

A New *Pseudocranion* (Coleoptera, Carabidae) from
Mt. Taibai Shan on the Qinling Mountains in
Shaanxi Province, Central China

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Abstract A new species belonging to the subgenus *Pseudocranion* of the genus *Carabus*(s.lat.) is described from Mt. Taibai Shan on the Qinling Mountains in Shaanxi Province, Central China, under the name of *C.(P.) kitawakiellus* nov.

Up to the present, eighteen species of the genus *Carabus*(s.lat.) are recorded from the Qinling Mountains in Shaanxi Province, Central China (cf. IMURA, 1993 a, b, 1994), though the carabid fauna of the high altitudinal area of the same mountain range is poorly investigated as yet. I had recently an opportunity to examine a short series of insect specimens consisting mainly of the genus *Carabus* obtained from near the summit of Mt. Taibai Shan, the highest peak of the same mountain range, and found a strange species belonging to the subgenus *Pseudocranion* in the collection. After careful comparative study, I have come to the conclusion that the species in question must be new to science, as will be described in the following lines (the abbreviations used in the text are the same as those explained in my previous papers).

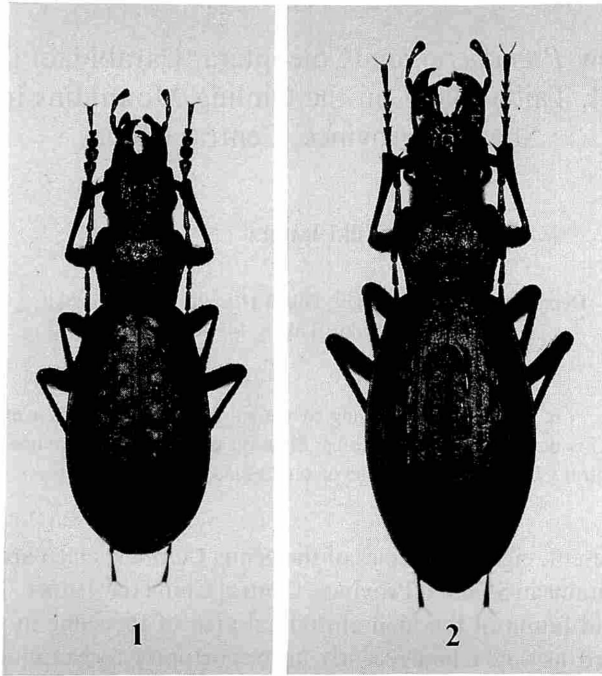
Before going further, I wish to express my cordial thanks to Dr. Shun-Ichi UÉNO of the National Science Museum, Tokyo, for kindly reviewing the original manuscript. Also I wish to thank Mr. Wakô KITAWAKI, Osaka, for kindly giving me the opportunity to examine the materials used for the present study.

***Carabus (Pseudocranion) kitawakiellus* IMURA, sp. nov.**

(Figs. 1–6)

Length: 18.8–23.5 mm (including mandibles). Small-sized species for the subgenus, characterized by marked macrocephalism, comparatively small pronotum, wide and less prominent primary callosities of elytra, and short and robust apical lobe of aedeagus, etc. Body above dark coppery and not shiny, except for depressed- and marginal parts of head, pronotum and elytra which are bluish green with metallic lustre. Venter and appendages black or dark brown, except for mandibles and antennae which are a little reddish.

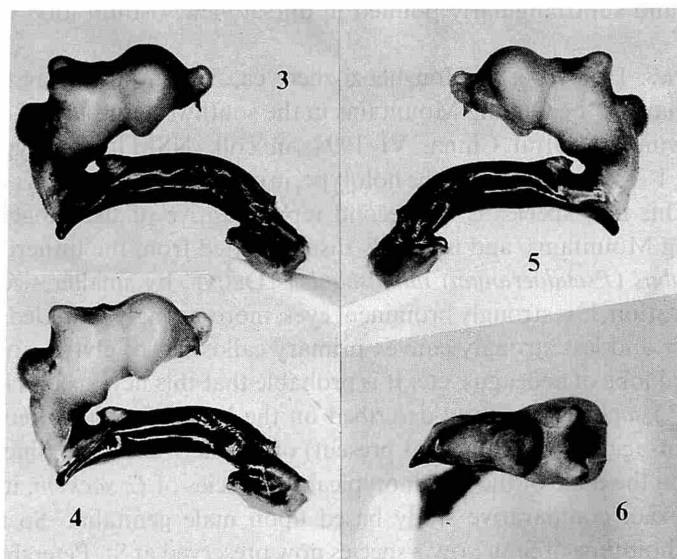
Head almost as in the other species belonging to the same subgenus, but mac-



Figs. 1-2. *Carabus (Pseudocranion) kitawakiellus* IMURA, sp. nov., from Mt. Taibai Shan on the Qinling Mountains in Shaanxi Province, Central China; 1, ♂ (holotype); 2, ♀ (allotype).

rocephalism is more conspicuous, especially in female; eyes less prominent laterad than those of the other members, more remarkably so in male; genae below eyes strongly extending laterad, with the sides feebly dilated posteriad; external angles of cardo-stipes joints conspicuously prominent laterad, its apices being visible beyond the sides of genae in dorsal view in female; frontal fullows distinct, with the surface smooth in apical parts, and strongly rugose in basal ones; frons strongly convex above, with the surface irregularly rugose and roughly punctate; dorsal surface of head behind eyes also irregularly and strongly rugose though hardly punctate; anterior tooth of right mandibular retinaculum much reduced; labial palpus quadri- or pentasetose; median tooth of mentum a little shorter than the lateral lobes, obviously produced ventrad, with the apex obtusely pointed; submentum asetose and transversely striate; antennae reaching basal third of elytra in male (in female, apical three or four segments are absent); relative lengths of scape and segments 2-4 as follows:— 1 : 0.7 : 1 : 0.8.

