

A Taxonomic Study of the Genus *Latipalpus* (Coleoptera, Scarabaeidae), III

Takeshi ITOH

Nishimiyahara 2–6–20–102, Yodogawa-ku, Osaka, 532–0004 Japan

Abstract This is the third part of the study of the rhizotrogine genus, *Latipalpus*. A Bornean species, *L. palpalis* MOSER is redescribed and a new species, *L. fujiokai* T. ITOH is described from the same island. A key to all the component species is provided.

Up to the present, six species have been known as the members of the genus *Latipalpus* after my two previous studies on the genus. In this paper, I am going to add a new species, *L. fujiokai* from Borneo Island. As the result, seven species in total are known to us from both Java and Borneo Islands.

In the first place, I am going to show a key to all the component species in the following lines.

Key to the Species

- 1(10) Body oval, elytra somewhat short, usually shorter than and rarely equal to 2.8 times the width; protibia in male usually shorter than and rarely equal to pronotal length; protarsus in male short, slightly longer than in female.
- 2 (3) Terminal segment of maxillary palpus extremely wide in the middle; dorsal surface rather shining; femora noticeably densely with long hairs; scutellum almost triangular; 20.5 mm; Java *L. latipalpis* MOSER.
- 3 (2) Terminal segment of maxillary palpus moderately wide in the middle; dorsal surface more opaque; femora moderately densely with hairs; scutellum more roundly cordate.
- 4 (5) Each claw with a very minute denticle; body rather small; 15.0 mm; Southern Borneo *L. truncatipalpis* MOSER.
- 5 (4) Each claw with a distinctly larger denticle; body larger.
- 6 (7) Frons and pronotum more or less haired particularly in antero-central portion, though it is rarely glabrous entirely; 1st denticle of protibia in male situated nearer to base than to apex; 16.2–18.2 mm; Java *L. maxillatus* BRENSKE.
- 7 (6) Frons flattened, without setae; pronotum glabrous; 1st denticle of protibia in male nearer to apex than to base or approximately at the middle.
- 8 (9) Dorsal surface opaque; parameres of male genitalia becoming hook-shaped at

- apices; eyes slightly more prominent; 17.9–22.1 mm; Northern Borneo
 *L. elegans* T. ITOH.
- 9 (8) Dorsal surface weakly shining; parameres of male genitalia sharply pointed at apices; eyes slightly less prominent, seemingly small; 14.8–20.2 mm; Western Borneo *L. occidentalis* T. ITOH.
- 10 (1) Body elongate, elytra prolonged, 2.8 times as long as wide or longer than that; protibia in male approximately equal to or longer than pronotal length; pro-tarsus in male noticeably long.
- 11(12) Dorsal surface weakly shining; each claw with a sharp denticle near base, though in male, at least outer claws of 4 posterior legs are edentate; protibia tridentate, though the 1st denticle is very small in male; 18.2–23.5 mm; Northern Borneo *L. palpalis* MOSER.
- 12(11) Dorsal surface almost opaque; each claw with a large blunt denticle in 4 anterior legs; both denticles of outer and inner claws of 4 posterior legs of the same shape in both sexes; protibia bidentate in male; 19.0–25.5 mm; Northern Borneo *L. fujiokai* T. ITOH, sp. nov.

***Latipalpus palpalis* MOSER**

(Figs. 1, 3 a, 4 a, 5 a–b, 6 a, 7 a)

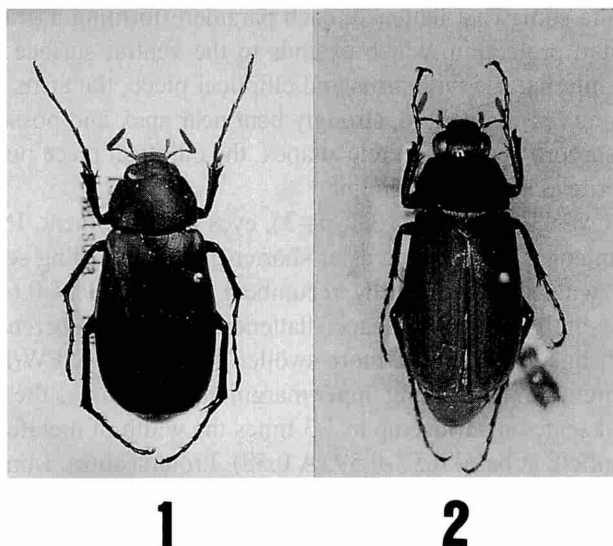
Latipalpus palpalis MOSER, 1921, Stett. ent. Ztg., **82**: 64.

