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On the *Nepalota* fauna of China (Coleoptera: Staphylinidae: Aleocharinae: Athetini)

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A b s t r a c t : Types and additonal material of the East Palaearctic aleocharine genus *Nepalota* PACE, 1987 are examined. Eleven species are (re-)described and illustrated: *N. franzi* PACE, 1987; *N. globifera* PACE, 1998; *N. smetanai* PACE, 1998; *N. guangdongensis* PACE, 2004; *N. fellowesi* PACE, 2004; *N. crocea* nov.sp. (Yunnan); *N. cuneata* nov.sp. (Yunnan); *N. mocytoides* nov.sp. (East Yunnan); *N. prominula* nov.sp. (Yunnan); *N. tuberifera* nov.sp. (Yunnan); *N. daweiana* nov.sp. (Yunnan). Five synonymies are proposed: *N. gansuensis* PACE, 1998 = *N. qinlingmontis* PACE, 2011, nov.syn.; *N. globifera* PACE, 1998 = *N. caluoensis* PACE, 2011, nov.syn., = *N. daxuensis* PACE, 2011, nov.syn.; *N. guangdongensis* PACE, 2004 = *N. rougemonti* PACE, 2011, nov.syn. = *N. ruficollis* PACE, 2011, nov.syn. *Nepalota franzi* is reported from China for the first time. In all, 35 valid species are currently known from the East Palaearctic, four of them of doubtful status (males unknown). Twenty species have been described or reliably recorded from China exclusive of Taiwan. The diversity is greatest in Yunnan (fourteen species, seven of them exclusive), followed by Hubei (five species; three exclusive); Sichuan (four species, one exclusive), Gansu and Shaanxi (three species each), Guangdong (two species), Zhejiang, Chongqing, Jiangxi, Guangxi, Guizhou, and Beijing (one species each). The distributions of 15 species are mapped. An updated checklist of *Nepalota* is provided.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, Athetini, *Nepalota*, East Palaearctic region, China, taxonomy, new species, new synonymies, new records, checklist.

Introduction

The athetine genus *Nepalota* PACE, 1987 is distributed in the southern East Palaearctic region sensu SMETANA (2004) and the northern Oriental region, from Kashmir across the Himalaya, Burma, and China to Japan and North Korea. It was previously represented by 34 named species. As many as seventeen species have been recorded exclusively from China, four exclusively from the Himalaya, two from both China and Nepal (one of them also from Burma), five from Taiwan, five from Japan, and one from North Korea (ASSING 2003; PACE 2004, 2009, 2011; SMETANA 2004). In China, the provinces with the greatest diversity were Sichuan (seven species) and Yunnan (six species), followed by Hubei (five species), Shaanxi (three), Gansu (two), Guangdong (two), and Guangxi (two species). Only one species each had been reported from Guizhou, Zhejiang, Beijing, and Gansu.

Nepalota species are characterized by a mostly relatively robust habitus similar to that of some groups of *Atheta* THOMSON, 1858 and *Liogluta* THOMSON, 1858, by a usually slender median lobe of the aedeagus with a more or less deeply bifid ventral process, and by a relatively uniform spermatheca with a rather long, curved, and proximally twisted proximal portion of the capsule. In addition, *Nepalota* species often display a more or less pronounced sexual dimorphism of the pronotum, of the anterior and posterior abdominal tergites, and of sternite VIII (ASSING 2003). The most reliable characters for an identification at the species level are the male primary and secondary sexual characters. The spermatheca, on the other hand, is often of rather uniform shape, particularly so among closely related species, and subject to more or less pronounced intraspecific variation, and consequently of little use for taxonomic purposes. Nevertheless, as many as eight species have been described based exclusively on females (PACE 1986, 1991, 1998, 2004, 2009, 2011). Moreover, several subsequent records of these and other species are based on females only and thus unreliable. For an overview of doubtful species and records see the catalogue at the end of this article.

The present contribution focuses on *Nepalota* material collected during two field trips to China conducted in 2012 and 2014, as well as on additional material from the collection of Michael Schülke (Berlin). Moreover, the types of several species were examined. In order to facilitate future taxonomic and faunistic work on the *Nepalota* fauna of China, literature data are considered and an updated catalogue is provided.

Material and methods

The material treated in this study is deposited in the following collections:

IRSNB..... Institut Royal des Sciences Naturelles de Belgique (Y. Gérard)
MHNG ..... Muséum d'Histoire Naturelle, Genève (G. Cuccodoro)
MNHUB..... Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch)
NMP..... National Museum of Natural History, Praha (J. Hájek)
SMF ..... Senckenberg-Museum Frankfurt (A. Hastenpflug-Vesmanis)
cAss..... author´s private collection
cPüt ..... private collection Andreas Pütz, Eisenhüttenstadt
cSch..... private collection Michael Schülke, Berlin

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). The images of the antennae, some of the forebodies, and the anterior portions of the male abdomina were created using a photographing device constructed by Arved Lompe (Nienburg) and CombineZ software. A digital camera (Nikon Coolpix 995) was used for the remaining photographs. The maps were created using MapCreator 2.0 (primap) software.

Body length was measured from the labrum to the apex of the abdomen, the length of the forebody from the labrum to the posterior margin of the elytra, head length from the anterior margin of the clypeus (without ante-clypeus) to the posterior carina of the head, the length of the elytra along the suture from the apex of the scutellum to the posterior margin of the elytra, the length of the median lobe of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule, and the length of the spermatheca is

given as the maximal extension (measured from the apex of the distal portion of the capsule) . The "parameral" side of the median lobe of the aedeagus (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

The *Nepalota* fauna of China

Including the new species described below and considering five new synonymies, *Nepalota* is currently represented in China exclusive of Taiwan by twenty valid species, one of them of doubtful identity. The diversity is greatest in Yunnan (fourteen species, seven of them exclusive), followed by Hubei (five species, three exclusive), Sichuan (four species, one exclusive), Gansu and Shaanxi (three species each), Guangdong (two species), Zhejiang, Chongqing, Jiangxi, Guangxi, Guizhou (one species each), and Beijing (one doubtful species). Disregarding the doubtful *N. pernitida*, only two species, *N. martensi* and *N. franzi*, are not exclusive to China, their vast distributions ranging from Nepal to southern Yunnan and Gansu. The remaining species have been recorded solely from China. While some of them are rather common and widespread, several species are known only from their respective type localities or their immediate vicinity.

Based on personal observations and on the material examined, *Nepalota* species usually inhabit the leaf litter layer of various montane forest and shrub habitats. The altitudes range from 1200 to 3800 m.

Nepalota dabamontis PACE, 2011

Nepalota dabamontis PACE, 2011: 173.

C o m m e n t : This species was described from a single male collected in the Daba Shan (Hubei) together with the holotypes of *N. gracilis* and *N. robusta* (PACE 2011).

Nepalota erlangensis PACE, 2011

Nepalota erlangensis PACE, 2011: 168 f.

C o m m e n t : The original description is based on a single male from the Erlang Shan in Sichuan collected by Andreas Pütz (PACE 2011). The whereabouts of the holotype are unknown. It was not found in the material from the Pütz collection or in the museum in Dresden, where it should be deposited according to PACE (2011).

Nepalota gracilis PACE, 2011

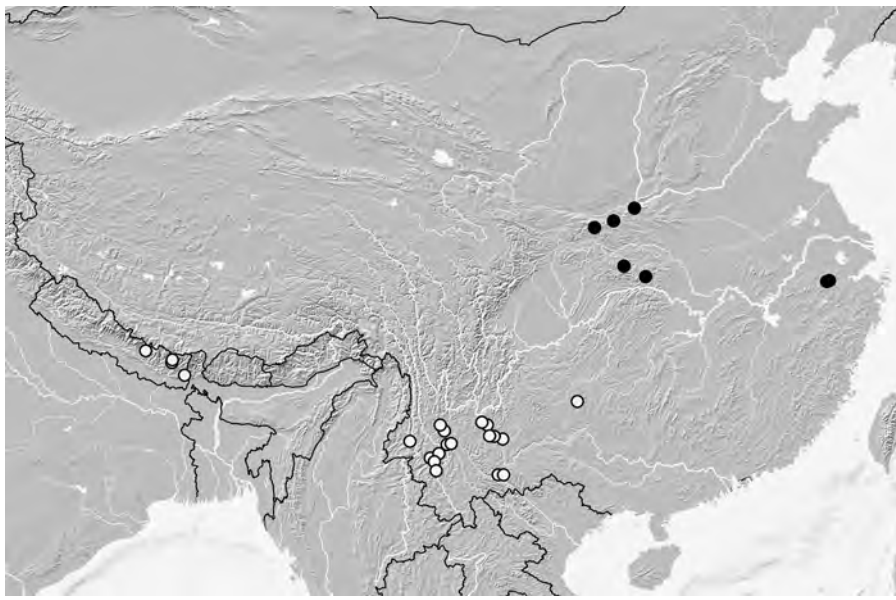
Nepalota gracilis PACE, 2011: 172.

C o m m e n t : This species was described from a single male collected in the Daba Shan (Hubei), together with the holotypes of *N. dabamontis* and *N. robusta* (PACE 2011).

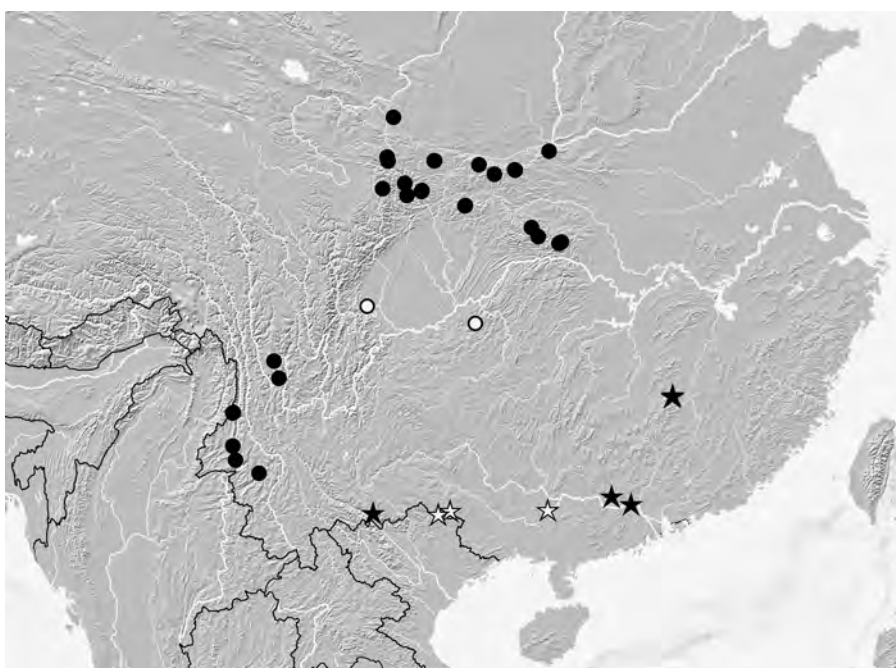
Nepalota robusta PACE, 2011

Nepalota robusta PACE, 2011: 171 f.

C o m m e n t : This species was described from a single male collected in the Daba Shan (Hubei) together with the holotypes of *N. dabamontis* and *N. gracilis* (PACE 2011).



Map 1: Distributions of *Nepalota chinensis* PACE (filled circles) and *N. martensi* PACE (open circles), based on examined and reliable literature records.



Map 2: Distributions of *Nepalota gansuensis* PACE (circles) and *N. guangdongensis* PACE (stars) in China, based on examined (filled symbols) and reliable literature records (open symbols).

Nepalota chinensis PACE, 1998 (Map 1)

Nepalota chinensis PACE, 1998: 947.

Material examined: China: Shaanxi: 4♂♂, 2♀♀, 1 ex., Qinling Shan, Hua Shan, 34°25'N, 110°06'E, 1950-2000 m, forest, sifted, 19.VIII.1995, leg. Schülke & Pütz (cSch, cAss); 1♀, Qinling Shan, pass on road Zhouzhi - Foping, 33°44'N, 107°59'E, 1990 m, stream valley with mixed deciduous forest, sifted, 2.&4.VII.2001, leg. Schülke (cSch) 1♂, Daba Shan, NW pass 25 km NW Zhenping, 32°01'N, 109°19'E, 2150 m, stream valley, young coniferous forest, 11.VII.2001, leg. Wrase (cAss).

Comment: The original description is based on numerous type specimens from Zhejiang, a male and a female from Shaanxi, as well as on a single female from Yunnan (PACE 1998). PACE (2011) reported one male from Hubei and another female from Yunnan. The records from Yunnan are exclusively based on females and consequently doubtful. Based on the similar sexual dimorphism of the pronotum, the similar modifications of the male tergites III and VII, as well as on the similar general morphology of the aedeagus, this species is closely allied to *N. franzi* PACE, 1987.

The material examined was sifted from litter in different types of forest at altitudes between 1950 and 2150 m. The currently known distribution is illustrated in Map 1.

Nepalota gansuensis PACE, 1998 (Map 2)

Nepalota gansuensis PACE, 1998: 943 ff.
Nepalota qinlingmontis PACE, 2011: 170; **nov.syn.**

Type material exmined: *N. gansuensis*: Holotype ♂: "CHINA, Gansu, Xinlong Shan, ca. 70 km S Lanzhou, 2225-2380 m, 7.VIII.1994, A. Smetana [C32] / Holotypus Nepalota gansuensis m., det. R. Pace 96 / Nepalota gansuensis sp. n., det. Pace 1996 / Nepalota gansuensis Pace, det. V. Assing 2014" (MHNG). Paratypes: 1♂, 1♀: same data as holotype (MHNG).
N. qinlingmontis: Holotype ♂: "China: Shaanxi, Qin Ling Shan, 108.47E, 33.51N, Mountain W Pass at Autoroute km 70, 47 km S Xian, 2300-2500 m, sifted, 26.-30.08.1995, leg. A. Pütz / Holotypus Nepalota qinlingmontis mihi, det. R. Pace 2009 / Nepalota qinlingmontis n. sp., det.. Pace 2009 / Nepalota gansuensis Pace, det. V. Assing 2014" (cPüt). Paratypes: 1♂: same data as holotype (cPüt); 1♀: "China: Shaanxi, Qin Ling Shan, 110.06E, 34°25'N, Hua Shan Mt., S.-top, 1950-2000 m, Forrest [sic], sifted, 19.08.1995, leg. A. Pütz" (cPüt); 1♀ [possibly conspecific with *N. yunnanensis*]: "China: Sichuan, Daxue Shan, Gongga Shan Mt., Hailougou [sic] glacier park, above Camp III, 3000 m, 30.V.1997, leg. A. Pütz" (cPüt).

Additional material examined: China: Shaanxi: 3♂♂, 3♀♀, 3 exs., SW Meixian, Qinling Shan, 34°02'N, 107°24'E, 1870 m, N-slope, secondary deciduous forest, near stream, litter and grass sifted, 26.VII.2012, leg. Assing, Schülke & Wrase (cAss, cSch, MNHUB); 1♀, Micang Shan, 34 km S Hanzhong, 32°44'N, 106°52'E, 1460 m, W-slope, deciduous forest margin with bamboo, litter, grass, and moss sifted, 14.VIII.2012, leg. Assing (cAss); 1♀, Micang Shan, 33 km S Hanzhong, 32°45'N, 106°53'E, 1360 m, stream valley, forest margin, litter and soil sifted, 15.VIII.2012, leg. Schülke (cSch); 1♀, Qinling Shan, mountain west autoroute 70, 33°51'N, 108°47'E, 2500-2600 m, 26.-27.VIII.1995, leg. Schülke (cAss); 2♂♂, 1♀, Qinling Shan, pass on road Zhouzhi - Foping, 33°44'N, 107°59'E, 1990 m, stream valley with mixed deciduous forest, sifted, 2.&4.VII.2001, leg. Wrase & Schülke (cSch); 1♂, Qinling Shan, 45 km SSW Xi'an, mountain range W pass on road Xi'an - Shagoujie, 33°52'N, 108°46'E, 2675 m, N-slope with *Abies*, *Betula*, *Larix*, and *Rhododendron*, sifted, 25.VII.2001, leg. Schülke (cSch); 1 ex., Daba Shan, mountain range N pass 22 km NW Zhenping, 32°01'N, 109°21'E, 2850 m, litter of fir and bushes sifted, 13.VII.2001, leg. Wrase (cAss). Border Shaanxi-Chongqing: 1♀, Daba Shan, pass 20 km SSE Zhenping, 31°44'N, 109°35'E, 1700-1800 m, young dry mixed forest, 9.VII.2001, leg. Schülke (cSch). Hubei: 4♂♂, 2♀♀, 10 exs., Daba Shan, mountain range NE Muyuping, pass 12 km N Muyuping, 31°32'N, 110°26'E, 2380 m, young deciduous forest, sifted, 17.-21.VII.2001, leg. Schülke & Wrase (cSch, cAss); 1♂, 12 km NW Muyuping, pass E Da Shennongjia, 31°30'N, 110°21'E, 1950-2050 m, mixed deciduous forest, sifted, 19.VII.2001, leg. Schülke (cAss). Gansu: 5♂♂, 4♀♀, N Chengxian, W-Qinling Shan, 34°10'N, 105°43'E,

1850 m, mixed secondary forest margin, litter sifted, 29.VII.2012, leg. Assing & Wrase (cAss, cSch, MNHUB); 18 exs., N Chengxian, W-Qinling Shan, 34°10'N, 105°42'E, 1830 m, stream valley with secondary deciduous forest, moist litter sifted, 29.VII.2012, leg. Assing (cAss, MNHUB); 19 exs., mountains SE Longnan, 33°13'N, 105°15'E, 2170 m, N-slope with shrubs and scattered coniferous trees, litter sifted, 31.VII.2012, leg. Assing (cAss); 16 exs., mountains SE Longnan, 33°11'N, 105°14'E, 2030 m, N-slope with scree, moss, fern roots, and moist litter sifted, 31.VII.2012, leg. Assing (cAss); 4♂♂, 3♀♀, 6 exs., W-Qinling Shan, NW Longnan, Lazikou pass, 34°15'N, 103°54'E, 3000 m, N-slope, pasture with shrubs, litter sifted, 2.VIII.2012, leg. Assing & Schülke (cAss, cSch); 3♂♂, 4♀♀, 1 ex., W-Qinling Shan, NW Longnan, Lazikou pass, S-side, Zhuli valley, 34°08'N, 103°56'E, 2260 m, N-slope, mixed forest with oak and pine near stream, litter and dead wood sifted, 3.VIII.2012, leg. Assing & Wrase (cAss, cSch); 14♂♂, 9♀♀, W Longnan, Min Shan, 33°26'N, 104°36'E, 1470 m, deep cleft with scree, shrubs at N-slope, litter sifted, 5.VIII.2012, leg. Assing (cAss, MNHUB); 2♂♂, 2♀♀, S Longnan, Min Shan, 33°03'N, 104°41'E, 2200 m, secondary pine forest with hazelnut, moist litter and roots sifted, 6.VIII.2012, leg. Assing (cAss); 2♂♂, 5♀♀, 3 exs., mountains SE Longnan, 33°11'N, 105°14'E, 2130 m, N-slope with scree, stony soil sifted, 7.VIII.2012, leg. Assing & Wrase (cAss, cSch). S i c h u a n : 9♂♂, 15♀♀, 9 exs., N Songpan, road S 301, above Gan lake, 33°15'N, 103°46'E, 2700 m, spruce forest with birch, litter, mushrooms, moss, and dead wood sifted, 12.VIII.2012, leg. Assing & Wrase (cAss, cSch, MNHUB); 2♀♀ [identification uncertain], Gongga Shan, Hailuogou Glacier Park, Camp 1, 29°36'N, 102°04'E, 2100 m, 27.-31.V.1997, leg. Schülke (cSch, cAss). Y u n n a n : 32 exs., Dehong Dai Aut. Pref., mountain range 31 km E Luxi, 24°30'N, 98°53'E, 2280 m, secondary pine forest with old deciduous trees, litter sifted, 3.VI.2007, leg. Schülke (cSch, cAss); 2♂♂, 1 ex., Gaoligong Shan, Baoshan Pref., 29 km ESE Tengchong, 24°56'N, 98°45'E, 2350 m, degraded deciduous forest, litter sifted, 1.VI.2007, leg. Schülke (cSch, cAss); 1♂, 1♀, Gaoligong Shan, Nujiang Lisu Aut. Pref., pass 21 km NW Liuku, 25°58'N, 98°41'E, 3150 m, bamboo with shrubs, litter sifted, 9.VI.2007, leg. Schülke (cSch, cAss); 7♂♂, 2♀♀, same data, but 2.-3.IX.2009 (cSch, cAss); 3♀♀, Gaoligong Shan, Nujiang Lisu Aut. Pref., 19 km NW Liuku, 25°59'N, 98°42'E, 2730 m, degraded primary forest, 9.-10.VI.2007, leg. Wrase (cSch); 2♂♂, 3 exs., Lijiang Naxi Aut. Co., 30 km N Lijiang, E Yulongxue Shan, 27°09'N, 100°15'E, 2800-2900 m, stream valley, secondary mixed forest, 13.VIII.2003, leg. Schülke (cSch, cAss); 1♂, 1♀, Zhongdian Co., 36 km ESE Zhongdian, 27°41'N, 100°02'E, 3500-3550 m, old mixed forest with bamboo, litter sifted, 23.-24.VIII.2003, leg. Schülke & Wrase (cSch, cAss); 1♂, 13 exs., Lincang Pref., Laobie Shan, Wei Bo Shan pass, 24°08'N, 99°43'E, 2375 m, degraded secondary deciduous forest, litter and moss sifted, 8.IX.2009, leg. Schülke (cSch, cAss).

