

## Descriptions of Two New Species of *Platycerus* (Coleoptera, Lucanidae) from Central Sichuan, Central China

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**Abstract** Two new lucanid beetles of the genus *Platycerus* are described from central Sichuan, Central China, under the names of *Platycerus benesi* sp. nov. and *P. dundai* sp. nov. Judging from obtusely rounded hind angles of pronotum, they belong presumably to the group of *P. delicatulus* hitherto known only from Japan.

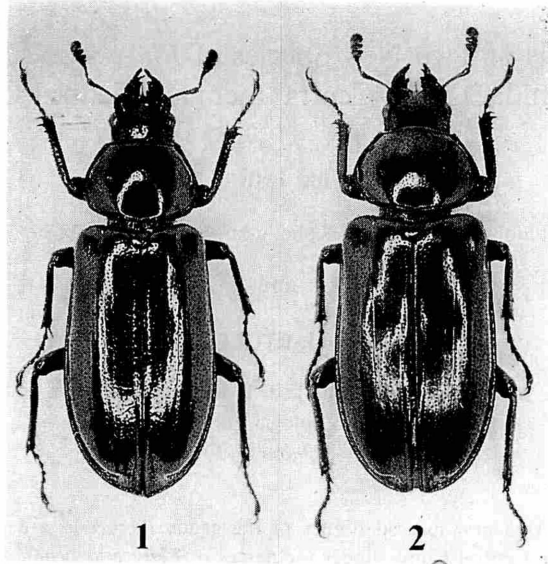
Our knowledge on *Platycerus* lucanid beetles of China is still very poor, as only two species have so far been recorded from that country: *P. caraboides caerulosus* DIDIER et SÉGUY (*sensu* IMURA, 1994) from Hunan, and *P. hongwonpyoi qinlingensis* IMURA from Shaanxi.

Recently, we had an opportunity to examine two female specimens of *Platycerus* collected from central Sichuan. They were found at different collecting sites in the same valley situated on the eastern slope of Mt. Gongga Shan. They are very similar in external appearance, but careful examination of their external morphology and genitalic structure has led us to the conclusion that they belong to two different species new to science.

Both the females are quite large for the genus (over 12 mm in length, including mandibles), have peculiarly shaped pronotum and elytra, and are readily distinguishable not only from the above two Chinese species but also from all other East Asian *Platycerus* including those from the Korean Peninsula and the Japanese Archipelago.

The most peculiar character of the new taxa is that the hind angles of the pronotum are not rectangularly pointed but rather obtusely rounded. A similar shape is found only in two Japanese endemic species, *P. delicatulus* LEWIS and *P. kawadai* FUJITA et ICHIKAWA. Although only two female specimens are now available for study, we are going to describe them in the present paper in order to increase the knowledge of the Chinese lucanid fauna and for their importance in further taxonomical and zoogeographical studies.

The abbreviations employed herein are as follows: HW – maximum width of



Figs. 1–2. *Platycerus* spp. from central Sichuan, China. — 1, *Platycerus benesi* IMURA et BARTOLOZZI, sp. nov., ♀ (holotype), from Moxi in Luding Xian; 2, *P. dundai* IMURA et BARTOLOZZI, sp. nov., ♀ (holotype), from Hailuo-gou on the eastern slope of Mt. Gongga Shan in Luding Xian.

head including eyes; PAW – approximate width of pronotal apex, measured between the most advanced points on both sides; PW – maximum width of pronotum; PL – length of pronotum, measured along the mid-line; EW – maximum width of elytra; EL – maximum length of elytra.

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#### 1. *Platycerus benesi* IMURA et BARTOLOZZI, sp. nov.

(Figs. 1, 3)

*Female.* Length: 12.5 mm (including mandibles). Width: 4.6 mm.

Body above brassy with dark greenish lustre especially on head, pronotum and elytral margins; median portion of mandibles, palpi and basal two-thirds of antennae reddish brown as well as tarsi and claws; marginal portion of mandibles, apical third of antennae and tibiae dark brown or brownish black; femora yellowish brown except for the apical tips which are dark brownish; venter black or dark brown except for metasterna, metepisterna and abdominal sternites which are reddish brown.

