New Taxa and Record of the Genus *Necydalis* (Coleoptera, Cerambycidae) from Yunnan, Southwest China

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Abstract A new species of the subgenus *Necydalisca* PLAVILSTSHIKOV is described from Yunnan in Southwest China under the name N. (*Necydalisca*) oblonga sp. nov. Though the new species is provisionally placed in the subgenus *Necydalisca* PLAVILSTSHIKOV, it is somewhat similar in facies to the members of the nominotypical subgenus. A peculiar new subspecies of N. (*Necydalis*) *hirayamai* OHBAYASHI is described from Yunnan under the name N. (N.) h. flava ssp. nov. The new subspecies is similar in coloration to N. (N.) h. flemonea TAKAKUWA et NIISATO from northern Vietnam. *Necydalis* (*Necydalis*) *niisatoi* HOLZSCHUH is recorded for the first time from Yunnan.

Since the earlier study by GRESSITT (1951), ten new members have been added to the necydaline fauna of mainland China (CHEN, 1991; PU, 1992; NIISATO & PU, 1998; NIISATO, 2004; NIISATO & YAGI, 2005), and a total of fourteen members of the genus have so far been known from the territory of China excluding Taiwan. Through the courtesy of my cooperators, I had an opportunity to examine three *Necydalis* species which were recently collected from Yunnan. After a close examination it is revealed that one of them is *N. niisatoi* HOLZSCHUH originally described from Sichuan, and the other two belong to a remarkable new species of the subgenus *Necydalisca* PLAVILSTSHIKOV and a peculiar new subspecies of *N.* (*Necydalis*) *hirayamai* OHBAYASHI. In the following lines, I will newly describe and record them from Yunnan Province of Southwest China.

Before going further, I would like to thank Dr. Shun-Ichi UÉNO for his constant guidance and to Mr. Theodore L. CHILDERS for reading the original draft of this paper. My thanks are also due to Mr. Nobuhiko KATSURA for arranging access to invaluable material.

Necydalis (Necydalisca) oblonga sp. nov. (Figs. 1, 8-12)

Body length (from apical margin of clypeus to abdominal apex) 14.5 mm in σ^{7} .

Relatively slender and small-sized species, with short broad body, almost flattened elytra with almost rounded apices, and long antennae almost attaining to the abdominal apex.

M a l e. Colour black with brownish elytra and appendage, moderately shiny; mouthparts blackish brown, with clypeus except for apical margin black; antennae brown in segments 2–5, dark brown in apical six segments, black in scape except for brown apex; elytra dark yellowish brown and more or less weakly shiny, infuscate in arcuate line from external side of basal fourth to sutural side of apical 3/8; abdomen dark brown, though largely infuscate in middle of each tergite; legs brown, infuscate in fore and mid tarsi, dull yellow in hind tarsi.

Head large, transverse quadrate including weakly prominent eyes in dorsal view, distinctly wider than pronotum, 1.4 times in apical width or 1.25 times in the maximum width of pronotum, weakly convex and depressed on occiput, densely coarsely punctured, densely clothed with thin light yellow pubescence, and scattered with long pale yellow hairs; frons 3/5 the length of the basal width, moderately narrowed apicad in slightly arcuate line, weakly convex, triangularly declivous along a deep median groove extending to the posterior margin of convex area before occiput, closely provided with small punctures throughout; clypeus with basal lobe shagreened, with large coarse punctures near middle, fronto-clypeal suture arcuate and distinct; genae a little less than 2/5 the depth of lower eye lobes; tempora obtusely angulate at the posterior corners, not reaching the level of the external margins of eyes; eyes large, weakly prominent. Antennae long and rather slender, almost attaining to abdominal apex, slightly thickened towards apical segments, shagreened in apical eight segments, more or less shiny in basal three, clothed with minute pubescence except for brownish haired scape; scape prominent and 2/3 the length of segment 3, finely shallowly punctured, segments 5–10 gently depressed, segment 7 the longest and 1.4 times as long as segment 3, terminal segment moderately arcuate.

Pronotum rather distinctly convergent to apex which is 4/5 the width of the base, moderately longer than wide (1 : 0.85), distinctly narrower than elytra (0.7 : 1); sides rounded for a short distance from apex, straightly narrowed to apical third, strongly arcuate at a level between apical third and basal fourth, then slightly dilated to base, disc weakly convex in basal 3/4, with a large trapezoidal callosity at a level between apical and basal fourth, largely smooth on surface, rugosely punctured in basal raised area, densely clothed with silvery white pubescence at sides, and rather densely with pale yellow hairs near basal raised area and sparsely so near apex, without pubescence above. Scutellum moderate in size, triangular with rounded apex, densely clothed with pale yellow pubescence.

