.** (paratype, dark form of female); **30,** *T. suratthanica* **sp. nov.** (paratype, light form of female).



Figs 31–37. *Tricliona* spp., dorsal view (31, 32); aedeagus, lateral (33, 41), ventral (34) and dorsal (35, 40) views; spermatheca (36–39). 31, *T. tonkinensis* (lectotype); 32, *T. paksensis*; 33–35, *T. tonkinensis* (holotype); 36, *T. melanura*; 37, *Tricliona tonkinensis* (paralectotype); 38, *T. paksensis*; 39, 40, 41, *Tricliona laotica* (paratypes).

Tricliona paksensis Kimoto & Gressitt, 1982 (Figs 32, 38)*Tricliona paksensis* Kimoto & Gressitt, 1982: 103.*Type material.* Not examined.*Additional material.* 1 female, Vietnam, Dac Lac Prov., environs of Ban Don on Ea Krong River, Yok Don Reserve, 23.XI.1993, A. Gorochov leg. (ZIN, ex. O. Kabakov coll.).*Remark.* *T. paksensis* was described from Laos. Now we have the specimen (Fig. 32, 38) from Vietnam.*Distribution.* Laos, Vietnam.***Tricliona trimaculata* sp. nov.** (Figs 10, 20, 21, 27)*Holotype.* Male, 'MALAYSIA, NW N Penang Island, / near Teluk Bahang vill., National Park, / Meromictic lake, 05°27'8"N, 100°11'4"E, h~15m, / 19. II.2014, P. Romantsov leg.' (ZIN).*Paratypes.* 2 males, 3 females, 'MALAYSIA, NW N Penang Island, / near Teluk Bahang vill., National Park, / Meromictic lake, 05°27'8"N, 100°11'4"E, h~15m, / 19. II.2014, P. Romantsov leg.' (PR, 1 female in ZIN); 2 females, 'Malaysia, Selangor, Morib / Sea level 24.2.1991 light / B. Gustafsson, H et H Hippa / G. Sellerholm' (NHRM).*Description.* Fulvous, seven last antennal segments slightly darkened, elytra with pattern from three rather large black spots: with one common cordate spot near scutellum and with one longitudinal spot near lateral margin in the posterior third of each elytron (Fig. 10).

Head narrower than pronotum, with large eyes which narrowly notched near the base of the antennae. Labrum shagreened with two short setae in the middle and two long ones on the sides, anterior margin shallow emarginate, frontoclypeus, frons and vertex sparsely and moderately deeply punctate, frons rather narrow distinctly separated from frontoclypeus, interocular space 0.76 times as wide as transverse diameter of eye, ratio of maximum width of head including eyes to minimum width of frons is 2.88. Inconspicuous median groove is in form of central depression, ocular grooves absent. Antennae filiform, reaching humeral tubercles, proportions of segments are as

10-6-7-8-10-10-10-9-9-9-11 (scales: 1: 0.25 mm), segments two and three almost cylindrical, last seven segments slightly thickened on apex. Prothorax moderately convex, 1.35 times as wide as long, with convex rounded sides; anterior and posterior margins almost straight. Punctuation rather fine and irregular, intervals between punctures 1-3 times of puncture diameter. Anterior corners obtuse, posterior ones almost straight, scarcely prominent, each of them with one long seta. Anterior margin unbordered, lateral and posterior margins bordered. Anterior margin of proepisterna convex, propleurae smooth and shining. Scutellum conical with rounded apex, impunctate. Elytra 1.5 times as long as wide, parallel, with twelve (1-8, mixed and reduced 9-10 and well developed 11-13 ones) regular rows of punctures distinct at the apical slope too and one row along lateral margin, interspaces of rows convex and impunctate. Pygidium with microsculpture and very small punctures, without setae on apical margin. Mid and hind tibiae emarginate on outer side near apex. Fore and hind femora with large tooth; tooth on middle femora about 3.5 times shorter. Claws bifid. Length of body 4.2 mm. Aedeagus with narrowed tip, deflexed upwards (Figs 20, 21); length of aedeagus 1.45 mm.

Variability. Paratypes body length: 4.0-4.4 mm. Length of spermatheca: 0.17 mm (Fig. 27). Ratio of maximum width of head including eyes to minimum width of frons is 2.8-2.95 in males and 2.4-2.55 in females. Colouration of five specimens is similar to that of holotype. Two teneral specimens (not completely sclerotised) have entirely yellow colouration without black spots.*Distribution.* Peninsular Malaysia.*Host plant.* *Lumnitzera* sp., fam. Combretaceae (Figs 13-15).*Etymology.* The name of the new species refers to the colouration of the body.*Comparison.* It differs from all known Indochinese *Tricliona* species with punctated head by narrow pronotum and elytral pattern.