Head basically similar to that of the other members of the genus; its dorsal surface

rather sparsely scattered with punctures which are not confluent with one another.

Pronotum subtrapezoidal, widest a little behind the middle, more acutely narrowed towards apex than towards base; PW/HW 1.71, PW/PL 1.37, PW/PAW 1.66; apical margin slightly bisinuate; front angles obtuse and feebly protrudent anteriorly; sides almost straight in front, subangulate at a little behind the middle, then gently narrowing posteriorly; hind angles obtuse and gently rounded; basal margin arcuate; disc moderately convex above, with the surface sparsely and irregularly scattered with rounded punctures which are not confluent with one another.

Elytra oblong-subovate, widest at about three-fifths from bases, narrower towards apices than towards bases; EW/PW 1.32, EL/EW 1.59; shoulders distinct and strongly rounded, and devoid of humeral tooth; sides narrowly bordered throughout, slightly emarginate behind shoulders, feebly but widely arcuate at middle, then moderately rounded to apices which are rather narrowly and almost conjointly rounded, though forming a small re-entrant angle at suture; sutural parts slightly elevated in posterior two-thirds; disc with scattered small punctures often arranged in longitudinal rows, and sporadically contiguous with each other by transversely or somewhat obliquely set short wrinkles; each disc with two fine longitudinal striae almost at the centre and a little outside there.

Abdominal sternites rather sporadically punctate. Gonocoxite subquadrate, with the apical inner angle rather acute but gently rounded, and not strongly projected postero-internally; stylus oblong-ovate, with the sides almost parallel.

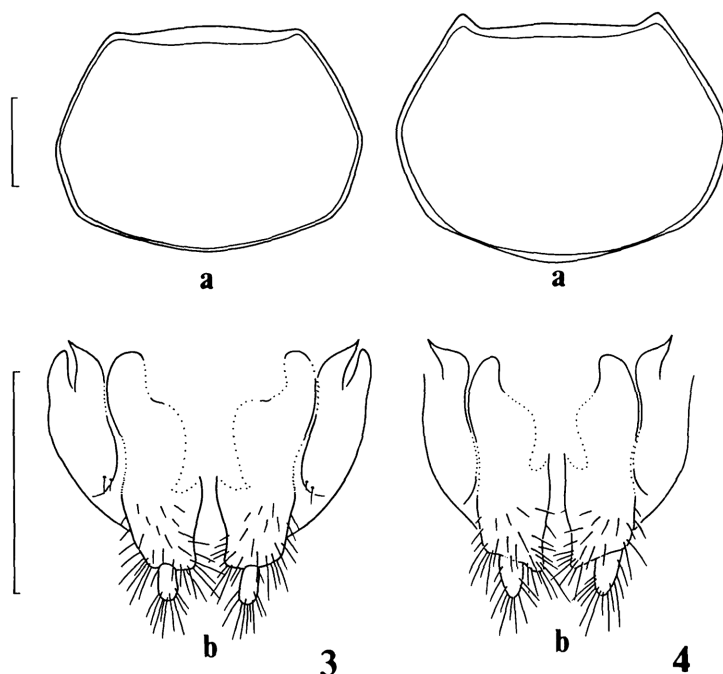
*Male.* Unknown.

Holotype: ♀, near Moxi, ca. 1,500 m, in Luding Xian, central Sichuan, Central China, 22-V ~ 10-VI-1993, V. BENEŠ leg.

*Type depository.* Museo di Storia Naturale della Università di Firenze, Sezione di Zoologia "La Specola" (collection number 9731).

*Derivatio nominis.* The present new species is named in honour of Dr. Vladimír BENEŠ (Ustí nad Labem, Czech Republic), a neurosurgeon and also an entomologist, who collected the holotype specimen.

