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On the *Nazeris* fauna of China II. New species and records from Zhejiang, Sichuan, and Yunnan (Coleoptera: Staphylinidae: Paederinae)

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Abstract. Material of the Palaearctic paederine genus *Nazeris* Fauvel, 1873 from the Chinese provinces Zhejiang, Sichuan, and Yunnan is revised. Thirty species are described and illustrated, eight of them from Sichuan and the remainder from Yunnan: *Nazeris bilamellatus* sp. n. (Sichuan: Emei Shan); *N. foveatus* sp. n. (Sichuan: Erlang Shan); *N. appendiculatus* sp. n. (Sichuan: Daxue Shan); *N. puetzi* sp. n. (Sichuan: Erlang Shan); *N. cornutus* sp. n. (Sichuan: Erlang Shan); *N. trifurcatus* sp. n. (Sichuan: Xiaoxiang Ling); *N. wrasei* sp. n. (Sichuan: Xiaoxiang Ling); *N. schuelkei* sp. n. (Sichuan: Labahe, Daxiang Ling); *N. wuliangicus* sp. n. (Yunnan: Wuliang Shan and adjacent mountain range); *N. nivimontis* sp. n. (Yunnan: Xue Shan N Lincang); *N. sagittifer* sp. n. (Yunnan: Ailao Shan, Wuliang Shan); *N. secatus* sp. n. (Yunnan: Laobie Shan); *N. cangicus* sp. n. (Yunnan: Diancang Shan); *N. aculeatus* sp. n. (Yunnan: Jizu Shan); *N. zhemoicus* sp. n. (Yunnan: Zhemo Shan); *N. pungens* sp. n. (Yunnan: Xue Shan ENE Lincang); *N. lanuginosus* sp. n. (Yunnan: Laobie Shan); *N. peniculatus* sp. n. (Yunnan: mountain range N Er Hai); *N. barbatus* sp. n. (Yunnan: Wuliang Shan); *N. firmilobatus* sp. n. (Yunnan: Gaoligong Shan); *N. spiculatus* sp. n. (Yunnan: mountain range E Luxi); *N. curvus* sp. n. (Yunnan: Gaoligong Shan); *N. infractus* sp. n. (Yunnan: Nu Shan); *N. subdentatus* sp. n. (Yunnan: Gaoligong Shan); *N. meilicus* sp. n. (Yunnan: Meili Xue Shan); *N. vexillatus* sp. n. (Yunnan: Gaoligong Shan); *N. circumclusus* sp. n. (Yunnan: Gaoligong Shan); *N. hastatus* sp. n. (Yunnan: Gaoligong Shan); *N. bangmaicus* sp. n. (Yunnan: Bangma Shan); *N. fissus* sp. n. (Yunnan: Ailao Shan, Wuliang Shan). Records of 17 additional species are reported. Seven of them are represented exclusively by females and probably undescribed, and the remainder described previously; the latter are from Zhejiang (two species), Sichuan (four species), and Yunnan (four species). The male sexual characters of some of the previously described species are illustrated. Species group affiliations are discussed. The distributions of 37 species are mapped. The genus now includes a total of 171 species and seven subspecies; 94 species have been reported from China (exclusive of Taiwan).

Key words. Taxonomy, Staphylinidae, Paederinae, *Nazeris*, China, Zhejiang, Sichuan, Yunnan, new species, species groups, distribution maps, endemism.

INTRODUCTION

According to a recent contribution (Assing 2013a), the paederine genus *Nazeris* Fauvel, 1873 has an essentially Palaearctic distribution and previously comprised a total of 143 species and seven subspecies. As many as 66 species had been recorded from China (exclusive of Taiwan); two of them, however, are synonymous (see below). All the *Nazeris* species are flightless and, with one exception (*N. cultellatus* Assing, 2013), the species from China are locally endemic. In China, *Nazeris* ranks second among the paederine genera with respect to the diversity of micropterous species with restricted distributions, outnumbered in described species only by *Lathrobium* Gravenhorst, 1802, which is currently represented in China by 170 described species, most of them locally endemic (Assing 2013b, c, in press; Peng et al. 2013b). The provinces with the greatest diversity of previously described *Nazeris* species are Zhejiang (13 species), Yunnan (11), and Shaanxi (11), followed by Sichuan (9), Guangxi (6), Anhui (4), Gansu (3), Hubei (3), Chongqing (3), Jiangxi (2), Fujian (2), Xizang (2), Guizhou (1), and Henan (1). The sum of species exceeds 64 in this overview because five species have been reported from more than one province or from the border region between two or three provinces.

In all, 15 *Nazeris* species have been described from Zhejiang province (Assing 2013a; Hu et al. 2011a; Ito 1996; Koch 1939). However, according to a revision of type material by Hu (e-mail 12.7.2013), two of the names made available in Hu et al. (2011a) are junior synonyms, so that the *Nazeris* fauna of Zhejiang currently comprises 13 species.

The nine *Nazeris* species previously known from Sichuan were recorded from Wolong (one species), the Gongga Shan (two species), the Emei Shan (two species), the Micang Shan (one species), the Erlang Shan (one species), Labahe (one species), and from the Qingcheng Shan (one species whose description is based on a single female) (Assing 2013a; Hu et al. 2007; Zheng 1992). Regarding the type locality of one of these species, *N. canaliculatus* Zheng, the original description (Zheng1992)

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is contradictory. According to the Chinese description, all the type specimens are from the Emei Shan, whereas according to the English abstract, the holotype is from Wolong and the two female paratypes are from the Emei Shan. Most likely, the type locality given in the abstract is erroneous.

The *Nazeris* fauna of Yunnan previously comprised eleven species, four from the Gaoligong Shan, two from the Diancang Shan and the Laohu Shan, two from the Nabanhe Nature Reserve, and one each from the Yulongxue Shan, the Jizu Shan, and the Yuan Shan near Kunming (Hu et al. 2011b; Watanabe & Xiao 1993, 1997, 2000).

Recent studies on the Chinese *Lathrobium* fauna revealed that the diversity in Yunnan (60 described species) is far greater than that of any other province and that Sichuan (39 described species) ranks second (Assing 2013b, c; Peng et al. 2013a); among the remaining provinces the *Lathrobium* fauna of Shaanxi (20 described species) is the most diverse, but still hosts much fewer species than Yunnan and Sichuan. Since both *Lathrobium* and *Nazeris* have a similar distribution in the East Palaearctic and are often found in the same habitats, it seemed likely that the diversity trends observed for *Lathrobium* should also apply to *Nazeris*.

The present paper is based primarily on outstanding material from the collection of Michael Schülke (Berlin), most of which was collected by him and David Wrase (Berlin) during nine field trips to China in the past two decades. Additional material came from the collections of Aleš Smetana (Ottawa) and Andreas Pütz (Eisenhüttenstadt).

MATERIAL AND METHODS

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs. The maps were created using MapCreator 2.0 (primap) software.

Body length was measured from the anterior margin of the mandibles (in resting position) to the abdominal apex, the length of the forebody from the anterior margin of the mandibles to the posterior margin of the elytra, head length from the anterior margin of the frons to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

For a discussion of the terminology of the aedeagal morphology see Assing (2009).

COLLECTION MATERIAL DEPOSITORIES

CAS	Chinese Academy of Sciences, Beijing
SMNS	Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller)
ZFMK	Zoologisches Forschungsmuseum Alexander Koenig, Bonn
cAss	author's private collection
cPüt	private collection Andreas Pütz, Eisenhüttenstadt
cSch	private collection Michael Schülke, Berlin
cSme	private collection Aleš Smetana, Ottawa

RESULTS

Diversity and zoogeography

The revised material is composed of 47 species, ten of them described previously from Zhejiang (two species), Sichuan (four species), and Yunnan (four species). The localities where the material was collected are mapped in Fig. 1. Thirty species are newly described, eight from Sichuan and twenty-two from Yunnan. Seven additional, probably undescribed species remain unnamed since they were represented exclusively by females. Thus, including the new species described in this paper, *Nazeris* comprises a total of 171 species and seven subspecies, with 94 of them recorded from, and confined to, China. In all, 33 species are now known from Yunnan and 16 from Sichuan, the provinces with the most diverse *Nazeris* faunas. The diversity trends previously observed for *Lathrobium* are indeed paralleled by *Nazeris*.

Except for one species (*N. ruani*), all the species from Sichuan and Yunnan are locally endemic and known only from individual or adjacent mountain ranges.

As was observed earlier for the fauna of the Qinling Shan and the Daba Shan (Assing 2013a), closely related species, particularly hypothesized adelphotaxa, are generally at the same time geographically close, suggesting local speciation events. However, identifying phylogenetic relationships is significantly more difficult in *Nazeris* than in *Lathrobium*, particularly because the external and, even more importantly, the male sexual characters are less diverse. Nevertheless, it was possible to assign the majority of the species to species groups. For details see the introductions to the regional faunas of Sichuan and Yunnan below. Species of one species group generally have allopatric distributions (exceptions: *N. truncatus* and *N. bilamellatus* of the *N. truncatus* group in the Emei Shan, and *N. puetzi* and *N. foveatus* of the *N. hailuogouensis* group in the Erlang Shan), but often two or three species of different groups were recorded from the same mountain, not infrequently collected even in the same sample.

Natural history

As can be inferred from the data specified on the labels of the material examined and as has been observed already for the *Nazeris* species of the Qinling Shan and the Daba Shan (Assing 2013a), the *Nazeris* species in the study regions live in the leaf litter and moss of various forest and shrub habitats. While the material from Zhejiang was collected at relatively low altitudes (300–1200 m), that from Sichuan and Yunnan came from significantly higher elevations. In Sichuan, the altitudes range from 1250 to 3250 m, with the vast majority of specimens found between 1600 and 3000 m. Only one species, *N. wrasei*, was observed at a lower (1250 m), and one probably undescribed species at a higher elevation (3250 m). In Yunnan, the altitudes range from 1900 to 3150 m, with only one species (*N. barbatns*) collected below 2100 m.

Species from Zhejiang

Nazeris rougemonti Ito, 1996

Material examined. China: Zhejiang: 5♂, 9♀, Tianmu Shan, pass 25 km NNW Linan, 30°26'N, 119°36'E, 620–820 m, stream valley with bamboo and mixed forest, litter sifted, 16.VI.2007, leg. Pütz, Schülke & Wrase (cPüt, cSch, cAss); 1♀, West Tianmu Shan N. R., trail to peak of immortals, 30°21'N, 119°26'E, 1100–1200 m, primary mixed forest, litter and moss sifted, 15.VI.2007, leg. Pütz (cPüt); 2♂, Tianmu Shan, 40 km WNW Linan, reservoir, 30°21'N, 119°19'E, 300 m, plant refuse and litter sifted, 17.VI.2007, leg. Schülke (cSch, cAss).

Comment. The original description of *N. rougemonti* is based on three type specimens from "Mt. Tienmushan" (Ito 1996). The known distribution is confined to the Tianmu Shan.

Nazeris chinensis Koch, 1939

Material examined. China: Zhejiang: 2♂, 1♀, West Tianmu Shan N. R., trail to peak of immortals, 30°21'N, 119°26'E, 1100–1200 m, primary mixed forest, litter and moss sifted, 15.VI.2007, leg. Pütz, Schülke & Wrase (cPüt, cSch, cAss).

Comment. *Nazeris chinensis* has been recorded from the Tianmu Shan and the Longwang Shan (Hu et al. 2011a).

Species from Sichuan

Species groups. Primarily based on the male sexual characters, the *Nazeris* fauna of Sichuan is represented by at least six species groups.

Nazeris dilatatus Assing, 2013 from the Micang Shan is the sole representative of the *N. shaanxiensis group* (see Assing 2013a) in Sichuan.

The evidently widespread *N. giganteus* group includes at least two species, *N. giganteus* from Yunnan and *N. ruani* from Sichuan. The species of this group are characterized by conspicuously large body size, a moderately deep V-shaped posterior excision of the male sternite VIII, and a rather large aedeagus with a slender and apically acute ventral process (ventral view) and with short, stout, curved, and apically dilated dorso-lateral apophyses. Based on the small median excision of the posterior margin of the male sternite VII, a characters otherwise seen only in *N. ruani*, the distinctly smaller *N. alpinus* from northern Yunnan may belong to this group, too. Unlike nearly all other Chinese representatives of the genus, *N. ruani* is not endemic to a single mountain range, but has a less restricted distribution (Fig. 28).

Nazeris magnus Hu et al., 2007 is the only species known from Sichuan that is of similarly large size as the species of the *N. giganteus* group, but it has an aedeagus of different morphology. Closer affiliations to other *Nazeris* species from Sichuan and Yunnan are not evident.

The *N. truncatus* group comprises six species from Sichuan, *N. truncatus*, *N. bilamellatus* (both from the Emei Shan), *N. bicornis* (Gongga Shan), *N. cornutus* (Erlang Shan), *N. trifurcatus* (Xiaoxiang Ling), and *N. folicaeus* Zheng, 1992 (Wolong). The species of this group are characterized by an aedeagus with two or three apical appendices of the ventral process of the aedagus, undoubtedly a synapomorphy. The posterior excision of the male sternite VIII is moderately deep, and the dorso-lateral apophyses are moderately long (reaching apex of ventral process at most, not extending beyond it).

The *N. hailuogouensis* group is represented in Sichuan by four species, *N. hailuogouensis* (Gongga Shan), *N. foveatus* (Erlang Shan), *N. appendiculatus* (Daxue Shan), and *N. puetzi* (Erlang Shan). The species of this group share a semi-membranous, short, ventrally sharply edged, and apically V-shaped (ventral view) ventral process of the aedeagus (e.g., Figs 5–6, 8–9, 13–14). The dorso-lateral apophyses extend far beyond the apex of the ventral process, and the posterior excision of the transverse male sternite VIII is rather deep and narrow (e.g., Figs 7, 12). *Nazeris hailuogouensis*, *N. foveatus*, *N. appendiculatus*, and *N. puetzi* are distinguished by clear-cut characters, but otherwise extremely similar, even in the male sexual characters. This observation suggests that speciation occurred in evolutionarily more recent times. Similar examples of closely related taxa have repeatedly been reported from

Fig. 1. Pooled examined records of *Nazeris* from the Chinese provinces Zhejiang (triangles), Sichuan (filled circles), and Yunnan (open circles). The frames illustrate the limits of the distribution maps for the individual species (Figs 28–29, 88–90).

the same region, e.g., for the genus *Othius* Stephens, 1829 (Staphylinidae: Othiini) (Assing 2003) or for some Lepidoptera (Lattin 1967). *Nazeris bicornis* and *N. cornutus* of the *N. truncatus* group (see above) represent another example of a pair of closely related *Nazeris* species occurring in the Gongga Shan and the Erlang Shan (like *N. hailuogouensis* and *N. foveatus*).