C o m m e n t : The original description of *N. gansuensis* is based on 18 type specimens from "Gansu, Xinlong Shan, ca. 70 Km S Lanzhou" (PACE 1998). PACE (2004, 2011) subsequently reported the species from additional localities in Hubei, Yunnan, Chongqing, and Sichuan.

In the description of *N. qinlingmontis*, which is based on several type specimens (males and females) from the Qinling Shan (Shaanxi) and a single female from the Gongga Shan in Sichuan, PACE (2011) compares the species only with *N. franzi* from Nepal (sic). The median lobe of *N. gansuensis* is of highly distinctive morphology (see PACE 1998: figures 136-137). Based on the illustrations of the aedeagus of *N. qinlingmontis* provided by PACE (2011: figures 74-76), there was little doubt that *N. qinlingmontis* was a junior synonym of *N. gansuensis*. A revision of the type material eventually confirmed this suspicion.

As is shown by the records above, *N. gansuensis* is common and widespread from Hubei and Shaanxi in the north and northeast to Yunnan in the southwest (Map 2). In numerous localities it was collected together with *N. smetanai*, in some also with *N. martensi*, *N. franzi*, and *N. cuneata*. The specimens were sifted from litter in various forest (both coniferous and broad-leaved) and shrub habitats at altitudes of 1360-3550 m.

***Nepalota martensi* PACE, 1987** (Fig. 144, Map 1)

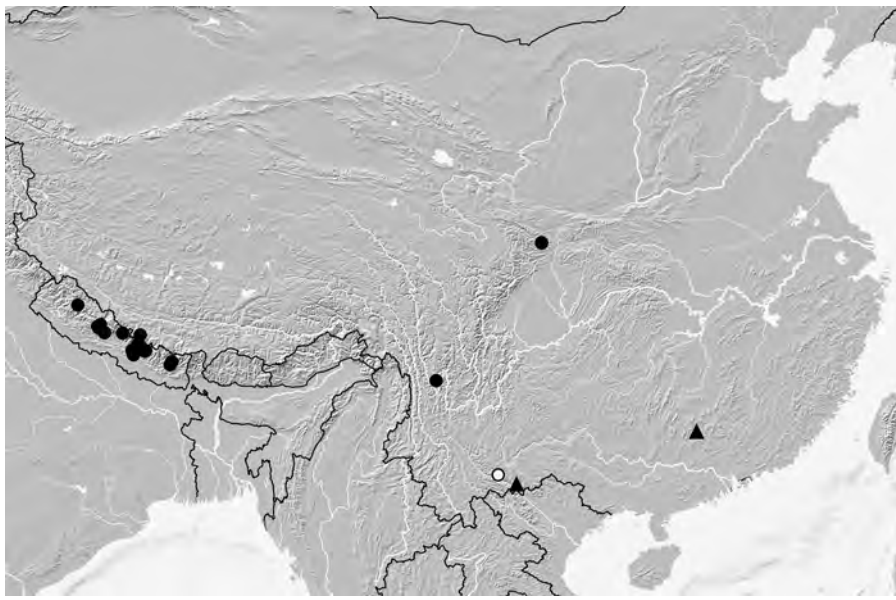
Nepalota martensi PACE, 1987b: 412.

Type material examined: Holotype ♂: "NEPAL-Expeditionen Jochen Martens / 179a Kaski Dist., oberhalb Dhumpus, Berlese 2100 m, Martens & Ausobsky 8/10Mai80 / Holotypus Nepalota martensi m., det. R. Pace 1984 / Holotypus / Nepalota martensi n. sp., det.. Pace 1984 / Senckenberg-Museum Frankfurt/Main" (SMF). Paratypes: 1♂: same data as holotype (SMF); 1♂: "NEPAL-Expeditionen Jochen Martens / 179 Kaski Dist., oberhalb Dhumpus, Laubwald 2100 m, Martens & Ausobsky 8/10Mai80" (SMF).

Additional material examined: China: Yunnan: 1♂, Gaoligong Shan, Baoshan Pref., 35 km SE Tengchong, near Xiaoheishan N.R., 24°50'N, 98°46'E, 2110 m, deciduous forest, litter sifted, 30.V.2007, leg. Schülke (cAss); 1♀, Gaoligong Shan, Baoshan Pref., 36 km SE Tengchong, 24°50'N, 98°46'E, 2200 m, deciduous forest, litter sifted, 31.V.2007, leg. Schülke (cSch); 6♂♂, 1♀, E Kunming, Xiaobailong Forest Park, 24°56'N, 103°05'E, 2110 m, secondary pine forest, pine litter and litter at trail margin sifted, 10.VIII.2014, leg. Assing & Schülke (cAss); 51♂♂, 50♀♀, 15 exs., Wuding, Lion Mountain Scenic Area, 25°32'N, 102°23'E, 2200 m, stream valley with deciduous forest, moist litter sifted, 17.VIII.2014, leg. Assing & Schülke (cAss, cSch, MNHUB); 1♂, 1 ex., mountain WNW Wuding, 25°39'N, 102°07'E, 2390 m, mixed forest margin with alder and pine, litter sifted, 1.IX.2014, leg. Schülke (cSch); 1♂, mountains S Jianshui, 23°25'N, 102°51'E, 1890 m, subtropical broad-leaved forest, litter sifted, 22.VIII.2014, leg. Assing (cAss); 1♂, mountain W Gejiu, 23°24'N, 103°07'E, 1990 m, mixed forest, litter and various debris sifted, 23.VIII.2014, leg. Assing (cAss); 1♀, same data, but 25.VIII.2014 (cAss); 1♂, 9 exs., Dali Bai Aut. Pref., mountain range E Weishan, 12 km NE Weishan, 25°17'N, 100°22'E, 2630-2660 m, scrub with pines and bamboo, litter sifted, 15.IX.2009, leg. Schülke & Wrase (cSch, cAss); 1♂, 4 exs., Lincang Pref., Laobie Shan, Wei Bo Shan pass, 24°08'N, 99°43'E, 2375 m, degraded secondary deciduous forest, litter and moss sifted, 8.IX.2009, leg. Schülke (cAss); 1♂, 3♀♀, Lincang Pref., Xue Shan, 48 km N Lincang, 24°19'N, 100°07'E, 2070 m, forest remnant, litter sifted, 12.IX.2009, leg. Schülke (cSch, cAss); 2♂♂, 13 exs., Lincang Pref., 20 km NW Lincang, Bangma Shan, 23°58'N, 99°55'E, 2210 m, degraded forest with fern, litter and fern sifted, 9.IX.2009, leg. Schülke (cSch); 1♀, Lincang Pref., 33 km SSW Lincang, Bangma Shan, 23°36'N, 100°00'E, 2150 m, deciduous forest remnant, litter sifted, 11.IX.2009, leg. Wrase (cSch); 1 ex. [apex of abdomen missing], Lincang Pref., Wuliang Shan, old pass road, 24°43'N, 100°30'E, 2200 m, primary forest remnant, litter sifted, 12.IX.2009, leg. Wrase (cSch); 12 exs., Pu'er Pref., Ailao Shan, 37 km NW Jingdong, 24°45'N, 100°41'E, 2300 m, degraded forest remnant, litter sifted, 13.IX.2009, leg. Schülke (cSch, cAss); 1♂, 1 ex., Dali Bai Aut. Pref., Zhemo Shan, 7 km SW Xiaguan, 25°32-33'N, 100°10-11'E, 2870-2970 m, shrub habitat with oak, bamboo, and rhododendron, litter sifted, 18.IX.2009, leg. Wrase (cSch, cAss). Nepal: 1 ex., Khandbari district, forest NE Kuwapani, 2450 m, 13.IV.1982, leg. Smetana (MHNG); 2 exs., same data, but 2500 m, 12.IV.1982 (MHNG); 1 ex., Khandbari district, below Sheduwa, 2100-2550 m, 9.IV.1982, leg. Smetana (MHNG); 1 ex., Bagmati province, NE Barahbise, Pokhare, 2700 m, 2.V.1981, leg. Löbl & Smetana (MHNG).

Comment: The original description is based on four males from two localities in Nepal (PACE 1987b). The species was subsequently reported from additional localities in Nepal (PACE 1991, 2006), as well as from the Chinese provinces Yunnan and Guizhou (PACE 1993, 2004). Three of the type specimens, among them the holotype, were examined. The median lobe of the aedeagus of a male from Yunnan is illustrated in Fig. 144.

The vast distribution of *N. martensi* ranges from Nepal to southern China (Yunnan, Guizhou) (Map 1). The examined material was collected by sifting litter in various forest habitats (broad-leaved, coniferous, mixed) at altitudes between 1890 and nearly 3000 m, partly together with *N. cuneata*, *N. smetanai*, or *N. gansuensis*.



Map 3: Distributions of *Nepalota franzi* PACE (filled circles), *N. mocytoides* nov.sp. (open circle), and *N. fellowesi* PACE (filled triangles), based on examined and reliable literature records.

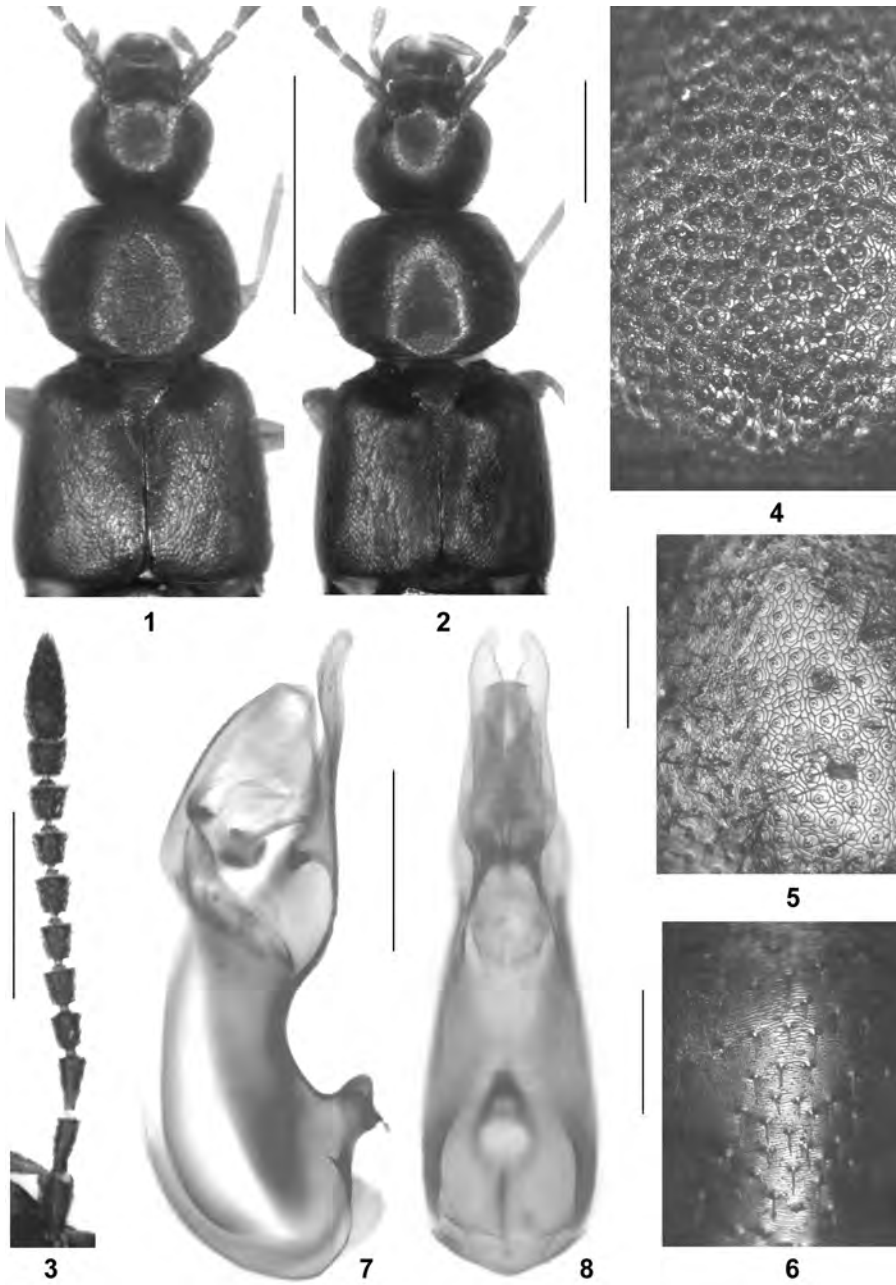
Nepalota yunnanensis PACE, 2011 (Map 4)

Nepalota yunnanensis PACE, 2011: 169.

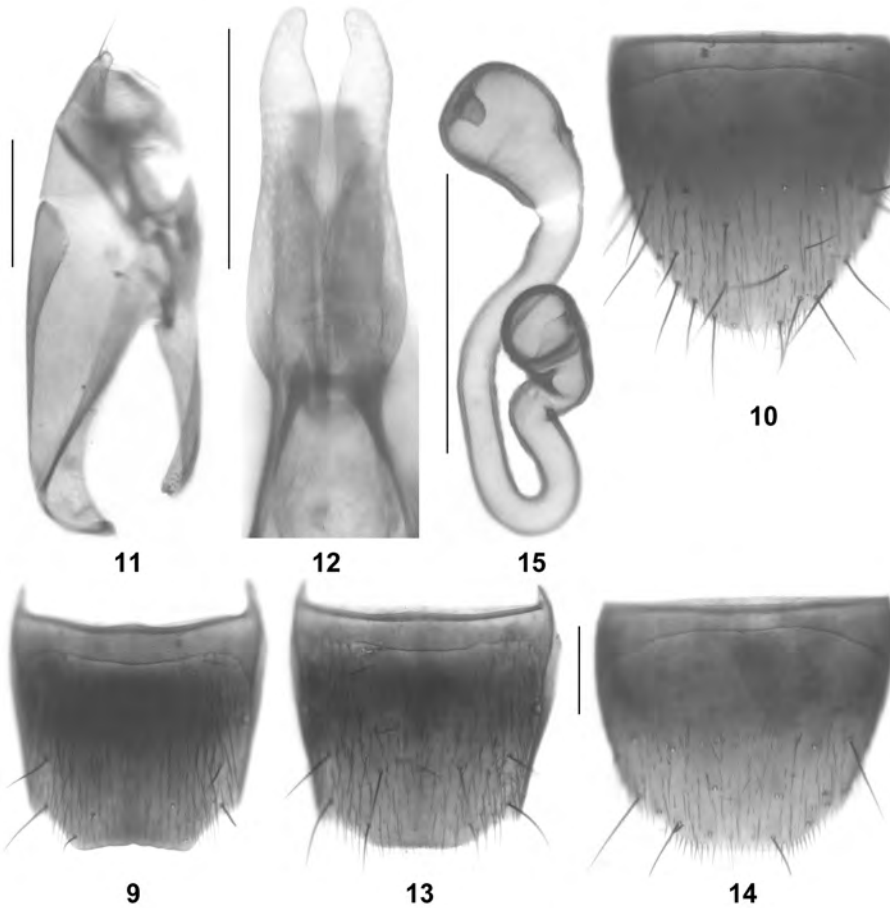
Material examined: China: Sichuan: 1♂, Gongga Shan, Hailuogou Glacier Park, river valley ca. 1 km above Camp 1, 29°36'N, 102°04'E, 2100 m, 28.-31.V.1997, leg. Pütz (cPüt). Yunnan: 4 exs., Nujiang Lisu Aut. Pref., Gaoligong Shan, 20 km NW Liuku, 25°49'N, 98°42'E, 3000 m, bamboo and shrubs, litter sifted, 9.VI.2007, leg. Wrase (cSch); 2 exs., Zhongdian Co., 48 km N Zhongdian, 28°17'N, 99°46'E, 3220 m, stream valley with degraded primary forest, moss sifted, 21.VIII.2003, leg. Schülke (cSch, cAss); 1 ex., Zhongdian Co., 55 km N Zhongdian, 28°20'N, 99°46'E, 3800 m, primary mixed forest with rhododendron, sifted, 18.VIII.2003, leg. Schülke (cSch); 3 exs., Dali Bai Aut. Pref., Diancang Shan, 43 km NW Dali, 26°00'N, 100°01'E, 2700 m, secondary pine forest, litter and moss sifted, 23.VIII.2009, leg. Schülke & Wrase (cSch, cAss).

Comment: This species was described from one male and one female collected in a locality near Zhongdian in northwestern Yunnan (PACE 2011). The male from the Gongga Shan is labelled as a paratype of *N. yunnanensis*, but not mentioned in the original description (PACE 2011). Based on the similarly derived male sexual characters, particularly the shape of the ventral process of the aedeagus, and the similar external characters, this species is closely related to, and probably the adelphotaxon of, *N. gansuensis*, from which it is distinguished by the presence of a median granule on the male tergite III and by the slightly different shape of the aedeagus.

The currently known distribution is illustrated in Map 4. The examined material was sifted from litter in various forest and shrub habitats at elevations of 2100-3800 m.



Figs 1-8: *Nepalota franzi* PACE from Gansu: (**1**) male forebody; (**2**) female forebody; (**3**) antenna; (**4**) postero-median portion of male pronotum; (**5**) postero-median portion of female pronotum; (**6**) median portion of tergite VII; (**7-8**) median lobe of aedeagus in lateral and in ventral view. Scale bars: 1-2: 1.0 mm; 3: 0.5 mm; 7-8: 0.2 mm; 4-6: 0.1 mm.



Figs 9-15: *Nepalota franzi* PACE from Gansu: (**9**) male tergite VIII; (**10**) male sternite VIII; (**11**) paramere; (**12**) ventral process of aedeagus in ventral view; (**13**) female tergite VIII; (**14**) female sternite VIII; (**15**) spermatheca. Scale bars: 0.2 mm.