Elytra short and broad, hardly narrowed to apices, as long as wide, triangularly

Figs. 1–7. Necydalis species from Yunnan and its adjacent localities. — 1, N. (Necydalisca) oblonga sp. nov., holotype ♂ from "Heishui" of Yunnan; 2, N. (Necydalis) hirayamai hirayamai OHBAYASHI, ♂ from Taiwan; 3, N. (N.) h. flemonea TAKAKUWA et NIISATO, ♂ from Mt. Tam Dao, N. Vietnam; 4, ditto from Pu Mat, NW. Vietnam; 5, N. (N.) h. flava ssp. nov., holotype ♂ from Mt. Leigongyan of Yunnan, SW. China; 6, N. (N.) niisatoi HOLZSCHUH, ♀ from "Baishui" of Yunnan, SW. China; 7, ditto, paratype ♀ from "Zihag" of Sichuan, SW. China.



dehiscent in apical 2/7; sides with humeri moderately prominent forwards, slightly convergent in arcuate line to apices which are completely rounded at external sides and with very obtuse angle at sutural sides, narrowly bordered except for rather broadly bordered sutural lines; disc flattened in profile, slightly depressed near middle and obliquely so before apical 2/5, slightly raised in apical 2/7, coarsely shagreened, irregularly provided with large shallow punctures, densely and almost uniformly clothed with pale yellow pubescence except for almost bare humeri. Hind wings in folded state almost reaching abdominal apex.

Prosternum strongly vertical towards coxal cavities, transversely rugose with a few coarse punctures and pale yellow haired, except for smooth median part before coxal cavities, with intercoxal process strongly compressed at middle and densely punctured, pleural process rested at the sides of triangular apex of intercoxal process. Mesosternum coarsely punctured, clothed with pale yellow hairs, with intercoxal process weakly narrowed apicad and barely reaching anterior part of metasternum, deeply concave at apex. Metasternum moderately convex, rather densely punctured, clothed with pale yellow hairs. Abdomen 3/5 the length of body, rather weakly broadened apicad, broadest at middle of ventrite 4, coarsely shagreened, densely clothed with pale yellow pubescence; basal ventrite almost parallel-sided and almost equal in length to each of ventrites 2–4, ventrites 3 and 4 strongly arcuate at sides and gradually broadened posteriad, anal ventrite 4/5 the length of the preceding, arcuately and distinctly narrowed towards apex which is transversely truncate with minute dents at sides, gradually declivous in apical 2/5 on disc.

Legs slender and rather long, hind tibiae distinctly exceeding the abdominal apex, hind femur moderately clavate in apical 2/5; tarsi rather slender, 1st hind tarsal segment a little more than twice the length of the following two segments combined.

Median lobe a little less than 1/4 the length of abdomen, short, thick, well convex and hardly arcuate in profile of apical lobe; dorsal plate gradually narrowed in straight line to apex which is broadly rounded, exposing apical fifth of ventral plate; ventral plate slightly arcuate with thickened extremity in profile, narrowed in somewhat sinuate lines to bluntly acute apex in dorsal view. Tegmen nearly 3/4 the length to median lobe; parameres markedly narrowed apicad, approximate at apices of lobes, dehiscent in half the length of paramere measured along the midline, with each lobe gradually narrowed to apex which is a little thickened and provided with a few medium-sized winding setae; ring part forming markedly broad lobes which are fused together in apical 3/8. Tergite 8 almost as long as wide, roundly truncate at apical margin.

Type specimen. Holotype \mathcal{A} , "CHINA, Yunnan 1994 / HEISHUI env., 28–30. VI / 35 km N of Lijiang / leg. B. Siška & T. Spevár". Deposited in the National Museum of Nature and Science, Tokyo.

Distribution. Yunnan, SW. China.

Notes. Though similar in facies to the nominotypical subgenus, N. oblonga sp. nov. should be placed in the subgenus Necydalisca PLAVILSTSHIKOV in view of the long and narrow pronotum, the flattened abdomen with the anal ventrite simply declivous in



Figs. 8-12. Male genitalia and abdominal segments of *Necydalis* (*Necydalisca*) oblonga sp. nov., holotype from "Heishui" of Yunnan, SW. China. — 8, Median lobe and tegmen in lateral view;
9, median lobe in dorsal view; 10, tegmen in dorsal view; 11, 8th tergite in dorsal view; 12, anal ventrite in ventral view. Scales 0.5 mm.

apical 3/5 of disc, the structure of male genital organ, especially in the simply narrowed parameres, and rather long and slender 1st hind tarsal segment. This is also a peculiar species even in *Necydalisca* in having the long antennae attaining to the abdominal apex in the male, and the broad elytra with almost flattened disc, and has no close relative in the genus and forms an isolated species-group in the subgenus.

