

Two new species of Clytini Mulsant, 1839 from Tibet (Coleoptera: Cerambycidae: Cerambycinae)

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Abstract. Careful analysis of material collected in Motuo county of Xizang province in China results into description of two new species of Clytini in two genera. In particular, *Ischnodora sancí* sp. nov. and *Perissus copei* sp. nov. are described and illustrated in the paper. Moreover, a new combination for Vietnamese *Clytus tristiculus* Fairmaire, 1895, currently in *Demonax* Thomson, 1861, is suggested as *Perissus tristiculus* comb. nov.

INTRODUCTION

Tribus Clytini Mulsant, 1839 is, in terms of species, one of the most numerous tribes of Cerambycidae. Although the tribe representatives can be found in most areas of the Earth, they are abundant especially in Southeastern Asia. However, remarkable species diversity of this tribe is not apparent only in the tropics and subtropics, but also in mountain ranges located on the transition of the Palaearctic and Oriental Regions. It comes that in such mountain ranges one can find many valleys with temperature and humidity conditions favourable for lush vegetation, but well isolated from neighbouring areas so that independent populations could arise during the age and give a birth to the new species, though with respect to difficult access to the area many entomological riches still remain to be discovered.

The Himalayas are one of the most interesting mountain ranges in the area – humid and warm from the south, but dry from the Tibetan plateau in the north. Although the Himalayas constitute a hardly passable natural barrier between India, Nepal, Bhutan and Myanmar in the south and the Chinese province of Xizang in the north, there exist several points, where the elevation is not so high and the air as well as life organism can easily penetrate into the north. One of such places is the area of Motuo (Medog) County located along the valley of Yarlung Zangbo (Yarlung Tsanpo) river, which is the up-stream of the well-known Brahmaputra River, and constituting the lowest and hottest area of Tibet.

In the past, there was hardly any record of Clytini from Motuo County, but recently Holzschuh (2016) has described several new species of Clytini from the area, in particular three species of *Rhaphuma* Pascoe, 1858 (*R. bii*, *R. zonalis*, *R. filipedes*) and two species of *Demonax* Thomson, 1861 (*D. flavicomus*, *D. pilipes*).

After careful analysis of the material collected in the area during several past years, we hereby describe two additional species in two further genera, one in *Ischnodora* Chevrolat, 1863 (*I. sancí* sp. nov.), the other in *Perissus* Chevrolat, 1863 (*P. copei* sp. nov.). Although both species belong to different genera, they share similar colour (black elytra with whitish fasciae) and distantly inserted antennae with about the same length. However, while *Ischnodora* is quite compact genus with almost all species looking similarly due to long and narrow body of more or

less the same colour, *Perissus* shows relatively high heterogeneity and various groups can be distinguished inside the genus.

We proceed as follows. After brief description of the methods and statement of the acronyms for collections, in which the studied material is deposited, we focus on particular species in alphabetical order according to the genus name.

MATERIAL AND METHODS

The material examined during the study of the new species described below is deposited especially in private collections of the authors. Some other private collections were studied as well. Moreover, the second author had recently a chance to visit BM (Bishop Museum, Honolulu, USA), BMNH (British Museum of Natural History, London, UK), CAS (California Academy of Sciences, San Francisco, USA), IRSNB (Institute Royal des Sciences Naturelles de Belgique, Brussels, Belgium), IZAS (Institute of Zoology, Chinese Academy of Sciences, Beijing, China), MCSN (Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy), MNHN (Muséum National d'Histoire Naturelle, Paris, France), NHMB (Naturhistorisches Museum Basel, Switzerland), NMFS (Natur-Museum und Forschungs-Institut Senckenberg, Frankfurt am Main, Germany), OMNH (Osaka Museum of Natural History, Osaka, Japan), RNHL (Rijksmuseum van Natuurlijke Historie, Leiden, the Netherlands), SMNH (Swedish Museum of Natural History, Stockholm, Sweden), USNM (National Museum of Natural History, Smithsonian Institution, Washington, DC, USA), ZFMK (Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany), and ZSM (Zoologische Staatssammlung, München, Germany) and study their significant collections, including many specimens of Clytini and their types.

Type materials are deposited solely in the following private collection:

CPV private collection of Petr Viktora, Kutná Hora, Czech Republic.

Slash (/) separates data in different rows on locality and determination labels.

TAXONOMY

Tribe Clytini Mulsant, 1839

Genus *Ischnodora* Chevrolat, 1863

Type species. *Ischnodora macra* Chevrolat, 1863.