*Notes.* This new species is more closely related to the group of *P. delicatulus* (containing two Japanese species, viz., *P. delicatulus* LEWIS and *P. kawadai* FUJITA et ICHIKAWA) than to the group of *P. caraboides* (four species in East Asia: *P. caraboides* LINNÉ, *P. acuticollis* Y. KUROSAWA, *P. sugitai* OKUDA et FUJITA, and *P. hongwonpyoi* IMURA et CHOE). It is easily distinguished from all the species belonging to the latter group by the differently shaped hind angles of pronotum. On the other hand, it is discriminated from the former group by the following points: size slightly larger; femora dark yellowish brown, though they are usually black in *P. delicatulus*; meso- and metatibiae black, though they are yellowish brown in *P. kawadai*; dorsal surface of head a little more sparsely punctate than in *P. delicatulus*; pronotum more transverse, with the front angles not so distinctly protrudent anteriorly as in the two Japanese species; elytra slenderer, with the shoulders more effaced and the apices a little more narrowly rounded; elytral surface more sparsely punctate, more weakly



Figs. 3-4. Pronotum (a, dorsal view) and female genitalia showing gonocoxite and stylus (b, ventral view) of *Platycerus* spp. — 3, *Platycerus benesi* IMURA et BARTOLOZZI, sp. nov. (holotype); 2, *P. dundai* IMURA et BARTOLOZZI, sp. nov. (holotype). Scale bar=1 mm.

rugoso-striate, and not clearly depressed in the median portion near suture on the disc; abdominal sternites more sparsely punctate; apical inner angle of gonocoxite a little more distinctly protrudent postero-internally.

## 2. *Platycerus dundai* IMURA et BARTOLOZZI, sp. nov.

(Figs. 2, 4)

*Female.* Length: 12.6 mm (including mandibles). Width: 4.9 mm.

Closely allied to *P. benesi* sp. nov., but differs from it in the following points: tibiae reddish brown except for blackish apical part; pronotum a little more transverse, with the front angles triangularly protrudent anteriorly; elytra a little robuster, with the shoulders a little more distinct, apices more widely and almost conjointly rounded; elytral disc gently but obviously depressed at about the middle near suture, with the surface slightly duller and not at all rugoso-striate; genital organ with the apical-inner angle of gonocoxite more strongly projected postero-internally, stylus gradually narrowing to the apex.

*Male.* Unknown.

Holotype: ♀, Hailuo-gou Glacier Park on the eastern slope of Mt. Gongga Shan in Luding Xian, central Sichuan, Central China, 21~24-VII-1993, R. DUNDA leg.

*Type depository.* Museo di Storia Naturale della Università di Firenze, Sezione di Zoologia "La Specola" (collection number 9730).

*Derivatio nominis.* This species is named after its collector, Mr. Radek DUNDA, an entomologist who lives in Prague, Czech Republic.

### 要 約

井村有希・Luca BARTOLOZZI: 中国四川省中部から発見されたルリクワガタの2新種。——中国のルリクワガタに関する知見はいまだにきわめて乏しく、これまでに湖南省と陝西省から、コルリクワガタ群に属する2種が記録されているにすぎない。筆者らはさいきん、四川省中部の貢嶮山東麓から発見された2頭の雌のルリクワガタを検査することができた。両者はいっけんよく似ているが、それぞれ異なる種に属するものと思われ、なおかつ既知のいかなる種からも識別しうる形態的特徴を有している。もっとも注目すべき点は、その前胸背板後角が尖らず、丸まっていることで、これは東アジアに産する同属各種のなかでは、わが国に産するルリクワガタ *P. delicatulus* とホソツヤルリクワガタ *P. kawadai* のみに共有される形質である。雄が未知であるために確かな類縁関係はわからないが、四川省の種はおそらくこれら2種と同じ種群に属するものと考えられ、邦産種の起源を考えるうえで重要な発見であることは疑いない。そこで、本論文ではこれらの2種に *Platycerus benesi* sp. nov. および *P. dundai* sp. nov. という名を与えて記載した。

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