***Tricliona suratthanica* sp. nov.**

(Figs 4, 5, 24, 25, 29, 30)

Holotype. Male, 'Thailand, Surat Thani Pr., / Khao Sok vill, h-80m / 08°53'50"N, 98°31'14"E / 17.IV.2015, P. Romantsov leg.' (ZIN).

Paratypes. 1 male, 'Thailand, Surat Thani Pr., / Khao Sok vill, h-80m / 08°53'50"N, 8°31'14"E / 24.IV.2015, P. Romantsov leg.' (PR); 1 female, 'THAILAND, Prov. Nan, / abobe Mae / Charim waterfall,' '7-8. XI. 2004 / M. Földvári, / A. Orosz & L. Papp' (ZIN); 1 female, 'THAILAND, pr. Trang, / Ton Pan Waterfall, / W of Ban Navong', 'swept & singled, / 26. XI. 2003, № 27. / A. Orosz & Gy. Sziráki' (HMNH).

Description. Fulvous, antennae with seven apical segments darkened (Fig. 4).

Head almost impunctate except a few very small punctures on frons, with one long setae near inner edge of the eye from each side, eyes with semicircular notch near the base of the antennae. Labrum with anterior margin shallowly emarginate and with four setae; frontoclypeus smooth, eyes large, frons narrow, interocular space 0.55 times as wide as transverse diameter of eye, ratio of maximum width of head including eyes to minimum width of frons is 3.9. Vertex convex, ocular grooves absent. Antennae filiform, reach humeral tubercles, proportions of segments are as 9-6-8-9-9-10-10-10-10-12 (scales: 1: 0.25 mm), segments two and three almost cylindrical, last seven segments slightly thickened on apex. Prothorax 1.58 times as wide as long, convex, surface sparse and shallowly punctuate, with rounded sides; front and basal margins convex. Anterior angles obtuse, posterior ones sharp, prominent, each of them with one long seta. Anterior margin unbordered, lateral and basal ones bordered. Anterior margin of 'propleura' convex; hypomera smooth and shining. Scutellum conical with rounded apex, impunctate. Elytra 1.3 times as long as wide, slightly expanding in the posterior third, with twelve (1-8, mixed and reduced 9-10 and well developed 11-13 ones) regular rows of punctures, feeble on the apical slope and one row along lat-

eral margin, interspaces of rows flat and almost impunctate. Pygidium shagreened with dense and short setae on apical margin. Mid and hind tibiae emarginate on outer side near apex. Fore femur with large tooth; teeth on hind femur about twice and on middle femur about three times shorter. Claws bifid. Length of body 3.7 mm. Aedeagus slightly widening to the top, with tooth on tip, slightly deflexed upwards (Figs 24, 25), length of aedeagus 1.12 mm.

Variability. Length of body of paratypes 3.7 mm (male); 4.0-4.3 mm (females), spermatheca (Figs 29, 30), length of spermatheca 0.4 mm. Ratio of maximum width of head including eyes to minimum width of frons is 3.85-3.9 in males and 2.95-3.15 in females. One paratype (female from Trang Province) is dark coloured: blackish with median line on pronotum and spot in the center of each elytron reddish (Fig. 5). It is usual for *Tricliona* that females have a greater variability in colouration than males (Moseyko, 2014).

Etymology. The name of the new species refers to the collecting locality.

Comparison. The species belongs to the group with feeble punctuation of head and pronotum and differs from other species by absence of longitudinal sulcus on frons and aedeagus widening to the top. Dark specimen similar in colouration to *T. fasciata* Lefèvre, 1885 from Sumatra but has a narrower body and smaller eyes.

Distribution. Thailand.

***Tricliona suturalis* Kimoto & Gressitt, 1982**
(Fig. 9)

Tricliona suturalis Kimoto & Gressitt, 1982: 104.

Type material. Not examined.

Additional material. 1 female 'THAILAND, / Pro. Chiang Mai, / Chon Thong' and '№ 5, singled, / 29. V. 2001, / E. Horváth & Gy. Sziráki' (HMNH); 1 spm., 'THAILAND, P. Chiang / Mai, Doi Kham, 390 m. / 18°45.647'N / 98°55.400' E, 18-22 / V. 2009. / leg. Scheidt' (NMEG).

Distribution. Thailand.

***Tricliona trangica* sp. nov.**

(Figs 6, 22, 23)

Holotype. Male, 'THAILAND, pr. Trang, / Pak Meng, along see / shore, coniferous & mangrove forest,', "swept & singled, / 1. XII. 2003, № 45, / A. Orosz & Gy. Szirák' (HMNH).