Necydalis (Necydalis) hirayamai flava ssp. nov.

(Figs. 2, 13-17)

Clearly distinguished by very slender body especially in the narrow pronotum from the nominotypical subspecies from Taiwan and *N*. *h*. *flemonea* from N. Vietnam, though the coloration is almost identical with that of the latter subspecies. Diagnostic character of the new subspecies are as follows: 1) Body markedly slender among the local populations of *N*. *hirayamai*, relatively small in size, 23.5 mm in the holotype σ^7 ; 2)

colour largely reddish yellow instead of red or reddish orange as in the other subspecies, with infuscate parts almost identical with those of N. h. flemonea; 3) pronotum extremely narrow, a little longer than wide, slightly dilated basad and not distinctly so as in the other subspecies, moderately clothed with light yellow pubescence and largely exposing the smooth median callosities; 4) elytra rather narrow, slightly longer than wide, more or less acute at apices; 5) legs long and slender, with 1st hind tarsal segment slender and not broadened laterad, 1.8 times longer than the following two segments combined; anal ventrite almost trapezoidal, weakly narrowed apicad, a little longer than wide, widely and deeply concave in an oval shape in apical 3/5; 8th tergite semicircular with a obtuse dent at middle of apical margin; male genitalia as in Figs. 13–15, with parameres large and very broad, approximate to each other.

Type specimen. Holotype ♂, Mt. Leigong'yan (雷公岩), Mengla Co., Yunnan Prov., SW. China, 1~5–VI–2008. Deposited in the National Museum of Nature and Science, Tokyo.

Distribution. Yunnan, SW. China.

Notes. Necydalis (Necydalis) hirayamai flemonea was originally described from Mt. Tam Dao of northern Vietnam as a local population of the Taiwanese species and is clearly distinguished from the latter by the diagnostic characters suggested in the original description; elytra entirely red without black apices as in the nominotypical race, and just as long as wide instead of 0.9 times as long as wide in the nominotypical race; hind femur more weakly clavate in apical 2/5, almost smooth at external sides while it is densely punctured in the nominotypical race. Though almost identical in coloration with N. h. flemonea, the present subspecies from Yunnan is distinguished from the other two subspecies by the diagnostic characters mentioned in the above description.

Necydalis hirayamai has so far been known from four isolated localities, viz., central Taiwan as the area of the nominotypical race, Mt. Tam Dao and Pu Mat of northern Vietnam as the localities of N. h. flemonea, and Mt. Leigong'yan of Yunnan as the type locality of N. h. flava ssp. nov. (OHBAYASHI, 1948; TAKAKUWA & NIISATO, 1996; NIISATO, 1998). In addition, a single specimen of the species was collected from Sapa of northern Vietnam according to a personal communication from N. KATSURA. The isolated populations from four or five localities show rather distinct geographical variations and may be placed at the rank of subspecies or independent species. It may be difficult to resolve the exact classification of all the populations of N. hirayamai, since we were able to examine only single specimens from two of the four known localities.

Comparative specimens examined. Necydalis (Necydalis) hirayamai hirayamai: $1 \triangleleft^{7}$, Mt. Kwangtaoshan, Jenai, Nantou Hsien, C. Taiwan, $6 \neg V \neg 1990$, C.-C. Luo leg. Necydalis (N.) hirayamai flemonea: $2 \triangleleft^{7} \triangleleft^{7}$ (paratypes), Mt. Tam Dao, Vinh Phu Prov., N. Vietnam, $1 \sim 18 \neg VI \neg 1995$; $1 \stackrel{\circ}{\rightarrow}$, same locality as the preceding, $V \neg 2000$; $1 \triangleleft^{7}$, Pu Mat, Nghe An Prov., NW. Vietnam, VI $\neg 2008$.



Figs. 13-17. Male genitalia and abdominal segments of *Necydalis (Necydalis) hirayamai flava* ssp. nov., holotype from Mt. Leigong'yan of Yunnan, SW. China. — 13, Median lobe and tegmen in lateral view; 14, median lobe in dorsal view; 15, tegmen in dorsal view; 16, 8th tergite in dorsal view; 17, anal ventrite in ventral view. Scales 0.5 mm.