Nepalota franzi PACE, 1987 (Figs 1-16, Map 3)

Nepalota franzi PACE, 1987a: 131.

Material examined: China: Gansu: 4♂♂, 1♀, mountains SE Longnan, 33°11'N, 105°14'E, 2030 m, N-slope with scree, moss, fern roots, and moist litter sifted, 31.VII.2012, leg. Assing (cAss); 3♂♂, mountains SE Longnan, 33°13'N, 105°15'E, 2080 m, sifted, 4.VIII.2012, leg. Assing" (cAss). Yunnan: 1♂, Zhongdian Co., 51 km SSE Zhongdian, 2970 m, 27°25'N, 99°57'E, 2970 m, stream valley, mixed coniferous forest with shrubs and bamboo, 16.VIII.2003, leg. Wrase (cSch). Nepal: 2 exs., Bagmati Province, Phulchoki near Kathmandu, 2500 m, 10.V.1981, leg. Löbl (MHNG); 1 ex., Bagmati Province, Nagarjun forest near Kathmandu, 1650 m, 2.IV.1981, leg. Löbl & Smetana (MHNG); 16 exs., Bagmati Province, Pokhare NE Barahbise, 2800 m, 2.V.1981, leg. Löbl & Smetana (MHNG); 1 ex., same data, but 2700 m (MHNG); 6 exs., same data, but 3000 m, 7.V.1981 (MHNG); 3 exs., Bagmati Province, Dobate Ridge NE Barahbise, 2700 m, 2.V.1981, leg. Löbl & Smetana (MHNG); 3 exs., Bagmati Province, Chaubas, 2600 m, 5.IV.1981, leg. Löbl & Smetana (MHNG); 1 ex., Bagmati Province, above

Shermathang, 2900 m, 26.IV.1981, leg. Löbl & Smetana (MHNG); 1 ex., Bagmati Province, Tarke Ghyang, 2650 m, 19.IV.1981, leg. Löbl & Smetana (MHNG); 2 exs., Khandbari District, forest above Ahale, 2300 m, 26.III.1982, leg. Smetana (MHNG); 1 ex., Khandbari District, Khandbari, 1700 m, 23.III.1982, leg. Smetana (MHNG); 1 ex., Mustang District, Lete, 2550 m, 2.X.1983, leg. Löbl & Smetana (cAss).

C o m m e n t : The original description is based on a male holotype and two paratypes from Nepal (PACE 1987a). The species was subsequently recorded from other localities in Nepal by PACE (1987b, 1991, 2013). Since a reliable identification based on the original description is difficult, a redescription is provided.

R e d e s c r i p t i o n : Body length 4.2-5.0 mm; length of forebody 2.1-2.3 mm. Coloration: head, pronotum, abdomen, and antennae blackish; elytra dark yellowish-brown to brown, with the anterior and the sutural portion diffusely and more or less distinctly darker; legs dark-yellowish.

Head (Figs 1-2) weakly, but noticeably transverse; dorsal surface with distinct microreticulation, subdued shine, and very fine, barely noticeable punctation. Eyes large, distinctly longer than postocular region in dorsal view. Antenna (Fig. 3) slender, 1.5-1.6 mm long; preapical antennomeres only weakly transverse; antennomere XI elongated and apically acute, slightly longer in male than in female.

Pronotum (Figs 1-2) 1.25-1.30 times as broad as long and 1.35-1.40 times as broad as head, subject to conspicuous sexual dimorphism; disc with pronounced microreticulation and subdued shine (Figs 3-4).

Elytra (Figs 1-2) 0.93-1.00 times as long as pronotum; punctation dense and fine; interstices with distinct microreticulation and subdued shine. Hind wings fully developed.

Abdomen with fine, but distinct transverse microsculpture (Fig. 6); tergites III-VI impunctate near anterior margins and with moderately dense punctation on remainder of surfaces; tergite VII with sparse punctation; pubescence predominantly composed of short and rather stout brownish setae (Fig. 6); tergite III with weakly pronounced, tergite VII without sexual dimorphism.

♂: median portion of pronotum more or less extensively depressed or shallowly impressed and with distinctly granulose punctation (Fig. 4), lateral portions with fine and non-granulose punctation; tergite III with indistinct median tubercle; tergite VIII with broadly and shallowly concave posterior margin (Fig. 9); sternite VIII (Fig. 10) weakly oblong, much longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 7-8, 12) approximately 0.75 mm long, strongly concave between base of ventral process and crista apicalis in lateral view, with long and slender ventral process, and with narrow crista apicalis; paramere (Fig. 11) large and approximately 0.8 mm long.

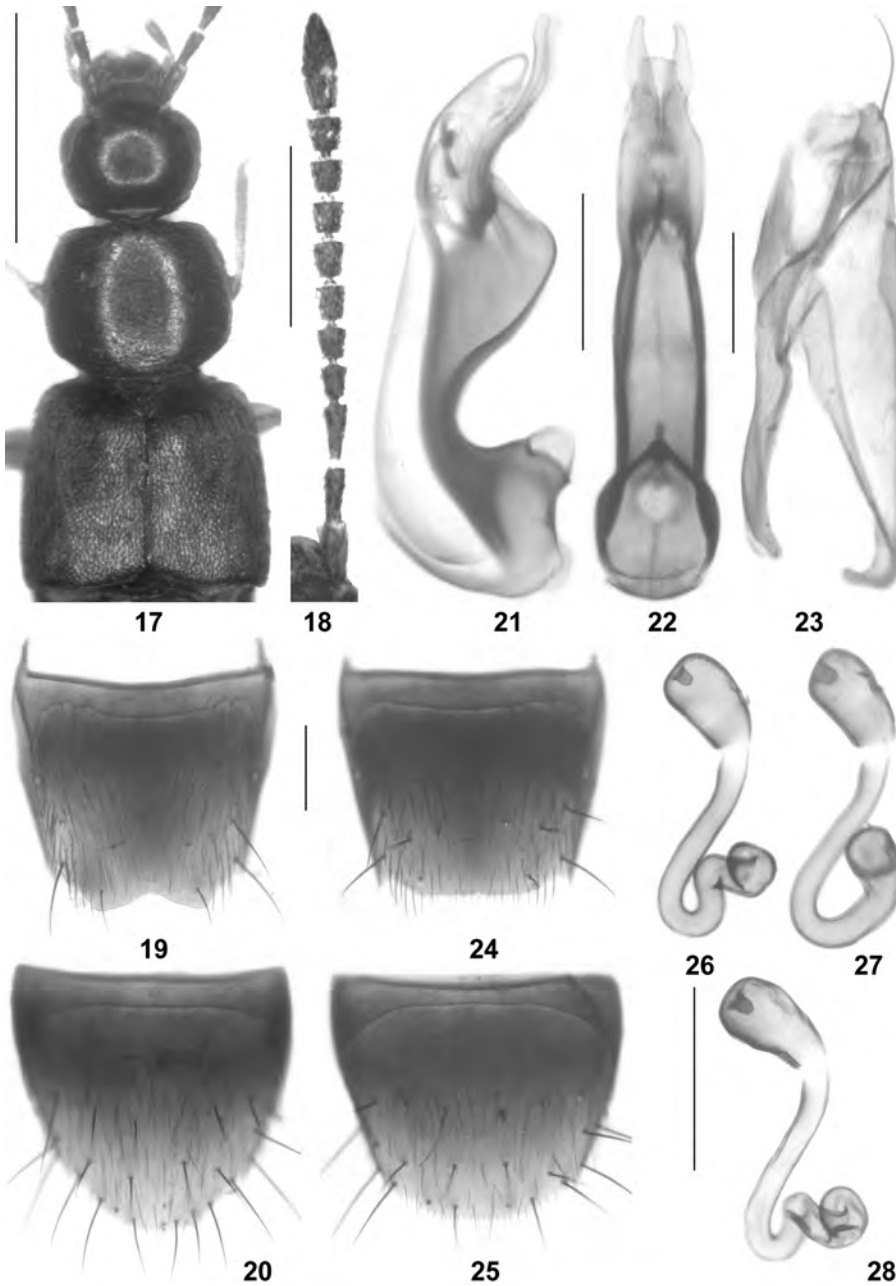
♀: median portion of pronotum not depressed and with fine, non-granulose punctation (Fig. 5); posterior margin of tergite VIII (Fig. 13) truncate in the middle; sternite VIII (Fig. 14) distinctly transverse and with broadly convex posterior margin, middle of posteriorly margin with fine and thin, lateral portions with moderately stout submarginal setae; spermatheca (Fig. 15) approximately 0.34 mm long, proximal portion of capsule rather short.

C o m p a r a t i v e n o t e s : As can be inferred from the similar sexual and external characters, particularly the similar sexual dimorphism of the pronotum (clearly a synapomorphy), *N. franzi* is closely allied to *N. chinensis*, from which it differs by the absence of a sexual dimorphism of the elytral punctation (*N. chinensis*: male elytra with

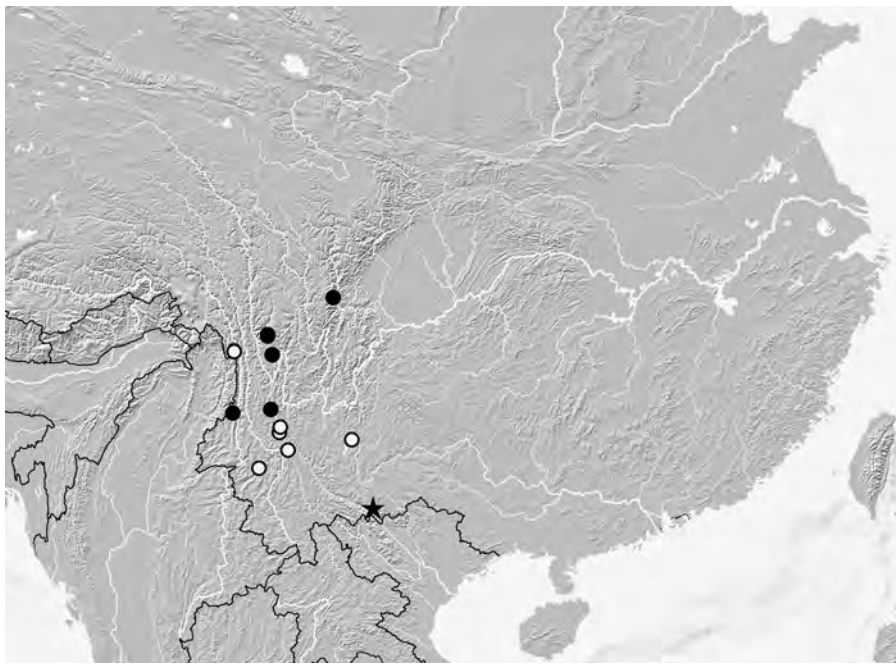
distinctly granulose, female elytra with non-granulose punctation), by the darker coloration (*N. chinensis*: basal antennomeres yellowish to yellowish-brown; pronotum, abdomen, and apical antennomeres brown to blackish-brown), by the modification of the male tergite III (*N. chinensis*: with spine-shaped median process), by the shapes of the male and female tergite VIII (*N. chinensis*: posterior margin convex), by the shape of the median lobe of the aedeagus, by the shape of the female sternite VIII (*N. chinensis*: posteriorly more strongly convex and with more distinctly modified submarginal setae), and by the slightly different shape of the spermatheca. For illustrations of the primary sexual characters of *N. chinensis* see PACE (1998). The aedeagus of *N. franzi* is most similar to that of *N. martensi*, from which it is distinguished by the pronounced sexual dimorphism of the pronotum, the absence of a median keel on the male tergite VII (*N. martensi*: tergite VII with a – sometimes weakly pronounced – median elevation), the posteriorly concave posterior margin of the male tergite VIII (*N. martensi*: weakly convex), and by the shape of the median lobe of the aedeagus.

Distribution and natural history: The vast distribution of *N. franzi* ranges from West Nepal to the Chinese provinces Gansu and Yunnan (Map 3), from where it is recorded for the first time. The examined material was sifted from litter in forest and shrub habitats at altitude of 1650-3000 m, in Gansu together with *N. gansuensis* and *N. smetanai*.

Fig. 16: Locality to the southeast of Longnan, Gansu, where *Nepalota franzi* was collected together with *N. gansuensis* and *N. smetanai*.



Figs 17-28: *Nepalota cuneata* nov.sp.: (**17**) male forebody; (**18**) antenna; (**19**) male tergite VIII; (**20**) male sternite VIII; (**21-22**) median lobe of aedeagus in lateral and in ventral view; (**23**) paramere; (**24**) female tergite VIII; (**25**) female sternite VIII; (**26-28**) spermatheca. Scale bars: 17: 1.0 mm; 18: 0.5 mm; 19-28: 0.2 mm.



Map 4: Distributions of *Nepalota yunnanensis* PACE (filled circles), *N. cuneata* nov.sp. (open circles), and *N. crocea* nov.sp. (star) in China, based on examined records.

***Nepalota cuneata* nov.sp.** (Figs 17-28, Map 4)

T y p e m a t e r i a l : Holotype ♂: "CHINA [6] - Yunnan, NE Kunming, 25°08'35"N, 102°53'49"E, 2320 m, mixed forest, sifted, 13.VIII.2014, V. Assing / Holotypus ♂ *Nepalota cuneata* sp.n. det. V. Assing 2014" (cAss). Paratypes: 1♀: same data as holotype (cAss); 2♀♀: "CHINA [5] - Yunnan, NE Kunming, 25°08'40"N, 102°53'48"E, 2290 m, mixed forest, sifted, 11.VIII.2014, V. Assing" (cAss); 1♂, 5 exs.: "CHINA - N-Yunnan [2005-12], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, 2500 m, 27°45.404'N, 98°35.749'E, litter & debries [sic] at snowfield sifted during rain, 19.VI.2005, M. Schülke" (cSch, cAss); 5♂♂, 8 exs.: "CHINA: Yunnan, Lincang Pref., Laobie Shan, Wei Bo Shan pass, 24°08'16"N, 99°42'53"E, 2375 m, creek valley, devastated second. decid. forest, litter & moss sifted, 8.IX.2009, leg. M. Schülke [CH09-35]" (cAss); 2♂♂, 3 exs.: "CHINA (Yunnan) Dali Bai Aut. Pref., mount. range E Weishan, 12 km NE Weishan, 2630-2660 m, (scrub with pines and bamboo, litter sifted), 25°17'02-15"N, 100°22'23-30"E, 15.IX.2009, D.W. Wrase [54A]" (cSch, cAss); 2♀♀: same data, but leg. Schülke (cSch); 1♂, "CHINA - Yunnan, Dali Bai Aut. Pref., Jizu Shan, path to cable car, 37 km NE Dali, 25°58'N, 100°23'E, 2450 m, mixed forest, sifted from litter, moss & pine apples, 5.IX.2009, leg. M. Schülke [CH09-29]" (cAss); 1♂, 1♀: same data, but leg. Wrase (cSch); 6♂♂, 8 exs.: "CHINA: Yunnan, Lincang Pref., Laobie Shan, Wei Bo Shan pass, 24°08'16"N, 99°42'53"E, 2375 m, creek valley, second. decid. forest, litter & moss sifted, 8.IX.2009, leg. M. Schülke [CH09-35] (cSch, cAss); 1♂: "CHINA: Yunnan, Pu'er Pref., Ailao Shan, 37 km NW Jingdong, 24°45'12"N, 100°41'24.5"E, 2300 m, devastated forest remnant, litter & dead wood sifted, 13.IX.2009, leg. M. Schülke [CH09-48]" (cAss).

E t y m o l o g y : The specific epithet (Latin, adjective: wedge-shaped) alludes to the conspicuous shape of the median lobe of the aedeagus.

D e s c r i p t i o n : Body length 5.0-5.4 mm; length of forebody 2.2-2.3 mm. Coloration: head blackish, pronotum blackish-brown to blackish, elytra dark-yellowish;

abdomen dark-brown to blackish, with the posterior margins of the segments narrowly brownish; legs yellowish; antennae blackish, with antennomere I paler brown.

Head (Fig. 17) noticeably transverse; dorsal surface with distinct microreticulation, subdued shine, and very fine and sparse, barely noticeable punctation. Eyes large, much longer than postocular region in dorsal view. Antenna (Fig. 18) slender, 1.5-1.7 mm long; preapical antennomeres very weakly transverse; antennomere XI elongated and apically acute.

Pronotum (Fig. 17) 1.20-1.25 times as broad as long and approximately 1.35 times as broad as head, subject to weakly pronounced sexual dimorphism; disc with pronounced microreticulation and subdued shine.

Elytra (Fig. 17) approximately as long as pronotum; punctation dense and fine; interstices with distinct microreticulation and subdued shine. Hind wings fully developed.

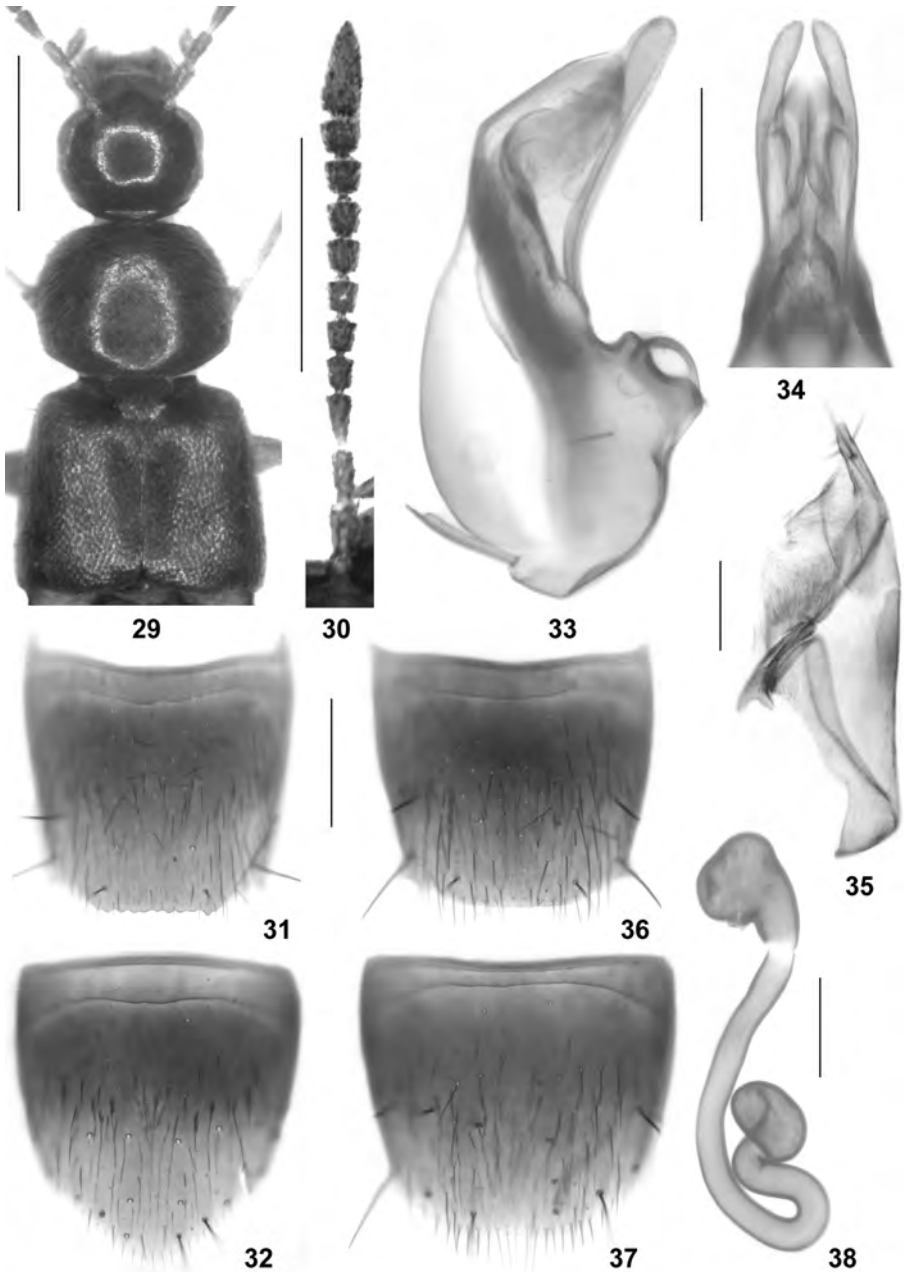
Abdomen with fine, but distinct transverse microsculpture; tergites III-VII impunctate near anterior margins; tergites III-VI with moderately dense, tergite VII with sparser punctation on remainder of surfaces; pubescence predominantly composed of short and rather stout brownish setae; tergite VII without sexual dimorphism.