The *N. schuelkei* group includes two species, *N. schuelkei* (Labahe, Daxiang Ling) and *N. wrasei* (Xiaoxiang Ling). It is distinguished from the other species groups distributed in Sichuan by a stout and short aedeagus with a laterally compressed ventral process and with short and stout dorso-lateral apophyses (Figs 46–47, 52–53). The posterior excision of the male sternite VIII is rather broad and moderately deep (Figs 45, 51). Regarding the morphology of the ventral process of the aedeagus, the species of the *N. schuelkei* group are similar to the *N. cultellatus* group, which is distributed from the Qinling Shan eastwards to Henan and Anhui (see Assing 2013a).

The phylogenetic affiliations of *N. qingchengensis* Zheng, 1992 from the Qingcheng Shan (male unknown) and *N. canaliculatus* Zheng, 1992 from the Emei Shan (poorly illustrated) are uncertain.

***Nazeris ruaui* Hu et al., 2007** (Fig. 28)

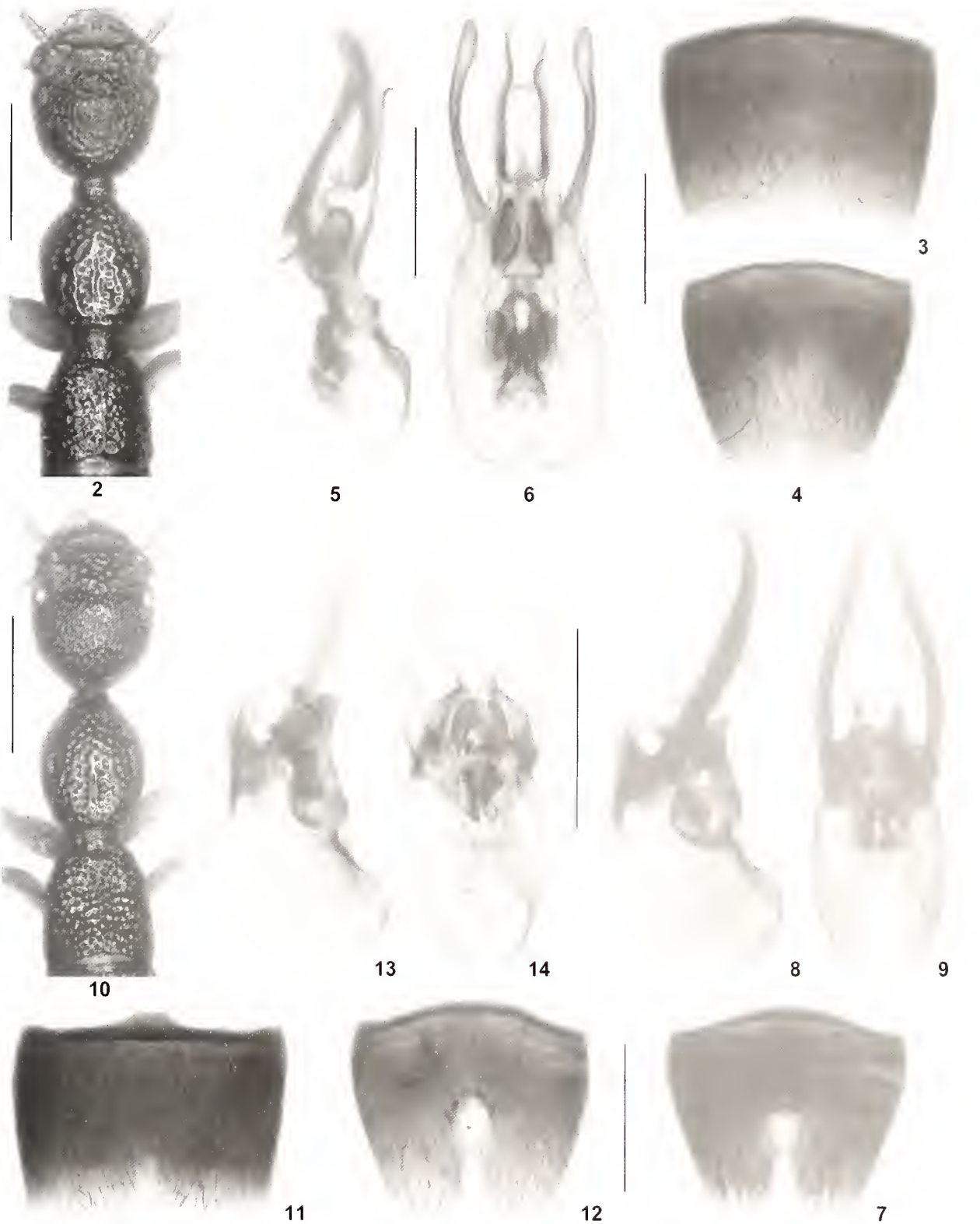
Material examined. China: Sichuan: 1♂, Emei Shan, 29°34'N, 103°21'E, 1800–2400 m, sifted, 27.VI.–5.VII.2009, leg. Grebennikov (cAss).

Comment. This species was described from Labahe, some 120 km to the northwest of the Emei Shan, suggesting that it is remarkably widespread (Fig. 28). The male sexual characters of the above male are identical to those illustrated by Hu et al. (2007: figures 15–19).

***Nazeris truncatus* Zheng, 1992** (Fig. 28)

Material examined. China: Sichuan: 1♂, 4♀, Emei Shan, 29°34'N, 103°21'E, 1950 m, sifted, 15.VI.2010, leg. Grebennikov (CAS, cSme, cAss); 4♂, 8♀, Emei Shan, 29°34'N, 103°21'E, 1800–2400 m, sifted, 27.VI.–5.VII.2009, leg. Grebennikov (CAS, cSme, cAss).

Comment. The known distribution of *N. truncatus*, a species characterized by an aedeagus of distinctive morphology (see figures 3B–C in Zheng 1992), is confined to the Emei Shan (Fig. 28).



Figs 2–14. *Nazeris bilamellatus* **(2–6)**, *N. hailuogouensis* **(7–9)**, and *N. foveatus* **(10–14)**. **2, 10:** forebody; **3, 11:** male sternite VII; **4, 7, 12:** male sternite VIII; **5–6, 8–9, 13–14:** aedeagus in lateral and in ventral view. Scale bars: 2, 10: 1.0 mm; 3–9, 11–14: 0.5 mm.

***Nazeris bilamellatus* sp. n.** (Figs 2–6, 28)

Type material. Holotype ♂: "P.R. CHINA, Sichuan, Emei Shan, N29°33.6', E103°20.6', 27.vi.–5.vii.2009, 1800–2400 m, siftings 11–17, V. Grebennikov / Holotypus ♂ *Nazeris bilamellatus* sp. n. det. V. Assing 2013" (CAS). Paratypes: 2♂, 6♀: same data as holotype (CAS, cSme, cAss).

Etymology. The specific epithet (Latin, adjective: with two lamellae) alludes to the lamellate pair of apical processes of the ventral process of the aedeagus.

Description. Body length 5.7–7.3 mm; length of forebody 3.0–3.3 mm. Coloration: body dark–brown to blackish-brown; legs yellowish; antennae yellowish, with antennomere 1 usually slightly darker.

Head (Fig. 2) weakly oblong; punctation coarse, dense, and umbilicate; interstices without microsculpture; eyes of moderate size and distinctly convex, slightly more than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.8 mm long.

Pronotum (Fig. 2) approximately 1.15 times as long as broad and 0.85–0.90 times as broad as head; punctation even coarser than that of head, non-umbilicate, and moderately dense; interstices narrower than diameter of punctures, glossy; midline punctate in anterior half, impunctate and somewhat elevated in posterior half; posterior half with a pair of lateral and somewhat irregularly oblique oblong elevations.

Elytra (Fig. 2) approximately 0.55 times as long as pronotum and slender; humeral angles obsolete; punctation dense, moderately defined, and coarse; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.30–1.35 times as broad as elytra; punctation dense, defined, and moderately coarse on tergite III, gradually becoming sparser towards posterior tergites, tergite VII with sparse punctation; interstices with shallow microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII distinctly convex.

♂: sternite VI–VII unmodified (Fig. 3); sternite VIII (Fig. 4) with unmodified pubescence, posterior excision small and V-shaped; aedeagus (Figs 5–6) rather large in relation to body size, 1.4–1.5 mm long; ventral process apically with pair of lamellate appendices; dorso-lateral apophyses curved, apically somewhat dilated and club-shaped, extending beyond apex of ventral process.

Comparative notes. Based on the morphology of the aedeagus (ventral process apically with pair of appendices; dorso-lateral apophyses club-shaped), *N. bilamellatus* is closely allied to *N. truncatus*, which too is distributed in the Emei Shan. It differs from this species by the much larger and differently shaped aedeagus (*N. truncatus*: aedeagus 0.9–1.0 mm long and with apical appendices of ventral process of completely different shape; apices of dorso-lateral apophyses far from reaching apex of ventral process), by slightly larger body size, and by the denser punctation of the posterior portion of the head and of the elytra. For illustrations of the aedeagus of *N. truncatus* see Zheng (1992).

Distribution and natural history. *Nazeris bilamellatus* is presumably endemic to the Emei Shan (Fig. 28), where the specimens were sifted from leaf litter at an altitude of 1800–2400 m, apparently together with *N. truncatus* and *N. ruani*.

***Nazeris hailuogoueusis* Hu et al., 2007** (Figs 7–9, 28)

Material examined. China: Sichuan: 5♂, 3♀, Gongga Shan, Hailuogou Glacier Park, Camp 1, 29°36'N, 102°04'E, 2100 m, 27.–31.V.1997, leg. Pütz, Schülke & Wrase (cPüt, cSch, cAss); 1♂, 2♀, Gongga Shan, Hailuogou Glacier Park, Camp 2, 29°35'N, 102°02'E, 2550–2700 m, 30.–31.V.1997, leg. Pütz & Schülke (cPüt, cSch); 1♀, Gongga Shan, Hailuogou Glacier Park, above Camp 3, 3000 m, 30.V.1997, leg. Pütz (cPüt).

Comment. The original description of *N. hailuogouensis* is based on nine type specimens from Hailuogou in the Gongga Shan (Hu et al. 2007), where it is probably endemic (Fig. 28). The species is characterized particularly by the shape of the ventral process and the long and slender dorso-lateral apophyses of the aedeagus. The male sexual characters are illustrated in Figs 7–9.

***Nazeris foveatus* sp. n.** (Figs 10–14, 28)

Type material. Holotype ♂: "CHINA: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Luding Co., W Erlangshan-Pass, 2600 m, 7 km SSE Luding, 29°51N, 102°15E, Laub+ Nadelstreu, Pilze, 22.VI., leg. M. Schülke / Holotypus ♂ *Nazeris foveatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 4♂, 2♀: "CHINA: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Luding Co., W Erlangshan-Pass, 2600 m, 7 km SSE Luding, 29°51N, 102°15E, Laubstreu, Pilze, 29.VI., leg. M. Schülke" (cSch, cAss); 1♂, 1♀: "CHINA W-Sichuan (Ganzi Tibet. Aut. Pref., Luding Co.) W Erlang Shan Pass, 2600 m, 7 km SSE Luding, 29°51N, 102°15E, Laubstreu, Pilze, 20.–29.VI.1999, D.W. Wrase" (cSch, cAss).

Etymology. The specific epithet (Latin, adjective: with impression) alludes to the distinct impression of the male sternite VIII, one of the characters distinguishing this species from its closest relatives.

Description. Species of rather variable size; body length 5.5–7.5 mm; length of forebody 2.9–3.5 mm. Coloration: body blackish-brown to black; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 10) 1.08–1.15 times as long as broad; punctation coarse, dense, and weakly umbilicate; interstices without microsculpture; eyes small, distinctly less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 1.7–2.0 mm long.

Pronotum (Fig. 10) 1.20–1.25 times as long as broad and approximately 0.9 times as broad as head; punctation distinctly coarser than that of head, non-umbilicate, and very dense; interstices forming narrow ridges, glossy; posterior half of midline narrowly elevated and impunctate.

Elytra (Fig. 10) approximately 0.6 times as long as pronotum and slender; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.20–1.25 times as broad as elytra; punctation dense, defined, and rather coarse on tergites III–VI, only indistinctly sparser and finer on tergite VII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII distinctly convex.

♂: sternite VII with weakly concave posterior margin (Fig. 11); sternite VIII (Fig. 12) 1.10–1.15 times as broad as long, with distinct oblong and in the middle weakly sclerotized defined impression in postero-median portion; posterior excision rather deep and narrow, its depth approximately 0.3 times the length of sternite; aedeagus (Figs 13–14) slender, approximately 0.9 mm long (1.2 mm including dorso-lateral apophyses); ventral process weakly sclerotized, ventrally sharply edged, and with lateral lamellae forming a "V" in ventral view; basal portion of ventral process broad, without distinct lateral processes; dorso-lateral apophyses long and slender, distinctly extending beyond apex of ventral process.

Comparative notes. As can be inferred from the highly similar external and male sexual characters, particularly the similarly derived morphology of the aedeagus, this species is undoubtedly closely allied to *N. hailuogouensis* and the two following species. It differs from them particularly by the shape of the male sternite VIII (deeper and larger postero-median impression; this impression without pubescence and more extensively yellowish in the middle) and by the morphology of the aedeagus, in particular the shape of the ventral process (apical lamellae short, ventral portion broad and without lateral processes in ventral view). For illustrations of *N. hailuogouensis* see Figs 7–9 and figures 10–14 in Hu et al. (2007).

Distribution and natural history. The type locality is situated in the Erlang Shan, 7 km to the south-southeast of Luding, Sichuan (Fig. 28). The type specimens were sifted from the litter of broad-leaved and coniferous trees at an altitude of 2600 m, together with the holotype of *N. cornutus*.

