A New Species and Two New Synonyms of the Genus *Plesiophthalmus* from Thailand (Coleoptera, Tenebrionidae)

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Abstract Members of the genus *Plesiophthalmus* (Coleoptera, Tenebrionidae) from Thailand were examined. A new species, *P.* (*P.*) *thainuanus* MASUMOTO & AKITA, sp. nov. is described and two known species *P.* (*P.*) *shingoi* MASUMOTO, 1991 [syn. nov.] and *P.* (*P.*) *sericidorsalis* MASUMOTO, 1999 [syn. nov.] are recognized as new synonyms of *P.* (*P.*) *thailandicus* MASUMOTO, 1990.

According to the world catalogue of Amarygmini, Rhysopaussini and Falsocossyphini by BREMER and LILLIG (2014), thirteen species of the genus *Plesiophthalmus* have hitherto been recorded from Thailand. Recently, we had an opportunity of re-examining members of this genus, and we recognized one new species, eleven named species and two new synonyms from Thailand.

Herein, we describe a new species and solve those synonyms. Furthermore, we provide a list of the *Plesiophthalmus* from Thailand in the last part of the present article.

Before going into details, we would like to express cordial thanks to Dr. Hans J. BREMER (Osnabrük) and Dr. Wolfgang SCHAWALLER (Stuttgart) for giving us warmhearted advice, and to Dr. Kiyoshi ANDO (Osaka) and Ottó MERKL (The Natural History Museum, Budapest) for giving us constantly critical suggestions. We thank Mr. Maxwell V. L. BARCLAY (The Natural History Museum, London) for lending invaluable specimens. Deep indebtedness should be expressed to Mr. Shigeaki KONDO (Urayasu) for giving bibliographic information, Dr. Makoto KIUCHI (Tsukuba) for taking excellent photographs inserted in the present paper, and Dr. Keiichi TAKAHASHI (Ushiku) for helping in the field surveys. We deeply thank Dr. Yupa HANBOONSONG (Khon Kaen University), Dr. Hans BÄNZIGER and Dr. Piyawan SUTTIPRAPAN (Chiang Mai University) for arrangement and supporting our research. Finally, we deeply thank Dr. Jun-ichi AOKI (Tokyo) for critical reading of this manuscript and giving us invaluable advice.

In collecting data of this paper, symbols of "", / and // are used. "" show the collecting data quoted from the original data; a slash separates the next line, and a double slash the next label.

I. Description of a New Species

Plesiophthalmus (Plesiophthalmus) thainuanus sp. nov.

(Figs. 1-2, 5-7)

Body subovate, strongly convex dorsad, almost wholly black, antennae slightly with brownish tinge, mouth parts, gula and tarsi blackish brown, hairs on ventral surfaces of tarsi brownish yellow; head weakly shining, pronotum strongly, somewhat vitreously shining, elytra strongly, slightly sericeously shining and with very feeble coppery tinge, five basal antennomeres weakly shining and six apical antennomeres rather mat, ventral surface weakly, sericeously shining; each surface mostly glabrous, six apical antennomeres clothed with fine hairs, intero-apical faces of tibiae clothed with rather

long hairs, ventral faces of tarsi clothed with setaceous hairs.

M a l e. Head somewhat transversely elliptical, though the apical portion is produced antero-ventrad; clypeus semicricular, depressed in basal part, raised in middle, gently bent ventrad and subparallel-sided in apical part, weakly microsculptured, rather closely punctate, sparsely clothed with subdecumbent hairs; fronto-clypeal suture finely, roundly impressed; genae weakly microsculptured and minutely punctate, weakly depressed in major interior part, raised antero-laterad in lateral parts, with external margins roundly curved; frons somewhat T-shaped, moderately inclined anteriad, very weakly microsculptured, rather closely, irregularly punctate; vertex irregularly punctate, longitudinally impressed on midline. Eyes large, strongly convex laterad, strongly inlaid into head, with distance between them 0.15 times the width of eye diameter. Antennae subfiliform; tip of terminal antennomere reaching basal 1/3 of elytra; each antennomere length in mm from base to apex: 0.52, 0.26, 1.23, 0.65, 0.88, 0.86, 0.78, 0.71, 0.65, 0.25, 0.75.