♂: pronotum with weakly granulose punctation only in postero-median portion, remainder of disc with fine and non-granulose punctation; tergite III with weakly pronounced median tubercle; tergite VIII (Fig. 19) with broadly and distinctly concave posterior margin; sternite VIII (Fig. 20) transverse, somewhat longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 21-22) approximately 0.75 mm long and of very conspicuous shape, particularly in lateral view: in the middle with pronounced wedge-shaped protrusion, ventral process distinctly bisinuate in lateral view, crista apicalis narrow, but pronounced; paramere (Fig. 23) large and approximately 0.75 mm long, apical lobe with conspicuously long and black subapical seta.

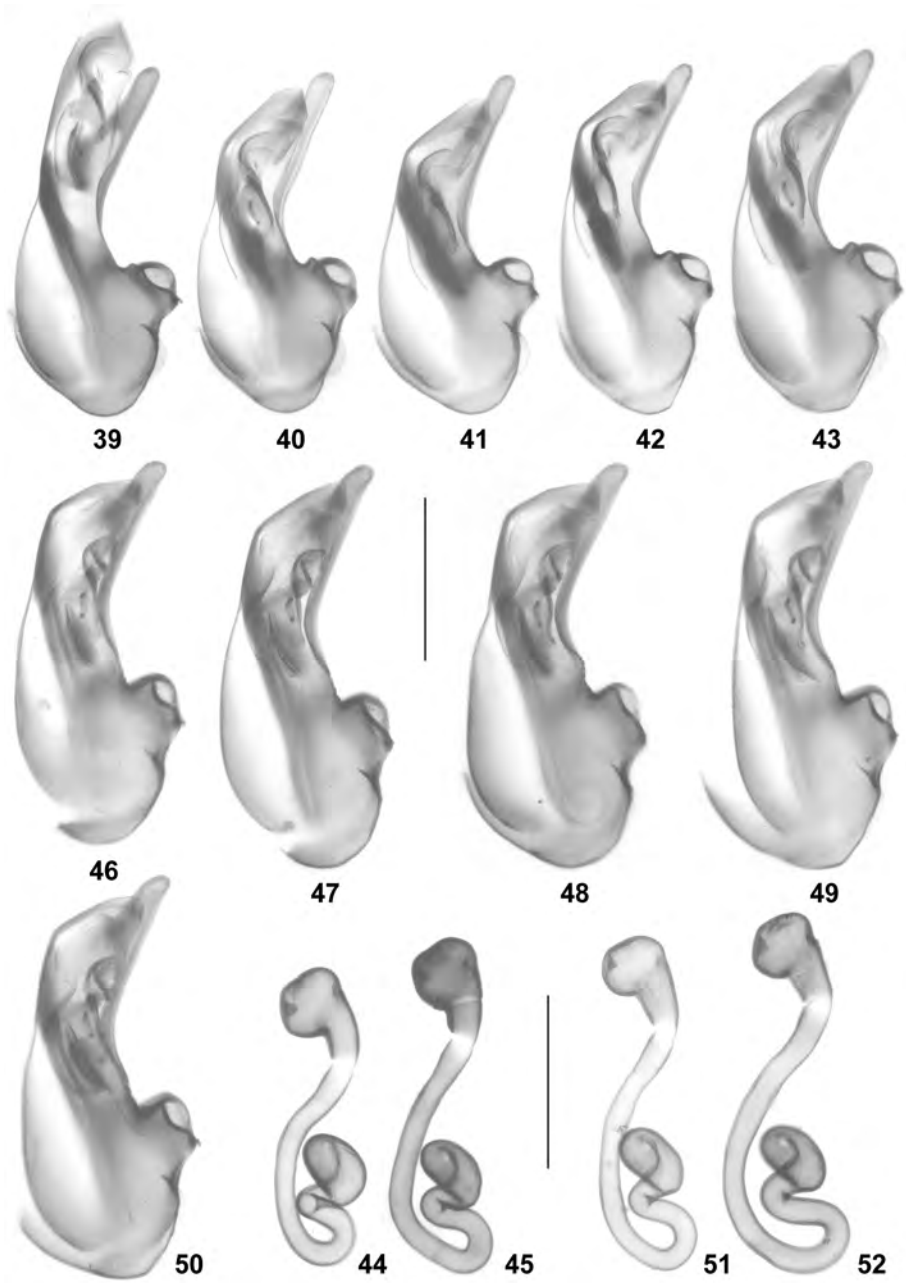
♀: pronotum with fine, non-granulose punctation; tergite III with or without median tubercle (similar to that of male); posterior margin of tergite VIII (Fig. 24) truncate in the middle; sternite VIII (Fig. 25) distinctly transverse and with broadly and distinctly convex posterior margin, submarginal setae only indistinctly modified; spermatheca (Figs 26-28) approximately 0.31 mm long, of very variable shape.

Comparative notes: As can be inferred from the similar sexual and external characters, particularly the presence of a sexual dimorphism of the pronotum, *N. cuneata* is closely allied to *N. franzi* and *N. chinensis*, from which it differs by the slightly more slender pronotum, the less extensively granulose punctation of the male pronotum, by the shapes of the male tergite and sternite VIII, the conspicuous morphology of the aedeagus, the shape and chaetotaxy of the female sternite VIII, and by the shape of the spermatheca.

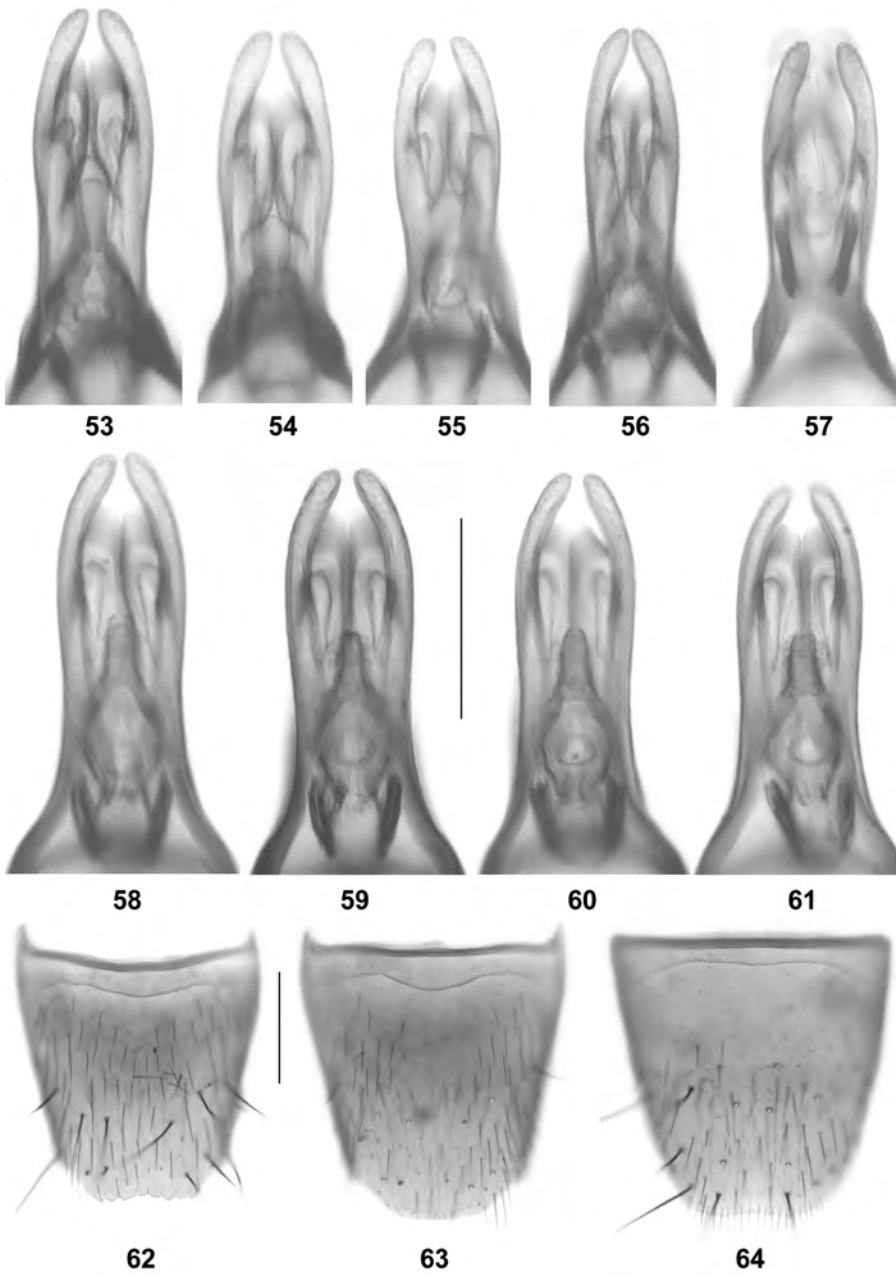
Distribution and natural history: The known distribution is confined to several localities in Yunnan (Map 4). The specimens were sifted from sifting leaf litter in various forest habitats at altitudes between 2290 and approximately 2650 m, partly together with *N. smetanai*.



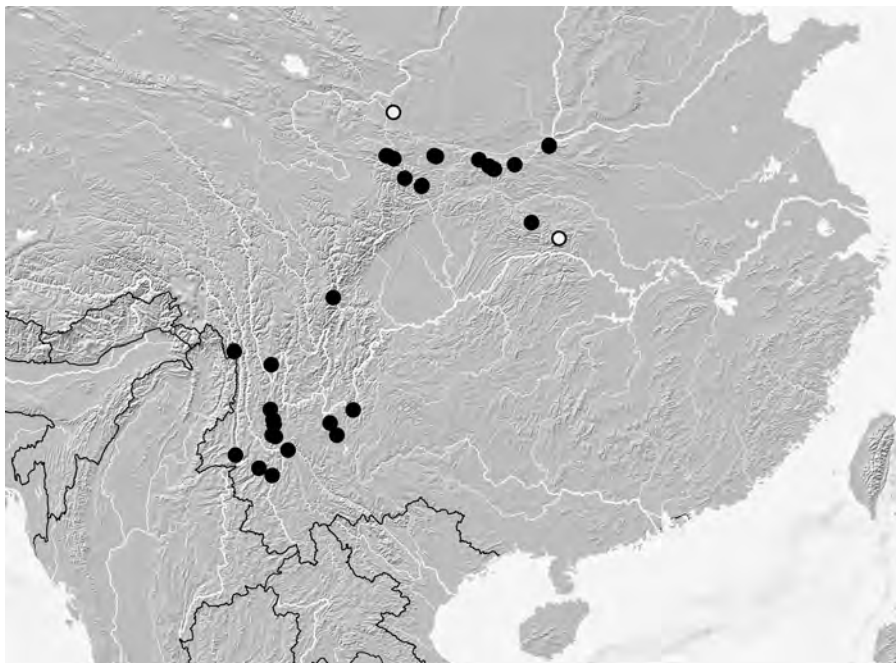
Figs 29-38: *Nepalota smetanai* PACE from East Yunnan: (**29**) male forebody; (**30**) antenna; (**31**) male tergite VIII; (**32**) male sternite VIII; (**33**) median lobe of aedeagus in lateral view; (**34**) apical portion of median lobe of aedeagus in ventral view; (**35**) paramere; (**36**) female tergite VIII; (**37**) female sternite VIII; (**38**) spermatheca. Scale bars: 29-30: 0.5 mm; 31-32, 36-37: 0.2 mm; 33-35, 38: 0.1 mm.



Figs 39-52: *Nepalota smetanai* PACE from East Yunnan (**39-45**) and from Gansu (**46-52**): (**39-43, 46-50**) median lobe of aedeagus in lateral view; (**44-45, 51-52**) spermatheca. Scale bars: 0.2 mm.



Figs 53-64: *Nepalota smetanai* PACE from East Yunnan (**53-57**) and from Gansu (**58-64**): (**53-61**) apical portion of median lobe of aedeagus in ventral view; (**62**) male tergite VIII; (**63**) female tergite VIII; (**64**) female sternite VIII. Scale bars: 62-64: 0.2 mm; 53-61: 0.1 mm.



Map 5: Distribution of *Nepalota smetanai* PACE in China, based on examined (filled circles) and reliable literature records (open circles).

Nepalota smetanai PACE, 1998 (Figs 46-64, Map 5)

Nepalota smetanai PACE, 1998: 945 ff.

Material examined: China: Shaanxi: 1♀, SW Zhouzhi, Qinling Shan, 33°44'N, 107°58'E, 1900 m, NE-slope, stream valley, mixed forest, litter and soil sifted, 25.VII.2012, leg. Assing (cAss); 13 exs., Qinling Shan, autoroute km 93 S of Zhouzhi, 33°45'N, 107°56'E, 1650 m, forest, sifted, 1-2.IX.1995, leg. Schülke & Wrase (cSch, cAss); 8 exs. [partly teneral], Qinling Shan, 45 km SSW Xi'an, mountain range W pass on road Xi'an - Shagoujie, 33°52'N, 108°46'E, 2675 m, N-slope with *Abies*, *Betula*, *Larix*, and *Rhododendron*, sifted, 25.VII.2001, leg. Schülke (cSch, cAss); 1 ex., Qinling Shan, pass on road Zhouzhi - Foping, 33°44'N, 107°59'E, 1990 m, stream valley with mixed deciduous forest, sifted, 2.&4.VII.2001, leg. Wrase (cSch); 1 ex., Qinling Shan, river bank above Houzhenzi, 33°50'N, 107°47'E, 1450 m, 5.VII.2001, leg. Schülke (cSch); 53 exs., SW Meixian, Qinling Shan, 34°02'N, 107°24'E, 1870 m, N-slope, secondary deciduous forest, near stream, litter and grass sifted, 26.VII.2012, leg. Assing, Schülke & Wrase (cAss, cSch, MNHUB); 44 exs., Qinling Shan, Hua Shan, 34°25'N, 110°06'E, 1950-2000 m, forest, sifted, 19.VIII.1995, leg. Schülke & Wrase (cSch, cAss); 25 exs., Hua Shan, 34°27'N, 110°06'E, 1200-1400 m, sifted, 18.&20.VIII.1995, leg. Pütz, Schülke & Wrase (cSch, cAss); 9 exs., Daba Shan, mountain range N pass 22 km NW Zhenping, 32°01'N, 109°21'E, 2850 m, litter beneath fir and bushes sifted, 13.VII.2001, leg. Wrase (cSch, cAss). Gansu: 1♂, N Chengxian, W-Qinling Shan, 34°08'N, 105°47'E, 1760 m, N-slope, secondary deciduous forest margin, sifted, 28.VII.2012, leg. Assing (cAss); 31 exs., N Chengxian, W-Qinling Shan, 34°10'N, 105°43'E, 1850 m, mixed secondary forest margin, litter sifted, 29.VII.2012, leg. Assing (cAss, MNHUB); 21 exs., N Chengxian, W-Qinling Shan, 34°10'N, 105°42'E, 1830 m, stream valley with secondary deciduous forest, moist litter sifted, 29.VII.2012, leg. Assing (cAss, MNHUB); 7 exs., mountains SE Longnan, 33°13'N, 105°15'E, 2170 m, N-slope with shrubs and scattered coniferous trees, litter sifted, 31.VII.2012, leg. Assing (cAss); 5 exs., mountains SE Longnan, 33°11'N, 105°14'E, 2030 m, N-slope with scree, moss, fern roots, and moist litter sifted, 31.VII.2012, leg. Assing

(cAss); 63 exs., W-Qinling Shan, NW Longnan, 34°03'N, 104°10'E, 2200 m, SW-slope with shrubs, litter sifted, 1.VIII.2012, leg. Assing & Wrase (cAss, cSch, MNHUB); 4♂♂, 6♀♀, 2 exs., W-Qinling Shan, NW Longnan, Lazikou pass, S-side, Zhuli valley, 34°08'N, 103°56'E, 2260 m, N-slope, mixed forest with oak and pine near stream, litter and dead wood sifted, 3.VIII.2012, leg. Assing & Wrase (cAsscSch); 8♂♂, 7♀♀, W-Qinling Shan, NW Longnan, Lazikou pass, S-side, Laolong valley, 34°08'N, 103°52'E, 2300 m, S-slope with pine and spruce forest, litter sifted, 3.VIII.2012, leg. Assing (cAss); 22♂♂, 26♀♀, W Longnan, Min Shan, 33°26'N, 104°36'E, 1470 m, deep cleft with scree, shrubs at N-slope, litter sifted, 5.VIII.2012, leg. Assing (cAss, MNHUB); 1♀, mountains SE Longnan, 33°11'N, 105°14'E, 2060 m, N-slope with scree, shrub litter and moss sifted, 7.VIII.2012, leg. Assing (cAss). S i c h u a n : 1♂, Gongga Shan, Hailuogou Glacier Park, Camp 1, 29°36'N, 102°04'E, 2100 m, 27.-31.V.1997, leg. Schülke (cAss). Y u n n a n : 10♂♂, 8♀♀, 8 exs., mountains W Dongchuan, Sedan Snow Mountain Scenic Resort, 26°06'N, 102°55'E, 2620 m, secondary pine forest, litter, moss, and roots of herbs sifted, 14.VIII.2014, leg. Assing & Schülke (cAss, cSch, MNHUB); 6♂♂, 5♀♀, 3 exs., mountain WNW Wuding, 25°39'N, 102°07'E, 2390 m, mixed forest margin with alder and pine, litter sifted, 18.VIII.2014, leg. Assing & Schülke (cAss, cSch, MNHUB); 6♂♂, 9♀♀, 7 exs., same data, but 1.IX.2014, leg. Assing & Schülke (cAss, cSch, MNHUB); 61 exs., Dali Bai Aut. Pref., mountain range E Weishan, 12 km NE Weishan, 25°17'N, 100°22'E, 2630-2660 m, shrubs with pine and bamboo, litter sifted, 15.IX.2009, leg. Schülke & Wrase (cSch, cAss); 8 exs., Dali Bai Nat. Aut. Pref., Diancang Shan, 3 km W Dali old town, pine forest at "Cloud Road", right upper chairlift station, 25°41'N, 100°07'E, 2650-2750 mpine needles and dry moss in ditches, 3.IX.2003, leg. Schülke (cSch, cAss); 1 ex., Dali Bai Nat. Aut. Pref., Diancang Shan, 3 km W Dali old town, creek valley at "Cloud Road", left upper chairlift station, 25°41'N, 100°07'E, 2700 m, bamboo, moss and litter sifted, 28.VIII.2003, leg. Schülke (cSch); 1 ex., Dali Bai Nat. Aut. Pref., Diancang Shan, 3 km W Dali old town, pine forest at "Cloud Road", 25°11'N, 100°07'E, 2650-2750 m, 17.VI.2005, leg. Schülke (cSch); 2 exs. Dali Bai Nat. Aut. Pref., Diancang Shan, 4 km W Dali, 25°41'N, 100°07'E, 2900-3000 m, E slope with degraded forest and old pine forest, 31.VIII.2003, leg. Schülke (cSch); 1♂, Dali Bai Nat. Aut. Pref., Diancang Shan, 5 km SSW Dali old town, creek valley above cable car, 25°39'N, 100°08'E, 2800 m, shrubs, bamboo, moss and old flood debris sifted, 26.VIII.2003, leg. Schülke (cAss); 1 ex., Dali Bai Nat. Aut. Pref., Diancang Shan, E pass 43 km NW Dali, 26°00'N, 100°00'E, 2700 m, secondary pine forest, litter and moss sifted, 23.VIII.2009, leg. Schülke (cSch); 16 exs., Dali Bai Aut. Pref., Wuliang Shan, 11 km SW Weishan, 25°09'N, 100°14'E, 2520 m, pine forest with shrubs, litter sifted, 14.IX.2009, leg. Schülke & Wrase" (cSch, cAss); 1 ex., Dali Bai Aut. Pref., Zhemo Shan, 7 km SW Xiaguan, 25°32-33'N, 100°10-11'E, 2870-2970 m, shrubs with bamboo, oak, and rhododendron, litter sifted, 18.IX.2009, leg. Schülke (cSch); 1♂, 34 exs., Lincang Pref., Xue Shan, 11 km ENE Lincang, 23°55'N, 100°11'E, 2510 m, secondary pine forest with rhododendron, litter sifted, 10.IX.2009, leg. Schülke (cSch, cAss); 1♀, Dehong Dai Aut. Pref., mountain range 31 km E Luxi, 24°30'N, 98°53'E, 2280 m, secondary pine forest with old deciduous trees, litter sifted, 3.VI.2007, leg. Schülke (cAss); 6 exs., Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, 27°45'N, 98°36'E, 2500 m, litter & debris at snowfield sifted, 19.VI.2005, leg. Schülke (cSch, cAss); 37 exs., Lincang Pref., Laobie Shan, Wei Bo Shan pass, 24°08'N, 99°43'E, 2375 m, stream valley with degraded secondary deciduous forest, litter and moss sifted, 8.IX.2009, leg. Schülke (cSch, cAss); 1♂, 4 exs., Pu'er Pref., Ailao Shan, 37 km NW Jingdong, 24°45'N, 100°41'E, 2300 m, degraded forest remnant, litter sifted, 13.IX.2009, leg. Schülke (cSch, cAss); 1 ex., Zhongdian Co., 51 km SSE Zhongdian, 27°25'N, 99°57'E, 2970 m, stream valley, mixed coniferous forest with shrubs and bamboo, 16.VIII.2003, leg. Wrase (cSch).