Necydalis (Necydalis) niisatoi HOLZSCHUH, 2003

(Figs. 6-7)

Necydalis niisatoi HOLZSCHUH, 2003, Ent. Basil., 25, p. 167, fig. 17; type locality: China, W Sichuan, Zihag env., 1500-2000 m.

Specimens examined. 1 $\stackrel{\circ}{+}$, "CHINA — YUNNAN / BAISHUI-3000 m / 26.6 — 3.7.1996 / E. KUČERA leg."; 2 $\stackrel{\circ}{+}$ (holotype & paratype), "China, W Sichuan / Zihag env., 1500–2000 m / 25.–30. vi. 1994 / J. Kaláb leg." "PARATYPE / Necydalis niisatoi n. sp. / det. C. Holzschuh 2003".

Distribution. Sichuan and Yunnan (new record), SW. China.

Notes. The single female specimen examined from Yunnan is almost identical with the type series of N. *niisatoi* from "Zihag env." of Sichuan, but differs from the latter

in the following points: 1) pronotum except for black apical and basal margins and head largely reddish brown, instead of dark reddish brown with almost entirely black pronotum; pronotum rather densely punctured instead of very sparsely so; 2) anal tergite roundly truncate at apical margin instead of truncate with a little concavity at middle. It is most probable that the differences mentioned above show the geographical variation in the locality of Yunnan. However, I cannot describe a new subspecies for it since only a single female specimen was available from Yunnan for the present examination.

要 約

新里達也:中国雲南省から見つかったホソコバネカミキリ属の新タクサおよび新記録種. 中国雲南省からはこれまでホソコバネカミキリ属のいかなる種も記録されていなかったが、同地 域の近年の調査により本論文で記録した3種が新しく発見された.そのうち1種はホソコバネカ ミキリ亜属に属し、既知のいかなる種とも類縁関係のない顕著な新種で、ほかの2種は近隣の四 川省およびベトナムからすでに記録のある種であった.

1) Necydalis (Necydalisca) oblonga sp. nov.: 腹部は平圧され,腹板末端節は先端に向けて単純 に傾斜し,後肢第1付節は細長いなどの特徴からホソコバネカミキリ亜属に所属する新種である が,外観や色調は基亜属の種にむしろ似ていて紛らわしい.ホソコバネカミキリ亜属としても非 常に特異な種で,近縁なものはほかに知られていない.

2) Necydalis (Necydalis) hirayamai flava ssp. nov.: ヒラヤマホソコバネカミキリには、台湾の 基亜種と北ベトナムのタムダオ山から記載された N. h. flemonea の 2 地域集団が知られていたが、 このたび雲南省雷公岩から特異な変異を示す個体が発見されたので、新亜種としてここで命名記 載した.本新亜種は既知の集団とは異なり、橙黄色の明るい色調の体をもつが、黒色部のパター ンは N. h. flemonea と基本的に変わらない.ただし、体形は既知亜種に比べて著しく細く、前胸背 板は基部に向けてわずかに広がるだけで、背面隆起は広く無毛かつ平滑、腹部腹板末端節はやや 縦長の台形で、先端 2/5 が幅広く卵形にえぐられるなどの多くの異なる特徴をそなえている.

3) Necydalis (Necydalis) niisatoi HOLZSCHUH: 四川省西部 "Zihag env.,"から記載された種であ るが、今回、近隣の雲南省 "Baishui"から1♀が得られた. 基準産地の個体と比べると、色調が明 るく、前胸背板の点刻はむしろやや密に点刻され、尾節板(腹部第7背板)の先端縁は完全に丸 められるなどの違いが認められる. これらの差異はおそらく同種内における地域変異と考えられ るが、その違いが比較的軽微であるうえに、検視できた両地域の標本が現状では1~2 個体と少な いことから、新亜種の命名は控えることにした.

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A New Paramimistena (Coleoptera, Cerambycidae) from Northeastern Laos

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A total fourteen species of the genus *Paramimistena* have so far been recorded mainly from Indochina and its neighborhood, and a few from Sri Lanka and Borneo. I recently found a peculiar new species of the genus with tricolored elytra in the field survey of northeastern Laos, and am going to describe it in the following lines. I am grateful to Mr. Hiroyuki WAKAHARA for his kind support in the field way.

Paramimistena tricolor sp. nov.

(Fig. 1)

Body length 4.2-4.6 mm (measured from apical margin of clypeus to abdominal apex). Belonging to the *P. polyalthiae* group (HOLZSCHUH, 1999) though slightly different in a few critical details from other members of the group. Colour black to brownish black, brown in mouthparts, antennae, legs, basal margin of pronotum, sides of mesosternum and metepisternum,