Pronotum subtrapezoid with rounded sides, wider than long (5 : 3), widest at base; apex nearly straight, clearly grooved and finely rimmed; base widely, weakly produced, weakly, roundly bulged in medial 1/5, weakly sinuous on both sides of the bulge, hardly bordered; sides rather steeply declined to lateral margins, which are finely grooved and more boldly rimmed than the apex, the rims visible from above; front and hind angles obtusely angular; disc rather strongly, transversely convex, minute-ly punctate. Scutellum weakly depressed, triangle with rounded sides, irregularly scattered with minute punctures.

Elytra subelliptical, though the basal portion is truncate, 1.43 times as long as wide, 5.00 times the length and 1.40 times the width of pronotum, widest at basal 4/5; dorsum strongly convex, highest slightly before basal 3/10; disc punctate-striate, the striae fine, the punctures in striae small and close in interior portion, becoming larger and sparser laterad; intervals gently convex, weakly microsculp-tured and microscopically aciculate, sparsely scattered with minute punctures, which are obviously smaller than those on pronotum; lateral margins bordered by row of punctures and slightly explanate; humeri gently swollen; apices rounded.

Maxilla with terminal palpomere triangular, exterior side 1.40 times the length of interior side, 0.90 times the length of apical side. Mentum subcordate, depressed in basal part, raised medio-anteriad, weakly microsculptured, minutely punctate, sparsely clothed with fine, rather long decumbent hairs. Gula nearly triangle, alutaceous, depressed in posterior part.

Prosternum short; apical margin very widely emarginated, finely rimmed, and slightly sinuous in lateral parts; anterior part depressed, somewhat alutaceous; medial part strongly raised, microsculptured, longitudinally concave between procoxal cavities; posterior part strongly depressed, microsculptured, coarsely granulate, with three ridges, of which one is straight and two on sides are widened posteriad; prosternal process triangularly produced. Mesoventrite rather short; anterior part strongly depressed and concealed under prosternum in repose, closely punctate and finely haired, with longitudinal ridge on medial line; posterior part strongly raised, triangularly, steeply inclined opposite to prosternal process, obliquely raised in interior parts of mesocoxal cavities, with Y-shaped ridge in middle. Metaventrite rather short, longitudinally impressed in posterior 3/4 on medial line, weakly microsculptured, micro-rugulose, irregularly scattered with small punctures, those in anterior and lateral parts becoming larger. Abdomen rather broad, microsculptured, punctate, the punctures on 1st and 2nd ventrites rather large, and becoming smaller from 3rd to 5th, longitudinally wrinkled in 1st and 2nd ventrites and lateral parts of 3rd and 4th; 5th (= anal) ventrite 1.40 times the length of 4th, rather no-ticeably pubescent in apical parts on each side, slightly truncate at apex, closely and finely punctate, the punctures somewhat transversely ovate, each with a decumbent hair.

Legs rather stout; profemora each with a spine at apical 2/5 on anterior face; protibiae gently pro-



Figs. 1–4. Habitus of *Plesiophthalmus* spp. — 1, *P*. (*P*.) *thainuanus* sp. nov., holotype, \Im ; 2, ditto, paratype, \Im ; 3, *P*. (*P*.) *thailandicus* MASUMOTO, \Im ; 4, ditto, \Im .



Figs. 5–10. *Plesiophthalmus* spp. — 5–7, *P*. (*P*.) *thainuanus* sp. nov., holotype, ♂; 8–10, *P*. (*P*.) *thailandicus* MA-SUMOTO, holotype, ♂; 5 & 8, protibiae; 6 & 9, male genitalia (dorsal view); 7 & 10, ditto (lateral view). Scales: 1.00 mm.

longed and curved intero-ventrad, with interior face gouged at middle, becoming bolder and haired in apical 2/5; tarsi densely clothed with setaceous hairs on ventral face, length of pro-, meso- and meta-tarsomeres in mm: 0.26, 0.25, 0.23, 0.28, 0.88; 0.56, 0.37, 0.30, 0.30, 1.00; 1.13, 0.41, 0.30, 1.02.