C o m m e n t : The original description of *N. smetanai* is based on a male holotype from "China, Sichuan, Gongga Shan, above camp 2" and 15 paratypes from "China, Gansu, Xinlong Shan, ca. 70 km S Lanzhou" (PACE 1998). The species was subsequently reported from additional localities in Shaanxi, Yunnan, Hubei by PACE (2011), who again illustrated the genitalia (PACE 2011: figures 88-90) without indicating what specimens these illustrations are based on. Since the specimens collected by Andreas Pütz in the Hua Shan have type labels by Pace ("Holotypus [or Paratypus, respectively] *Nepalota huamontis* mihi, det. R. Pace 2009") attached to them, the illustrations in Pace (2011) probably refer to this material.

Nepalota smetanai is subject to remarkable intraspecific variation of external and sexual characters, which at first led me to hypothesize that the examined material was composed of two species. The material from the Qinling Shan (and adjacent mountain ranges), the Daba Shan, and the Gongga Shan is characterized by a reddish-brown to brown body, relatively short elytra (approximately 0.8 times as long as the pronotum), and a dimorphism of the hind wings, whereas the specimens from Yunnan are of darker coloration (body blackish-brown to blackish), have longer elytra (approximately as long as pronotum), and always fully developed hind wings; for illustrations the external and sexual characters of specimens from East Yunnan see Figs 29-38. Moreover, slight differences in the shape and size of the median lobe of the aedeagus, in the internal structures of the aedeagus, and in the secondary sexual characters were observed, while the spermatheca is practically identical (Figs 39-64). However, in some populations in western Yunnan these characters were found to be variable: some specimens are externally identical to other material from Yunnan, but have an aedeagus of similar morphology as material from the Qinling Shan and the Daba Shan. Thus, it was not possible to unambiguously attribute them to either of the two morphs. It seems possible that these morphs represent distinct subspecies, but additional (e.g., molecular) evidence would be needed to clarify their status. Therefore, for the time being, the observed differences are interpreted as intra- rather than inter(sub-)specific variation.

Distribution and natural history: *Nepalota smetanai* is one of the most common representatives of the genus in China, its distribution ranging from Hubei and Shaanxi in the north and northeast to Yunnan in the south (Map 5). The examined material was sifted from litter in various types of forest and shrub habitats at altitudes between 1200 and 3000 m. On numerous occasions it was found together with other species of the genus, mostly *N. gansuensis*, but also *N. franzi*, *N. martensi*, and *N. cuneata*.

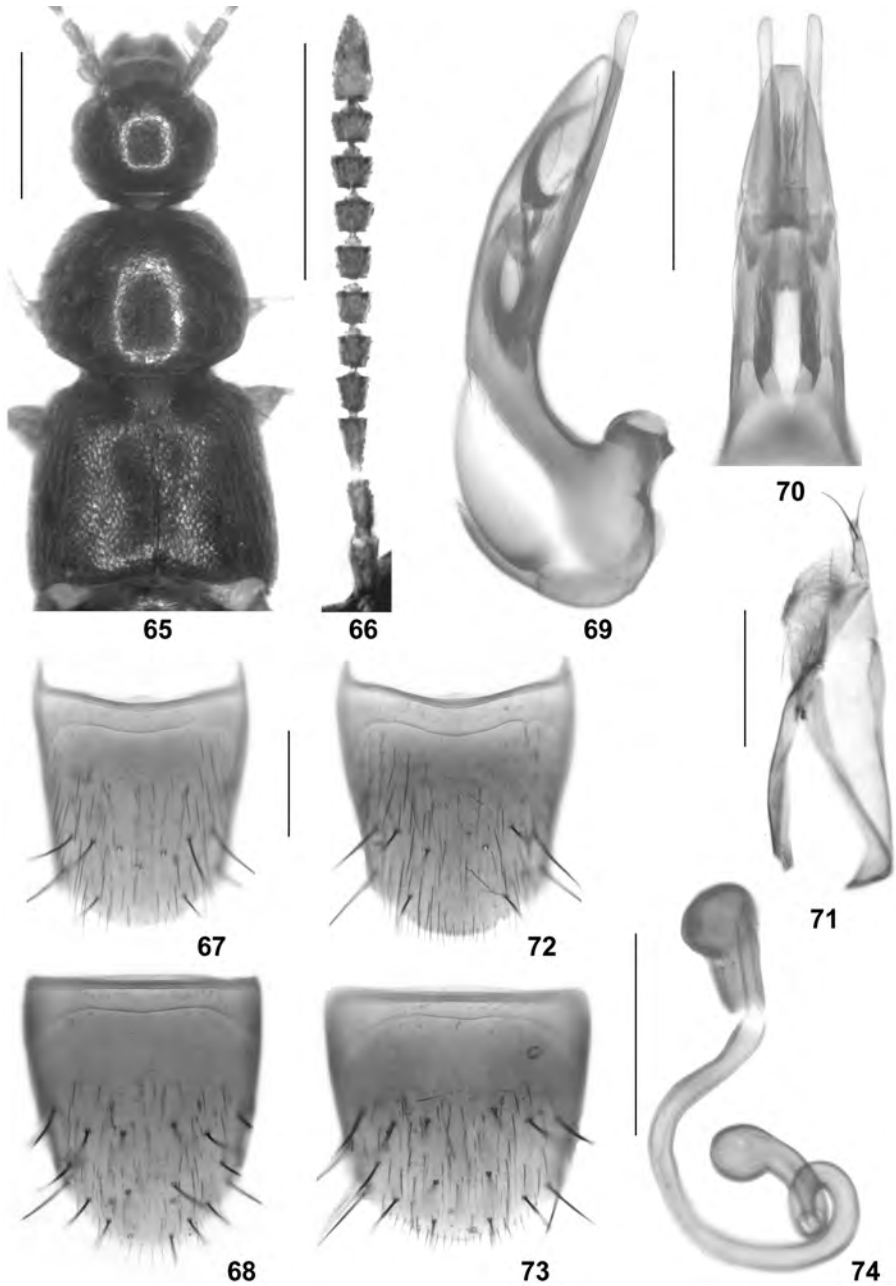
Nepalota fellowesi PACE, 2004 (Figs 65-74, Map 3)

Nepalota fellowesi PACE, 2004: 508.

Type material examined: Holotype ♂: "CHINA Guangdong, Da Wu Ling, 1500 m, 26.IV.97, J. Fellowes / Rougemont Collection / Holotypus Nepalota fellowesi m., det. R. Pace 1998 / Nepalota fellowesi sp. n., det. R. Pace 1998 / Nepalota fellowesi Pace, det. V. Assing 2015" (IRSNB). Paratype ♀: same data as holotype (IRSNB).

Additional material examined: China: 4♂♂, 6♀♀: Yunnan, NNE Pingbian, 23°01'N, 103°42'E, 1500 m, subtropical broad-leaved forest, litter sifted, 26.VIII.2014, leg. Assing (cAss).

Comment: This species was described from "China, Guandong, Da Wu Ling" (PACE 2004), based on a male holotype and two female paratypes. The examined type material is in rather poor condition. The holotype has one elytron missing, its aedeagus is somewhat deformed, and the spermatheca of the paratype is completely deformed. Since the description and illustrations provided by PACE (2004) are incomplete and somewhat misleading, respectively, a redescription and new illustrations are given.



Figs 65-74: *Nepalota fellowesi* PACE: (**65**) forebody; (**66**) antenna; (**67**) male tergite VIII; (**68**) male sternite VIII; (**69**) median lobe of aedeagus in lateral view; (**70**) apical portion of median lobe of aedeagus in ventral view; (**71**) paramere; (**72**) female tergite VIII; (**73**) female sternite VIII; (**74**) spermatheca. Scale bars: 65-66: 0.5 mm; 67-74: 0.2 mm.

Redescription: Body length 3.3-4.5 mm; length of forebody 1.6-1.9 mm. Coloration: head blackish-brown to blackish; pronotum dark-brown to blackish-brown; elytra brown to dark-brown; abdomen blackish-brown, with the anterior segments often slightly paler and with the posterior margins of the segements narrowly reddish to reddish-brown; legs yellowish; antennae reddish-brown with the basal 2-3 antennomeres and antennomere XI reddish.

Head (Fig. 65) weakly transverse; dorsal surface with distinct microreticulation and with very fine and sparse punctation. Eyes moderately large, slightly longer than postocular region in dorsal view. Antenna (Fig. 66) slender, 1.2-1.3 mm long; antennomere IV weakly oblong or approximately as long as broad; antennomeres V-X of gradually increasing width and increasingly transverse; preapical antennomeres moderately transverse; antennomere XI apically acute, slightly longer than the combined length of IX and X.

Pronotum (Fig. 65) 1.20-1.25 times as broad as long and approximately 1.4 times as broad as head, without sexual dimorphism; disc with distinct microreticulation and with very fine punctation.

Elytra (Fig. 65) approximately 0.9 times as long as pronotum; punctation dense and fine; interstices with distinct microreticulation and subdued shine. Hind wings fully developed.

Abdomen with distinct transverse microsculpture; anterior portions of tergites III-VII impunctate; posterior portions of tergites III-V with moderately sparse, those of tergites VI-VII with very sparse punctation; pubescence predominantly composed of very thin setae; tergites III and VII without sexual dimorphism.

♂: tergite VIII (Fig. 67) approximately as long as broad and with distinctly convex posterior margin; sternite VIII (Fig. 68) oblong, somewhat longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 69-70) approximately 0.6 mm long, conspicuously long and slender; paramere (Fig. 71) approximately 0.55 mm long, shorter than median lobe, and with slender apical lobe with two long black setae.

♀: tergite VIII (Fig. 72) approximately as long as broad and with distinctly convex posterior margin; sternite VIII (Fig. 73) moderately transverse and with broadly convex posterior margin, middle of posterior margin not concave; spermatheca (Fig. 74) approximately 0.4 mm long, with rather long capsule.

Comparative notes: This species is characterized particularly by the conspicuous shape and internal structures of the median lobe of the aedeagus.

Distribution and natural history: The known distribution is confined to one locality in Guangdong and one at the foot of Dawei Shan near Pingbian, southeastern Yunnan (Map 3). The specimens from Yunnan were sifted from leaf litter in a subtropical broad-leaved forest at an altitude of 1500 m, together with *N. guangdongensis* and *N. crocea*.

***Nepalota mocytoides* nov.sp.** (Figs 75-85, Map 3)

Type material: Holotype ♂: "CHINA [18] - Yunnan, mts S Jianshui, broad-leaved for., 23°25'20"N, 102°51'05"E, 1890 m, 22.VIII.2014, V. Assing / Holotypus ♂ *Nepalota mocytoides* sp.n. det. V. Assing 2014" (cAss). Paratypes: 3♂♂, 2♀♀: same data as holotype (cAss, MNHUB); 2 exs.: "CHINA: Yunnan, mountains S Jianshui, 1890 m, 23°25'20"N, 102°51'05"E, subtropical broad-leaved forest, litter sifted, 22.VIII.2014, leg. M. Schülke [CH14-18]" (cSch, cAss); 3♂♂ [1 teneral]: "CHINA [19] - Yunnan, mts S Jianshui, forest margin, 23°25'18"N, 102°50'53"E, 1810 m,

22.VIII.2014, V. Assing" (cAss, MNHUB); 2 exs.: "CHINA: Yunnan, mountains S Jianshui, 1810 m, 23°25'18"N, 102°50'53"E, secondary forest margin, litter & debris sifted, 22.VIII.2014, leg. M. Schülke [CH14-19]" (cSch, cAss).

Etymology: The specific epithet (adjective) alludes to the external resemblance of this species to species of the subgenus *Mocyta* MULSANT & REY, 1874 of the genus *Atheta* THOMSON, l858.

Description: Body length 3.3-4.5 mm; length of forebody 1.6-1.9 mm. Coloration: head blackish-brown to blackish; pronotum dark-brown to blackish-brown; elytra brown to dark-brown; abdomen blackish-brown, with the anterior segments often slightly paler and with the posterior margins of the segements narrowly reddish to reddish-brown; legs yellowish; antennae reddish-brown with the basal 2-3 antennomeres and antennomere XI reddish.

Head (Fig. 75) transverse; dorsal surface with shallow microreticulation and with fine and moderately sparse punctation. Eyes large, much longer than postocular region in dorsal view. Antenna (Fig. 76) 0.80-0.95 mm long; antennomere IV weakly oblong or approximately as long as broad; antennomeres V-X of gradually increasing width and increasingly transverse; preapical antennomeres distinctly transverse; antennomere XI longer than the combined length of IX and X, but shorter than the combined length of VIII-X.

Pronotum (Fig. 75) large and transverse, approximately 1.4 times as broad as long and approximately 1.5 times as broad as head, without sexual dimorphism; disc with shallow microreticulation and with rather dense, moderately fine punctation.

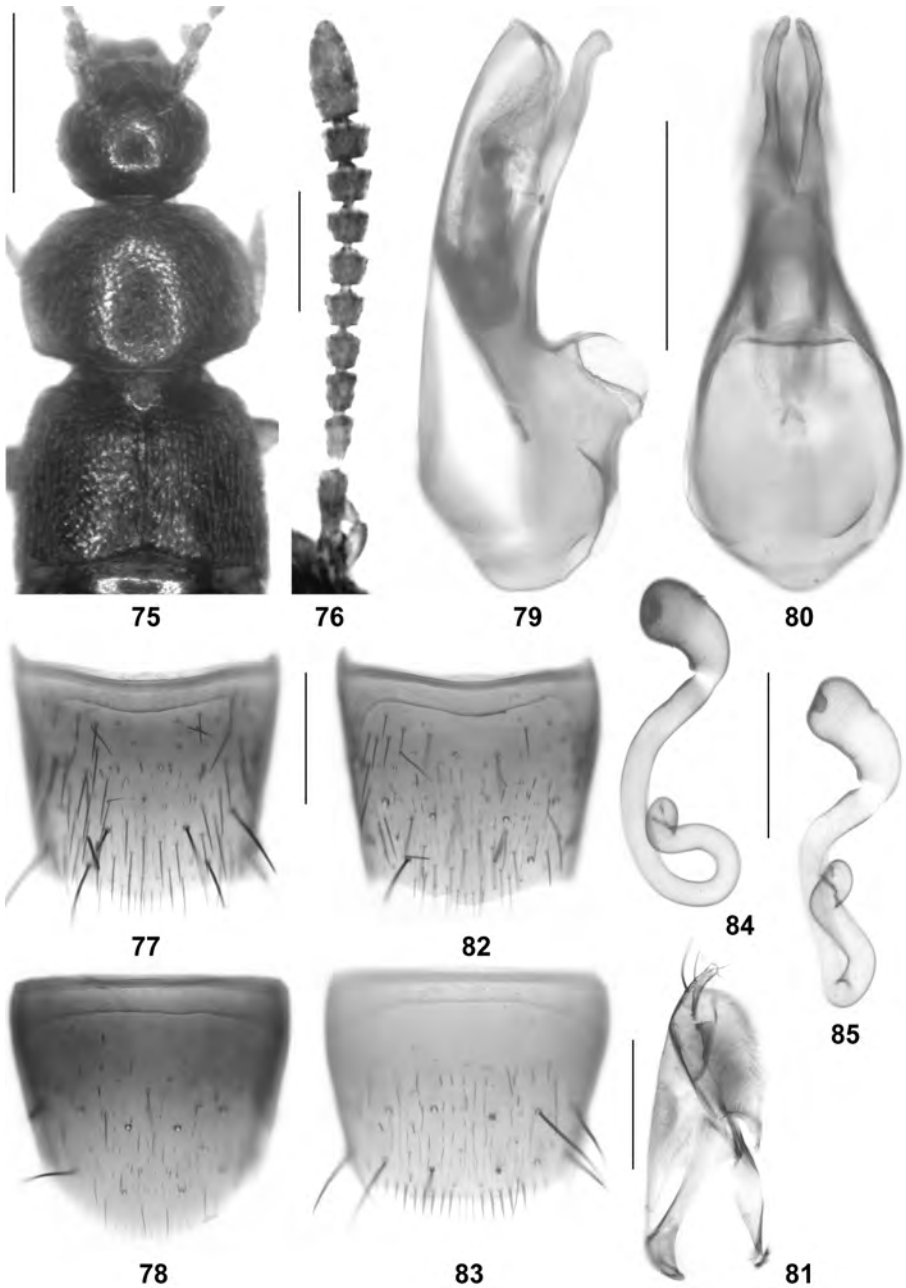
Elytra (Fig. 75) short, approximately 0.8 times as long as pronotum; punctation dense and moderately fine; interstices with distinct microreticulation. Hind wings present.

Abdomen with very shallow transverse microsculpture, glossy; anterior portions of tergites III-VII impunctate; posterior portions of tergites III-IV, with moderately dense, those of tergites V-VI with moderately sparse, and that of tergite VII with sparse punctation; pubescence composed of very thin pale setae; tergites III and VII without sexual dimorphism.