The genus *Ischnodora* Chevrolat, 1863 was erected by its author for *I. macra* from "Indes or." (most probably, Darjeeling or nearby area) and it is believed that the species has been later described once again as *I. angustula* Holzschuh, 1983. Currently, the genus comprises of seven species distributed mostly in the wider Himalaya range area, from Himachal Pradesh (a single specimen in authors' collection) to Gaoligong Mountains in northwest Yunnan (*I. decolorata* Holzschuh, 1995), though it penetrates southeast as far as to northern Laos (*I. rectangula* Holzschuh, 2009). All known species are black with long, narrow elytra with whitish or greyish fasciae. In the following lines we describe additional species, which is the eight species of the genus and the third representative in China after *I. sejugata* Holzschuh, 1991 from southern Yunnan and *I. decolorata* from northwest Yunnan.

***Ischnodora sancii* sp. nov.**

(Fig. 1)

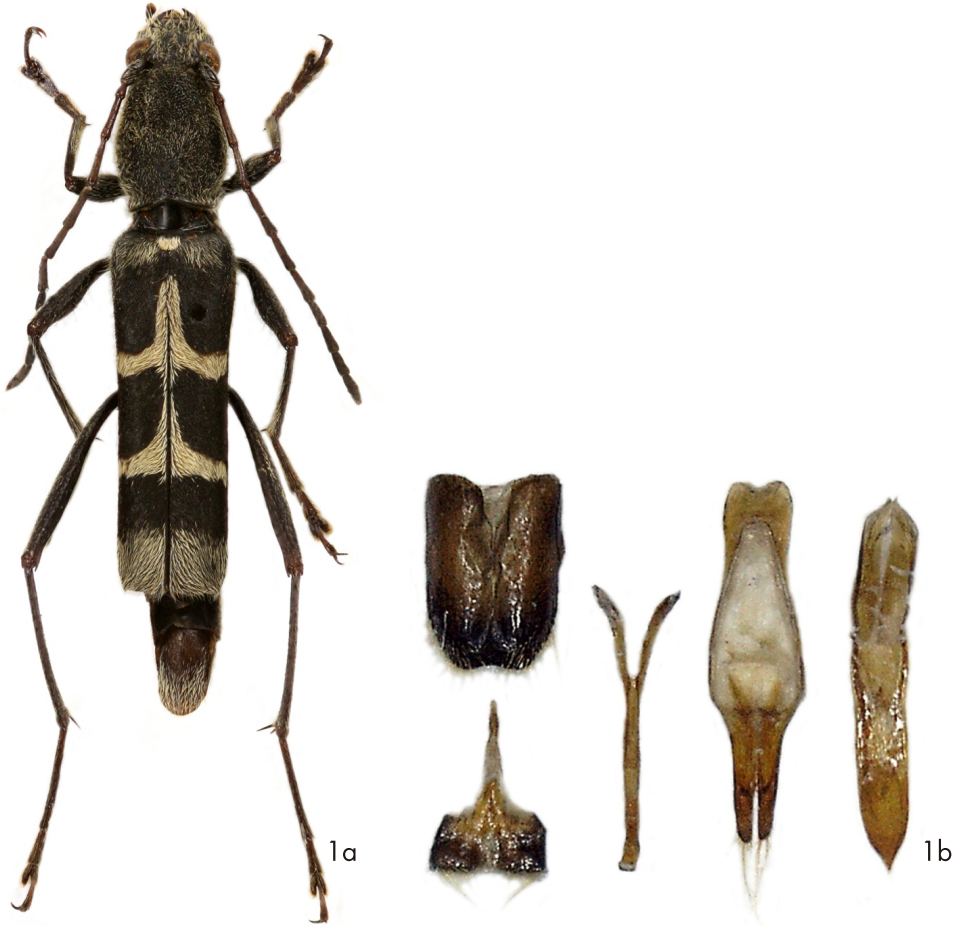
Type locality. Tibet, Motuo (=Medog), Hanmi.**Type material.** Holotype (♂): 'China, Tibet, Motuo' / 'Hanmi 4-viii-2013' / 'Cope Collection' (CPV). The type is provided with a printed red label: '*Ischnodora sancii* sp. nov.' / 'HOLOTYPE' / 'P. Viktora et T. Tichý det., 2017'.

Fig. 1: *Ischnodora sancii* sp. nov.: a-♂ holotype; b-♂ genitalia.

Description of holotype. Habitus of male holotype as in Fig. 1a. Body black, elongate, narrow, parallel, punctate, with pubescence. Complete body length with pygidium 12.58 mm. Body length from apex of head to apex of elytra 10.63 mm, widest in humeral part of elytra (2.38 mm), 4.47 times longer than wide.

Head black, relatively short, widest through the eyes, distinctly narrower than pronotum, with relatively long pale pubescence. Clypeus brown with long pale setae. Eyes distinctly longitudinally emarginated.