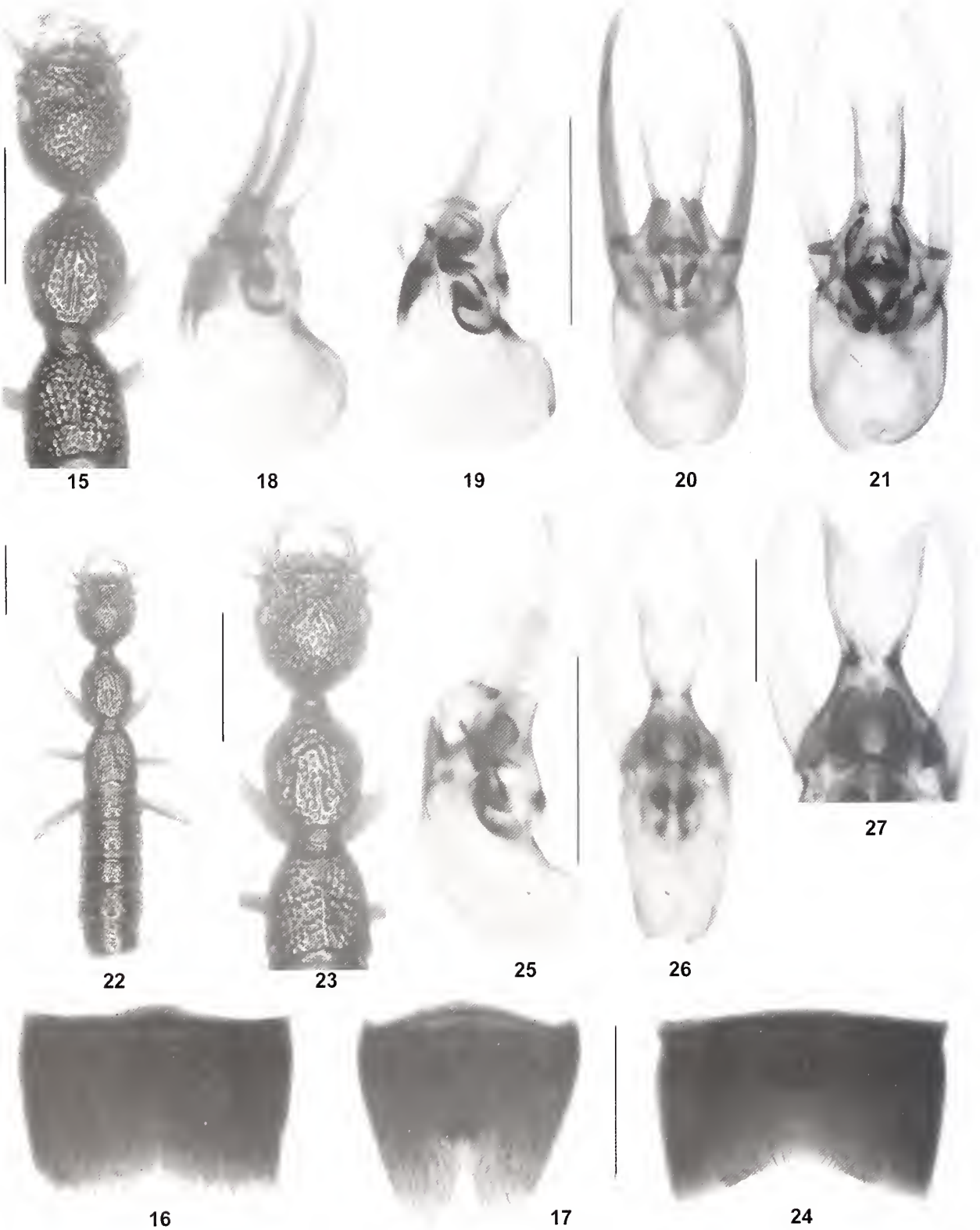
Nazeris appendiculatus sp. n. (Figs 15–21, 28)

Type material. Holotype ♂: "CHINA: W-Sichuan (7), Daxue Shan, W Kangding, 30.03.13N, 101.57.11E, 2700–2800 m, 24.05.1997, M. Schülke / Holotypus ♂ *Nazeris appendiculatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♂, 5♀: "CHINA: W-Sichuan (4), Daxue Shan, 2500–2800 m, Bachtal 5 km E Kangding, 30.03.28N, 102.00.15E, 20.05.1997, M. Schülke" (cSch, cAss); 2♀: "CHINA: W-Sichuan (4a), Daxue Shan, Bachtal 5 km E Kangding, 30.03.28N, 102.00.15E, 2500–2800 m, 23.05.1997, M. Schülke" (cSch); 1♂: "CHINA: (W Sichuan) (4), Daxue Shan, river valley 5 km E Kanding [sic], 30.03N, 102.00E, 20.&23.05.1997, Wrase" (cAss); 2♀: "CHINA: Sichuan, Ganzi pref., Daxue Shan, 102.00E, 30.03N, 5 km E Kangding, river valley, ca. 3000 m, 20.&23.V.1997, leg. A. Pütz" (cPüt); 1♂, 2♀: "CHINA: Sichuan, Ganzi pref., Daxue Shan, 101.57N, 30.03E, N Kangding, 2600–2700 m, 22.&24.V.1997, leg. A. Pütz" (cPüt, cAss).

Etymology. The specific epithet (Latin, adjective: with appendices) alludes to the distinctive baso-lateral projections (ventral view) of the ventral process of the aedeagus.

Description. Head with punctation not distinctly umbilicate. Other external characters (Fig. 15) as in *N. hailuogouensis* and *N. foveatus*.

♂: sternite VII (Fig. 16) with posterior margin moderately concave, particularly in the middle; sternite VIII (Fig. 17) approximately 1.05 times as broad as long, without distinct postero-median impression, posterior excision narrowly V-shaped, its depth approximately 0.23 times the length of sternite; aedeagus (Figs 18–21) slender, 0.87 mm long (approximately 1.1 mm including dorso-lateral apophyses); ventral process weakly sclerotized, ventrally sharply edged, and with lateral lamellae forming a "V" in ventral view; basal portion of ventral process slender, with a pair of distinct lateral projections; dorso-lateral apophyses long and slender, distinctly extending beyond apex of ventral process.



Figs 15–27. *Nazeris appendiculatus* **(15–21)**, and *N. puetzi* **(22–27)**. **15, 23:** forebody; **16, 24:** male sternite VII; **17:** male sternite VIII; **18–21, 25–26:** aedeagus in lateral and in ventral view; **22:** habitus; **27:** apical portion of median lobe of aedeagus in ventral view. Scale bars: 15, 22–23: 1.0 mm; 16–21, 24–26: 0.5 mm; 27: 0.2 mm.

Comparative notes. *Nazeris appendiculatus* undoubtedly belongs to the group of species allied to *N. hailuogouensis*, as is suggested particularly by the similarly derived morphology of the aedeagus. It is distinguished from the two preceding species of this group by the non-umbilicate punctation of the head, the less deep and relatively broader posterior excision of the male sternite VIII, the absence of a distinct postero-median impression of the male sternite VIII, and the morphology of the aedeagus (median lobe of aedeagus relatively longer and of different shape in lateral view, basally with pair of conspicuous projections in ventral view).

Distribution and natural history. The species was discovered in three localities in the Daxue Shan in the environs of Kangding, Sichuan (Fig. 28), at altitudes between 2600 and approximately 3000 m. Additional data are not available

***Nazeris puetzi* sp. n.** (Figs 22–28, 41)

Type material. Holotype ♂: "CHINA: W-Sichuan, Ya'an Prefecture, Tianquan Co., W Erlang Shan Pass / 2900 m, 21.VI.1999, 29.51.13N, 102.17.28E, leg. A. Pütz, sifted / Holotypus ♂ *Nazeris puetzi* sp. n. det. V. Assing 2013" (cAss).

Etymology. The species is dedicated to Anreas Pütz, specialist of Byrrhidae, who collected the holotype.

Description. Habitus as in Fig. 22. Head with punctation not distinctly umbilicate (Fig. 23). Other external characters as in *N. hailuogouensis* and *N. foveatus*.

♂: sternite VII (Fig. 24) strongly transverse, posterior margin distinctly concave; sternite VIII (Fig. 41) 1.17 times as broad as long, without distinct postero-median impression, posterior excision narrowly V-shaped, its depth approximately 0.3 times the length of sternite; aedeagus (Figs 25–27) slender, 0.87 mm long (1.08 mm including dorso-lateral apophyses); ventral process weakly sclerotized, ventrally sharply edged, and with lateral lamellae forming a "V" in ventral view; basal portion of ventral process moderately broad, without lateral projections; dorso-lateral apophyses long and slender, distinctly extending beyond apex of ventral process.

Comparative notes. *Nazeris puetzi*, too, clearly belongs to the group of species allied to *N. hailuogouensis*. It is distinguished from *N. foveatus*, another species of this group probably endemic to the Erlang Shan, by the non-umbilicate punctation of the head, the distinctly concave posterior margin of the more transverse male sternite VII, the shape of the male stenite VIII (without distinct postero-median impression, posterior excision broad), and the morphology of the aedeagus (basal portion of ventral process more slender in ventral view; apical portion of ventral process longer; lateral aspect of ventral process of different shape).

Distribution and natural history. The type locality is situated in the Erlang Shan in W-Sichuan (Fig. 28). The holotype was sifted from leaf litter at an altitude of 2900 m.

***Nazeris bicornis* Hu et al., 2007** (Fig. 29)

Material examined. China: Sichuan: 1♂, 2♀, Gongga Shan, Hailuogou Glacier Park, Camp 1, 29°36'N, 102°04'E, 2100 m, 27.–31.V.1997, leg. Schülke & Wrase (cSch, cAss); 1♀, Gongga Shan, Hailuogou Glacier Park, Camp 2, 29°35'N, 102°02'E, 2550–2700 m, 30.–31.V.1997, leg. Schülke (cSch).

Comment. *Nazeris bicornis* is known only from the Gongga Shan (Fig. 29); its original description is based on eight type specimens from Hailuogou. Based on the morphology of the aedeagus (ventral process apically with a pair of processes), it is closely allied to *N. truncatus* and *N. bilamellatus*.

***Nazeris cornutus* sp. n.** (Figs 29, 30–34)

Type material. Holotype ♂: "CHINA: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Luding Co., W Erlangshan-Pass, 2600 m, 7 km SSE Luding, 29°51N, 102°15E, Laubstreu, Pilze, 29.VI., leg. M. Schülke / Holotypus ♂ *Nazeris cornutus* sp. n. det. V. Assing 2013" (cAss).

Etymology. The specific epithet (Latin, adjective: with horns) alludes to the horn-shaped apices of the ventral process of the aedeagus and the evident close relationship with *N. bicornis*.

Description. Body length 6.0 mm; length of forebody 2.9 mm. Habitus as in Fig. 30. Coloration: body blackish-brown; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 31) 1.08 times as long as broad; punctation coarse, very dense, and umbilicate; interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 1.6 mm long.

Pronotum (Fig. 31) 1.2 times as long as broad and 0.9 times as broad as head; punctation somewhat coarser than that of head, non-umbilicate, and moderately dense; interstices distinctly narrower than diameter of punctures, glossy; posterior half of midline narrowly elevated and impunctate.

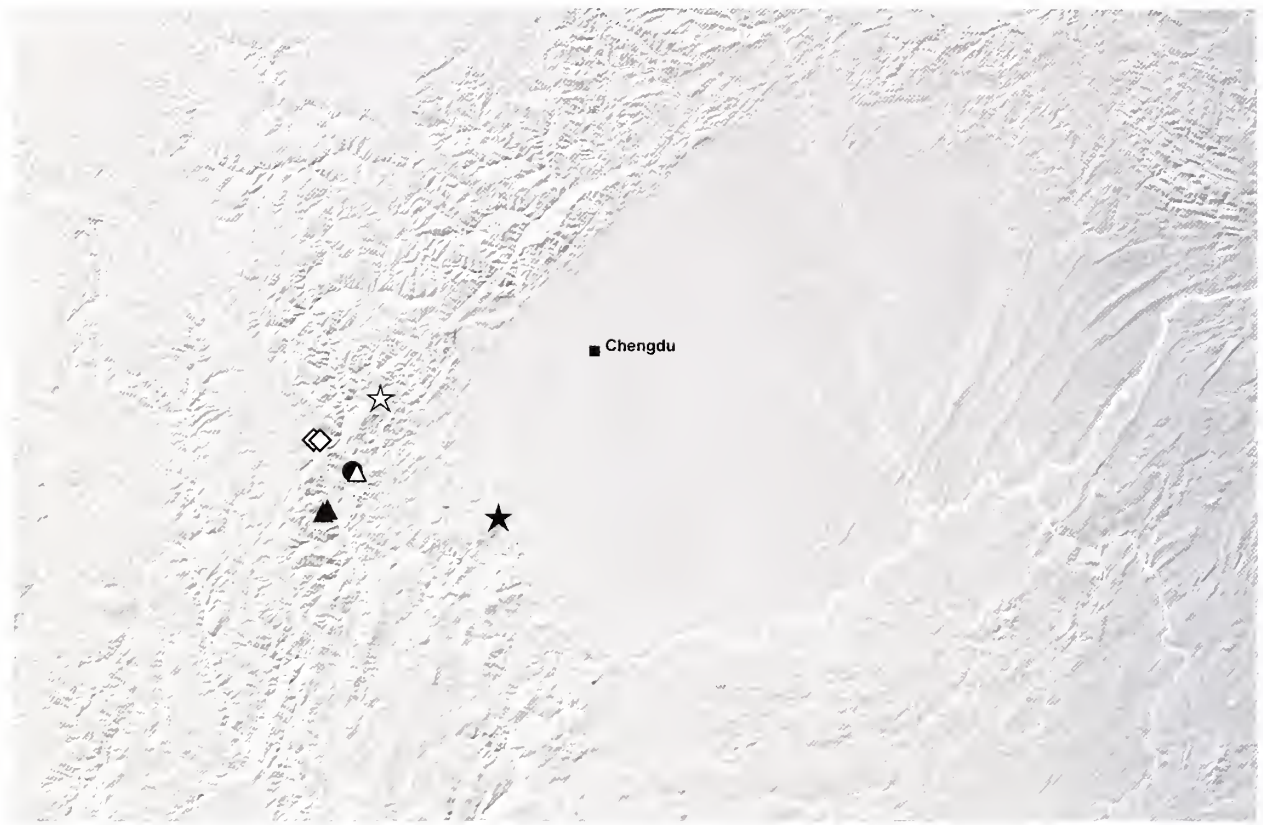


Fig. 28. Distributions of *Nazeris* species in Sichuan: *N. truncatus* (filled star); *N. bilamellatus* (filled star); *N. ruani* (filled star: examined record; open star: type locality); *N. hailuogouensis* (filled triangles); *N. foveatus* (filled circle); *N. appendiculatus* (diamonds); *N. puetzi* (open triangle).

Elytra (Fig. 31) 0.58 times as long as pronotum and slender; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.2 times as broad as elytra; punctation dense, defined, and rather coarse on anterior tergites, gradually becoming sparser and finer towards posterior tergites, rather sparse and fine on tergite VII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: sternite VII unmodified; sternite VIII (Fig. 32) 1.05 times as broad as long, posterior excision V-shaped and rather small, its depth approximately 0.18 times the length of sternite; aedeagus (Figs 33–34) slender, 1.05 mm long; ventral process apically with pair of curved and apically acute horn-shaped processes in ventral view; dorso-lateral apophyses long and slender, apically just reaching apices of ventral process.

