

A New Species of the Group of *Necydalis nanshanensis* (Coleoptera, Cerambycidae) Discovered in Continental China

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Abstract A new cerambycid beetle belonging to the group of *Necydalis nanshanensis* is described from Fujian Province, South China, under the name of *N. fujianensis* sp. nov. This new species is the first representative of the species-group from the continental side of China, and shows some intermediate character states between those of *N. nanshanensis* from Taiwan and *N. shinborii* from northern Vietnam.

The cerambycid beetles belonging to the group of *Necydalis nanshanensis* are characterized by the robust but elongate body with rather stout appendages, the voluminous pronotum with sides arcuately rounded, the short elytra, and the moderately dilated abdomen, and also usually show distinct sexual dimorphism (cf. NIISATO, 1998 b). Four members of this group have been known from eastern Indochina to Southwest Japan, viz., *N. shinborii* TAKAKUWA et NIISATO and *N. katsuraorum* NIISATO from northern Vietnam, *N. nanshanensis* KUSAMA from Taiwan, and *N. yakushimensis* KUSAMA from Southwest Japan. Any species of the same group has not been recorded so far from the continental side of China no doubt because of insufficient field research.

Examining the cerambycid collection deposited in the Academia Sinica, Beijing, we found a single Chinese specimen of this species-group long waited for. The male specimen in question is characterized by the hardly narrowed apex of pronotum with close and rugose punctuation, the short elytra which are as long as wide, and the deep apical concavity of the anal sternite of abdomen. It has several intermediate characters between *N. nanshanensis* from Taiwan and *N. shinborii* from northern Vietnam, e.g., the hardly narrowed pronotal apex and the short elytra with rounded apices agree with those of the former species, and the deep and coarse punctuation on the pronotum and elytra, and the extremely deep apical concavity on the anal abdominal sternite with those of the latter. On the other hand, the more strong and rugose punctuation on the head and pronotum, the narrow triangular scutellum, and the largely black femoral

bases may be an apomorphy of this continental species. It is doubtless that three allopatric species have been derived from a common ancestor, though we cannot determine their true affinity because no information is available at present for such a *Necydalis* species in a wide blank area of South China.

In the following lines, we are going to describe the continental species. It is expected that such isolated species of the species-group will be reclassified on a sounder basis by future investigations to be made in Continental China.

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Necydalis (Necydalis) fujianensis NIISATO et PU, sp. nov.

(Fig. 1 a-b)

Belonging to the group of *N. nanshanensis*, and possessing the intermediate characters between *N. nanshanensis* and *N. shinborii*. Characterized by the hardly narrowed pronotum with close and rugose punctuation, the closely punctured short elytra without sutural angles, the deep apical concavity on the anal abdominal sternite and the largely black bases of all the femora.

Male. Colour black, reddish brown to dark reddish brown on abdomen and appendages, moderately shiny; mouth parts black, with yellowish brown palpi and labrum; antennae except for 2 basal black segments dark reddish brown; elytra dark reddish brown, with black margins which are enlarged to disc near apical parts; hind wings dark brown; abdomen reddish brown, black in sternite 3, base of sternite 4, and apical margins of sternites 5 and 6; legs reddish brown, black in basal halves of fore and mid femora, and basal 2/3 of hind femora, hind tarsi yellow. Body clothed with pale yellow pubescence, partly with golden yellow or silvery white ones; frons densely with pale yellow pubescence; pronotum golden yellow haired, the hairs especially dense at sides; scutellum rather thinly with pale yellow pubescence; elytra sparsely with pale hairs; ventral sides of meso- and metathoraces densely with silvery white pubescence; abdomen densely with pale yellow pubescence.

Head large and voluminous, closely and scabrously punctured, HW/PA 1.17, HW/PW 1.04; frons nearly as long as wide, moderately raised, provided with a deep median longitudinal groove extending to vertex; occiput weakly raised; gena nearly half the depth of lower eye-lobe; eyes large, moderately prominent laterad. Antennae stout and relatively long, reaching basal third of tergite 4; scape thick, weakly arcuate on dorsal side, finely punctured, nearly as long as segment 3; segments 3 and 4 thickened at each apex, the latter segment nearly 3/4 the length of the former; remaining 6 segments slightly inflated; terminal segment hardly arcuate.

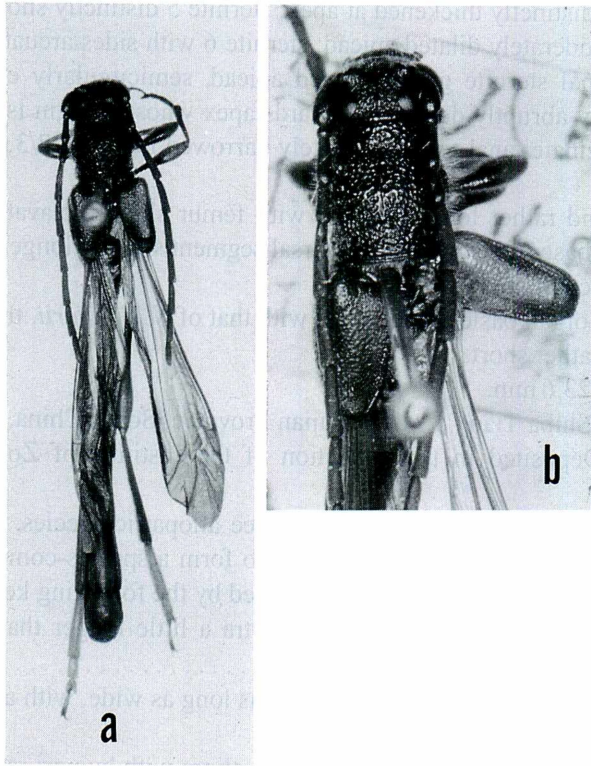


Fig. 1. *Necydalis (Necydalis) fujianensis* NIISATO et PU, sp. nov., holotype ♂, from Fujian Province, South China; a, whole body; b, fore body.