Maxillary palpus from pale brown to brown. Ultimate palpomere widened to apex, apex rounded.

Antennae filiform, from brown to black. Antennomeres without any spine. Antennomere 2 the shortest, antennomere 5 the longest. Antennomeres 2-4 brown, shiny, with long and very sparse pale pubescence. Antennomeres 5-11 distinctly darker, more matte, with dense and short pale pubescence. Antennomere 1 black and shiny, with sparse long pale setae. Antennomeres 3-4 with a few long pale setae on inner side of apex. Antennae reaching four sevenths of elytral length. Ratios of relative lengths of antennomeres 1-11 equal to 0.69 : 0.30 : 1.00 : 1.01 : 1.08 : 0.87 : 0.79 : 0.57 : 0.61 : 0.55 : 0.68.

Pronotum black, elongate, distinctly arcuate in lateral margins; 1.44 times longer than wide at the base and 1.16 times longer than wide at the widest point (near the middle of pronotum); with coarse punctuation, punctures relatively large. Dorsal surface with pale pubescence, which is denser at sides. Lateral margins with longer pale setae. Anterior margin slightly arcuate, base distinctly excised.

Scutellum black, covered by dense pale pubescence.

Elytra 6.96 mm long and 2.38 mm wide; black, with relatively dense punctuation, punctures small, distinctly smaller than those in pronotum. Elytra narrow, elongate, covered by black and yellowish white pubescence (as in Fig. 1a). Each elytron terminated by distinct lateral spine.

Legs long and narrow, black, with short and dense pale pubescence; pro- and mesotibia and femora with longer pale pubescence. Metatibia and metafemora longer than pro- and mesotibia and pro- and mesofemora. Metatarsomere 1 almost twice as long as metatarsomeres 2 and 3 together.

Ventral side of body black with pale pubescence. Apex of ventrites, apical part of meso- and metasternum and prosternum covered by dense pale pubescence.

Genitalia as in Fig. 1b.

Female. Unknown.

Differential diagnosis. Although most species of the genus share very similar body shape as well as colour, with respect to the general appearance the most similar species to the species newly described here are *Ischnodora macra* Chevrolat, 1863 and *Ischnodora munda* Holzschuh, 1990, both known from Darjeeling area of India. Notwithstanding, *Ischnodora sancii* sp. nov. clearly differs from both these species by the shape of pronotum, which is wider and more arcuate in lateral margins, by wider elytra and different shape of pale pubescence of dorsal surface of elytra (suture of elytra between transverse bands of pale pubescence narrowly covered with pale pubescence) and by different shape of tegmen.

Etymology. Dedicated to David Šanc (Plzeň, Czech Republic), our friend and a specialist in western Palaearctic Cerambycidae.

Distribution. China (Tibet).

Genus *Perissus* Chevrolat, 1863

Type species. *Perissus x-littera* Chevrolat, 1863.

The genus *Perissus* Chevrolat, 1863 was erected, by the same author as the aforementioned genus *Ischnodora*, for *P. x-littera* from Aru Island of Indonesia. Currently, this diverse genus

comprises more than 80 species (82 according to Tavakilian and Chevillote, 2016) distributed predominantly in Southeast Asia. In the following lines we first provide a new combination for *Clytus tristiculus* Fairmaire, 1895 (currently in *Demonax* Thomson, 1861) from northern Vietnam and subsequently describe closely related species from Tibet (Xizang, China).

***Perissus tristiculus* (Fairmaire, 1895) comb nov.**

Clytus tristiculus Fairmaire, 1895: 183.

Chlorophorus tristiculus, Aurivillius, 1912: 404.

Demonax ? *tristiculus*, Pic, 1935: 12.

Demonax tristiculus Gressitt, 1951: 301.

Type locality. N Vietnam, Lang Son.

Additional material. (1 ♂; 1 ♀): 'VIETNAM 6.-14. vi. 2000' / 'FanSiPan 1600m' / 'B. + K. Martini lgt.' (CPV).

Remark. The species was originally described as *Clytus tristiculus* Fairmaire, 1895. However, while Aurivillius (1912) reported this species in the genus *Chlorophorus*, Pic (1935) suggested its placement into *Demonax*, though with question. Notwithstanding it seems that Pic's opinion was based on misidentified specimen from south Gansu, China (specimen located in SMNH, which was collected during the expedition reported in Pic's paper (1935), really belongs to the genus *Demonax*, but has no relation with *C. tristiculus*). Finally, based on our studies of the type specimen of *Clytus tristiculus* Fairmaire, 1895 located in MNHN, it is clear that this species is a representative of the genus *Perissus* Chevrolat, 1863 in its current treatment. The main features of the genus are antennae distantly inserted, metatarsomere 1 at least twice as long as metatarsomeres 2 and 3 together (less than twice as long in *Clytus* Laicharting, 1784), antennomeres without spines, and frons without conspicuous carina. Since *Clytus tristiculus* Fairmaire, 1895 fulfils all these features, it cannot not belong to the genus *Demonax* Thomson, 1861 (in *Demonax* antennae are closely inserted and some segments have apical spines) and should rather be transferred to the genus *Perissus* Chevrolat, 1863.