Paratype. Male, same data as in holotype (ZIN).

Description. Fulvous, antennae with seven apical segments darkened, pronotum with two hardly visible blackish spots at sides elytra with two blurred spots at base (one smaller near humeral calli, second larger at middle) and with longitudinal blurred spot behind middle at 5th interspace (Fig. 6). Head shining, frontoclypeus with small punctures, frons and vertex entirely impunctate, eyes with elliptic notch near the base of the antennae. Ratio of maximum width of head including eyes to minimum width of frons is 3.4. Labrum with almost straight anterior margin and four setae, eyes large, frons with longitudinal sulcus at middle, narrow, interocular space 0.6 times as wide as transverse diameter of eye, vertex convex, ocular grooves absent. Antennae filiform, reach humeral tubercles, proportions of segments are as 10–6–8–8–9–9–10–10–10–10–12 (scales: 1: 0.25 mm), segments one and two slightly curved, segments three and four cylindrical, last seven segments slightly thickened on apex. Prothorax 1.57 times as wide as long, convex, surface sparse and shallow but distinct punctate, with rounded sides, convex basal and straight front margins. Anterior angles obtuse, posterior ones blunt, not prominent. Anterior margin without emargination, lateral and basal ones bordered. Anterior margin of 'propleura' convex; hypomera smooth and shining. Scutellum conical with rounded apex, impunctate. Elytra with weak basal depression, 1.36 times as long as wide, slightly expanding behind the middle, with eleven (1–8 and well developed 11–13 ones) regular rows of punctures, slightly weakening at the apical slope but distinct up to the apex and one row along lateral margin. Rows nine and ten completely reduced. Interspaces of rows

with micropunctures, flat and very slightly convex at the sides. Pygidium shagreened with rounded apical margin. Mid and hind tibiae emarginate on outer side near apex. Fore femur with wide tooth; teeth on hind femur about 2.5 times shorter, middle femur without distinct tooth, only with weak convexity. Claws bifid. Length of body 3.8 mm. Aedeagus parallel-sided, with narrowed tip, almost not deflexed (Figs 22, 23); length of aedeagus 1.3 mm.

Variability. Colouration of paratype as in holotype but elytral spots less pronounced. Length of body 4.2 mm. Ratio of maximum width of head including eyes to minimum width of frons is 3.1–3.4.

Distribution. Thailand.

Etymology. The name of the new species refers to the collecting locality.

Comparison. It differs from others *Tricliona* species which have a head without punctures and sulcus at middle of frons, by punctured frontoclypeus and pronotum (see a key).

***Tricliona tristis* L. Medvedev, 2001**

(Figs 11, 12, 23, 28)

Tricliona tristis L. Medvedev, 2001: 173.

Holotype. Female, 'THAILAND, 8 55'N / Khao Sok 98 45'E / 1996M Mostovski coll.' (LM).

Additional material examined. 1 female, 'NW THAILAND, Pai, / 500m, 17–19 IV. 2004 / leg. W. SCHAWALLER' (LM).

Distribution. Thailand.

Remarks. External morphological characters and structure of spermatheca (Fig. 23) of specimens from North Thailand (Fig. 12) are almost identical to those of holotype of *T. tristis* from South Thailand.

Tricliona tonkinensis* (Lefèvre, 1893),*comb. nov.**

(Figs 31, 33–35, 37)

Phytorus tonkinensis Lefèvre, 1893: 128.

Lectotype. Male (designated here), 'Museum Paris / Tonkin / Langue 1886'; '3303 / 86' (MNHN).

Paralectotypes. 2 females, same data as lecto-type (MNHN).

Affinity of *Phytorus tonkinensis* to *Tricliona* species was discussed and justified earlier (Medvedev, Moseyko, 2003) therefore it is transferred here to *Tricliona* after the study of type specimens.

Distribution. North Vietnam.