Comparative notes. As can be inferred from the similar external and male sexual characters, particularly the similarly derived morphology of the aedeagus, this species is undoubtedly closely allied to *N. bicornis*, from which it differs by the slightly denser punctation of the abdomen, the smaller posterior excision of the male sternite VIII, and by the distinctly smaller and differently shaped aedeagus (ventral process basally more slender; apical processes of ventral process shorter and apically less acute; dorso-lateral apophyses more slender; internal structures of different shape). The aedeagus of *N. bicornis* is 1.2 mm long; for illustrations of the male sternite VIII and the aedeagus of *N. bicornis* see figures 6–9 in Hu et al. (2007).

Distribution and natural history. The type locality is situated in the Erlang Shan, 7 km to the south-southeast of Luding, Sichuan (Fig. 29). The holotype was sifted from leaf litter at an altitude of 2600 m, together with *N. foveatus*.

Nazeris trifurcatus sp. n. (Figs 29, 35–40)

Type material. Holotype ♂: "CHINA: S-Sichuan 1999, Ya'an Prefecture, Shimian Co., Xiaoxiang Ling, 7 km S Liziping, 35 km S Shimian, 28°56N, 102°18E, ca. 1600 m, Bambus, Feldrand, 7.VII., leg. M. Schülke / Holotypus ♂ *Nazeris trifurcatus* sp. n. det. V. Assing 2013" (cAss).

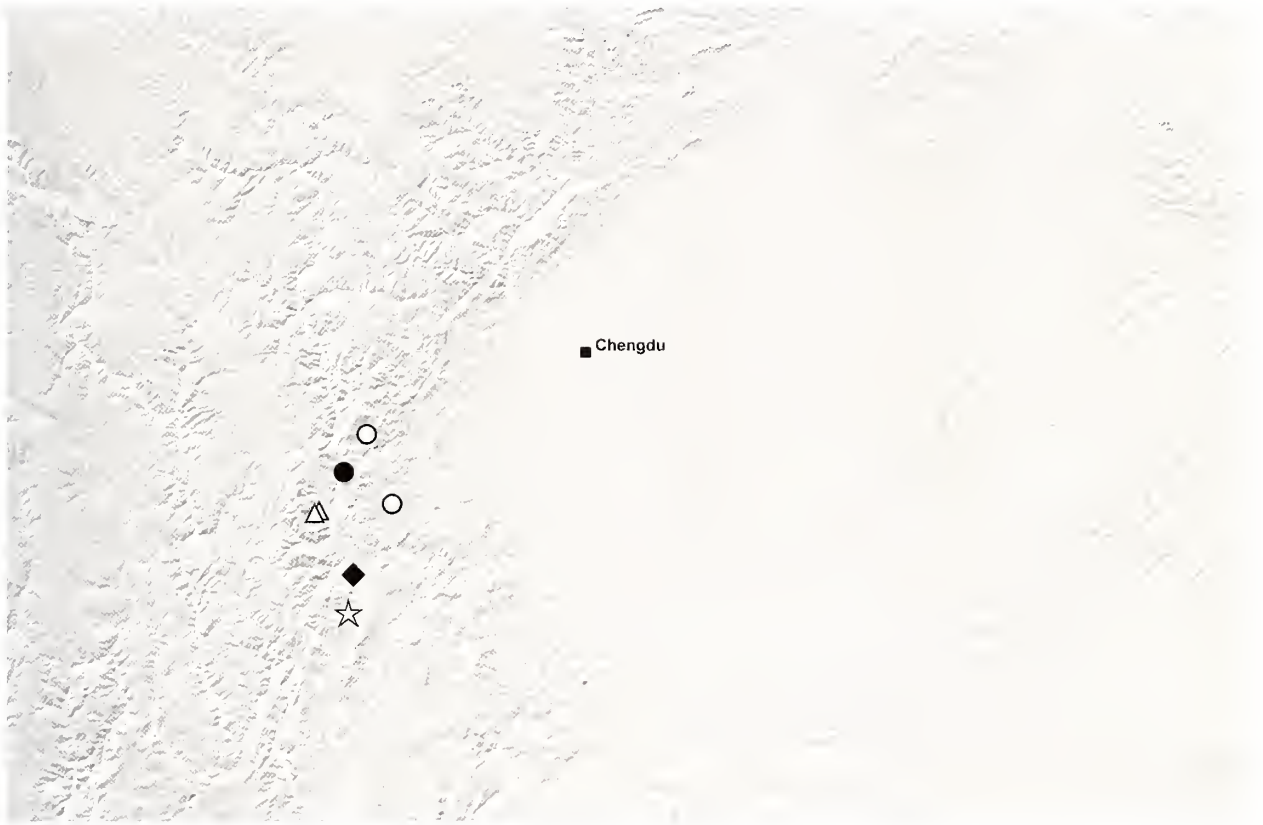


Fig. 29. Distributions of *Nazeris* species in Sichuan: *N. bicornis* (triangles); *N. cornutus* (filled circle); *N. infurcatus* (star); *N. wrasei* (diamond); *N. schuelkei* (open circles).

Etymology. The specific epithet is an adjective composed of the Latin prefix tri- (three) and an adjective derived from the Latin noun furca (fork). It alludes to the trifurcate apex of the ventral process of the aedeagus.

Description. Body length 6.0 mm; length of forebody 3.1 mm. Habitus as in Fig. 35. Coloration: body blackish-brown; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 36) 1.08 times as long as broad; punctation coarse, dense, and umbilicate; interstices without microsculpture; eyes small, less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 1.8 mm long.

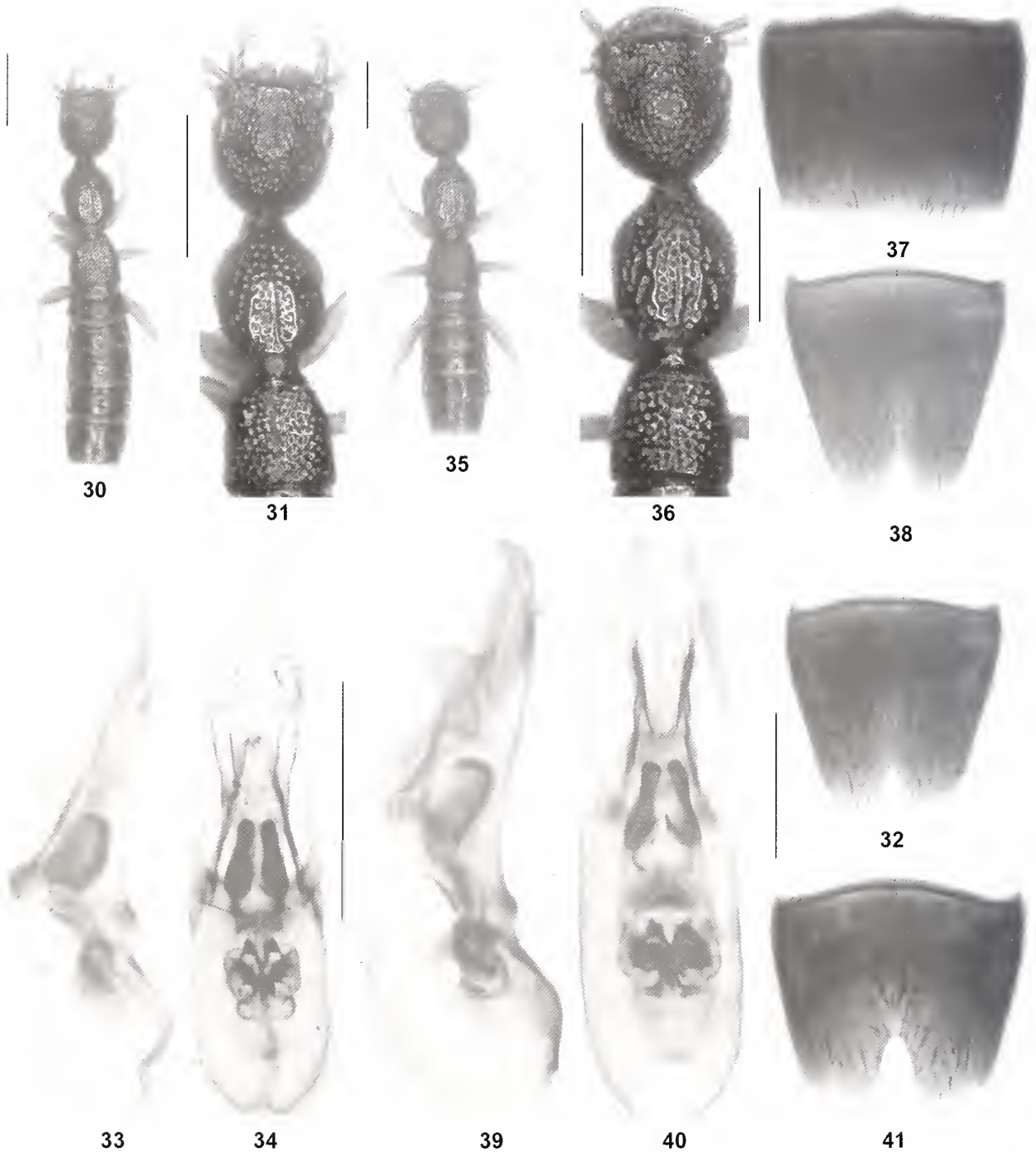
Pronotum (Fig. 36) 1.20 times as long as broad and 0.93 times as broad as head; punctation even coarser than that of head, non-umbilicate, and moderately dense; interstices distinctly narrower than diameter of punctures, glossy; midline punctate in anterior half, impunctate and somewhat elevated in posterior half; posterior half with a pair of somewhat irregular glossy oblong elevations.

Elytra (Fig. 36) 0.6 times as long as pronotum and slender; humeral angles obsolete; punctation dense, moderately defined, and nearly as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.25 times as broad as elytra; punctation dense, defined, and moderately coarse on tergites III-IV, sparser on tergite V, gradually becoming sparser towards posterior tergites, tergite VII with sparse punctation; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII distinctly convex.

♂: sternite VII unmodified (Fig. 37); sternite VIII (Fig. 38) weakly oblong with unmodified pubescence, posterior excision V-shaped, 0.17 times as deep as length of sternite; aedeagus (Figs 39–40) slender, 1.1 mm long; ventral process apically trifurcate, with the median process distinctly shorter than the lateral ones; dorso-lateral apophyses curved, weakly dilated in apical half, and not reaching apex of ventral process.

Comparative notes. *Nazeris trifurcatus* is distinguished from all its congeners by the male sexual characters, particularly the trifurcate apex of the ventral process of the aedeagus. The latter suggests that the species may be closely related to *N. bicornis* and allied species.



Figs 30–41. *Nazeris cornutus* (**30–34**), *N. trifurcatus* (**35–40**), and *N. puetzi* (**41**). **30, 35:** habitus; **31, 36:** forebody; **32, 38, 41:** male sternite VIII; **33–34, 39–40:** aedeagus in lateral and in ventral view; **37:** male sternite VII. Scale bars: 30–31, 35–36: 1.0 mm; 32–34, 37–41: 0.5 mm.

Distribution and natural history. The type locality is situated to the south of Shimian in southern Sichuan (Fig. 29). The holotype was collected in a field margin with bamboo at an altitude of approximately 1600 m.

***Nazeris wrasei* sp. n.** (Figs 29, 42–47)

Type material. Holotype ♂: "CHINA S.Sichuan (Ya'an Pref., Shimian Co.), Xiaoxiang Ling, side-valley above Nanya Cun nr. Caluo, 11 km S Shimian, ca. 1250 m,

7.VII.1999, D.W. Wrase / Holotypus ♂ *Nazeris wrasei* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♀: same data as holotype (cSch); 2♀: "CHINA: W-Sichuan, Ya'an Pref., Shimian Co., Xiaoxiang Ling, side-valley ab. Nanya Cun nr. Caluo, 11 km S Shimian, 1250 m, 7.VII.1999, leg. A. Pütz" (cPüt, cAss).

Etymology. The species is dedicated to my friend David Wrase (Berlin), specialist of Carabidae, who collected two of the type specimens.

Description. Body length 4.7–5.2 mm; length of forebody 2.5–2.7 mm. Habitus as in Fig. 42. Coloration: body blackish-brown; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 43) approximately 1.05 times as long as broad; punctation moderately coarse, very dense, and umbilicate; interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.5 mm long.

Pronotum (Fig. 43) approximately 1.15 times as long as broad and 0.95 times as broad as head; punctation distinctly coarser than that of head, non-umbilicate, and moderately dense; interstices distinctly narrower than diameter of punctures, glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 43) approximately 0.55 times as long as pronotum; humeral angles obsolete; punctation dense, moderately defined, and distinctly less coarse than that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.20–1.25 times as broad as elytra; punctation dense, defined, and moderately coarse on anterior tergites; sparser and finer on tergite VII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII weakly convex.

♂: sternite VII (Fig. 44) with truncate posterior margin and with a transverse series of long submarginal setae, otherwise unmodified; sternite VIII (Fig. 45) approximately as long as broad, posterior excision anteriorly rounded (not acute) and approximately 0.2 times as deep as length of sternite; aedeagus (Figs 46–47) stout, 0.85 mm long; ventral process apically concave in ventral view; dorso-lateral apophyses stout and strongly sclerotized, slightly extending beyond apex of ventral process.

Comparative notes. The morphology of the aedeagus is somewhat similar to that of species of the *N. cultellatus* group (Assing 2013a), but the ventral process is less distinctly compressed laterally and, unlike the species of the *N. cultellatus* group, the punctation of the head is umbilicate. From the species previously recorded from Sichuan, *N. wrasei* is readily distinguished by the stouter aedeagus.

Distribution and natural history. The type locality is situated to the south of Shimian in southern Sichuan (Fig. 29). The type specimens were collected at an altitude of approximately 1250 m.