Pronotum transverse and widest at about apical third; PW/HW 1.20–1.21, PW/PL 1.39–1.42, PW/PAW 1.27–1.34, PW/PBW 1.27–1.28, PAW/PBW 0.95–1.00; apical margin moderately emarginate; front angles obtuse and barely produced anteriorly; sides gently rounded in front and weakly sinuate posteriad; hind angles triangularly protrudent posteriad though short, with the apices not so strongly pointed; basal



Figs. 3-6. Aedeagus (with endophallus fully everted) of *Carabus(Pseudocranion) kitawakiellus* IMURA, sp. nov., from Mt. Taibai Shan on the Qinling Mountains in Shaanxi Province, Central China; 3, right lateral view; 4, right ventro-lateral view; 5, left lateral view; 6, posterior view.

margin weakly bisinuate; disc slightly convex above, asperous and scabrous except for two pairs of longitudinally arranged hump-like convexities on each side of the mid-line near centre, whose surface is rather sparsely punctate; lateral margins bi- or trisetose, one or two setate near the widest part and one slightly before hind angles; basal foveae rather deeply concave; median longitudinal line narrow but clearly impressed.

Elytra elongated oval, rather strongly convex above, and widest at about or a little behind the middle; EW/PW 1.56–1.59, EL/EW 1.69–1.72; shoulders effaced in male and a little more distinctly marked in female; sculpture triploid heterodyname; primaries the widest though not strongly convex above, frequently and rather regularly interrupted by shallow primary foveoles to form rows of elliptical callosities; secondaries much narrower, a little less strongly raised, and almost contiguous though partly crenulate or segmented by small, irregularly shaped secondary foveoles; tertiaries indicated by irregularly and rather coarsely set rows of large granules which show a tendency to fuse with adjacent primaries and secondaries; striae between intervals shallow and often becoming unclear.

Pro-, meso-, metepisterna and sides of sternites irregularly wrinkled; sternal sulci absent; metacoxa bisetose, proximal setae absent; legs slender though not so long, basal four segments of male foretarsus dilated with hair pads on the ventral surface. Male genitalia as shown in Figs. 3–6; aedeagus robust, subcylindrical in median portion, and gently arcuate towards apex which is very short and obtusely rounded in tip in

lateral view, and subtriangularly pointed in dorsal view; ostium lobe very short and unilobate.

Type series. Holotype: ♂, Houzhenzi-zhen, ca. 3,700m alt., near the summit of Mt. Taibai Shan on the Qinling Mountains in the southwestern part of Zhouzhi Xian, Shaanxi Province, Central China, VI-1994, in coll. NSMT. Paratypes (including allotype): 1 ♂, 1 ♀, same data as for the holotype, in colls. Y. IMURA and K. MIZUSAWA.

Notes. This new species is the second representative of the subgenus occurring on the Qinling Mountains, and is readily discriminated from the hitherto known one, namely, *Carabus (Pseudocranion) taibaishanicus* DEUVE, by smaller size, much more greenish coloration, less strongly prominent eyes, more strongly wrinkled upper surface of head, wider and less strongly convex primary callosities of elytra, and shorter and robuster apical lobe of aedeagus, etc. It is probable that this new species is most closely allied to *C.(P.) sackeni* SEMENOW described on the basis of a single female specimen from near Lun-ngan-fu (= Pingwu at present) of northern Sichuan. Since nothing has been known on the male of the nominotypical subspecies of *C. sackeni*, it is impossible to make an exact comparative study based upon male genitalia. So far as I have examined the holotype of SEMENOW's species now preserved at St. Petersburg, however, the Taibai Shan species differs from it by having much more strongly rugose dorsal surface of head, longer antennae and legs, more transverse pronotum, slenderer elytra, and much less roughly sculptured elytral disc, etc.

要 約

井村有希：秦嶺山脈太白山から発見されたニセキンオサムシの1新種。——中国陝西省秦嶺山脈の主峰、太白山（標高3,767 m）の山頂付近から得られたニセキンオサムシ亜属の1種を新種と認め、*Carabus (Pseudocranion) kitawakiellus* IMURA, sp. nov. という名を与えて記載した。同山脈から知られていた同亜属の *C. (P.) taibaishanicus* DEUVE よりも小型で、緑色味が強く、複眼の突出が弱く、上翅間室隆起部がより平坦で、陰莖先端が短いので、両者の識別は容易である。本種にもっとも類縁が近いと思われるのは、四川省北部から記載された *C. (P.) sackeni* SEMENOW であろう。後者の雄が未知であるために、雄交尾器形態に基づく比較は不可能だが、サンクト・ペテルブルクに保管されている正基準標本を検したところ、太白山の種のほうが頭部の皺が強く、触角と肢がより長く、前胸背板はより横長で、上翅はやや細長く、各間室の隆起がはるかに弱い。

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