♂: tergite VIII (Fig. 77) weakly transverse, posterior margin obtusely pointed in the middle; sternite VIII (Fig. 78) approximately as long as broad, somewhat longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 79-80) approximately 0.5 mm long, with pronounced crista apicalis; paramere (Fig. 72) approximately 0.5 mm long and with slender apical lobe.

♀: tergite VIII (Fig. 82) of similar shape as in male; sternite VIII (Fig. 83) distinctly transverse and with weakly convex posterior margin; spermatheca (Figs 84-85) approximately 0.4 mm long.

Comparative notes: This species is distinguished from all previously described *Nepalota* species by the broad forebody with a strongly transverse pronotum, in combination with almost uniformly brown coloration of the body. In addition, it is characterized by the shape of the ventral process and the crista apicalis of the median lobe of the aedeagus, by the secondary sexual characters, and by the shape of the spermatheca.



Figs 75-85: *Nepalota mocytoides* nov.sp.: (**75**) forebody; (**76**) antenna; (**77**) male tergite VIII; (**78**) male sternite VIII; (**79-80**) median lobe of aedeagus in lateral and in ventral view; (**81**) paramere; (**82**) female tergite VIII; (**83**) female sternite VIII; (**84-85**) spermatheca. Scale bars: 75: 0.5 mm; 76-85: 0.2 mm.

Distribution and natural history: The type specimens were collected in two adjacent localities to the south of Jianshui, southern Yunnan (Map 3), by sifting leaf litter in a subtropical broad-leaved forest and in a secondary forest margin at altitudes of 1890 and 1810 m, respectively. One of the paratypes is teneral.

***Nepalota guangdongensis* PACE, 2004** (Figs 86-95, Map 2)

Nepalota guangdongensis PACE, 2004: 508 ff.
Nepalota rougemonti PACE, 2011: 171; **nov.syn.**
Nepalota ruficollis PACE, 2011: 170 f.; **nov.syn.**

Type material examined: Holotype ♀: "CHINA Guangdong Pr., Ding Hu Shan Biosphere R., 6 V.1998 J. Fellowes / Rougemont Collection / Holotypus Nepalota guangdongensis m., det. R. Pace 1998 / Nepalota guangdongensis sp. n., det. R. Pace 1998 / Nepalota guangdongensis Pace, det. V. Assing 2015" (IRSNB).

Additional material examined: China: Yunnan: 2♂♂, 3♀♀, NNE Pingbian, 23°01'N, 103°42'E, 1500 m, subtropical broad-leaved forest, litter sifted, 26.VIII.2014, leg. Assing & Schülke (cAss, cSch). Jiangxi: 1♂, 1♀, 1 ex., Jinggang Shan, Shuangxikou, 26°31'N, 114°11'E, 410 m, river valley, moist litter in a sparse forest near a river sifted, 24.IV.2011, leg. Fikáček et al. (NMP, cAss); 1♂, 1 ex., Jinggang Shan, Xiping, 26°34'N, 114°12'E, 915 m, sparse tree-bamboo bush, moist leaf litter accumulated above bank of a stream sifted, 24.IV.2011, leg. Fikáček et al. (NMP, cAss). Guangdong: 2♂♂, 1♀, 11 exs., W Qixing, Heishiding nature reserve, 23°28'N, 111°54'E, 190-260 m, primary lowland forest, moist leaf litter near streams sifted, 1.-3.V.2011, leg. Fikáček & Hájek (MNHNP, cAss).

Comment: *Nepalota guangdongensis* was described from a single female from "China, Guandong Pr., Ding Hu Shan, Biosphere R." (PACE 2004). The spermatheca of the holotype is somewhat deformed. However, based on the general spermathecal and the identical external characters, there is no doubt that the above material is conspecific with the holotype.

The original description of *N. rougemonti* is based on a single male collected in "Guangxi, Diding", that of *N. ruficollis* on two males and one female from two localities in Guangxi (PACE 2011). The whereabouts of the type material of *N. rougemonti* and *N. ruficollis* is currently unknown. According to PACE (2011), it is deposited in the IRSNB, where it was looked for, but not found by the curator in charge (GÉRARD, e-mail 3 Feb., 2015).

In the section on *N. rougemonti*, PACE (2011) states that the species is distinguished from *N. ruficollis* only by the shape of the aedeagus; the colour photographs (PACE 2011: figures 18 and 19) do not show any external differences. An examination of the above material revealed that the median lobe of the aedeagus resembles the illustration provided by PACE (2011: figures 80-81) for the aedeagus of *N. rougemonti*. There are, however, slight differences in the shape of the ventral process (lateral view) and in the shapes of the internal structures. Similar differences were observed also in the above material from Guangdong, undoubtedly an artefact resulting from the killing and/or preservation method(s) used. The same evidently applies to the aedeagus of the type material of *N. ruficollis* (see PACE 2011: figures 77-78). The spermatheca of the above material is identical to that of *N. ruficollis* (PACE 2011: figure 79) and, as mentioned, to that of *N. guangdongensis*. As can be inferred from the above records, *N. guangdongensis* is widespread and not uncommon across South China. It appears most unlikely that three externally identical species of highly distinctive coloration should occur sympatrically in this region. Therefore, it is concluded that the condition of the median lobe of the aedeagus

as illustrated by PACE (2011) for *N. ruficollis* represents an artefact and that the type material of *N. guangdongensis*, *N. ruficollis* and *N. rougemonti* is conspecific. Hence the synonymies proposed above.

In view of the misleading illustrations of the aedeagus and the incomplete description of external and secondary sexual characters in PACE (2004, 2011), a redescription and new illustrations are provided.

Redescription: Body length 3.7-4.1 mm; length of forebody 1.5-1.7 mm.

Coloration: head blackish; pronotum yellowish-red; elytra reddish-yellow with a more or less extensive darkish spot reaching lateral margins, but not suture and posterior margins; abdomen reddish, with segment VI sometimes somewhat infuscate; legs pale-yellowish; antennae dark-reddish, apically and basally more or less extensively paler.

Head (Fig. 86) transverse; dorsal surface with shallow microreticulation and with very fine and moderately dense punctation. Eyes moderately large, slightly longer than postocular region in dorsal view. Antenna (Fig. 87) slender, approximately 1.2 mm long; preapical antennomeres weakly transverse; antennomere XI longer than the combined length of IX and X, but shorter than the combined length of VIII-X.

Pronotum (Fig. 86) 1.30-1.35 times as broad as long and 1.3-1.4 times as broad as head, without sexual dimorphism; disc with shallow microreticulation and with fine and rather dense punctation.

Elytra (Fig. 86) approximately 0.90-0.95 times as long as pronotum; punctation dense and moderately fine; interstices with distinct microreticulation and somewhat subdued shine. Hind wings fully developed.

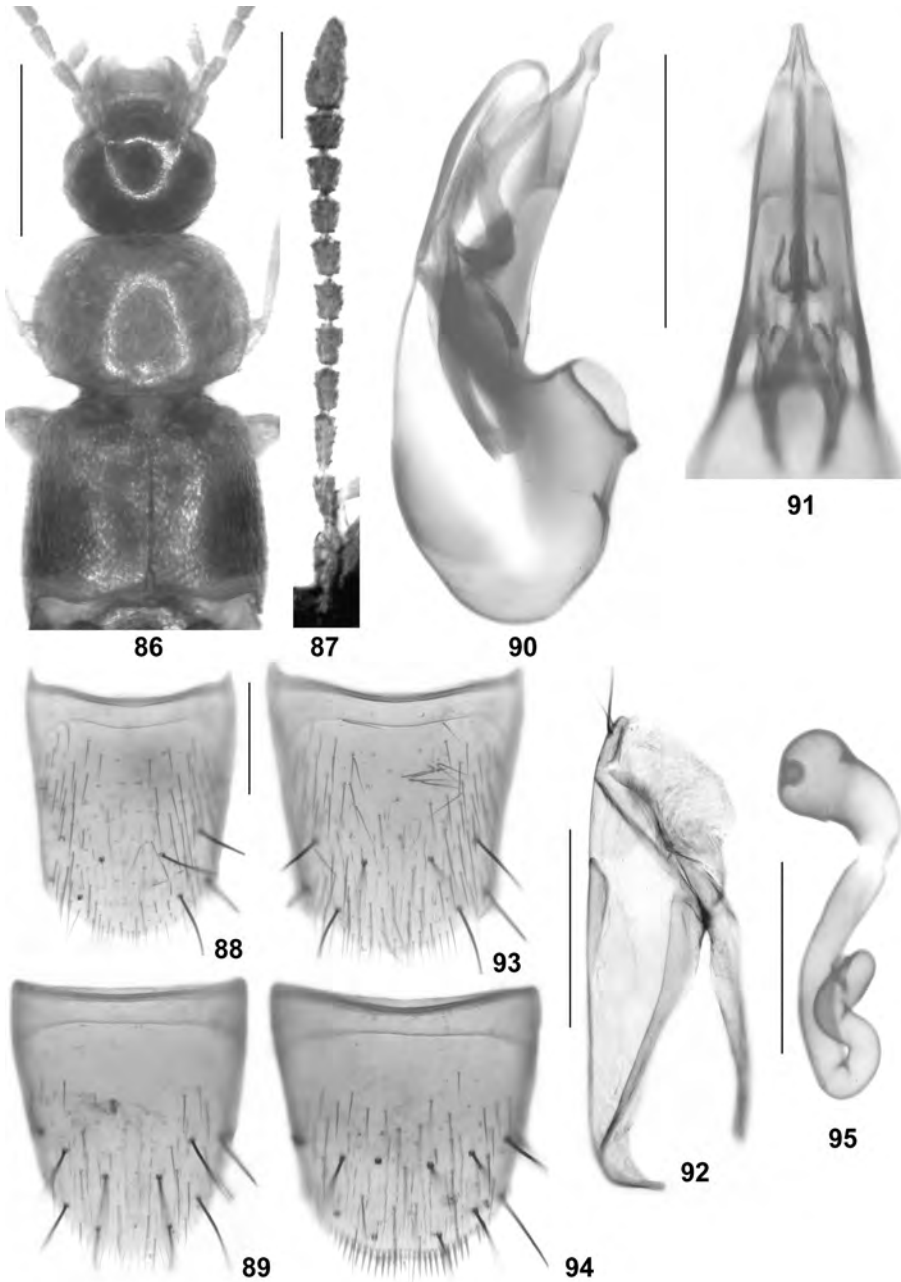
Abdomen with shallow transverse microsculpture; anterior portions of tergites III-VII impunctate; posterior portions of tergites III-V with moderately sparse, those of tergites VI-VII with sparse punctation; pubescence predominantly composed of thin setae; tergites III and VII without sexual dimorphism.

♂: tergite VIII (Fig. 88) oblong and with distinctly convex posterior margin; sternite VIII (Fig. 89) oblong, somewhat longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 90-91) approximately 0.45 mm long, ventral process apically not deeply incised, acute (ventral view), and of distinctive shape in lateral view; internal sac with long dark structures; paramere (Fig. 92) slightly longer than median lobe (0.48 mm), with slender and rather short apical lobe.

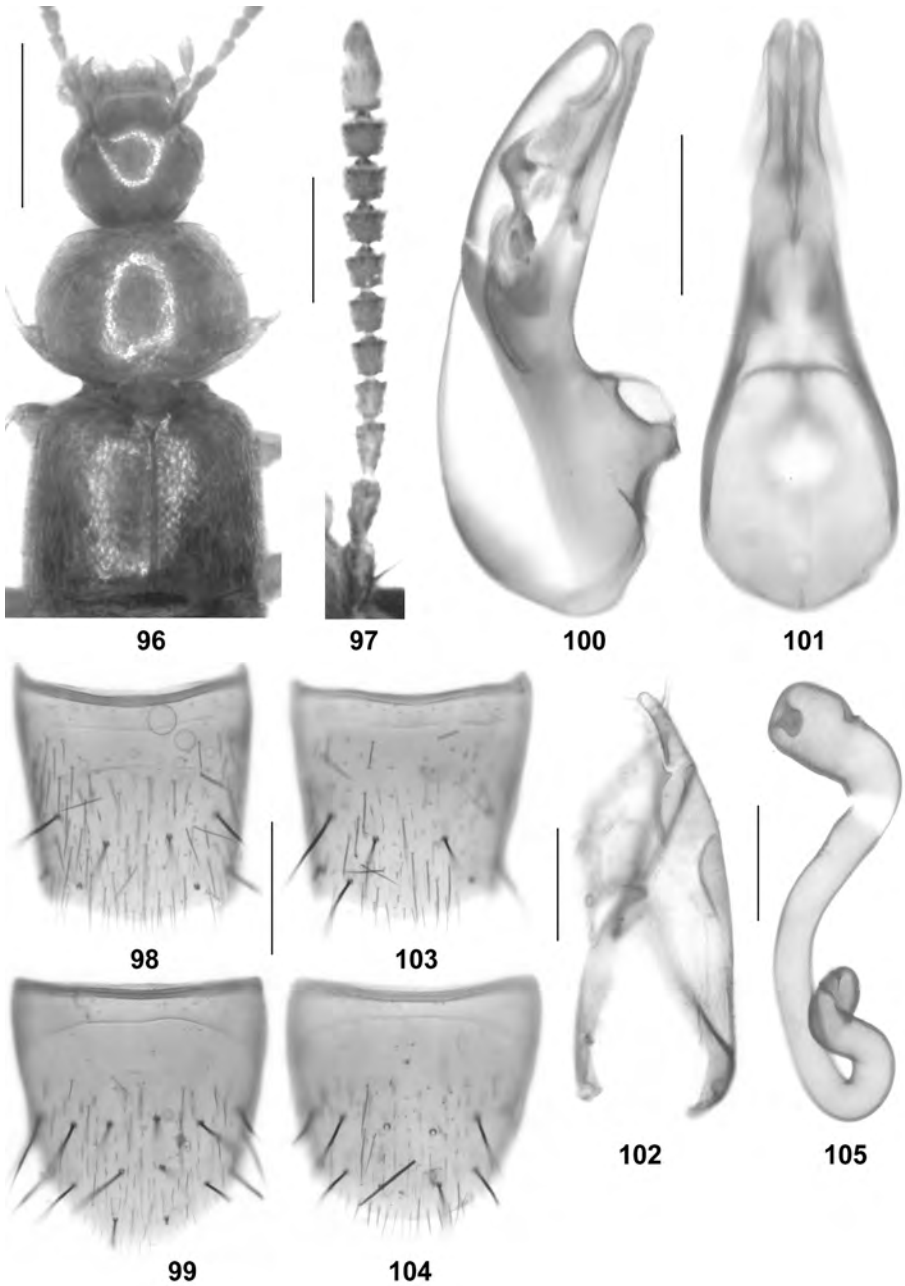
♀: tergite VIII (Fig. 93) approximately as long as broad and with distinctly convex posterior margin; sternite VIII (Fig. 94) weakly transverse and with broadly convex posterior margin, middle of posterior margin weakly concave; spermatheca (Fig. 95) approximately 0.38 mm long.

Comparative notes: This species is readily distinguished from other *Nepalota* species particularly by the conspicuous coloration and by the shape of the ventral process of the aedeagus, which is bifid only at its apex.

Distribution and natural history: *Nepalota guangdongensis* is now known from Yunnan, Jiangxi, Guangxi, and Guangdong provinces (Map 2). Thus, the species is evidently widespread across South China. The material from Yunnan was collected together with *N. fellowesi* and *N. crocea*.



Figs 86-95: *Nepalota guangdongensis* PACE: (**86**) forebody; (**87**) antenna; (**88**) male tergite VIII; (**89**) male sternite VIII; (**90**) median lobe of aedeagus in lateral view; (**91**) apical portion of median lobe of aedeagus in ventral view; (**92**) paramere; (**93**) female tergite VIII; (**94**) female sternite VIII; (**95**) spermatheca. Scale bars: 86: 0.5 mm; 87-95: 0.2 mm.



Figs 96-105: *Nepalota crocea* nov.sp.: (**96**) forebody; (**97**) antenna; (**98**) male tergite VIII; (**99**) male sternite VIII; (**100-101**) median lobe of aedeagus in lateral and in ventral view; (**102**) paramere; (**103**) female tergite VIII; (**104**) female sternite VIII; (**105**) spermatheca. Scale bars: 96: 0.5 mm; 97-99, 103-104: 0.2 mm; 100-102, 105: 0.1 mm.

***Nepalota crocea* nov.sp.** (Figs 96-105, Map 4)

Type material: Holotype ♂: "CHINA [21] - Yunnan, NNE Pingbian, broad-leaved for., 23°00'39"N, 103°42'10"E, 1500 m, 26.VIII.2014, V. Assing / Holotypus ♂ *Nepalota crocea* sp.n. det. V. Assing 2014" (cAss). Paratypes: 11♂♂, 9♀♀: same data as holotype (cAss, MNHUB); 16 exs.: "CHINA: Yunnan, NNE Pingbian, 23°00'39"N, 103°42'10"E, 1500 m, subtropical broad-leaved forest, litter sifted, 26.VIII.2014, leg. M. Schülke [CH14-21]" (cSch, cAss).

Etymology: The specific epithet (Latin, adjective: yellow) alludes to the uniformly yellowish coloration.

Description: Body length 2.6-3.8 mm; length of forebody 1.3-1.6 mm. Coloration: body dark-yellowish, with the abdominal segment VI sometimes weakly infuscate in the middle; legs pale-yellowish; antennae reddish to reddish-brown, with the basal antennomeres often paler reddish and antennomere XI dark-yellowish.

Head (Fig. 96) transverse; dorsal surface with nearly obsolete microreticulation and glossy; punctation sparse and extremely fine. Eyes large, much longer than postocular region in dorsal view. Antenna (Fig. 97) approximately 0.9-1.0 mm long; antennomere IV weakly oblong or approximately as long as broad; antennomeres V-X of gradually increasing width and increasingly transverse; preapical antennomeres distinctly transverse, nearly 1.5 times as broad as long; antennomere XI apically acute, slightly shorter than the combined length of VIII-X.

Pronotum (Fig. 96) large and strongly transverse, 1.30-1.35 times as broad as long and 1.4-1.5 times as broad as head, without sexual dimorphism; disc with nearly obsolete microreticulation, glossy, and with extremely fine punctation.

Elytra (Fig. 96) approximately as long as pronotum; punctation dense and fine; interstices with shallow microreticulation. Hind wings fully developed.

Abdomen with very shallow transverse microsculpture; punctation very sparse and fine; tergites III and VII without sexual dimorphism.

♂: tergite VIII (Fig. 98) approximately as long as broad and with distinctly convex posterior margin; sternite VIII (Fig. 99) approximately as long as broad, slightly longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 100-101) relatively small, approximately 0.38 mm long, of slender shape; paramere (Fig. 102) approximately as long as median lobe and with slender apical lobe.

♀: tergite VIII (Fig. 103) of similar shape as in male; sternite VIII (Fig. 73) weakly transverse and with broadly convex posterior margin, middle of posterior margin not concave; spermatheca (Fig. 105) approximately 0.38 mm long.

Comparative notes: This species is distinguished from its congeners by the nearly uniformly yellowish coloration of the body and by the shape of the median lobe of the aedeagus.

Distribution and natural history: The type locality (Map 4) and the circumstances of collection are identical to those of *N. fellowesi* (see above). *Nepalota guangdongensis* was present at the same site.