Nazeris schuelkei sp. n. (Figs 29, 48–53)

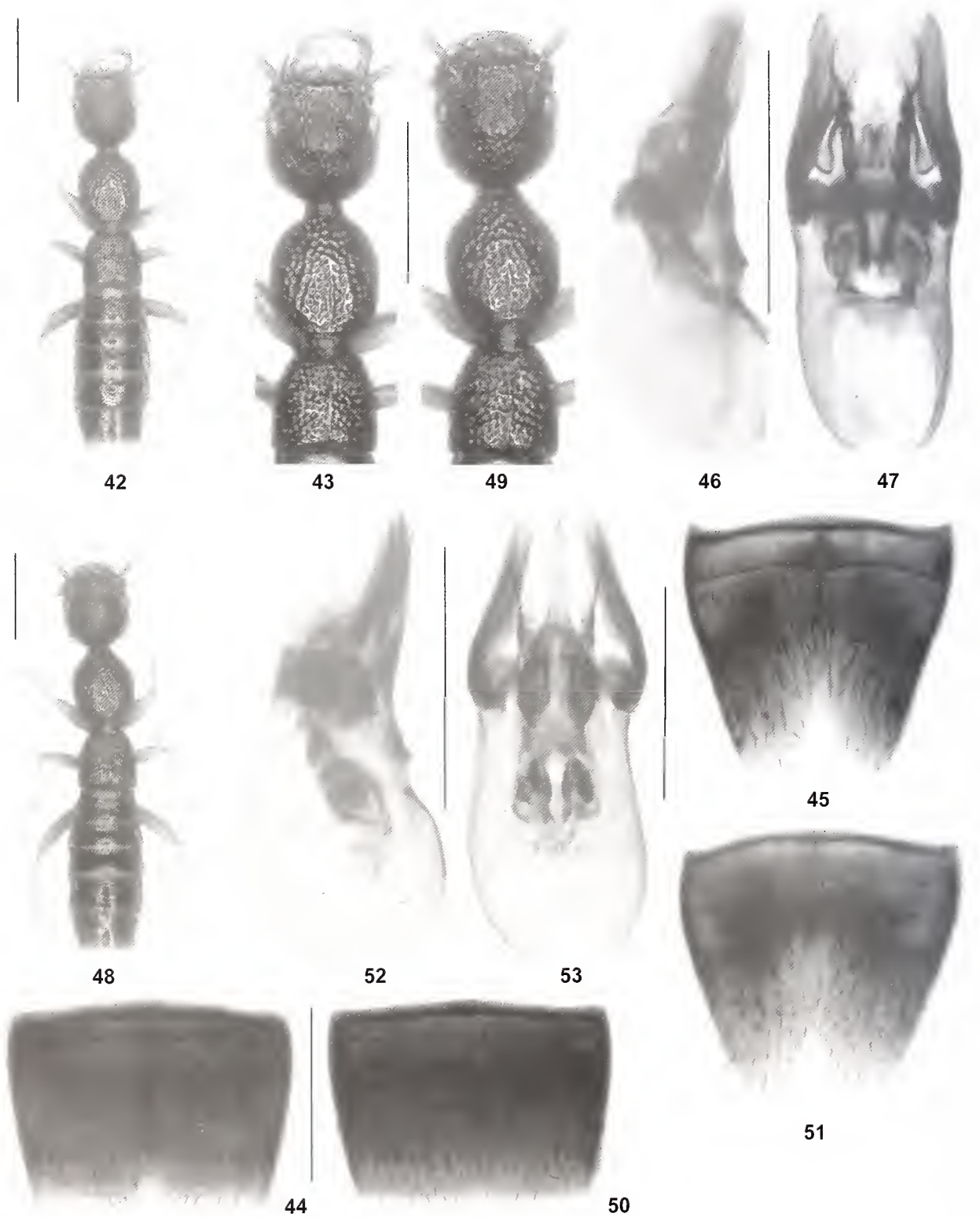
Type material. Holotype ♂: "CHINA: W-Sichuan 1999, Ya'an Prefecture, Tianquan Co., Jiajin Shan, Tal oberh. Labahe N.R. St., 57 km W Ya'an, 30°06N, 102°25E, Streu, Rinde, Pilze, 1800 m, 12.VII., leg. M. Schülke / Holotypus ♂ *Nazeris schuelkei* sp. n. det. V. Assing 2013" (cAss). Paratypes: 2♂: same data as holotype (cSch); 1♂: "CHINA: W-Sichuan 1999, Ya'an Prefecture, Fulin Co., Daxiang Ling, Rd. zw. Hanyuanjie u. Siping, 51 km NNE Shimian, 2300 m, 29°39N, 102°37E, Ufer, Gesiebe, 10.VII., leg. M. Schülke" (cAss); 1♀: "CHINA: W-Sichuan, Ya'an Pref., Fulin Co., Daxiang Ling, pass N / Hanyuanjie, 51 km NNE Shimian, smal [sic] stream, 29.39N, 102.37E, 2300 m, 10.VII.1999, leg. A. Pütz" (cPüt).

Etymology. The species is dedicated to my friend and colleague Michael Schülke, who collected most of the type specimens and whose material the present paper is largely based on.

Description. Body length 5.0–5.7 mm; length of forebody 2.6–2.9 mm. Habitus as in Fig. 48. Coloration: body dark-brown to blackish-brown; legs yellowish; antennae yellowish, with antennomere I slightly darker. Abdomen with microsculpture. Other external characters (Fig. 49) as in *N. wrasei*.

♂: sternite VII (Fig. 50) with truncate posterior margin and with a transverse series of moderately long submarginal setae, otherwise unmodified; sternite VIII (Fig. 51) approximately 1.1 times as broad as long, posterior excision anteriorly narrowly rounded (not acute) and approximately 0.2 times as deep as length of sternite; aedeagus (Figs 52–53) stout, 0.85 mm long; ventral process apically acute in ventral view; dorso-lateral apophyses stout and strongly sclerotized, subbasally somewhat dilated, distinctly converging in ventral view, and extending nearly to apex of ventral process.

Comparative notes. The similar external and male sexual characters suggest that *N. schuelkei* is closely related to the geographically close *N. wrasei*, from which it is distinguished particularly by the presence of microsculpture on the abdomen, by the different shape of the male sternite VIII, and by the morphology of the aedeagus (shapes of ventral process and of dorso-lateral apophyses).



Figs 42–53. *Nazeris wrasei* (**42–47**) and *N. schuelkei* (**48–53**). **42, 48:** habitus; **43, 49:** forebody; **44, 50:** male sternite VII; **45, 51:** male sternite VIII; **46–47, 52–53:** acdeagus in lateral and in ventral view. Scale bars: 42–43, 48–49: 1.0 mm; 44–47, 50–53: 0.5 mm.

Distribution and natural history. The species was discovered in two localities in Ya'an Prefecture, West Sichuan (Fig. 29). The specimens were sifted from litter, in one locality near a stream bank, at altitudes of 1800 and 2300 m.

Unnamed and presumably undescribed species

Three probably undescribed species remain unnamed since they are represented in the examined material exclusively by females.

Nazeris sp. 1: 1♀: "CHINA – W-Sichuan, Ya'an Pref., Shimian Co., Xiaoxiang Ling, Pass betw. Shimian-Ganluo, 27 km SE Shimian, 2450 m, springfed-swamp, 29.02.75N, 102.31.48E, 8.VII.1999, leg. A. Pütz" (cPüt).

This large species is distinguished from the similarly large *N. ruani* by more slender body, a more elongate head, distinctly coarser and non-umbilicate punctation of the head, and the coarser punctation of the abdomen. The only other species of similar size known from Sichuan is *N. magnus* Hu et al., 2007, which was described from the Erlang Shan. Judging from the habitus photo provided by Hu et al. (2007), *N. magnus* appears to have a more densely punctate head and pronotum.

Nazeris sp. 2: 1♀: "CHINA W.Sichuan (Ganzi Tibet. Aut. Pref., Yajiang Co.), Shalui Shan, river valley 6 km WSW Yajiang, 3250 m, 30°01N, 102°57E (river bank, bank slope), 4.VII.1999 D.W. Wrase" (cSch).

This moderately large, black species is distinguished from most geographically close congeners by the non-umbilicate punctation of the head. Based on the external characters, it may belong to the *N. hailuogouensis* group.

Nazeris sp. 3: 1♀: "CHINA NW Sichuan, 20 km NW Maowen, 2150 m, Jiuding Shan, coniferous wood, 7–28.VI.2004, leg. R. Fabbri" (cSch).

Species from Yunnan

Species groups. The *N. giganteus* group is represented in Yunnan by *N. giganteus* (Diancang Shan) and possibly the distinctly smaller *N. alpinus* (Yulongxue Shan). This group also includes *N. ruani* from Sichuan, most likely the adelphotaxon of *N. giganteus*. For more details see the section on the species groups of Sichuan.

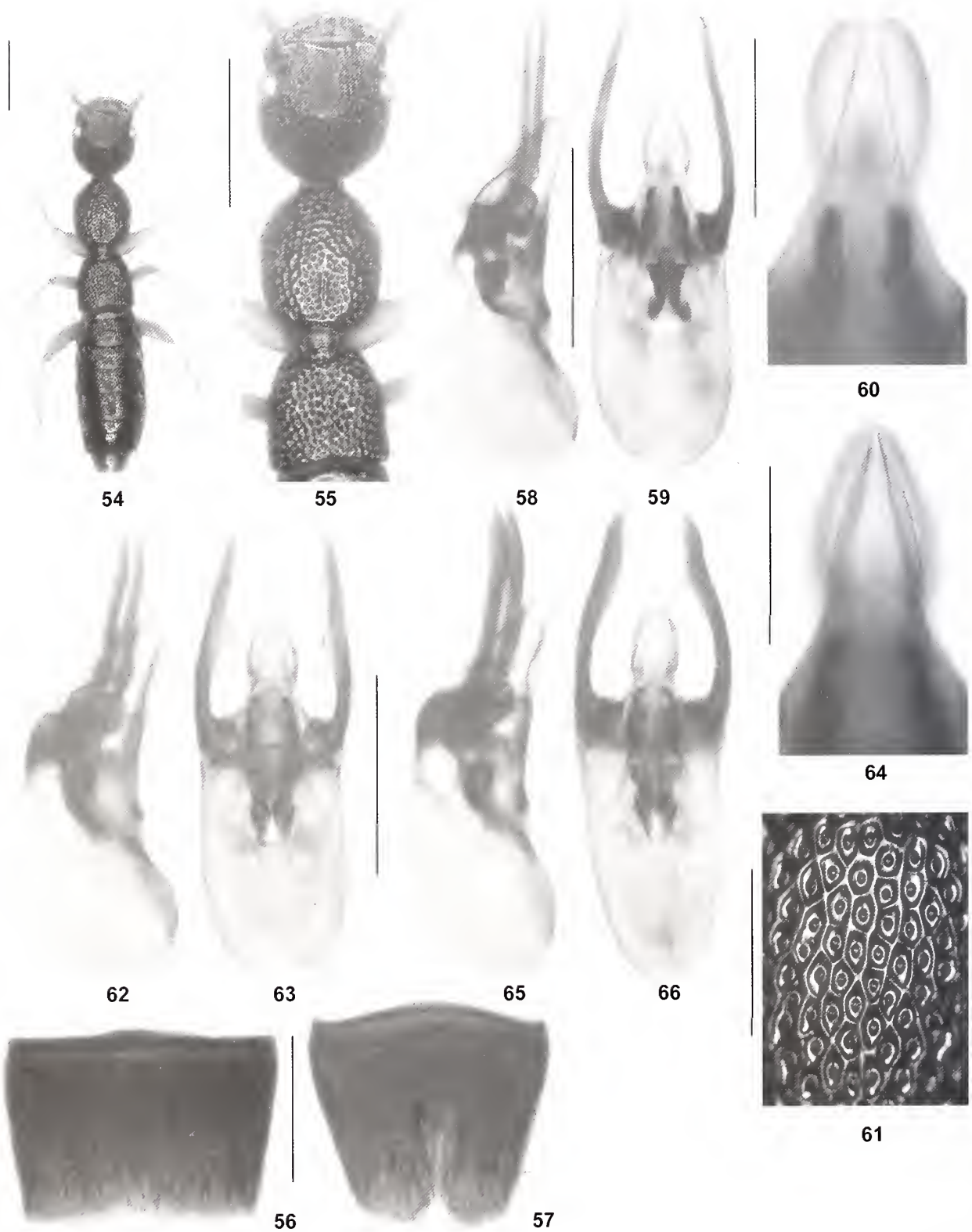
The *N. daliensis* group comprises at least five species, *N. daliensis* (Diancang Shan), *N. jizushanensis* (Jizu Shan), *N. wuliangicus* (Wuliang Shan and adjacent mountain range), *N. sagittifer* (Wuliang Shan, Ailao Shan), and *N. nivimontis* (Xue Shan N Lincang). This species group is constituted particularly by the derived morphology of the aedeagus (ventral process short, weakly sclerotized, more or less sharply edged ventrally; dorso-lateral apophyses long and slender, extending far beyond apex of the ventral process) (e.g., Figs 58–59, 62–63, 65–66). The male posterior incision of the male sternite VIII is relatively small, 0.25 times as deep as the sternite at most (e.g., Figs 57, 69, 73, 75), and the male sternite VII is weakly modified at most (posterior margin truncate to moderately concave in the middle) (e.g., Figs 68, 72, 74).

The *N. vexillatus* group includes three species, all of them distributed in the Gaoligong Shan: *N. vexillatus*, *N. circumclusus*, and *N. hastatus*. They are characterized by an aedeagus with a short ventral process and with modified (dilated or with processes) dorso-lateral apophyses extending far beyond the apex of the ventral process of the median lobe (Figs 180–181, 187–188, 193–194). The male sternite VII is weakly modified (e.g., Figs 185, 191) and the body colour is brown to dark-brown, but not black.

The *N. fissus* group is composed of two species, *N. fissus* (Wuliang Shan, Ailao Shan) and *N. caoi* Hu et al., 2011 (Nabanhe Nature Reserve). This group is constituted by a conspicuous synapomorphy, a completely divided (bifid) ventral process of the aedeagus (Figs 205–206).

The male sexual characters of *N. secatus* (Laobie Shan) and *N. bangmaicus* (Bangma Shan) do not suggest closer affiliations to any of the other species known from Yunnan.

The remaining species are - partly tentatively - assigned to the *N. cangicus* group. They are characterized by an aedeagus with a more or less slender and apically acute ventral process (e.g., Figs 96–97, 102–103), usually unmodified dorso-lateral apophyses not extending distinctly beyond the apex of the ventral process of the median lobe (exceptions: *N. pungens*, *N. lanuginosus*), a more or less distinctly modified male sternite VII (often with a postero-median impression, a medially concave posterior margin, and/or modified pubescence) (e.g., Figs 94, 100), and a male sternite VIII with a usually deep and narrow posterior excision (often also with an oblong median impression) (e.g., Figs 95, 101). The colour of the body of mature specimens is usually blackish. Based on the illustrations provided in their respective original descriptions, *N. zhangi* Watanabe & Xiao, 1993 (Yu'an Shan near Kunming), *N. baihuaensis* Watanabe & Xiao, 2000 (Gaoligong Shan), *N. nomurai* Watanabe & Xiao, 2000 (Gaoligong Shan), *N. huanxipoensis* Watanabe & Xiao, 2000 (Gaoligong Shan), *N. ishiianus* Watanabe & Xiao, 2000 (Gaoligong Shan), and *N. nabanhensis* Hu et al., 2011 (Nabanhe Nature Reserve) may belong to the *N. cangicus* group, too. Within this group, two species pairs were identified. One of them is represented by *N. pungens* (Xue Shan N Lincang) and *N. lanuginosus* (Laobie Shan), both of which have a male sternite VII with a posterior cluster of long black setae (Figs 113, 119) and an aedeagus



Figs 54–66. *Nazeris wuliangicus* **(54–60)**, *N. daliensis* **(61–64)**, and *N. jizushanensis* **(65–66)**. **54:** habitus; **55:** forebody; **56:** male sternite VII; **57:** male sternite VIII; **58–59, 62–63, 65–66:** aedeagus in lateral and in ventral view; **60, 64:** ventral process of aedeagus in ventral view; **61:** median dorsal portion of head. Scale bars: 54–55: 1.0 mm; 56–59, 62–63, 65–66: 0.5 mm, 60–61, 64: 0.2 mm.

with the dorso-lateral apophyses extending far beyong the apex of the ventral process (Figs 115–116, 121–122). The other species pair comprises *N. peniculatus* (mountain range N Er Hai) and *N. barbatus* (Wuliang Shan), whose male sternites VII share a unique synapomorphy, a cluster of modified stout black setae (Figs 118, 133).