Description. Length: 18.2–23.5 mm.

Male. Head, pronotum, scutellum, tibiae and tarsi dark blackish brown, elytra, pygidium and ventral surface light brown. Dorsal surface weakly shining and glabrous, ventral surface opaque and densely haired, though the abdomen is shining and glabrous and the legs are shining. Body noticeably elongate and slender.

Head flattened, hardly elevated and moderately densely with fine punctures; clypeus transverse, very densely and coarsely punctate, CW/CL 3.0–3.4 (A 3.2, n=5), fronto-clypeal suture weakly arcuate or biarcuate; eyes remarkably prominent, IN/HW 0.52–0.55 (A 0.54, n=5); vertex hardly ridged; antennal club shorter than 7 preceding segments together; terminal segment of maxillary palpus moderately swollen, widened towards the middle, thence subparallel-sided apicad, with roundly truncate apex; occipital area with short, forwardly recumbent hairs, which neither reach nor extend beyond the vertex.

Pronotum transverse and moderately convex, PL/PW 0.60–0.64 (A 0.62, n=5); anterior margin rimmed and glabrous; lateral margins straight in anterior halves, sharply curved approximately at the middle, straight or slightly emarginate in posterior halves; anterior and posterior angles obtuse; posterior margin with a wide transverse ridge conspicuous except for a part near the median line; disc entirely glabrous, smooth, sparsely and finely punctate in central area, more densely so near sides, the punctures seemingly somewhat coarser near sides than those in central area because



Figs. 1-2. *Latipalpus* spp. — 1, *L. palpalis* MOSER, ♂; 2, *L. fujiokai* T. ITOH, sp. nov., ♂.

the surroundings of the former are more noticeably concave.

Elytra inconspicuously costate, sutural costa gradually widened in basal 2/5 and thence subparallel-sided apicad, 2nd costa very weakly raised, slightly widened apicad and wider than 1st interval in posterior half of elytron; 3rd costa narrower than 2nd, slightly wider than 2nd interval; 4th costa greatly reduced and 5th absent; epipleuron conspicuous to the level of 2nd sternite, reaching the level between 4th and 5th sternites; marginal membrane extending to sutural angle. Scutellum with fine, dense punctures except for a part along the median line. Pygidium slightly convex, smooth, with somewhat dense and coarse punctures, which are coarser than those on pronotum. Prosternum with a somewhat bidentate (M-shaped), transverse post-coxal process. Metasternum, mesepimeron, metepisternum and metacoxa with long, rather dense, yellowish hairs.

Legs slender, FW/FL 0.30–0.32 (A 0.31, n=5). Femora sparsely covered with hairs, sparsely and finely punctate; metafemur with rather short hairs along upper margin, which are up to 2/5 times the width of metafemur, and also with a row of short setae on surface, which are up to 2/9 times the width of metafemur. Protibia rather elongate, tridentate, with 1st denticle inconspicuous, nearer to apex than to base (at basal 0.51–0.55 (A 0.53)). Longer one of metatibial spurs as long as 1st metatarsal segment, which is slightly longer than the 2nd. Protarsi extremely elongate. Each claw gently curved apicad, with a sharp denticle near base in anterior legs, without a denticle or sometimes with a small one near base only in inner claw in middle legs, with a small, sharp denticle only in inner claw and without a denticle in outer claw in posterior legs.

Male genitalia somewhat flattened; each paramere forming a gradually narrowed and bluntly pointed projection, which extends to the ventral surface so as to contact with each other; internal sac with arms and elliptical piece, the arms each moderately stout and gently curved throughout, strongly bent near apex and possessing a very inconspicuous mushroom-shaped tubercle at apex, the elliptical piece possessing a longitudinal thick sclerite along its median line.