***Nepalota tuberifera* nov.sp.** (Figs 106-116, Map 6)

Type material: Holotype ♂: "CHINA - Yunnan [CH07-15], Baoshan Pref., Gaoligong Shan, 29 km ESE Tengchong, 24°55'37"N, 98°45'09"E, 2350 m, dev. decid. forest, litter, wood, fungi sifted, 1.VI.2007, M. Schülke / Holotypus ♂ *Nepalota tuberifera* sp.n. det. V. Assing 2015"

(cAss). Paratypes: 4♂♂, 2♀♀: same data as holotype (cSch, cAss); 1♂: "CHINA: Yunnan, Nujiang Lisu Pref., Gaoligong Shan, E pass 20 km NW Liuku, 25°58'49"N, 98°41'48"E, 3000 m, creek valley with devast. prim. forest, litter & moss sifted, 3.IX.2009, leg. M. Schülke [CH09-25]" (cAss); 1♂: same data, but leg. Wrase (cSch); 1♂: "CHINA - Yunnan [CH07-14A], Baoshan Pref., Gaoligong Shan, 33 km SE Tengchong, 2100-2200 m, 24°51'22"N, 98°45'36"E, decid. forest, litter, wood, fungi sifted, 4.VI.2007, M. Schülke" (cSch).

Etymology: The specific epithet (Latin, adjective: carrying a protuberance) alludes to the pronounced median granule of the male tergite III.

Description: Body length 3.8-4.8 mm; length of forebody 1.7-2.1 mm. Coloration: head and pronotum blackish-brown to blackish; elytra dark-yellowish to brown, with the scutellar region and the postero-lateral angles diffusely and more or less extensively darker; abdomen dark-brown to blackish-brown, with the posterior margins of the segments reddish; legs dark-yellowish; antennae blackish-brown to blackish, with antennomere I yellowish-brown.

Head (Fig. 106) transverse, approximately 1.1 times as broad as long; dorsal surface with distinct microreticulation; punctation moderately dense and fine. Eyes large, much longer than postocular region in dorsal view. Antenna (Fig. 107) slender, 1.4-1.5 mm long; antennomere IV oblong; preapical antennomeres very weakly transverse or as long as broad; antennomere XI apically acute, longer than the combined length of IX and X.

Pronotum (Fig. 106) approximately 1.2 times as broad as long and 1.3 times as broad as head, without sexual dimorphism; disc with distinct microreticulation; punctation dense and moderately fine, more distinct than that of head.

Elytra (Fig. 106) slightly longer than pronotum; punctation very dense and fine; interstices with microreticulation. Hind wings fully developed.

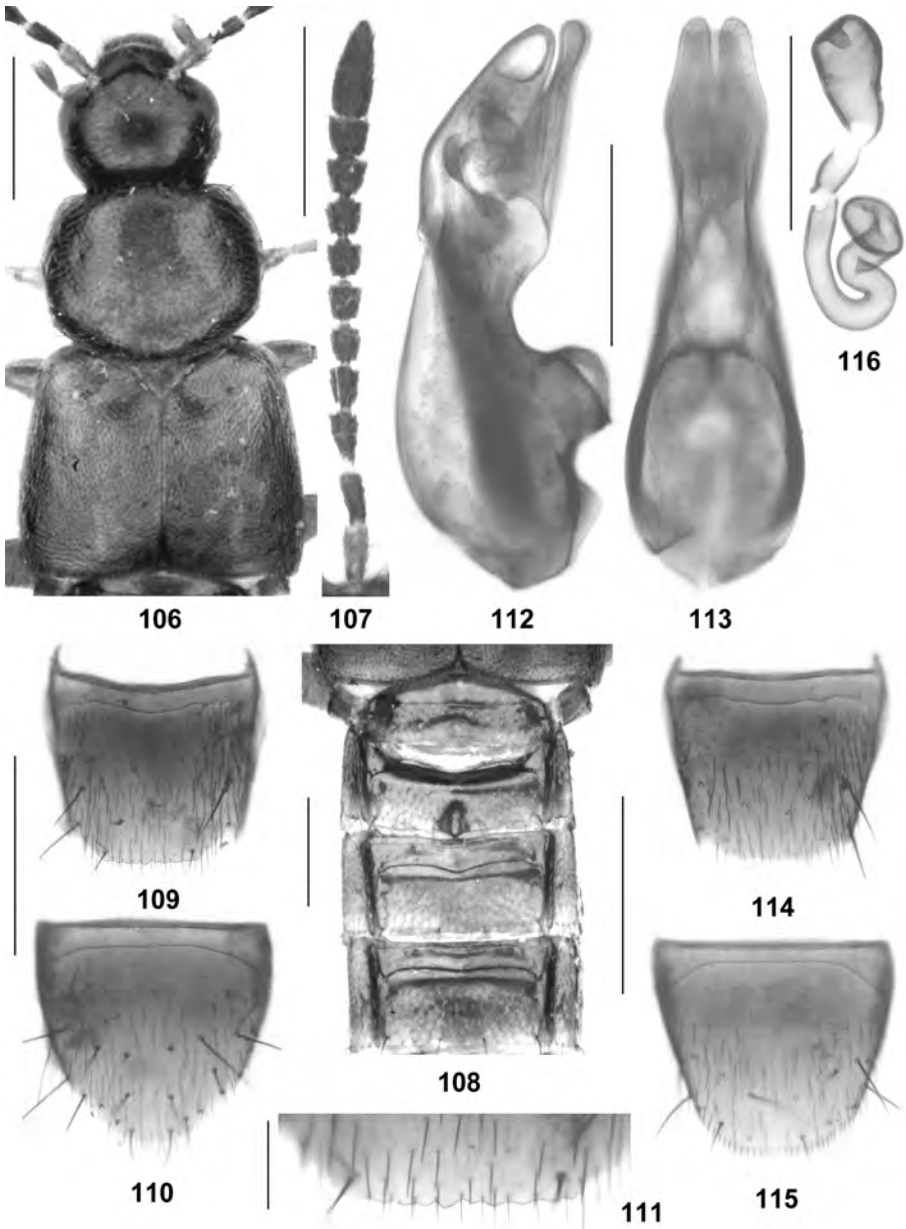
Abdomen with very shallow transverse microsculpture; punctation sparse and fine; tergites III and VII with sexual dimorphism.

♂: tergite III with pronounced median protuberance at posterior margin (Fig. 108); tergite VII with weakly pronounced median elevation, this elevation with denser punctation and more distinct microreticulation; tergite VIII (Figs 109, 111) with truncate and crenulate posterior margin; sternite VIII (Fig. 110) slightly longer than tergite VIII and strongly convex posteriorly; median lobe of aedeagus (Figs 112-113) approximately 0.55 mm long; ventral process and internal structures of distinctive shapes; paramere longer than median lobe and with moderately slender apical lobe.

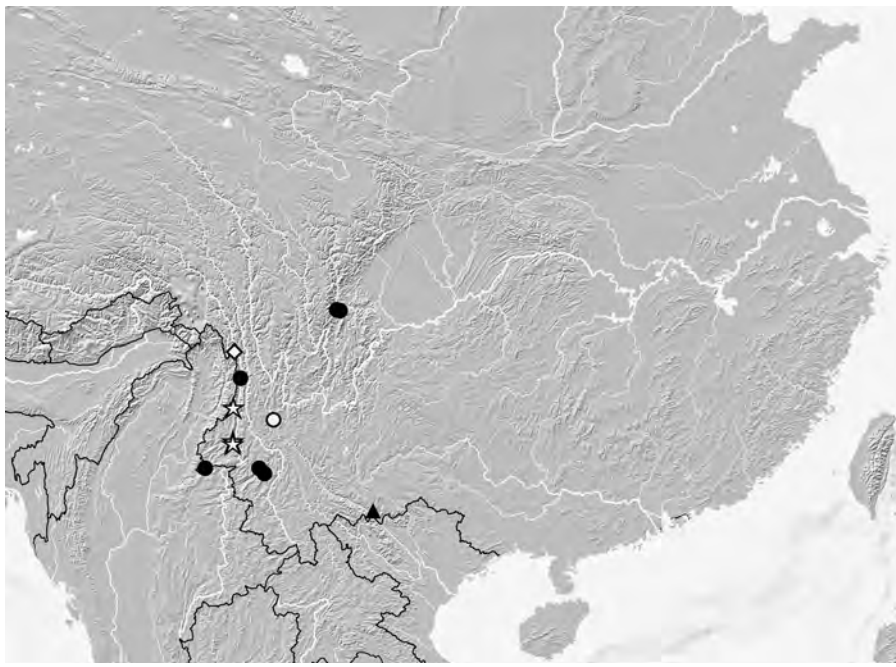
♀: tergite VIII (Fig. 114) with moderately convex posterior margin; sternite VIII (Fig. 115) broadly convex posteriorly; spermatheca (Fig. 116) approximately 0.3 mm long.

Comparative notes: This species is characterized particularly by the pronounced protuberance of the male tergite III and the shape of the aedeagus. The similar modifications of the male tergites III and VII, as well as the similar general morphology of the aedeagus suggest that *N. tuberifera* is closely allied to *N. martensi*. For characters distinguishing this species from the highly similar *N. prominula* see the comparative notes in the following section.

Distribution and natural history: The specimens were collected in three localities in the southern Gaoligong Shan, western Yunnan (Map 6), by sifting leaf litter in deciduous and degraded primary forests at altitudes of 2100-3000 m.



Figs 106-116: *Nepalota tuberifera* nov.sp.: (**106**) forebody; (**107**) antenna; (**108**) anterior portion of male abdomen; (**109**) male tergite VIII; (**110**) male sternite VIII; (**111**) posterior margin of male tergite VIII; (**112-113**) median lobe of aedeagus in lateral and in ventral view; (**114**) female tergite VIII; (**115**) female sternite VIII; (**116**) spermatheca. Scale bars: 106-110, 114-115: 0.5 mm; 112-113, 116: 0.2 mm; 111: 0.1 mm.



Map 6: Distributions of *Nepalota globifera* PACE (filled circles: examined records; open circle: literature record), *N. tuberifera* nov.sp. (open stars), *N. prominula* nov.sp. (open diamond), and *N. daweiana* nov.sp. (filled triangle) in China.

***Nepalota prominula* nov.sp.** (Figs 117-127, Map 6)

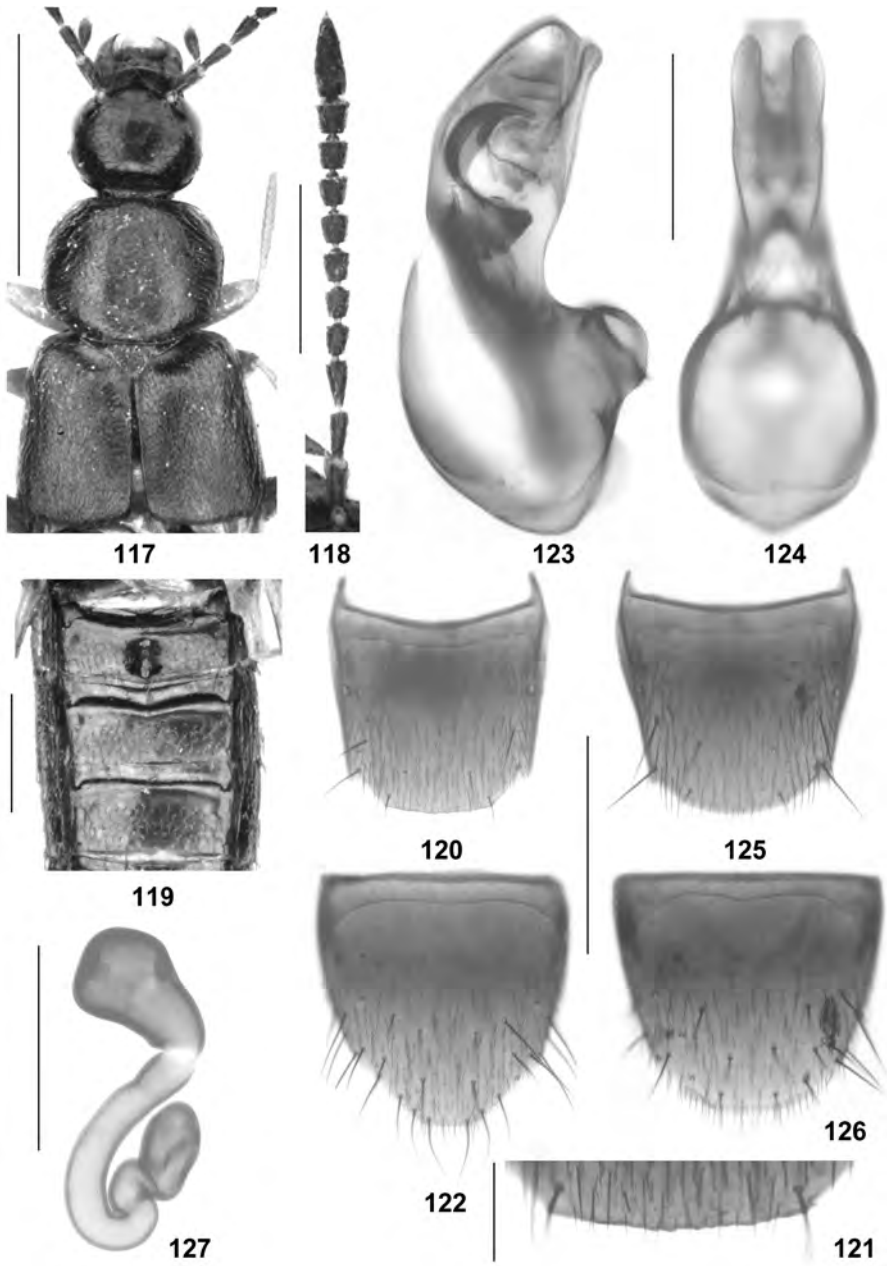
T y p e m a t e r i a l : Holotype ♂: "CHINA: N-Yunnan [C2005-12], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, 2500 m, 27°45.404'N, 98°35.749'E, litter & debries [sic] at snow-field sifted during rain, 19.VI.2005, M. Schülke / Holotypus ♂ *Nepalota prominula* sp.n. det. V. Assing 2015" (cAss). Paratypes: 2♂♂, 1♀: same data as holotype (cSch, cAss).

E t y m o l o g y : The specific epithet (Latin, adjective: prominent) alludes to the pronounced median granule of the male tergite III.

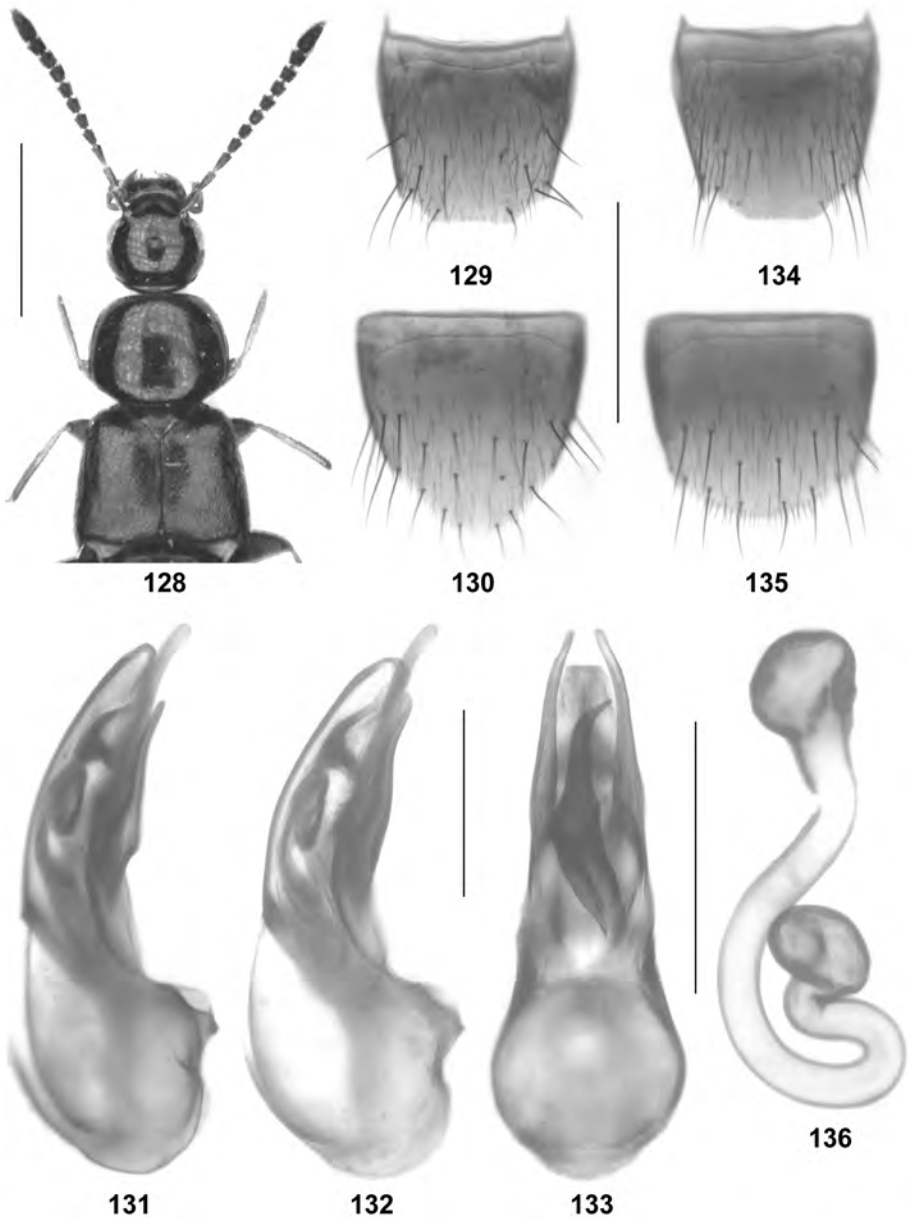
D e s c r i p t i o n : Abdomen completely blackish; antennomere I blackish-brown, as dark as antennomeres II-XI or nearly so. Other external characters (Figs 117-118) as in *N. tuberifera*.

♂: tergite III with pronounced median protuberance (Fig. 119); tergite VII with weakly pronounced median elevation, this elevation with denser punctation and more distinct microreticulation; tergite VIII (Figs 120-121) with truncate and weakly crenulate posterior margin; sternite VIII (Fig. 122) longer than tergite VIII and strongly projecting posteriorly, middle of posterior margin truncate; median lobe of aedeagus (Figs 123-124) 0.53 mm long; ventral process and internal structures of distinctive shapes; paramere longer than median lobe and with moderately slender apical lobe.

♀: tergite VIII (Fig. 125) with strongly convex posterior margin; sternite VIII (Fig. 126) broadly convex posteriorly; spermatheca (Fig. 127) approximately 0.3 mm long.



Figs 117-127: *Nepalota prominula* nov.sp.: (**117**) forebody; (**118**) antenna; (**119**) anterior portion of male abdomen; (**120**) male tergite VIII; (**121**) posterior margin of male tergite VIII; (**122**) male sternite VIII; (**123-124**) median lobe of aedeagus in lateral and in ventral view; (**125**) female tergite VIII; (**126**) female sternite VIII; (**127**) spermatheca. Scale bars: 117: 1.0 mm; 119-120, 122, 125-126: 0.5 mm; 123-124, 127: 0.2 mm; 121: 0.1 mm.



Figs 128-136: *Nepalota globifera* PACE: (**128**) forebody; (**129**) male tergite VIII; (**130**) male sternite VIII; (**131-133**) median lobe of aedeagus in lateral and in ventral view; (**134**) female tergite VIII; (**135**) female sternite VIII; (**136**) spermatheca. Scale bars: 128: 1.0 mm; 129-131, 134-135: 0.5 mm; 131-133, 136: 0.2 mm.

Comparative notes: As can be inferred from the highly similar modifications of the male tergites III and VII, as well as from the similar morphology of the aedeagus and the practically identical shape of the spermatheca, *N. prominula* is most closely allied to *N. tuberifera*, from which it is distinguished by the darker coloration of antennomere I, the nearly uniformly blackish abdomen, the differently shaped male tergite and sternite VIII, the shape of the ventral process of the aedeagus (less strongly excavate at base in lateral view), the shapes of the internal structures of the aedeagus, and the more strongly convex posterior margin of the female tergite VIII.