Distribution. Vietnam.

***Perissus copei* sp. nov.**

(Fig. 2)

Type locality. Tibet, Motuo (=Medog), Hanmi.

Type material. Holotype (♀): 'China, Tibet, Motuo' / 'Hanmi 4-viii-2013' / 'Cope Collection' (CPV). Type is provided with a printed red label: '*Perissus copei* sp. nov.' / 'HOLOTYPE' / 'P. Viktora et T. Tichý det., 2017'.

Description of holotype. Habitus of female holotype as in Fig. 2. Body black, elongate, parallel, punctate, with pubescence. Body length 12.94 mm, widest in humeral part of elytra (3.33 mm), 3.9 times longer than wide.

Head black, relatively short, widest through the eyes, distinctly narrower than pronotum in widest place, with coarse reticulation in basal part and fine punctuation in apical part, with whitish grey pubescence. Eyes distinctly longitudinally emarginate. Clypeus dark brown with long pale setae. Dorsal surface of mandibles glabrous.

Maxillary palpus dark brown, palpomeres short. Ultimate palpomere the longest, widened apically.



Fig. 2: *Perissus copei* sp. nov.: ♀ holotype.

Antennae filiform, black, with very small punctuation. Antennomeres without any spine. Antennomeres 1-4 with sparse and longer pale pubescence, antennomeres 5-10 with dense white pubescence, antennomere 11 with short sparser pale pubescence. Antennae short, reaching three-eighths of elytral length from base to apex. Antennomeres 2-6 with long pale setae in inner side. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to 0.88 : 0.39 : 1.00 : 0.73 : 0.67 : 0.57 : 0.60 : 0.46 : 0.52 : 0.48 : 0.81.

Pronotum black, with distinctly arcuate lateral margins, 1.5 times longer than wide at the base and 1.18 times longer than wide at the widest point (near the middle of pronotum). Dorsal surface with dense granulation and distinct reticulation only in the middle. Dorsal surface with short and dense pale pubescence, in the middle with short black pubescence, completely covered by long pale erect setae. Anterior and posterior margins finely arcuate.

Scutellum black, completely covered by dense white pubescence.

Elytra 8.91 mm long and 3.33 mm wide, black with black pubescence, with pale stripes (first oblique in basal half, second transverse behind the middle of elytra), both stripes with dense and long pale pubescence (in the first stripe sparser) (as in Fig. 2). Apex of elytra with long pale pubescence, sides of elytra with short and sparse pale setae. Dorsal surface with erect, long pale setae. Each elytron terminated with one thorn from both sides.

Legs long and narrow, black, with dense whitish pubescence. Inner side of protibia and apex of mesotibia with denser pubescence. Femora and tibia with erect long pale setae. Metatibia and metafemora longer than pro- and mesotibia and pro- and mesofemora. Metatarsomere 1 2.0 times as long as metatarsomeres 2 and 3 together.

Ventral side of body black, with four stripes of white pubescence (first in prothorax, second in meso- and metathorax, third in apex of ventrite 1, fourth in apex of ventrite 2). Ventral side with erect long white setae. Elytral epipleura black, narrow.

Male. Unknown.

Differential diagnosis. The most similar species is *Perissus tristiculus* (Fairmaire, 1895) comb. nov. *Perissus copei* sp. nov. differs from *P. tristiculus* mainly through the granulation and dense pubescence of dorsal surface of pronotum, denser, finer and smaller punctuation of elytra, since *P. tristiculus* has dorsal surface of pronotum completely reticulate, with very sparse pubescence, and elytra with sparser and larger punctuation. Further similar species are *Perissus albobifasciatus* Pic, 1927 from Vietnam and *Perissus thibetanus* Pic, 1918 from Tibet. However, *P. copei* sp. nov. clearly differs from them by wider body and more arcuate sides of pronotum, since *P. albobifasciatus* and *P. thibetanus* have narrow body, sides of pronotum almost parallel and antennomeres distinctly narrower (comparing with *P. copei*).

Etymology. Dedicated to Jim Cope (San Jose, California, USA), our friend and a specialist in Cerambycidae.

Distribution. China (Tibet).

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