Female. CW/CL 2.9–3.3 (A 3.1, n=3), eyes not prominent, IN/HW 0.56–0.57 (A 0.57, n=2), antennal club as long as or shorter than 6 preceding segments together, occiput sparsely with short, forwardly recumbent hairs. PL/PW 0.62–0.65 (A 0.63, n=3). Pygidium subtly various in shape: flattened, weakly bituberculate, and convex along the median line. Metafemora more swollen than in male, FW/FL 0.33–0.37 (A 0.35, n=3), metafemoral hairs along upper margin up to 2/5 times the width of metafemur, metafemoral setae on surface up to 1/3 times the width of metafemur. Protibia robust, with 1st denticle at basal 0.57–0.59 (A 0.58). Protarsi short. Longer one of metatibial spurs as long as 1st metatarsal segment, which is slightly longer than the 2nd. Each claw with a denticle, the denticles of inner and outer claws of the same shape in all legs.

Distribution. Northern Borneo.

Specimens examined. 1 ♀ (type), with 2 labels inscribed “N Borneo Kina Balu WATERSTRADT S.”, “*Latipalpus palpalis* MOS Type”; 1 ♀, “Kinabalu Borneo 1500 m”, “*palpalis* MOS”; 1 ♀, “Kina-Balu Geb. 1500 m Coll. WATERSTRADT”; 2 ♂♂, Mt. Kinabalu, 1500 m, Sabah, Malaysia, 29–IV–1994. H. MATSUDA leg.; 1 ♀, near P. H. Q., Mt. Kinabalu, Sabah, N Borneo, XI–1994; 1 ♂, near Keningau, Sabah, N Borneo, 1–IV–1985; 1 ♂, 16 miles, near Keningau, Sabah, N Borneo, 9–III–1988. One male specimen each is presented to ZMHU and MNHA, respectively.

Remarks. This species is very remarkable by the following male characters: at least outer claws of 4 posterior legs edentate, protarsi extremely long and eyes noticeably prominent.

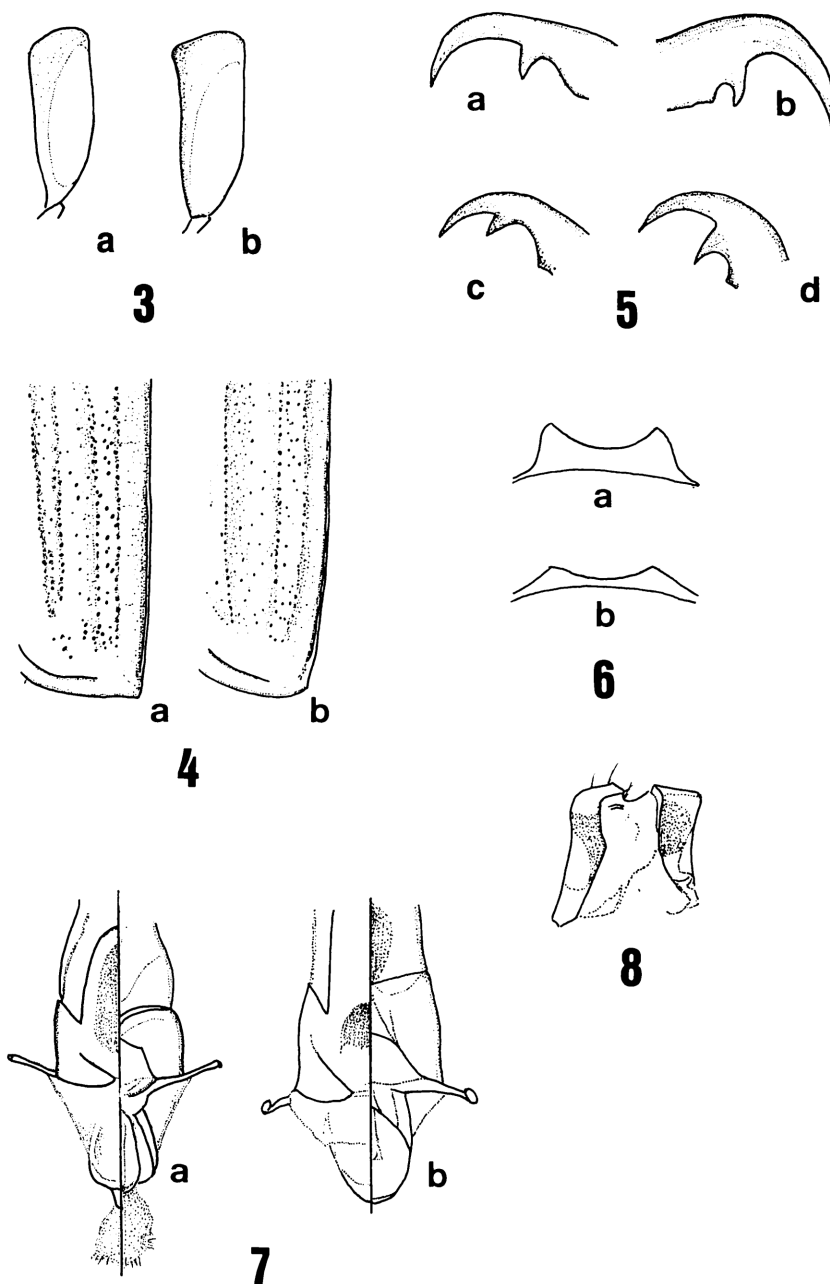
***Latipalpus fujiokai* T. ITOH, sp. nov.**