Distribution and natural history: The type locality is situated in the northern Gaoligong Shan in northwestern Yunnan (Map 6). The specimens were sifted from litter and debris near a snowfield at an altitude of 2500 m.

***Nepalota globifera* PACE, 1998** (Figs 128-136, Map 6)

Nepalota globifera PACE, 1998: 945.
Nepalota caluoensis PACE, 2011: 173; **nov.syn.**
Nepalota daxuensis PACE, 2011: 174; **nov.syn.**

Type material examined: *N. globifera*: Holotype ♀: "CHINA Yunnan, Ruili, 4.II.1993, G. de Rougemont / Holotypus Nepalota globifera m., det. R. Pace 1995 / Nepalota globifera sp. n., det. R. Pace 1995 / Nepalota globifera Pace, det. V. Assing 2014" (MHNG).
N. caluoensis: Holotype ♀: "CHINA: W-Sichuan, Ya'an Pref., Shimian Co., Xiaoxiang Ling, side-valley ab. Nanya Cun nr. Caluo, 1250 m, 7.VII.1999, leg. A. Pütz / Holotypus Nepalota caluoensis mihi, det. R. Pace 2009 / Nepalota caluoensis n. sp., det. R. Pace 2009 / Nepalota globifera Pace, det. V. Assing 2015" (cPüt). Paratype ♀: same data as holotype (cPüt).
N. daxuensis: Holotype ♀: "CHINA: W-Sichuan, Ya'an Pref., Shimian Co., Daxue Shan, road betw. Anshunchang-Wanba, 12 km W Shimian, 1300 m, 1300 m, 9.VII.1999, leg. A. Pütz / Holotypus Nepalota daxuensis mihi, det. R. Pace 2009 / Nepalota daxuensis n. sp., det. R. Pace 2009 / Nepalota globifera Pace, det. V. Assing 2015" (cPüt).

Material examined: China: Yunnan: 13 exs., Lincang Pref., Laobie Shan, Wei Bo Shan pass, 24°08'N, 99°43'E, 2375 m, degraded secondary deciduous forest, litter and moss sifted, 8.IX.2009, leg. Schülke (cSch, cAss); 5 exs., Lincang Pref., 20 km NW Lincang, Bangma Shan, 23°58'N, 99°55'E, 2210 m, degraded forest with fern, litter and fern sifted, 9.IX.2009, leg. Schülke (cSch, cAss); 2 exs., Nujiang Lisu Aut. Pref., Salween side valley 5 km S Fugong, road SS 228 km 223, litter sifted, 2.VI.2007, leg. Wrase (cSch, cAss).

Comment: The original description of *N. globifera* is based on a single female from "China, Yunnan, Ruili" (PACE 1998). It was subsequently reported from the Diancang Shan (Yunnan) by PACE (2011), again based on a single female. Based on external characters and the shape of the spermatheca, the additional material listed above is identical to, and most likely conspecific with, the holotype. The species is distinguished from all other congeners reliably recorded from China by the shiny forebody.

In the description of *N. caluoensis*, which is based on two females collected in Xiaoxiang Ling, Sichuan, PACE (2011) compares the species with - the doubtful - *N. pernitida*. There is no reference whatsoever to *N. globifera*. An examination of the type material of *N. globifera* and *N. caluoensis* yielded no differences suggesting that they should represent different species.

An examination of the female holotype of *N. daxuensis*, which was collected near the type locality of *N. caluoensis*, revealed that both the body and the spermatheca are malformed most likely as a result of improper treatment applied during original dissection. The true shape of the spermatheca is rather different from that illustrated by PACE (2011: figure 92). The specimen is undoubtedly conspecific with the type material of both *N.*

globifera and *N. caluoensis*. Hence the synonymies proposed above. The question whether or not *N. globulifer* and *N. pernitida* really represent different species still requires clarification.

In view of the previous taxonomic confusion of this species and since neither the male sexual characters nor the female secondary sexual characters were known, a redescription is provided:

R e d e s c r i p t i o n : Body length 3.3-4.0 mm; length of forebody 1.6-1.8 mm. Coloration: head, pronotum, and abdomen blackish; elytra dark-brown; legs brown with paler tarsi; antennae blackish-brown to blackish.

Head (Fig. 128) transverse, approximately 1.05 times as broad as long; dorsal surface with extremely fine and sparse punctation and with practically obsolete microsculpture, glossy. Eyes large, longer than postocular region in dorsal view. Antenna moderately slender, approximately 1.2 mm long; antennomere IV weakly oblong; preapical antennomeres weakly transverse; antennomere XI apically acute, longer than the combined length of IX and X.

Pronotum (Fig. 128) approximately 1.25 times as broad as long and 1.4 times as broad as head, without sexual dimorphism; punctation moderately dense and fine, more distinct than that of head; interstices with practically obsolete microsculpture and glossy.

Elytra (Fig. 128) approximately 0.9 times as long as pronotum; punctation very dense and fine; interstices with shallow microreticulation. Hind wings fully developed.

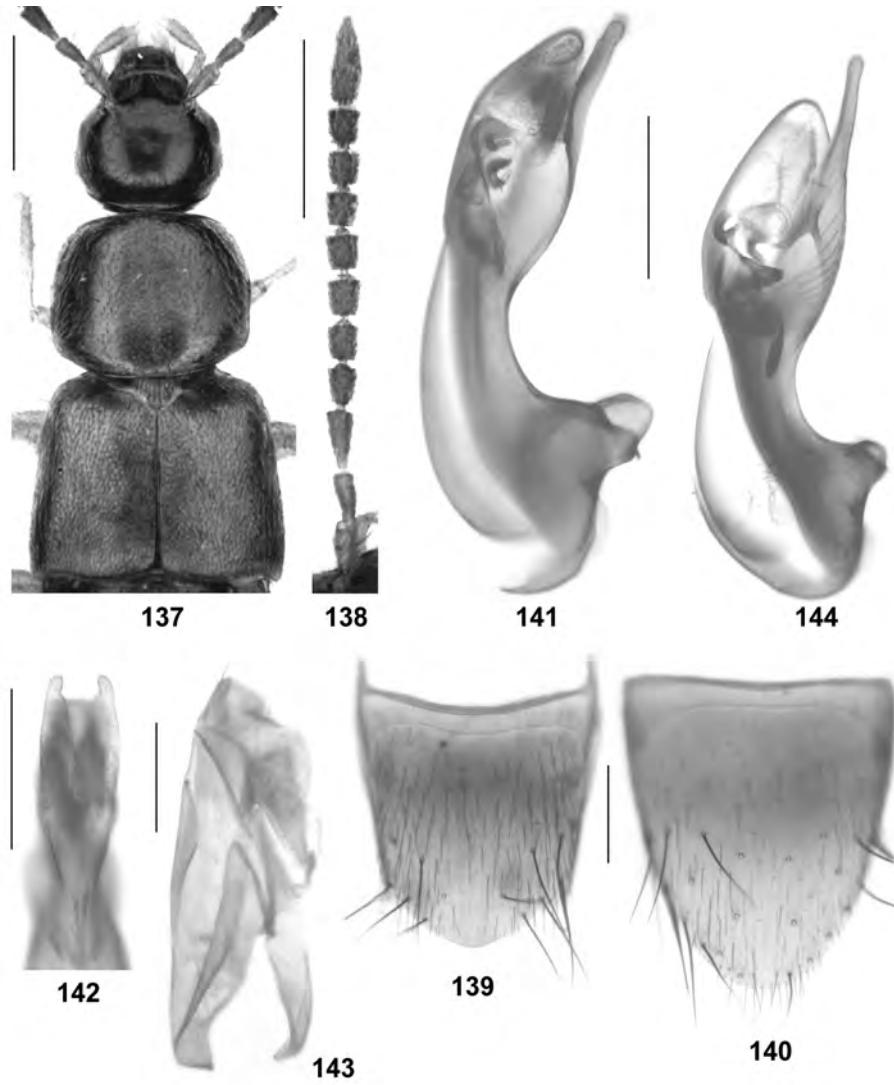
Abdomen without appreciable microsculpture; punctation fine, moderately dense on tergites III-V, very sparse on tergites VI-VIII; tergites III and VII without sexual dimorphism.

♂: tergite VIII (Fig. 129) with truncate or weakly concave posterior margin; sternite VIII (Fig. 130) longer than tergite VIII, posterior margin obtusely pointed in the middle; median lobe of aedeagus (Figs 131-133) approximately 0.6 mm long and of highly distinctive shape; ventral process deeply bifid; ventrally with a large and strongly sclerotized asymmetric structure; internal structures of distinctive shapes and rather strongly sclerotized; paramere nearly as long as median lobe and with slender apical lobe.

♀: tergite VIII (Fig. 134) with truncate posterior margin; sternite VIII (Fig. 135) broadly convex posteriorly; spermatheca (Fig. 136) approximately 0.35 mm long.

C o m p a r a t i v e n o t e s : This species is distinguished from all other congeners reliably recorded from China by the (nearly) obsolete microsculpture and shiny appearance of the head, pronotum, and abdomen alone. In particular, it is characterized by the derived morphology of the aedeagus, as well as by the shapes of the male and female tergite VIII.

D i s t r i b u t i o n a n d n a t u r a l h i s t o r y : This species is currently known from several localities in Yunnan and Sichuan (Map 6). The examined material was collected by sifting litter in various forest habitats at altitudes of 1250-2375 m.



Figs 137-144: *Nepalota daweiana* nov.sp. (**137-143**) and *N. martensi* PACE from Yunnan (**144**): (**137**) forebody; (**138**) antenna; (**139**) male tergite VIII; (**140**) male sternite VIII; (**141, 144**) median lobe of aedeagus in lateral view; (**142**) apical portion of median lobe of aedeagus in ventral view; (**143**) paramere. Scale bars: 137: 0.5 mm; 138-144: 0.2 mm.

***Nepalota daweiana* nov.sp.** (Figs 137-143, Map 6)

T y p e m a t e r i a l : Holotype ♂: "CHINA: Yunnan, SE Pingbian, 22°54'31"N, 103°41'44"E, 2100 m, / primary subtropical broad-leaved forest, litter sifted, 28.VIII.2014, leg. M. Schülke [CH14-22a] / Holotypus ♂ *Nepalota daweiana* sp.n. det. V. Assing 2015" (cAss).

E t y m o l o g y : The specific epithet is an adjective derived from the name of the mountain (Dawei Shan) where the type locality is situated.

D e s c r i p t i o n : Body length 4.6 mm; length of forebody 2.0 mm. Coloration: head blackish-brown; pronotum dark-brown; elytra brown, with the postero-lateral angles diffusely darker; abdomen brown, with segments VIII-X and the posterior margins of segments III-VII reddish, and with the anterior portions of segments VI-VII blackish; legs yellowish; antennae dark-brown, with antennomeres I-II reddish.

Head (Fig. 137) transverse, approximately 1.1 times as broad as long, widest behind eyes; dorsal surface with distinct microreticulation; punctation sparse and extremely fine, barely noticeable. Eyes moderately large and weakly convex, approximately as long as postocular region in dorsal view. Antenna (Fig. 138) slender, 1.6 mm long; antennomere distinctly IV oblong; preapical antennomeres as long as broad; antennomere XI apically acute, longer than the combined length of IX and X.

Pronotum (Fig. 137) approximately 1.2 times as broad as long and 1.35 times as broad as head; disc with distinct microreticulation; punctation rather dense and very fine, but slightly more distinct than that of head.

Elytra (Fig. 137) 0.95 times as long as pronotum; punctation very dense and moderately fine; interstices with microreticulation. Hind wings fully developed.

Abdomen with very shallow transverse microsculpture; punctation moderately dense on tergites III-VI, sparser on tergite VII; tergites III and VII without sexual dimorphism.

♂: tergite VIII (Fig. 139) with posterior margin obtusely angled in the middle, not crenulate; sternite VIII (Fig. 140) oblong, distinctly longer than tergite VIII, and strongly convex posteriorly; median lobe of aedeagus (Figs 141-142) approximately 0.7 mm long; ventral process and internal structures of distinctive shapes; crista apicalis pronounced; paramere (Fig. 143) approximately as long as median lobe and with short apical lobe.

♀: unknown.

C o m p a r a t i v e n o t e s : This species is distinguished from its congeners particularly by the shapes of the median lobe of the aedeagus and of the male tergite and sternite VIII, from the similar *N. martensi* additionally by the unmodified male tergites III and VII and the smaller and less convex eyes (*N. martensi*: eyes distinctly longer than postocular region in dorsal view). For comparison, the aedeagus of *N. martensi* is illustrated in Fig. 144.

D i s t r i b u t i o n a n d n a t u r a l h i s t o r y : The type locality is situated in the Dawei Shan Virgin Forest Park, to the southeast of Pingbian, southern Yunnan (Map 1). The holotype was sifted from leaf litter at an altitude of 2100 m, together with several other undescribed species of Staphylinidae. For a photograph of the type locality see Fig. 12 in ASSING (2015).

Species of doubtful identity

Nepalota granulosella PACE, 1998

Nepalota granulosella PACE, 1998: 947.

T y p e m a t e r i a l e x a m i n e d : Holotype ♀: "CHINA Beijing, 1100-1500 m, 1.VII.1993, G. de Rougemont / Holotypus Nepalota granulosella m., det. R. Pace 1995 / Nepalota granulosella sp. n., det. R. Pace 1995" (MHNG).

C o m m e n t : The original description is based on a single female from "China, Beijing, Xialongmen" (PACE 1998).

***Nepalota pernitida* (PACE, 1986)**

Atheta (*Stethusa*) *pernitida* PACE, 1986: 447 ff.

C o m m e n t : The original description of *N. pernitida* is based on a single female from "Burma, Kalaw" (PACE 1986). Originally described in the genus *Atheta* THOMSON, 1858, it was moved to *Nepalota* by PACE (2004), who recorded it from Sichuan based on a single female. It was once again moved to *Nepalota* by PACE (2006), who reported it from Nepal, again based on a single female. The record from Sichuan most likely refers to the externally similar *N. globifera*, if in fact *N. globifera* and *N. pernitida* represent different species.

Catalogue of the species of *Nepalota*

C o m m e n t : The articles in the references column are abbreviated as follows: A03 = ASSING (2003); App = ASSING (present paper); P86 = PACE (1986); P87a = PACE (1987a); P87b = PACE (1987b); P91 = PACE (1991); P93 = PACE (1993); P98 = PACE (1998); P04 = PACE (2004); P06 = PACE (2006); P09 = PACE (2009); P11 = PACE (2011); P13 = PACE (2013); Pk01 = PAŚNIK (2001). References containing illustrations and descriptions are underlined.

Species whose original descriptions (and subsequent records) are based only on females are of doubtful identity and listed separately. Exclusively female-based, unreliable, and presumably erroneous records are given in brackets.

Taxon	Distribution	References
angusticavata ASSING, 2003	Japan	A03
aptera PACE, 2009	Taiwan	P09
chinensis PACE, 1998	China: Shaanxi, Zhejiang, [Yunnan]	App, P98, P11
crocea **nov.sp.**	China: Yunnan	App
cuneata **nov.sp.**	China: Yunnan	App
dabamontis PACE, 2011	China: Hubei	P11
daweiana **nov.sp.**	China: Yunnan	App
erlangensis PACE, 2011	China: Sichuan	P11
fellowesi PACE, 2004	China: Guangdong, Yunnan	App, P04
fessa PACE, 1987	Nepal	P87a, P91
franzi PACE, 1987	Nepal; China: Gansu, Yunnan	App, P87a, P87b, P91, P13
gansuensis PACE, 1998 = *qinlingmontis* PACE, 2011, **nov.syn.**	China: Gansu, Hubei, Shaanxi, Sichuan, Chongqing, Yunnan	App, P98, P04, P11
globifera PACE, 1998 = *caluoensis* PACE, 2011, **nov.syn.** = *daxuensis* PACE, 2011, **nov.syn.**	China: Sichuan, Yunnan	App, P98, P11
gracilis PACE, 2011	China: Hubei	P11
guangdongensis PACE, 2004 = *ruficollis* PACE, 2011, **nov.syn.** = *rougemonti* PACE, 2011, **nov.syn.**	China: Guangdong, Guangxi, Jiangxi, Yunnan	App, P04, P11
kyushuica ASSING, 2003	Japan	A03
laticavata ASSING, 2003	Japan	A03

Taxon	Distribution	References
loebliana PACE, 1991	Nepal	P91
longearmata PACE, 2009	Taiwan	P09
martensi PACE, 1987	Nepal; China: Yunnan, Guizhou	App, P87b, P91, P93, P04, P06
mocytoides **nov.sp.**	China: Yunnan	App
namphoensis (PAŚNIK, 2001)	North Korea	Pk01
naomii ASSING, 2003	Japan	A03
peinantensis PACE, 2009	Taiwan	P09
prominula **nov.sp.**	China: Yunnan	App
rectisulcata ASSING, 2003	Japan	A03
robusta PACE, 2011	China: Hubei	P11
smetanai PACE, 1998	China: Hubei, Shaanxi, Gansu, Sichuan, Yunnan	App, P98, P11
taiwanensis PACE, 2009	Taiwan	P09
tuberifera **nov.sp.**	China: Yunnan	App
yunnanensis PACE, 2011	China: Yunnan	App, P11
species of doubtful identity		
devi PACE, 1991	Kashmir; Nepal	P91
granulosella PACE, 1998	China: Beijing	P98
mendax PACE, 2009	Taiwan	P09
pernitida (PACE, 1986)	Burma, [Nepal], [China: Sichuan]	P86, P04, P06

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Zusammenfassung

Typen und weiteres Material der ostpaläarktisch verbreiteten Gattung *Nepalota* PACE, 1987 wird untersucht. Elf Arten werden beschrieben bzw. redeskribiert und abgebildet: *N. crocea* nov.sp. (Yunnan), *N. cuneata* nov.sp. (Yunnan), *N. franzi* PACE, 1987, *N. globifera* PACE, 1998, *N. smetanai* PACE, 1998, *N. fellowesi* PACE, 2004, *N. guangdongensis* PACE, 2004, *N. mocytoides* nov.sp. (Yunnan), *N. prominula* nov.sp. (Yunnan), *N. tuberifera* nov.sp. (Yunnan) und *N. daweiana* nov.sp. (Yunnan). Fünf Namen werden synonymisiert: *N. gansuensis* PACE, 1998 = *N. qinlingmontis* PACE, 2011, nov.syn.; *N. globifera* PACE, 1998 = *N. caluoensis* PACE, 2011, nov.syn., = *N. daxuensis* PACE, 2011, nov.syn.; *N. guangdongensis* PACE, 2005 = *N. rougemonti* PACE, 2011, nov.syn. = *N. ruficollis* PACE, 2011, nov.syn. *Nepalota franzi* wird erstmals aus China nachgewiesen. Die Gattung ist damit derzeit mit 35 Arten in der Ostpaläarktis vertreten, vier davon sind allerdings von zweifelhaftem Status (Männchen unbekannt). Insgesamt 20 valide Arten, eine davon zweifelhaft, wurden aus China (ohne Taiwan) beschrieben oder verlässlich von dort nachgewiesen. Die Diversität ist am höchsten in Yunnan (vierzehn Arten, davon sieben exklusiv), gefolgt von Hubei (fünf Arten; drei exklusiv); Sichuan (vier Arten; eine exklusiv), Gansu und Shaanxi (je drei Arten), Guangdong (zwei Arten), Zhejiang, Chongqing, Jiangxi, Guangxi, Guizhou und Beijing (jeweils eine Art). Die derzeit bekannten Verbreitungsgebiete von 15 Arten werden anhand von Karten illustriert. Ein Gesamtkatalog der Gattung wird erstellt.

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