Key to species of the genus *Tricliona* Lefèvre, 1885 from Indochina and Peninsular Malaysia

- 1(16) Frons very feebly punctate or impunctate; pronotum very weakly punctured at side. Rows of punctures usually feeble or obsolete on the apical slope of elytra (except *T. costipennis*).
- 2(3) Elytra with puncture rows sulcate, the punctures stained with black and interstices strongly raised to apex. Head with short longitudinal sulcus at middle. Pronotum sparsely and more finely punctate than elytra. Dorsum reddish; length 5.5 mm. Vietnam ***Tricliona costipennis***
- 3(2) Elytra with puncture rows not sulcate and interstices not raised, dorsum reddish with or without blackish margins of elytra.
- 4(7) Elytra yellow with black pattern or on the contrary.
- 5(6) Elytra yellow with lateral and apical margins narrowly and sutural margin widely blackish; ventral surfaces with meso- and metathorax blackish; length 2.9–3.4 mm. North Thailand ***Tricliona suturalis***
- 6(5) Elytra black, with rufous central band not reaching their lateral margins. Rows of punctures on elytra strongly smoothed in apical third; length 4.0–4.3 mm. Indonesia (Sumatra), South Thailand ***Tricliona suratthanica* sp.nov.** (dark form of female)
- 7(4) Elytra unicolour.
- 8(9) Head without longitudinal sulcus at middle, posterior corners of pronotum sharp, prominent, dorsum reddish, length 3.7–4.3 mm. Shouth Thailand ***Tricliona suratthanica* sp. nov.**
- 9(8) Head with longitudinal sulcus at middle (very shallow in *T. minuta*), posterior corners of pronotum scarcely prominent.
- 10(13) Pronotum and frontoclypeus shallow but distinctly punctuate.
- 11(12) Fulvous with slightly darkened apical segments of antennae, length 3.8–4.2 mm. Shouth Thailand ***Tricliona trangica* sp. nov.**
- 12(11) Fulvous, antennae with black 5–11 segments, length 5.3–5.8 mm. North Vietnam ***Tricliona tonkinensis***
- 13(10) Pronotum and frontoclypeus impunctate.
- 14(15) Fulvous with 6 apical segments of antennae black. Apex of aedeagus truncate, with small central tip. Length 3.8–4.5 mm. Laos ***Tricliona laotica***
- 15(14) Fulvous with 5 apical segments of antennae black. Longitudinal sulcus on haed very shallow. Apex of aedeagus rounded triangular. Length 2.8–3.8 mm. Laos ***Tricliona minuta***
- 16(1) Frons distinctly punctured; pronotum heavily and closely punctate at side. Rows of punctures usually distinct on the apical slope of elytra.
- 17(18) Pronotum rather narrow, less transverse (0.73 times as wide as elytra width and 1.35 times as wide as long). Head rather sparsely but distinctly punctate with longitudinal sulcus at middle. Elytra with patters from 3 black large spots. Length 4.0–4.4 mm. Malaysia (Penang Island) ***Tricliona trimaculata* sp. nov.**
- 18(17) Pronotum wider, more transverse (about 0.8 times as wide as elytra width and 1.5 times as wide as long). Elytra without large black spots.
- 19(24) Head densely and coarsely punctate.
- 20(21) Head with shallow and shorter longitudinal sulcus at middle. Larger, length 5.4–5.9 mm. Length of body over 5.0 mm. Dark piceous to black, dorsal side with feeble metallic iridescence, head, 4 basal segments of antennae, anterior angles of pronotum, sides and apex of elytra and legs (except partly darkened knees) red fulvous. Head coarsely punctuate, without longitudinal sulcus at middle. Thailand ***Tricliona tristis***
- 21(20) Head with deep and distinct longitudinal sulcus at middle. Smaller, length of body less 5.0 mm.
- 22(23) Dorsum entirely pitchy black, with slight aeneous iridescence, ventral surfaces pitchy brown; length 4.2–4.8 mm. Vietnam ***Tricliona melanura***
- 23(22) Dorsum pitchy, somewhat mixed with green; elytron a broad longitudinal stripe, more deeply coloured than lest of surface, extending from humerus to a little d'stance be-

yond middle; ventral surfaces pitchy black; length 4.5. Vietnam . . . *Tricliona consobrina* 24(19) Head more sparsely and finely punctuate, with a shallow longitudinal furrow at middle. Dorsum entirely pitchy black, with slight aeneous reflexion, ventral surfaces pitchy brown; pitchy brown with basal segments paler; legs deep brown; length 2.7–3.2 mm. Laos, Vietnam *Tricliona paksensis*

ACKNOWLEDGEMENTS

We are grateful to Lev Medvedev (Russia, Moscow), †Nicole Berti (MNHN), Ottó Merkl (HMNH), Alexander Konstantinov (USNM) for the possibility to study the material (including types), and to L.V. Averyanov (Botanical Institute, St Petersburg) for plant identification.

This work was performed within the framework of the State Research Project 01201351189 for ZIN RAS and funded by the Russian Foundation for Basic Research (grant no. 16-04-00412).

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Received 23 July 2016 / Accepted 8 Nov. 2016

Editorial responsibility: N.N. Yunakov