Genitalia subfusiform in dorsal view, 4.36 mm in length, 0.94 mm in width; basale longitudinally convex, weakly curved in lateral view; apicale 1.20 mm in length, 0.28 times of the total length of genitalia, (0.25–0.28 times of the range in the type series) slightly elongated triangle, weakly curved in lateral view, with apices slightly, roundly produced.

F e m a l e. Antennae shorter, tip of terminal antennomere reaching basal 1/5 of elytra, distance between eyes wider (0.25 times the width of eye diameter), protibiae without modification.

Body length: 11.8–12.8 mm.

Type series. Holotype: ♂, "[Thailand] / Chiang Mai / Mae Rim, Mae Sa / 16~26–V–2002 / T. TSURU leg. // Coll. Masumoto / 2002" (preserved in National Museum of Nature and Science, Tsukuba). Paratypes: 1 ♂, Chiang Mai, Doi Saket, 22–25.V.2015, K. TAKAHASHI leg.; 1 ♂, Chiang Dao Hill Resort, 3–7.V.2013, K. TAKAHASHI leg.; 1 ♀, Loei-Prov., Phu Rua N. P., 30.IV.2006, S. TSUYUKI leg.

Distribution. North Thailand.

Notes. The new species closely resembles *Plesiophthalmus thailandicus* MASUMOTO, 1990 (Figs. 3-4 & 8-10). The former can be distinguished from the latter by the elytra wider (1.52–1.56 times as long as wide in male of *P. thailandicus*) more strongly punctate-striate, the punctures in striae larger and closer, the elytral intervals more noticeably convex, and the male genitalia relatively long and slender, with the apicale shorter, 0.25–0.28 times of the total length of genitalia (0.29–0.33 times in *P. thailandicus*), less strongly narrowed apicad.

Etymology. The specific epithet of the present new species is named after "Thai-nua", means North Thailand in Thai language, where the type series were collected.

II. New Synonyms of Thai Species

In *Plesiophthalmus shingoi* MASUMOTO, 1991, the author did not compare with *P. thailandicus* MASUMOTO, 1990, and we newly compare it in the present re-examination and conclude that the former is a synonym of the latter. Meanwhile, in *P. sericidorsalis* MASUMOTO, 1999, he compared with *P. thailandicus* and pointed out the dorsal surface and rows of punctures on the elytra as distinguishable differences. But we regard such differences as inner-specific variations in this time.

Plesiophthalmus (Plesiophthalmus) thailandicus MASUMOTO, 1990

Plesiophthalmus (Plesiophthalmus) shingoi MASUMOTO, 1991: 26 [syn. nov.]. Plesiophthalmus (Plesiophthalmus) sericidorsalis MASUMOTO, 1999: 360 [syn. nov.].

Type specimens examined. Holotype of *P*. (*P*.) *thailandicus* MASUMOTO, 1990: ♂, "Doi-Suthep / N. THAILAND // 2–VI, 1981 / H. Detani leg. // Coll. Masumoto / 2002 // Holotype / Plesiophthalmus / thailandicus Masumoto". Holotype of *P*. (*P*.) *shingoi* MASUMOTO, 1991: ♂, "Chiang Mai Prov. / N. W. Thailand / V. 1998 // Coll. Masumoto / 2000 // Holotype / Plesiophthalmus / shingoi MASUMOTO // *Plesiophthalmus / thailandicus* / MASUMOTO, 1990 / Det. K. Akita, 2017". Holotype of *P*. (*P.) sericidorsalis* MASUMOTO, 1999: ♂, "Wiang Papao / N. Thailand / 2. VI. 1993 // Coll. Masumoto / 2004 // Holotype / *Plesiophthalmus / sericidorsalis* MAS. // *Plesiophthalmus / thailandicus* / Masumoto, 1990 / Det. K. Akita, 2017". Paratypes of *P*. (*P.) thailandicus* MASUMOTO, 1990: 1 ♂, Doi Pui, 26.VI.1984; 1 ♀, Doi Suthep, 28.V.1981, H. DETANI leg.