Nazeris giganteus Watanabe & Xiao, 1997 (Fig. 90)

Material examined. China: Yunnan: 1♀, Dali Bai Aut. Pref., Diancang Shan, 3 km W Dali old Town, "cloud road", 25°41'N, 100°07'E, 2750 m, pine forest with broadleaved undergrowth and bamboo, vinegar trap, 17.–23.VI.2005, leg. Wrase (cAss).

Comment. This large species was described based on three specimens from "Qinghi Xi, Diancang Shan Mts." and one male from "Mt. Laohu Shan, Dali Shi" (Watanabe & Xiao 1997). The above specimen is a female, but no other species of similar size are known from the Diancang Shan. Aside from the conspicuously large body size, *N. giganteus* shares similarly derived male characters with *N. ruani* from Sichuan (see the section on the species groups occurring in Sichuan). The above record is mapped in Fig. 90.

Nazeris alpinus Watanabe & Xiao, 1997 (Fig. 88)

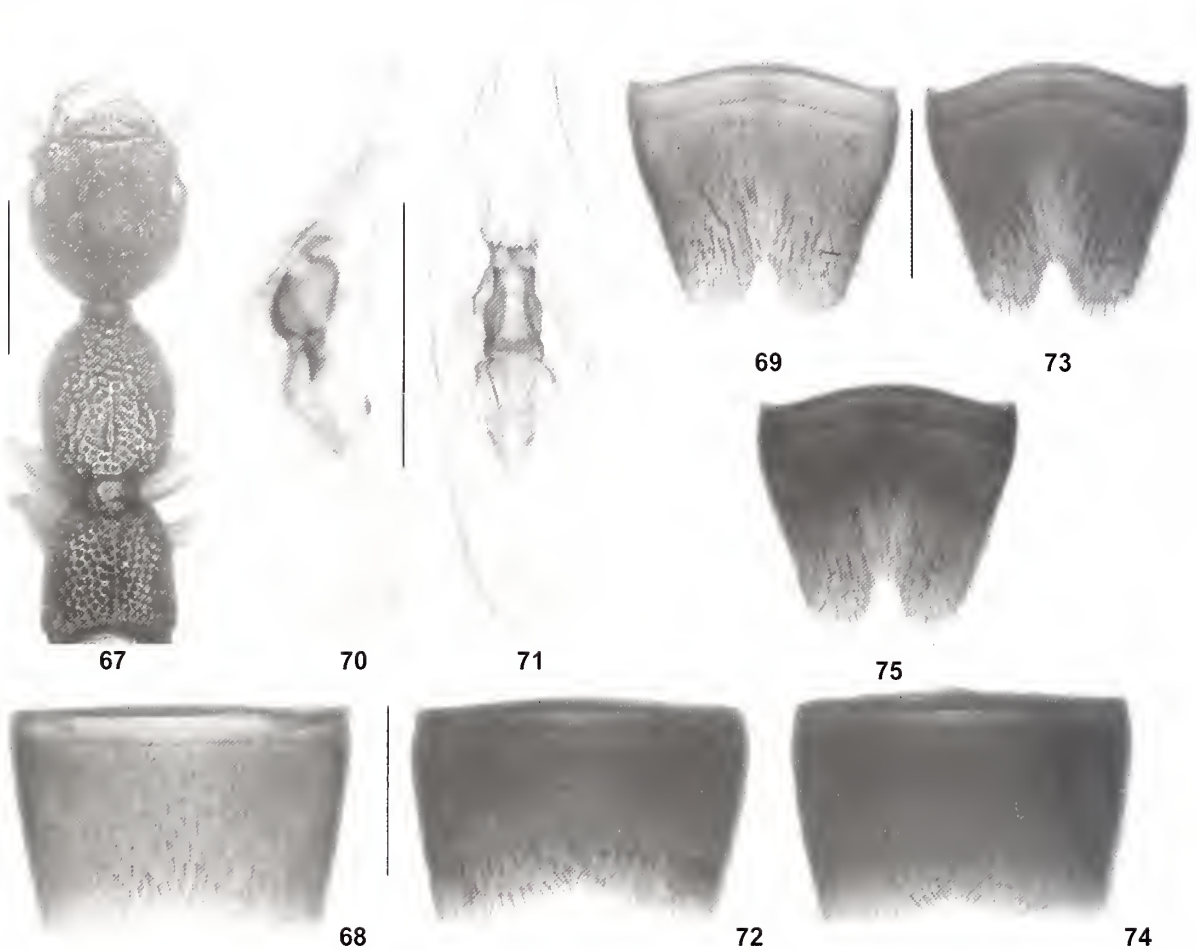
Material examined. China: Yunnan: 2♂, 7♀, Lijiang Naxi Aut. Co., E Yulongxue Shan, 30 km N Lijiang, 27°09'N, 100°15'E, 2800–2900 m, secondary mixed forest, 13.VIII.2003, leg. Smetana & Wrase (cSch, cSme, cAss); 1♀, 26 km N Lijiang, Ganhaizi pass, 27°07'N, 100°15'E, 3000 m, mixed coniferous forest, litter and moss under rhododendron sifted, 15.VI.2007, leg. Hájek & Růžička (cAss).

Comment. The original description of *N. alpinus* is based on nine type specimens from the Yulongxue Shan (Watanabe & Xiao 1997), where this species is probably endemic. The phylogenetic affiliations are unclear. Based on the short, strongly curved, and strongly sclerotized dorso-lateral apophyses and the presence of a minute median incision of the posterior margin of the male sternite VII (a character otherwise observed only in *N. ruani*), *N. alpinus* is tentatively attributed to the *N. giganteus* group. The above records are mapped in Fig. 88.

Nazeris dalienusis Watanabe & Xiao, 1997 (Figs 61–64, 72–73, 88)

Material examined. China: Yunnan: 4♀, Dali Bai Aut. Pref., Diancang Shan, 5 km SSW Dali, 25°39'N, 100°08'E, 2800 m, 26.VIII.2003, leg. Schülke, Smetana, Wrase (cSch, cSme, cAss); 1♂, 2♀ [all teneral], Diancang Shan, 3 km W Dali, 25°41'N, 100°07'E, 2600–2650 m, 30.VIII.2003, leg. Smetana (cSme); 1♂, 1♀ [1 teneral], Diancang Shan, 3 km W Dali, 25°41'N, 100°07'E, 2750 m, 1.IX.2003, leg. Smetana (cSme, cAss); 1♀, Diancang Shan, 4 km W Dali, 25°41'N, 100°07'E, 2900–3000 m, 21.VIII.2003, leg. Smetana (cSme); 1♂, Diancang Shan, 3 km W Dali old Town, "cloud road", 25°41'N, 100°07'E, 2700 m, 17.VI.2005, leg. Smetana (cAss); 1♂, 5♀ [4 teneral], Diancang Shan, 3 km W Dali old Town, "cloud road", 25°41'N, 100°07'E, 2650–2750 m, pine forest, pine litter and moss in ditches sifted, 30.VIII.2003, leg. Schülke (cSch); 1♀ [teneral], same data, but 1.IX.2003, leg. Wrase (cSch); 1♀, same data, but 17.VI.2005, leg. Schülke (cAss); 1♀, same data, but 17.–23.VI.2005, leg Wrase (cSch); 3♂ [all slightly teneral], 1♀, Diancang Shan W Dali, 25°42'N, 100°07'E, 2860 m, pine forest, litter and moss sifted, 28.V.2007, leg. Pütz & Schülke (cPüt, cSch, cAss); 1♂, Diancang Shan, near Dali, 25°40'N, 100°08'E, 2730 m, 11.V.2010, leg. Grebennikov (cSme); 1♀, Diancang Shan, east slope of Zhonghe Shan, 25°41'N, 100°08'E, 2650 m, mixed forest with pine and rhododendron, litter sifted, 13.VI.2007, leg. Hájek & Růžička (cAss); 1♂, 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. Wrase (cAss); 1♂, 1♀, Diancang Shan above Dali, 2000–2200 m, 4–17.IV.1999, leg. Schawaller (SMNS, cAss); 2♂ [1 teneral], same data, but 2500–2700 m, 8–18.IV.1999 (SMNS, cAss); 1♀, same data, but 2700–2900 m, 14.IV.1999 (SMNS).

Comment. The original description of *N. daliensis* is based on numerous type specimens from the type locality ("Mt. Xiaojin Shan, Diancang Shan Mts., Dali Shi"), two other localities ("Zhonghe Feng", "Qinghi Xi") in the Diancang Shan, and from the "Laohu Shan, Dali Shi". Watanabe & Xiao (1997) illustrate the slightly different aedeagi of a male from the type locality and from the Laohu Shan. These illustrations are evidently not quite accurate, particularly regarding the shape of the dorso-lateral apophyses. Photographs of the head, the aedeagus, and of the male sternites VII and VIII are provided in Figs 61–64, 72–73. The above records are mapped in Fig. 88. Teneral specimens were collected in April and May, as well as in August and September.



Figs 67–75. *Nazeris nivimontis* **(67–71)**, *N. daliensis* **(72–73)**, and *N. jizushanensis* **(74–75). 67:** forebody; **68, 72, 74:** male sternite VII; **69, 73, 75:** male sternite VIII; **70–71:** aedeagus in lateral and in ventral view. Scale bars: 67: 1.0 mm; 68–75: 0.5 mm.

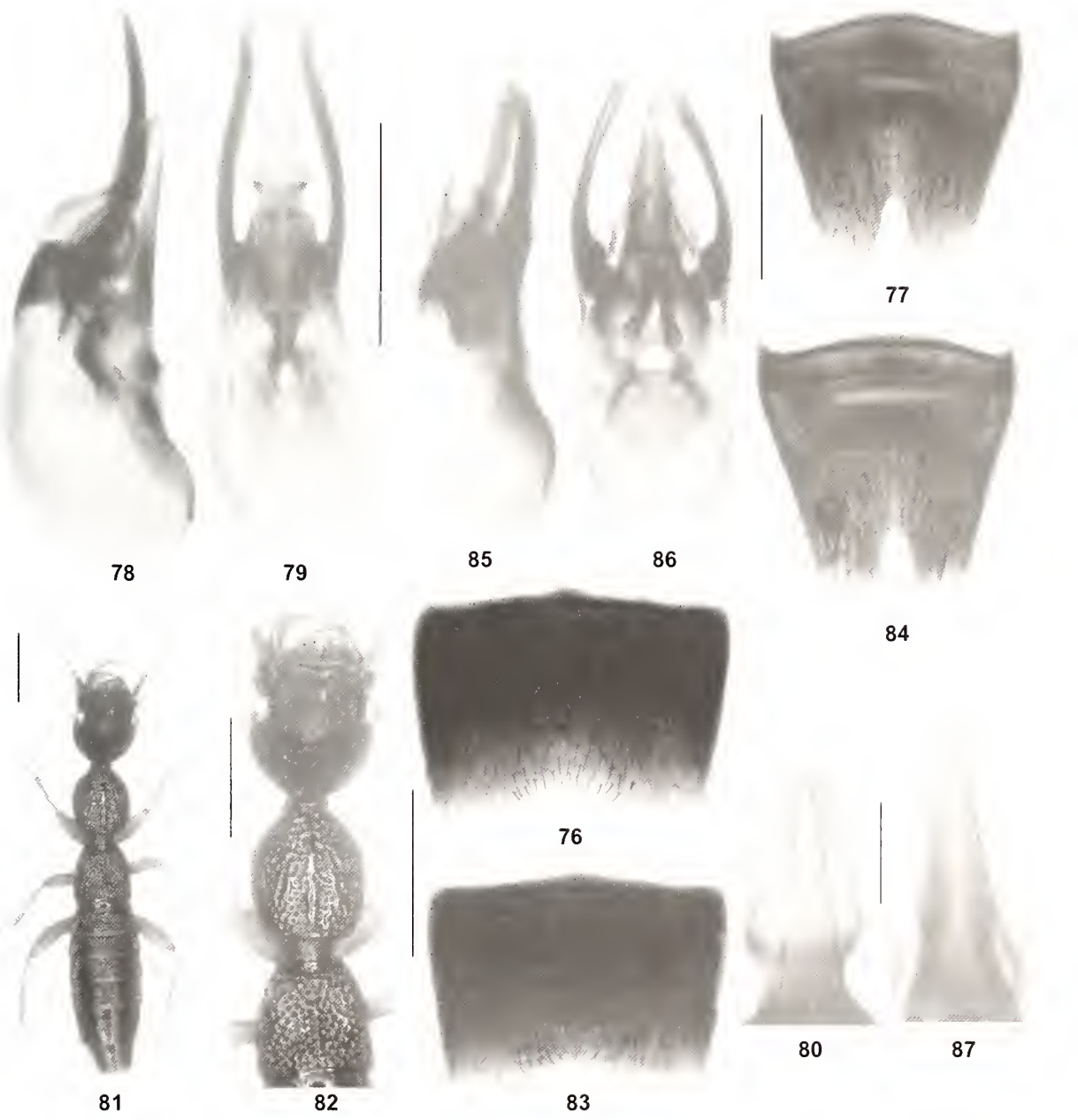
***Nazeris jizushanensis* Watanabe & Xiao, 1997** (Figs 65–66, 74–75, 88)

Material examined. China: Yunnan: 5♂, 5♀ [partly teneral], Dali Bai Aut. Pref., 37 km NE Dali, Jizu Shan, trail to cable car, 25°58'N, 100°23'E, 2450 m, mixed forest, litter an moss sifted, 5.IX.2009, leg. Schülke & Wrase (cSch, cAss); 2♂, 2♀, Jizu Shan, along trail to the summit, 25°58'N, 100°23'E, 2180–2580 m, mixed forest with pine, oak, and rhododendron, near stream, 22.–24.VI.2007, leg. Hájek & Růžička (cSch, cAss).

