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# Contributions to the Knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China

Part 18. Genus Bolitogyrus CHEVROLAT, 1848. Section 2

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Abstract Bolitogyrus nigropolitus is described as new, based on specimens from Sichuan. Two main lineages of the Chinese species of Bolitogyrus are briefly discussed, and a key to the species of Bolitogyrus known at present from mainland China is given.

After submitting the manuscript of the first contribution to the knowledge of the Chinese species of *Bolitogyrus* (SMETANA & ZHENG, 2000) for print, I received two additional specimens which I believed to be *B. elegans* SMETANA et ZHENG, 2000. However, they turned out to belong to a different, very similar and apparently closely related species. This species is described below. With the discovery of this additional species the number of species of *Bolitogyrus* of mainland China rose to six, though further species will very likely be discovered. A key to the presently known species is presented.

The Chinese species of *Bolitogyrus* apparently belong to two main lineages, defined by the pronotal sculpture. One lineage, containing the species *B. elegans*, *B. nigropolitus* sp. nov., *B. cyanipennis* ZHENG, 1988 and *B. kitawakii* SMETANA et ZHENG, 2000, is characterized by the presence of coarse punctation on the anterolateral corners of the pronotum. In the other lineage, containing *B. fukienensis* SCHEERPELTZ, 1974 and *B. pictus* SMETANA et ZHENG, 2000, the anterolateral corners lack any punctation. The two Taiwanese species, *B. rufomaculatus* SHIBATA, (1979) and *B. taiwanensis* (HAYASHI, 1991) both belong to the latter lineage.

## Bolitogyrus nigropolitus sp. nov.

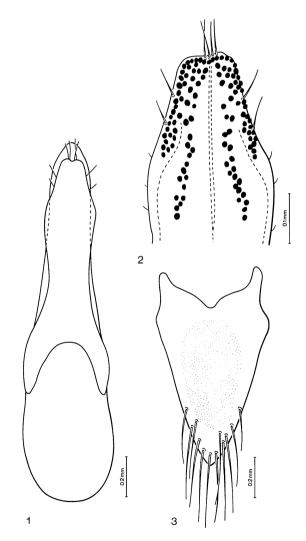
(Figs. 1-3)

*Description.* In all external characters very similar to *B. elegans* and different mainly by the sexual characters, particularly by the shape of the aedoeagus.

Male. First four segments of front tarsus similar to those of *B. elegans*, but slightly less dilated. Apical margin of tergite 8 simple, widely, inconspicuously sinu-

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ate; sternites 7 and 8 not appreciably different from those of *B. elegans*. Genital segment with tergite 10 and sternite 9 both not appreciably different from those of *B. elegans*. Aedoeagus (Figs. 1, 2) similar to that of *B. elegans*, but smaller; median lobe moderately constricted in middle portion, anteriorly narrowed into subacute apex; paramere in general shorter and wider, apical portion shorter, with apex subtruncate, distinctly not reaching apex of median lobe; four fine setae at apex, two similar setae at each lateral margin far below apex; sensory peg setae on underside of paramere arranged differently from those of *B. elegans*, although pattern is similar; internal sac without larger sclerotized structures.



Figs. 1–3. *Bolitogyrus nigropolitus*: 1, aedoeagus, ventral view; 2, apical portion of underside of paramere; 3, tergite 10 of female genital segment.

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Female. First four segments of front tarsus similar to those of *B. elegans*, but slightly less dilated. Tergite 8 with apex simple, subtruncate. Genital segment with tergite 10 similar to that of *B. elegans* in shape and pigmentation, but with apical portion less narrowed, and with more numerous setae at apex (Fig. 3).

Length 8.0–9.3 mm.

*Type material*. Holotype (male): China: "China: W Sichuan 1999 Ya'an Prefecture, Tianquan Co. Jiain Shan, Tal oberh. Labahe N.R.St, 57 km W Ya'an, 30°06N, 102°25E, Streu, Rinde, Pilze, 1800 m 12.VII., leg. M. Schülke". In the SCHÜLKE collection, Berlin, Germany.