Other specimens examined. 1 &, Chiang Mai, Doi Suthep, 8.V.1997, K. MASUMOTO leg.; 1 Q,

ditto, 8.V.2012, K. MASUMOTO & K. TAKAHASHI leg.; 1 Å, Chiang Mai, Chiang Dao Hill Resort, 3–7. V.2013, K. TAKAHASHI leg.; 1 Å, ditto, 30.V.–2.VI.2017, K. TAKAHASHI leg.; 1 Å, Chiang Mai, Mae Rim, 14–16.V.2015, T. MATSUMOTO leg.; 1 Å, ditto, 22–23.V.2017, K. MASUMOTO leg.; 1 Å, Chiang Mai, Mae Rim, Ban Nong Hoi Kao–Ban Pong Yaeng Nai, 16.V.2015, K. MASUMOTO & T.-C. WANG leg.; 1 Å, 1 \bigcirc , Chiang Rai, Wiang Pa Pao, 10.V.2012, K. TAKAHASHI leg.; 1 Å, ditto, 27.IV.–1.V.2013, K. TAKAHASHI leg.; 3 ÅÅ, ditto, 27.V. –1.VI.2014, K. TAKAHASHI leg.; 1 Å, ditto, 17–21.V.2015, K. TAKAHASHI leg.; 2 ÅÅ, 2 \bigcirc , ditto, 5–10.VI. 2016, K. TAKAHASHI leg.; 9 ÅÅ, 3 \bigcirc , ditto, 20–29. V.2017, K. TAKAHASHI leg.

III. A List of Plesiophthalmus from Thailand

Plesiophthalmus MOTSCHULSKY, 1857

Plesiophthalmus MOTSCHULSKY, 1857: 34. Type species: Plesiophthalmus nigrocyaneus MOTSCHULSKY, 1857.
Cyriogeton PASCOE, 1871: 356. Type species: Cyriogeton insigne PASCOE, 1871.
Spinamarygmus PIC, 1915: 7. Type species: Spinamarygmus indicus PIC, 1915.
Eumolpocyriogeton PIC, 1922: 305. Type species: Eumolpocyriogeton convexum PIC, 1922.

- 1) Plesiophthalmus (Inspinogeton) doipuiensis MASUMOTO, 1991 Distr.: N. Thailand.
- 2) P. (Plesiophthalmus) hirasawai MASUMOTO, 1989 Distr.: N. Thailand.
- P. (P.) legalleni (PIC, 1917) Distr.: N. & C. Vietnam, Laos, Thailand.
- 4) *P*. (*P*.) *maniti* MASUMOTO, 1989 Distr.: N. Thailand, Laos.
- 5) *P.* (*P.*) *sawaiae* MASUMOTO & AKITA, 2009 Distr.: N. Thailand.
- 6) *P.* (*P.*) *schawalleri* MASUMOTO & AKITA, 2009 Distr.: N. Thailand.
- 7) P. (P.) siamensis MASUMOTO, 1990 Distr.: N. Thailand.
- 8) *P.* (*P.*) splendens MASUMOTO, 1990 Distr.: N. Thailand, Bhutan.
- 9) P. (P.) thailandicus MASUMOTO, 1990
 P. (P.) shingoi MASUMOTO, 1991 [syn. nov.].
 P. (P.) sericidorsalis MASUMOTO, 1999 [syn. nov.].

Distr.: N. Thailand, N. & C. Laos.

- 10) *P*. (*P*.) *thainuanus* MASUMOTO & AKITA, sp. nov. Distr.: N. Thailand.
- 11) *P.* (*P.*) *yukae* Маѕимото, 2000 Distr.: N. Thailand.
- 12) *P. (Eumolpocyriogeton) thaiperpulchrus* MASUMOTO, 2000 Distr.: N. Thailand.

要 約

益本仁雄・秋田勝己:タイ産キマワリ属 (鞘翅目ゴミムシダマシ科)の1 新種, 2シノニム. タイ産キマワリ属を検討した結果, 1 新種を見出したので, Plesiophthalmus (Plesiophthalmus) thainuanus MA-SUMOTO & AKITA, sp. nov. として命名記載した. また, 多数の P. (P.) thailandicus MASUMOTO, 1990 を検した結果, P. (P.) shingoi MASUMOTO, 1991 と P. (P.) sericidorsalis MASUMOTO, 1999 は, この種のシノニムであると認め処 置を行った. さらに, タイ産キマワリ属のリストを作成した.

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Manuscript received 12 February 2018; Revised and accepted 24 March 2018.