Comment. The original description is based on seven type specimens from the Jizu Shan (Watanabe & Xiao 1997), where the above specimens were collected, too (Fig. 88). The extremely similar external and male sexual characters suggest that *N. jizushanensis* is closely related to, and possibly the sister species of, *N. daliensis*, from which it is best distinguished by the differently shaped dorso-lateral apophyses of the larger aedeagus. The male sexual characters of *N. jizushanensis* are illustrated in Figs 65–66, 74–75.

***Nazeris wuliangicus* sp. n.** (Figs 54–60, 88)

Type material. Holotype ♂: "CHINA: Yunnan, Dali Bai Aut. Pref., Wuliang Shan, 9 km SW Weishan, 25°10'15.5"N, 100°14'21.8"E, 2480 m, scrub with (oak, alder, pine), litter & mushrooms sifted, 14.IX.2009, leg. M. Schülke [CH09-51] / Holotypus ♂ *Nazeris wuliangicus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 9♂, 7♀ [partly teneral]: same data as holotype (cSch, cAss); 6♂, 7♀: "CHINA: Yunnan [CH07-35], Dali Bai Auton. Pref., Wuliang Shan, 9 km SW Weishan, 2450-2500 m, 25°10'14"N, 100°14'22"E, oaks and pines, sifted, 13.VI.2007, M. Schülke" (cSch, cAss); 2♂, 6♀: same data, but leg. A. Pütz (cPüt, cAss); 3♂, 2♀: "CHINA (Yunnan) Dali Bai Auton. Pref., Wuliang Shan, 9 km SW Weishan, 2450–2500 m, 25°10'14"N, 100°14'22"E, (W. slope, sec. oak/pine for., pasture, und. stones),13.VI.2007 D.W. Wrase [35]" (cSch, cAss); 9♂, 20♀ [partly teneral]: "CHINA: Yunnan, Dali Bai Aut. Pref., mount. range E Wei-shan, 12 km NE Weishan, 25°17'02-15"N, 100°22'23-30"E, 2630–2660 m, scrub with pines and bamboo, litter sifted, 15.IX.2009, leg. M. Schülke [CH09-



Figs 76–87. *Nazeris sagittifer* **(76–80)** and *N. secatus* **(81–87). 76, 83:** male sternite VII; **77, 84:** male sternite VIII; **78–79, 85–86:** aedeagus in lateral and in ventral view; **80, 87:** ventral process of aedeagus in ventral view; **81:** habitus; **82:** forebody. Scale bars: 81–82: 1.0 mm; 76–79, 83–86: 0.5 mm; 80, 87: 0.1 mm.

54]" (ZFMK, cSch, cAss); 3♂ [1 teneral]: "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).

Etymology. The specific epithet is an adjective derived from the mountain range where the type locality is situated.

Description. Body length 5.2–6.3 mm; length of forebody 2.8–3.1 mm. Habitus as in Fig. 54. Coloration: body blackish-brown to black, with the elytra occasionally slightly paler; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 55) approximately 1.05 times as long as broad; median dorsal portion indistinctly elevated at most; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture, forming narrow ridges;

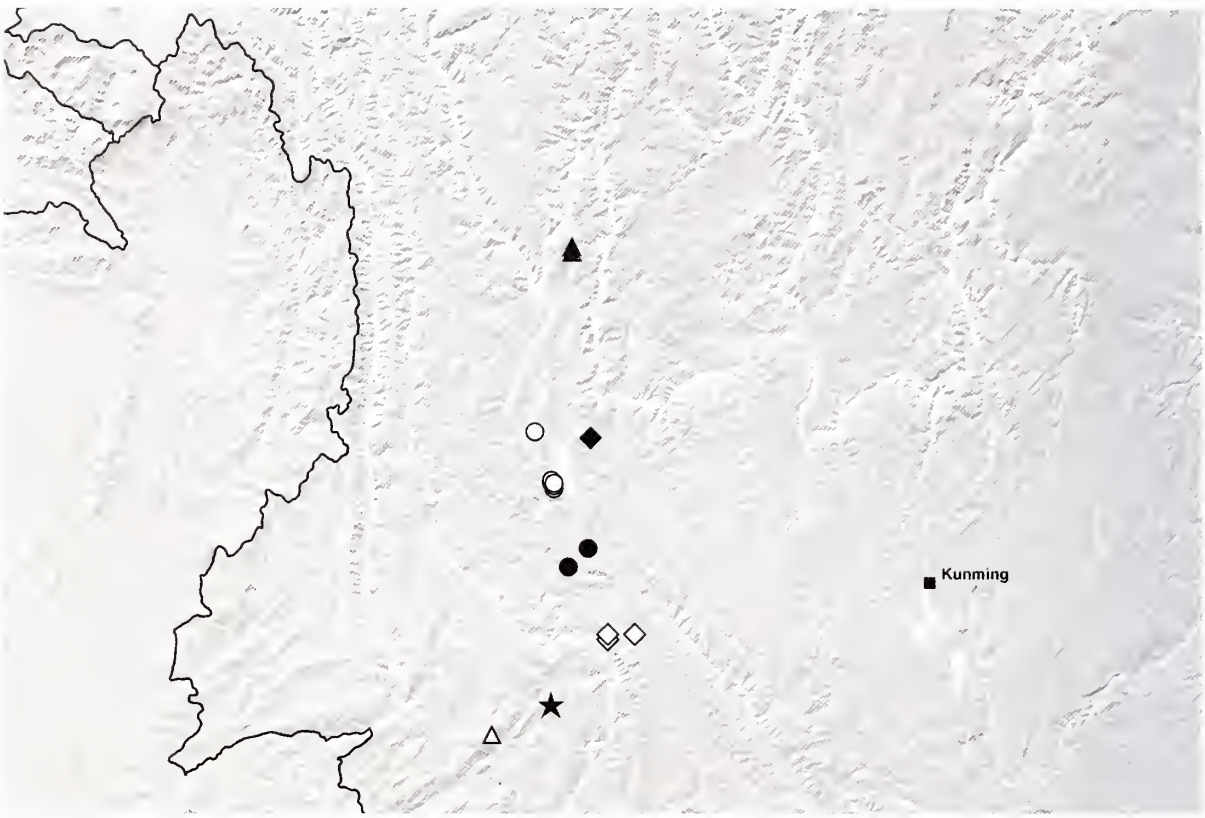


Fig. 88. Distributions of *Nazeris* species in Yunnan: *N. alpinus* (filled triangles); *N. daliensis* (open circles); *N. jizushanensis* (filled diamond); *N. wuliangicus* (filled circles); *N. sagittifer* (open diamonds); *N. nivimontis* (star); *N. secatus* (open triangle).

eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.7 mm long.

Pronotum (Fig. 55) approximately 1.2 times as long as broad and 0.9 times as broad as head; punctation dense and non-umbilicate, much coarser than that of head; interstices glossy, forming narrow ridges; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 55) approximately 0.55 times as long as pronotum; humeral angles obsolete; punctation similar to that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, much finer and sparser on tergites VII and VIII than on tergite VI; interstices without microsculpture and glossy; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 56) with posterior margin very weakly concave in the middle, otherwise unmodified; sternite VIII (Fig. 57) weakly transverse, posterior excision small and V-shaped; aedeagus (Fig 58–60) approximately 0.85 mm long; ventral process short, apically acute in ventral view, and laterally somewhat compressed; dorsolateral apophyses long and slender, distinctly extending beyond apex of ventral process.

Comparative notes. Based on the shapes and chaetotaxy of the male sternite VII and VIII, as well as on the morphology of the aedeagus (short ventral process; long and slender dorso-lateral apophyses), *N. wuliangicus* is closely allied to *N. daliensis*, from which it differs particularly by the more slender dorso-lateral apophyses of the aedeagus. It is reliably distinguished from the geographically close *N. barbatus*, which too was found only in the Wuliang Shan, only by the completely different male sexual characters. The syntopic *N. fissus* is smaller and of more slender habitus, of paler coloration, has a more coarsely punctate head, a less densely punctate abdomen, and completely different male sexual characters.

Distribution and natural history. *Nazeris wuliangicus* was collected in two localities, one in the Wuliang Shan and the other in an adjacent mountain range to the east of Weishan, Yunnan (Fig. 88). The specimens were sifted from leaf litter in shrub habitats at altitudes of 2450–2660 m. Several specimens collected in September are teneral.

***Nazeris nivimontis* sp. n.** (Figs 67–71, 88)

Type material. Holotype ♂ [teneral]: "CHINA: Yunnan, Lincang Pref., Xue Shan, 48 km N Lincang, 2070 m, 24°19'03"N, 100°07'13"E, forest remnant, N-slope, litter & mushrooms sifted, 12.IX.2009, leg. M. Schülke [CH09-45] / Holotypus ♂ *Nazeris nivimontis* sp. n. det. V. Assing 2013" (cAss). Paratype ♂: [teneral]: same data as holotype (cSch).

Etymology. The specific epithet is a noun composed of the Latin noun for snow (nix, nivis) and the genitive of the Latin noun for mountain (mons). It is derived from the name of the mountain (Xue Shan = Snow Mountain) where the species is probably endemic.

Description. Body length 5.6–5.9 mm; length of forebody 3.1–3.3 mm. Head (Fig. 67) 1.00–1.03 times as long as broad. Pronotum (Fig. 67) 0.85 times as broad as head. Other external characters as in *N. wuliangicus*.
♂: sternite VII (Fig. 68) with weakly concave posterior margin, otherwise unmodified; sternite VIII (Fig. 69) approximately 1.1 times as broad as long, posterior excision rather small and approximately V-shaped, but anteriorly rounded, not acute, nearly 0.2 times as deep as length of sternite; aedeagus (Figs 70–71) approximately 0.9 mm long; ventral process short, apically acute in ventral view; dorso-lateral apophyses moderately long and slender, distinctly extending beyond apex of ventral process.

Comparative notes. Based on the male primary and secondary sexual characters, *N. nivimontis* is undoubtedly closely related to *N. dalienesis* and allied species. The shape of the ventral process of the aedeagus of *N. nivimontis* (ventral view) is remarkably similar to that of *N. wuliangicus*, from which *N. nivimontis* is distinguished by slightly larger body size, a larger head, the different shape of the posterior excision of the male sternite VIII, and by the relatively shorter dorso-lateral apophyses.

Distribution and natural history. The type locality is situated in the Xue Shan to the north of Lincang, Yunnan (Fig. 88). Both type specimens are teneral; they were sifted from forest leaf litter at an altitude of 2070 m.

***Nazeris sagittifer* sp. n.** (Figs 76–80, 88)

Type material. Holotype ♂: "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] / Holotypus ♂ *Nazeris sagittifer* sp. n. det. V. Assing 2013" (cAss). Paratypes: 7♂, 3♀ [partly teneral]: same data as holotype (ZFMK, cSch, cAss); 3♀ [partly teneral]: "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, moss, grass roots sifted) 13.IX.2009 D.W. Wrase [48]" (cSch, cAss); 2♂: "CHINA: Yunnan, Lincang Pref., Wuliang Shan, old pass road, W side, 24°42'58.6"N, 100°29'52.0"E, 2200 m, small creek valley with primary forest remnant, litter sifted, 16.IX.2009, leg. M. Schülke [CH09-47a]" (cSch, cAss); 1♂, 2♀: same data, but "litter & debris sifted, ..., 12.X.2009 ... [CH09-47]" (cSch, cAss); 1♀: same data, as before, but leg D.W. Wrase (cSch); 2♂: "CHINA: Yunnan, Lincang/Dali Pref., Wuliang Shan, old pass road, N pass, 24°45'16.4"N, 100°29'50.3"E, 2350 m, forest litter & tea plantation, litter, mushrooms, grass sifted, 16.IX.2009, leg. M. Schülke [CH09-55]" (cSch, cAss).

Etymology. The specific epithet (Latin, adjective: carrying an arrow) alludes to the shape of the ventral process of the aedeagus, which in ventral view somewhat resembles an arrowhead.

Description. External characters as in *N. wuliangicus*.
♂: sternite VII (Fig. 76) with posterior margin distinctly concave in the middle, otherwise unmodified; sternite VIII (Fig. 77) approximately as long as broad, posterior excision narrowly V-shaped, its depth approximately 0.25 times the length of sternite; aedeagus (Figs 78–79) approximately 0.95 mm long; ventral process (Fig. 80) moderately short, apically acute, shaped like an arrowhead in ventral view, laterally somewhat compressed; dorso-lateral apophyses long and slender, distinctly extending beyond apex of ventral process.

Comparative notes. Based on the virtually identical external and the similar male sexual characters, *N. sagittifer* is closely related to the geographically close, apparently parapatric *N. wuliangicus*, from which it is reliably distinguished only by the male sexual characters, especially the more distinctly concave posterior margin of the male sternite VII, the deeper posterior excision of the male sternite VIII, and the longer aedeagus with a differently shaped ventral process and with longer dorso-lateral apophyses.

Distribution and natural history. *Nazeris sagittifer* is known from one locality in the Ailao Shan and two localities in the Wuliang Shan, Yunnan (Fig. 88). The specimens were sifted from forest leaf litter at altitudes of 2200–2350 m, on two occasions together with *N. fissus*. Some of the type specimens are teneral.

Nazeris secatus **sp. n.** (Figs 81–88)

Type material. Holotype ♂: "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] / Holotypus ♂ *Nazeris secatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 3♂, 4♀ [3 teneral]: same data as holotype (cSch, cAss).

Etymology. The specific epithet is the past participle of the Latin verb secare (to cut off) and refers to the truncate lateral portions of the posterior margin of the male sternite VIII.

Description. Body length 5.2–5.8 mm; length of forebody 3.0–3.3 mm. Habitus as in Fig. 81. Coloration: body black; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 82) 1.01–1.04 times as long as broad; median dorsal portion elevated; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture; eyes strongly convex and at least one third as long as the distance from posterior margin of eye to posterior constriction of head, usually somewhat longer. Antenna approximately 1.8 mm long.

Pronotum (Fig. 82) approximately 1.15 times as long as broad and 0.85–0.90 times as broad as head; punctation dense and non-umbilicate, much coarser than that of head; interstices glossy, forming narrow ridges; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 82) approximately 0.55 times as long as pronotum; humeral angles obsolete; punctation similar to that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, somewhat finer and sparser on tergites VII and VIII; interstices without microsculpture and glossy; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 83) with posterior margin weakly concave in the middle, otherwise not distinctly modified; sternite VIII (Fig. 84) approximately 1.05 times as broad as long, lateral portions of posterior margin obliquely truncate, posterior excision moderately deep and U-shaped, approximately 0.2 times as deep as length of sternite; aedeagus (Figs 85–86) 0.95–1.0 mm long; ventral process (Fig. 87) long and apically acute in ventral view, laterally compressed; dorso-lateral apophyses moderately long and weakly curved, slightly extending beyond apex of ventral process.