Pronotum moderately voluminous, slightly longer than wide, hardly narrowed apicad, PL/PW 1.11, PL/PA 1.25, PA/PB 0.96, PW/EW 0.84, PL/EL 0.93; sides largely and rather weakly arcuate near middle, slightly constricted before and behind the median swellings; disc convex, moderately raised toward base, transversely concave near apical $2/5$ and just before base; surface closely, coarsely and somewhat rugosely punctured, with irregularly formed, impunctured areas near the centre. Scutellum narrowly triangular, narrowly truncate at apex, concave along the midline.

Elytra as long as wide (EL/EW 1.00), slightly exposing the sides of metathorax, distinctly marginate throughout, sides with humeri moderately projected forwards, straightly convergent to apical fourth, then arcuate to completely rounded apices; disc weakly convex though almost flattened above, concave near suture in apical third, distinctly raised in apical sixth; surface coarsely and rather closely punctured. Hind wings reaching the base of tergite 6.

Prosternum coarsely and rugosely punctured. Metasternum rather coarsely shagreened. Abdomen slender, moderately dilated apicad; sternite $3\frac{1}{3}$ longer than sternite 4, moderately and arcuately emarginate near the middle, and then widely dilated

apicad; sternite 4 distinctly thickened at apex; sternite 5 distinctly shorter than the preceding sternite, moderately dilated apicad; sternite 6 with sides arcuate and weakly divergent apicad; anal sternite gently dilated apicad, semicircularly concave in apical third, the concavity abruptly declivous towards apex whose margin is widely and subtriangularly emarginate; anal tergite arcuately narrowed in apical 2/3, with moderately rounded apex.

Legs stout and rather long; hind leg with femur slightly clavate in apical third, tibia reaching the base of last tergite, 1st tarsal segment slightly longer than the following two segments combined.

Male genital organ basically identical with that of *N. shinborii*, though the median lobe is thick and rather short.

Body length 23.6 mm.

Holotype ♂, Shiba Tiao (十八跳), Fujian Province, South China, 16–VI–1981, JIE Shi-Cheng leg. Deposited in the collection of the Institute of Zoology, Academia Sinica, Beijing.

Notes. As was mentioned above, the three allopatric species, *N. nanshanensis*, *N. fujianensis* sp. nov. and *N. shinborii*, seem to form a species-complex in the group of *N. nanshanensis*. Their males are discriminated by the following key:

- 1(2) Pronotum distinctly narrowed apicad; elytra a little longer than wide, provided with small sutural angles; N. Vietnam. *N. shinborii*.
- 2(1) Pronotum hardly narrowed apicad; elytra as long as wide, with almost completely rounded apices.
- 3(4) Pronotum closely and rugosely punctured; elytra with humeri rather strongly projected, with close punctuation; apical concavity on anal sternite very deep; S. China. *N. fujianensis* sp. nov.
- 4(3) Pronotum finely and rather sparsely punctured; elytra with humeri moderately projected, with rather sparse punctuation; apical concavity on anal sternite moderately deep; Taiwan *N. nanshanensis*.

The exact location of Shiba Tiao, the type locality, is uncertain. It may be a peak of mountains somewhere in Fujian Province, since “Shiba” + “Tiao” means “Eighteen Jumps” in Chinese. The collecting site of the new species may be a place at higher altitude, because the date “June 16” seems rather late for the flight period of the group of *N. nanshanensis*.

要 約

新里達也・蒲 富基：中国福建省から発見されたナンシャンホソコバナネカミキリ種群の1新種。——ナンシャンホソコバナネカミキリ種群には、ナンシャンホソコバナネカミキリ（台湾）、ヤクシマホソコバナネカミキリ（西南日本）、シンボリホソコバナネカミキリおよびカツラホソコバナネカミキリ（北ベトナム）の4種が知られ、異所的に分布する前3種は直系の祖先が推定される姉妹群を形成している（新里，1998b）。この種群のホソコバナネカミキリは、その分布拡散の経路を考えても、中国の大陸側に分布することが予想されていたが、同地域の調査がじゅう

ぶんでなかったことから、これまで未発見であった。

このたび、中国科学院動物研究所の所蔵標本を再調査したところ、中国南部福建省から同種群の1雄の標本を見いだすことができた。この個体はきわめて興味深いもので、北ベトナムのシンボリホソコバネと台湾のナンシャンホソコバネの中間的な特徴をあわせもっている。たとえば、前胸背板と鞘翅の表面が荒く密に点刻され、腹部腹板の先端部がいちじるしく深くえぐれるなどの特徴は前者に、前胸背板が前方に狭まらず、鞘翅が短く、その内角が丸い点などは後者にきわめてよく似ている。また、頭部と前胸背板の点刻はこれらの2種より密に強く皺状となること、小盾板は狭い三角形で、腿節は広く黒色を呈することなどの特徴は本種に固有である。

これら3種は同一祖先から派生した地域個体群に間違いはないが、北ベトナムと中国南部の広い分布空白地帯に関する情報はこれまでのところまったく得られておらず、現状では本種群の全分布域をとらえた、満足な検討を行うことができない。そこで本論文では、この福建のものを既知種の個体群に属しない独立種と暫定的にみなし、フッケンホソコバネカミキリ（福建膜翅花天牛）*Necydalis (Necydalis) fujianensis* sp. nov.と命名記載し、詳細については将来の調査研究に委ねることとした。

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