Allotype (female): [Sichuan]: "China: W Sichuan 1999 Ya'an Prefecture, Shimian Co. Xiaoxiang Ling, Seitental ob. Nanya Cun bei Caluo, 11 km S Shimian ca. 1250 m, Rinde, Pilze, Streu 76.VII., leg. M. Schülke". In the SMETANA collection, Ottawa, Canada.

*Bionomics.* Both specimens were collected by sifting debris consisting of bark, forest floor litter and mushrooms.

*Recognition.* Bolitogyrus nigropolitus is the second Chinese species with the body entirely black with a slight metallic hue. It shares this character state with *B. elegans* and may be distinguished from it positively only by the differently shaped aedoeagus. The two species seem to be allopatric at present, since *B. elegans* is known only from Yunnan.

*Etymology*. The specific epithet is a combination of two Latin adjectives: *niger*, -*a*, -*um* (black), and *politus*, -*a*, -*um* (shiny). It refers to the coloration and appearance of the species.

# Key to Species of Bolitogyrus of Mainland China

1. Anterior corners of pronotum with coarse punctation
- Anterior corners of pronotum without punctation
2. Body entirely black with faint metallic hue
- Body not entirely black, variably bicolored with elytra metallic blue or metallic
greenish-blue
3. Aedoeagus with apex of paramere narrowly arcuate, subacute, distinctly exceeding
apex of median lobe (fig. 9 in SMETANA & ZHENG, 2000), sensory peg setae on
underside of paramere as in fig. 11 in SMETANA & ZHENG, 2000). Length 8.1-9.2
mm. Yunnan B. elegans
- Aedoeagus with apex of paramere subtruncate, distinctly not reaching apex of me-
dian lobe (Fig. 1), sensory peg setae on underside of paramere as in Fig. 2.
Length 8.0–9.3 mm. Sichuan B. nigropolitus sp. nov.
4. Paramere of aedoeagus in ventral view large, covering most of median lobe, nar-
rowly arcuate apex hardly exceeding apex of median lobe, attenuate middle por-
tion short, hardly exposing lateral portions of median lobe. Length 9.5-10.5 mm.
Western Sichuan B. cyanipennis

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要 約

A. SMETANA:中国産ツヤムネハネカクシ亜族に関する知見. 18. Bolitogyrus属の2. — 四 川省から新種Bolitogyrus nigropolitusを記載し、中国産のこの属のハネカクシを6種にした. こ れらは、前胸背板の印刻の差異によって大きく2系統に区分され、そのひとつは台湾産の2種 を含む、今後の研究に資するため、中国本土産全種の検索表を論文末に掲げた.

#### References

- CHEVROLAT, L. A. A., 1842. In: C. D'ORBIGNY: Dictionnaire universel d'histoire naturelle. Tome Deuxième. 796 pp. Langois & Leclercq; Fortin, Masson & Cie., Paris.
- HAYASHI, Y., 1991. Notes on Staphylinidae from Taiwan, VI. Ent. Rev. Japan, 46: 45-51.
- SCHEERPELTZ, O., 1974. Studien an den Arten der Gattung Cyrtothorax KRAATZ. Mit Beschreibung neuer Arten sowie einer Dichotomik aller bisher bekannt gewordenen Arten dieser Gattung (Coleoptera, Staphylinidae, Staphylininae, Quediini). (14. Beitrag zur Kenntnis der orientalischen Staphyliniden, gleichzeitig 27. Beitrag zur Kenntnis der neotropischen Staphyliniden). Reichenbachia, 15: 175–192.
- SHIBATA, Y., 1979. New or little known Staphylinidae (Coleoptera) from Taiwan, I. Ent. Rev. Japan, 33: 19–29.
- SMETANA, A., & ZHENG, Fa-ke, 2000. Contributions to the knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China. Part 17. Genus *Bolitogyrus* CHEVROLAT, 1842. Section 1. *Elytra*, *Tokyo*, 28: 55–64.
- ZHENG, Fa-ke, 1988. A new species of the genus *Cyrtothorax* KRAATZ from Sichuan province (Coleoptera: Staphylinidae, Quediina). *Acta ent. sin.*, **31**: 306–308. (In Chinese.)

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