(Figs. 2, 3 b, 4 b, 5 c–d, 6 b, 7 b, 8)

Description. Length: 19.0–25.5 mm.

Male. Head, pronotum, scutellum, tibiae and tarsi dark blackish brown, femora and ventral surface dark brown to light brown, antennae, maxillary palpi, elytra and pygidium light brown; dorsal surface almost opaque and glabrous; ventral surface opaque and densely haired, though the abdomen is glabrous and the femora are bluntly shining and sparsely haired. Body noticeably elongate and slender.

Head almost flattened, moderately densely with coarse punctures; clypeus transverse, densely and very coarsely punctate, CW/CL 3.2–3.7 (A 3.4, n=6), fronto-clypeal suture biarcuate; eyes noticeably prominent, IN/HW 0.55–0.57 (A 0.56, n=6); vertex uniformly and inconspicuously raised; antennal club as long as or feebly shorter



Figs. 3-8. — 3. Terminal segment of maxillary palpus; a: *L. palpalis*; b: *L. fujiokai* sp. nov. — 4. Apical portion of elytron; a: *L. palpalis*; b: *L. fujiokai* sp. nov. — 5. Inner claw of fore leg; a: *L. palpalis*, ♂; b: ditto, ♀; c: *L. fujiokai* sp. nov., ♂; d: ditto, ♀. — 6. Prosternal process; a: *L. palpalis*; b: *L. fujiokai* sp. nov. — 7. Male genitalia (right half: dorsal side; left half: ventral side); a: *L. palpalis*; b: *L. fujiokai* sp. nov. — 8. Female genitalia of *L. fujiokai* sp. nov.

than 7 preceding segments together; terminal segment of maxillary palpus somewhat slender, gradually widened towards the middle, thence subparallel-sided apicad, with bluntly truncate apex; occipital area densely with short, forwardly recumbent hairs, which do not extend beyond the vertex.

Pronotum transverse and moderately convex, PL/PW 0.62–0.64 (A 0.63, n=6); anterior margin rimmed and glabrous; lateral margins straight in anterior halves, sharply curved approximately at the middle, straight or sometimes feebly emarginate in posterior halves; anterior and posterior angles subrectangular; posterior margin with a wide transverse ridge conspicuous approximately throughout, the ridge becoming irregularly deformed (seemingly serrate) by a row of elliptical punctures; disc glabrous, smooth, sparsely and finely punctate in central area and more densely so near sides.

Elytra inconspicuously costate, sutural costa gradually widened in basal 1/3 and thence subparallel-sided apicad, 2nd costa very weakly raised, gradually widened apicad and wider than 1st interval in posterior half of elytron, considerably close to sutural costa near apex, 3rd costa distinctly narrower than 2nd and wider than 2nd interval, 4th and 5th costae absent; epipleuron recognized to the level of 1st sternite and reaching the level of apical callus; marginal membrane extending to sutural angle. Scutellum sparsely with fine punctures. Pygidium slightly convex, very slightly rugose and somewhat densely covered with coarse punctures, which are coarser than those on pronotum. Prosternum with a shallowly M-shaped, transverse post-coxal process.

Legs shining, slender, FW/FL 0.31–0.33 (A 0.32, n=6). Femora sparsely covered with short hairs; metafemora with somewhat long hairs along upper margin, which are shorter than half the width of metafemur, and also with a row of short setae on surface, which are up to 1/5 times the width of metafemur; profemora coarsely and sparsely punctate, mesofemora finely and more densely so, metafemora finely and sparsely so. Protibia rather elongate, bidentate, with 1st denticle almost vestigial. Longer one of metatibial spurs longer than 1st metatarsal segment, which is as long as or sometimes feebly longer than the 2nd. Protarsi rather elongate. Each claw gently curved apicad, with a blunt denticle near the middle in 4 anterior legs and near base in posterior legs; all the denticles of outer and inner claws of the same shape.

Male genitalia somewhat flattened; each paramere forming a strongly narrowed projection apicad, which does not extend so as to contact with each other on the ventral surface; internal sac with arms and elliptical piece, the arms each moderately stout, straight to basal 3/5, thence rather strongly bent and possessing a noticeable mushroom-shaped tubercle at apex.

Female. Body larger and more robust. CW/CL 3.0–3.6 (A 3.2, n=5), eyes not prominent, IN/HW 0.60–0.63 (A 0.62, n=4), antennal club approximately as long as 6 preceding segments together. PL/PW 0.59–0.66 (A 0.63, n=5), abdomen uniformly swollen. Meso- and metafemur stouter than in male, FW/FL 0.35–0.38 (A 0.36, n=5). Metafemoral hairs along upper margin up to 1/4–3/10 times the width of metafemur; metafemoral setae on surface longer than in male, up to 1/3 times the width of metafemur. Protibia robust, tridentate, with 1st denticle distinct, nearer to apex than to base

(at basal 0.51–0.58 (A 0.54)). Protarsi conspicuously short. Longer one of metatibial spurs as long as or longer than 1st metatarsal segment, which is as long as the 2nd. Each claw obviously more strongly bent, with a denticle sharper and closer to base than in male. Female genitalia as shown in Fig. 8.

Distribution. Northern Borneo.

Holotype: ♂, Keningau, Sabah, N Borneo, 28–V–1987. Paratypes: 2♂♂, 1♀, same locality as for holotype, 23–27–III–1985; 2♂♂, same locality, 17–II–14–IV–1985; 1♀, Keningau, 1–IV–1985; 1♀, 16 miles NW of Keningau, alt. 1,400 m, Sabah, N Borneo, 12–II–1982; 1♀, same locality, 12–19–VIII–1983; 1♂, N Borneo, 27–V–1988; 1♀, Head Quarter, Sabah, Borneo, 22–VIII–1981, Y. JOHKEI leg. The holotype and 1 paratypes are deposited in MNHA, 2 paratypes in ZMHU, and 7 paratypes in the author's collection.

要 約

伊藤 武：スンダ列島のクロコガネ *Latipalpus* 属の分類学的研究，III。——今回，*Latipalpus* 属の1新種，*L. fujiokai* をボルネオ島北部より記載し，*L. palpalis* MOSER の再記載を行った。さらに既知7種を含む検索表を作成した。

Reference (Additional)

ITO, T., 1999. A taxonomic study of the genus *Latipalpus* (Coleoptera, Scarabaeidae), II. *Elytra, Tokyo*, **27**: 177–184.

Elytra, Tokyo, **27** (2): 451–452, November 13, 1999

A Synonym and a New Record in the Genus *Glipa* (Coleoptera, Mordellidae) from Taiwan

Masatoshi TAKAKUWA

Kanagawa Prefectural Museum of Natural History,
499, Iryuda, Odawara, 250–0031 Japan

Glipa (*Macroglipa*) *shirozui takashii* NOMURA was described from Taiwan on the basis of a single male specimen. It is, however, doubtless that it is identical with *Glipa* (*Macroglipa*) *formosana* PIC (redescribed by ERMISCH, 1940), according to my reexamination of the holotype. I