Comparative notes. The shapes of the male sternites VII and VIII are similar to those of the species allied to *N. daliensis*, but the ventral process of the aedeagus is much longer in relation to the dorso-lateral apophyses. *Nazeris secatus* is distinguished from the syntopic *N. lanuginosus* by slightly smaller body size, the relatively larger and more convex eyes, and the completely different male sexual characters (shape and chaetotaxy of the male sternite VII; sternite VIII with less deep posterior excision and with obliquely truncate lateral portions of the posterior margin; ventral process of the aedeagus less slender in ventral view; dorso-lateral apophyses more slender, less strongly sclerotized, and shorter in relation to ventral process).

Distribution and natural history. The type locality is situated in the Laobie Shan (Fig. 88). The partly teneral type specimens were sifted from litter in a secondary deciduous forest at an altitude of 2375 m, together with *N. lanuginosus*.

Nazeris cangicus **sp. n.** (Figs 89, 91–97)

Type material. Holotype ♂: "CHINA: N-Yunnan [C03-19], Dali Bai Nat. Aut. Pref., Diancang Shan, 3 km W Dali old town, creek valley and pine forest at "Cloud Road", right upper chairlift station, 25°41.1'N, 100°06.8'E, 2650–2750 m / [C03-19] litter, pine needles, moss (dry and wet), mushrooms, 29.VIII.2003, leg. M. Schülke / Holotypus ♂ *Nazeris cangicus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♂, 1♀: same data as holotype (cSch); 1♂: "CHINA: N-Yunnan Dali Bai Aut. Pref. Diancang Shan 3 km W Dali, 25°41.1'N, 100°06.8'E, 2650–2750 m / 29.8.03, A. Smetana [C140]" (cAss); 3♂: "CHINA: N-Yunnan [C03-20], Dali Bai Nat. Aut. Pref., Diancang Shan, 4 km W Dali old town, 25°41.4'N, 100°06.7'E, 2900–3000 m, E-slope with devastated forest and old pine forest, mushrooms, 31.VIII.2003, leg. M. Schülke" (cSch, cAss); 1♀ [teneral]: "CHINA (N-Yunnan) Dali Bai Nat. Aut. Pref., Diancang Shan, 4 km W Dali old town, 2900–3000 m, 25°41.4'N, 100°06.7'E, E-slope, (edge of road, slope with Salix, bamboo, knotgrass, leaf litter, sifted), 22.VI.2005 D.W. Wrase [15]" (cSch); 2♂, 1♀: "CHINA: Yunnan [CH07-03], Dali Bai Auton. Pref., Diancang Shan W Dali, 25°41'49"N, 100°06'24"E, 2970 m, sifted at rock edges and under shrubs, 28.V.2007, M. Schülke" (cSch, cAss); 1♂, 3♀: "CHINA: Yunnan [CH07-04], Dali Bai Auton. Pref., Diancang Shan W Dali, 25°41'47"N, 100°06'32"E, 3016 m, moist escarpment, litter sifted, 28.V.2007, M. Schülke" (cSch, cAss); 1♂: "CHINA: Yunnan, Dali Bai Aut. Pref., Diacang [sic] Shan, W Dali, 25°41'52"N, 100°06'28"E, 2960 m, along path, sifted from litter, moss, flood debris, 6.IX.2009, leg. M. Schülke [CH09-31]" (cAss); 1♂, 1♀: "CHINA (Yunnan)

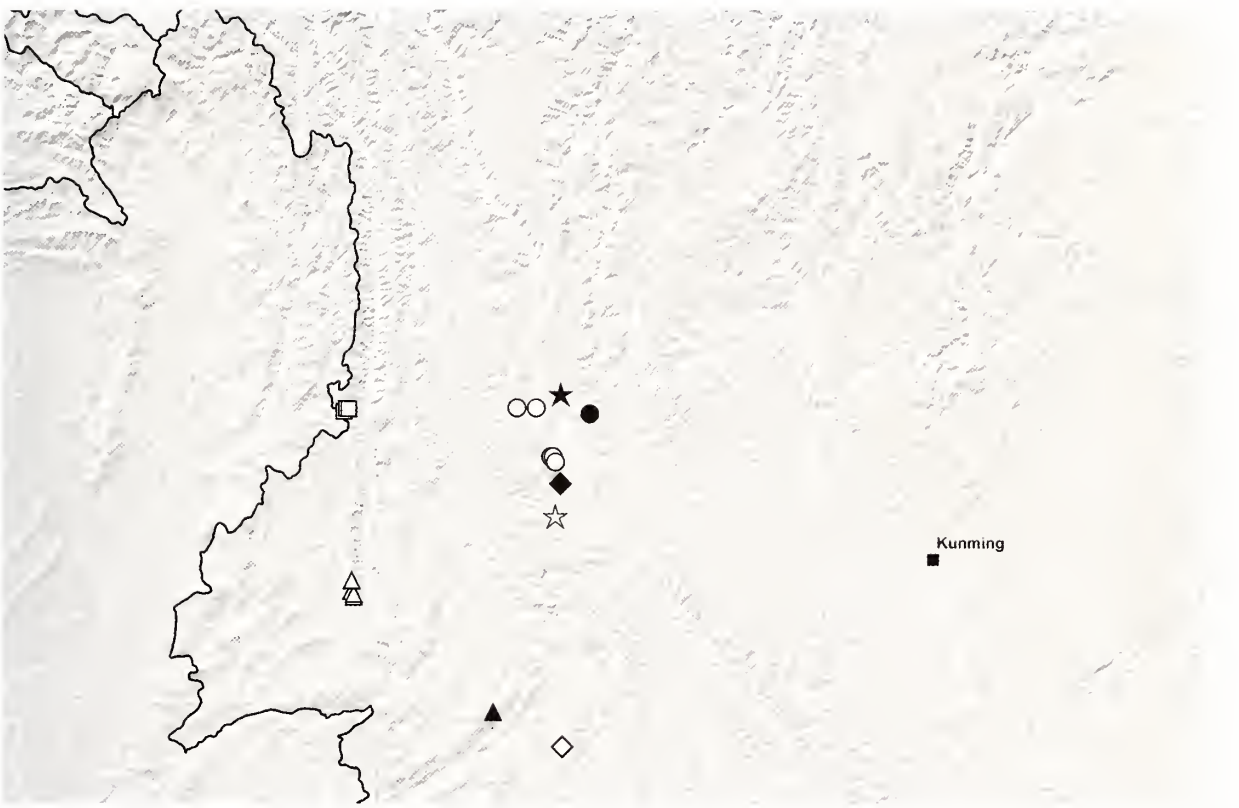


Fig. 89. Distributions of *Nazeris* species in Yunnan: *N. cangicus* (open circles); *N. aculeatus* (filled circle); *N. zhemoicus* (filled diamond); *N. pungens* (open diamond); *N. lanuginosus* (filled triangle); *N. peniculatus* (filled star); *N. barbatus* (open star); *N. curvus* (open triangles); *N. subdentatus* (open squares).

Dali Bai Aut. Pref., Diancang Shan E pass, 43 km NW Dali, 2700 m, (secondary pine forest, litter, moss sifted), 25°59'50"N, 100°00'30"E, 23.VIII.2009 D.W. Wrase [02]" (cSch, cAss); 1♀: "CHINA: Yunnan, Dali Bai Aut. Pref., Diancang Shan, E pass, 43 km NW Dali, 25°59'50"N, 100°00'30"E, 2700 m, secondary pine forest, litter, moss and mushrooms sifted, 23.VIII.2009, leg. M. Schülke [CH09-02]" (ZFMK); 1♂, 2♀: "CHINA (Yunnan) Dali Bai Aut. Pref., Diancang Shan E pass, 43 km NW Dali, 3104 m, (oak shrubs, Rhod., bamboo, litter sifted), 25°59'33.5"N, 99°52'12.5"E, 23.VIII.2009 D.W. Wrase [01A]" (cSch, cAss); 2♂, 3♀ [partly slightly teneral]: "CHINA: Yunnan [CH07-08], Dali Bai Auton. Pref., Diancang Shan 43 km NW Dali, 3078 m, 25°59'35"N, 99°52'06"E, W pass, Rhodod., oaks, bamboo, sifted, 29.V.2007, M. Schülke" (cSch, cAss); 3♂: "P.R. CHINA, Yunnan, E slope Cangshan at Dali, N25°40'15.5", E100°07'45.4", 18.v.2010, 2657 m, sifting17, V.Grebennikov" (CAS, cAss); 1♂, 4♀: "P.R. CHINA, Yunnan, E slope Cangshan at Dali, N25°40'13.2", E100°07'54.8", 11.v.2010, 2728 m, sifting05, V.Grebennikov" (CAS, cSme); 1♀: "P.R. CHINA, Yunnan, E slope Cangshan at Dali, N25°40'15.1", E100°07'39.9", 10.v.2010, 2711 m, sifting04, V.Grebennikov" (CAS); 1♀: "P.R. CHINA, Yunnan, E slope Cangshan at Dali, N25°40'13.2", E100°07'54.8", 13.v.2010, 2728 m, sifting08, V.Grebennikov" (CAS); 1♂: "P.R. CHINA, Yunnan, E slope Cangshan at Dali, N25°40'13.2", E100°07'54.8", 9.v.2010, 2728 m, sifting01, V.Grebennikov" (cAss); 1♀: "CHINA: Yunnan [CH07-04], Dali Bai Auton. Pref., Diancang Shan W Dali, 25°41'47"N, 100°06'32"E, 3016 m, moist escarpment, litter sifted, 28.V.2007, leg. A. Pütz" (cPüt); 1♂, 2♀: "CHINA: Yunnan, above Dali, 2500–2700 m, 9.–18.IV.1999, leg. W. Schawaller" (SMNS, cAss).

Etymology. The specific epithet is an adjective derived from Cang (= Diancang) Shan, the name of the mountain range where the species was discovered.

Description. Body length 6.0–7.0 mm; length of forebody 3.1–3.5 mm. Habitus as in Fig. 91. Coloration: body blackish; legs yellowish; antennae yellowish, with antennomere 1 slightly darker.

Head (Fig. 92) 1.05–1.10 times as long as broad; median dorsal portion more or less distinctly elevated, i.e., above the level of the frons; punctation coarse, dense, and umbilicate (Fig. 93); interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 1.7–1.9 mm long.

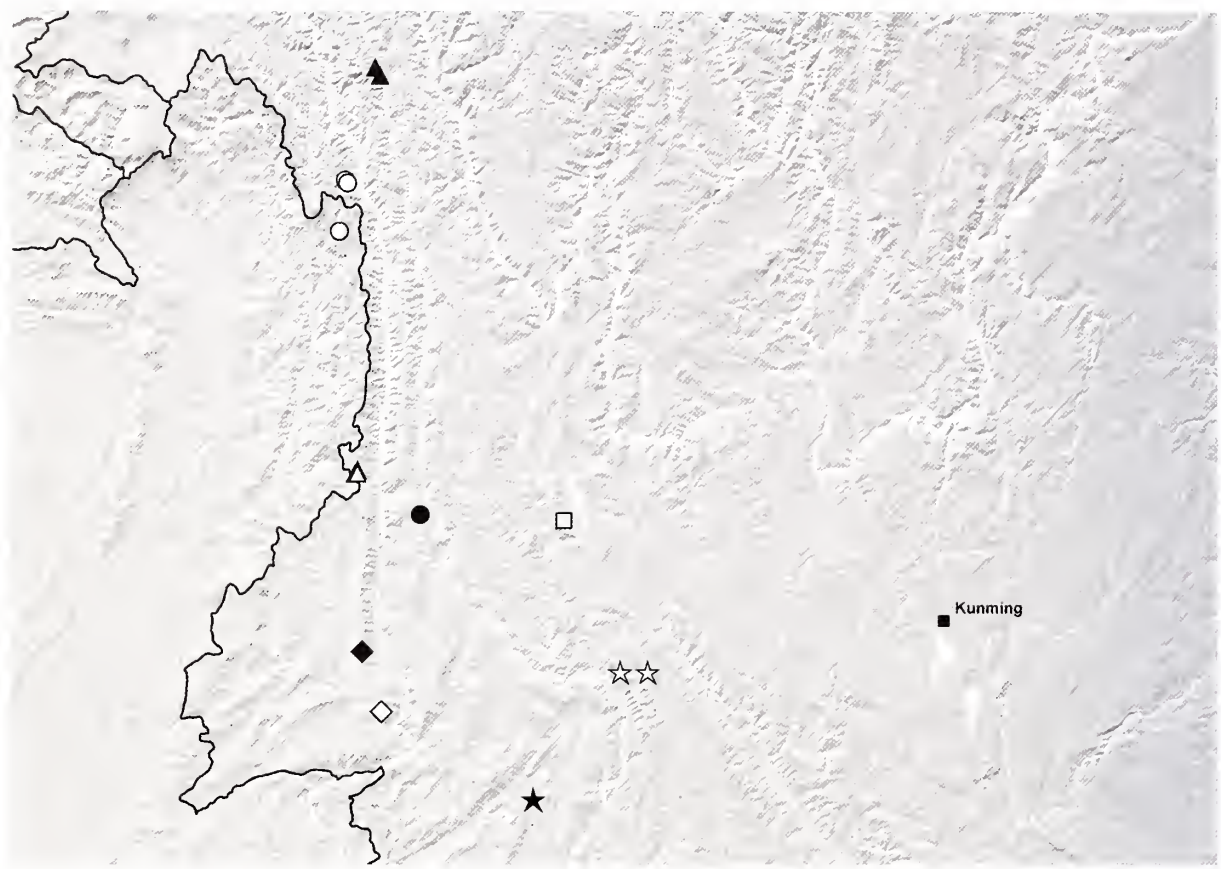


Fig. 90. Distributions of *Nazeris* species in Yunnan: *N. firmilobatus* (open circles); *N. spiculatus* (open diamond); *N. infractus* (filled circle); *N. meilicus* (filled triangles); *N. vexillatus* and *N. hastatus* (open triangles); *N. circumclusus* (filled diamond); *N. bangmaicus* (filled star); *N. fissus* (open stars); *N. giganteus* (open square).

Pronotum (Fig. 92) approximately 1.15 times as long as broad and 0.9 times as broad as head; punctation approximately as coarse as that of head, non-umbilicate, and moderately dense; interstices narrower than diameter of punctures, glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

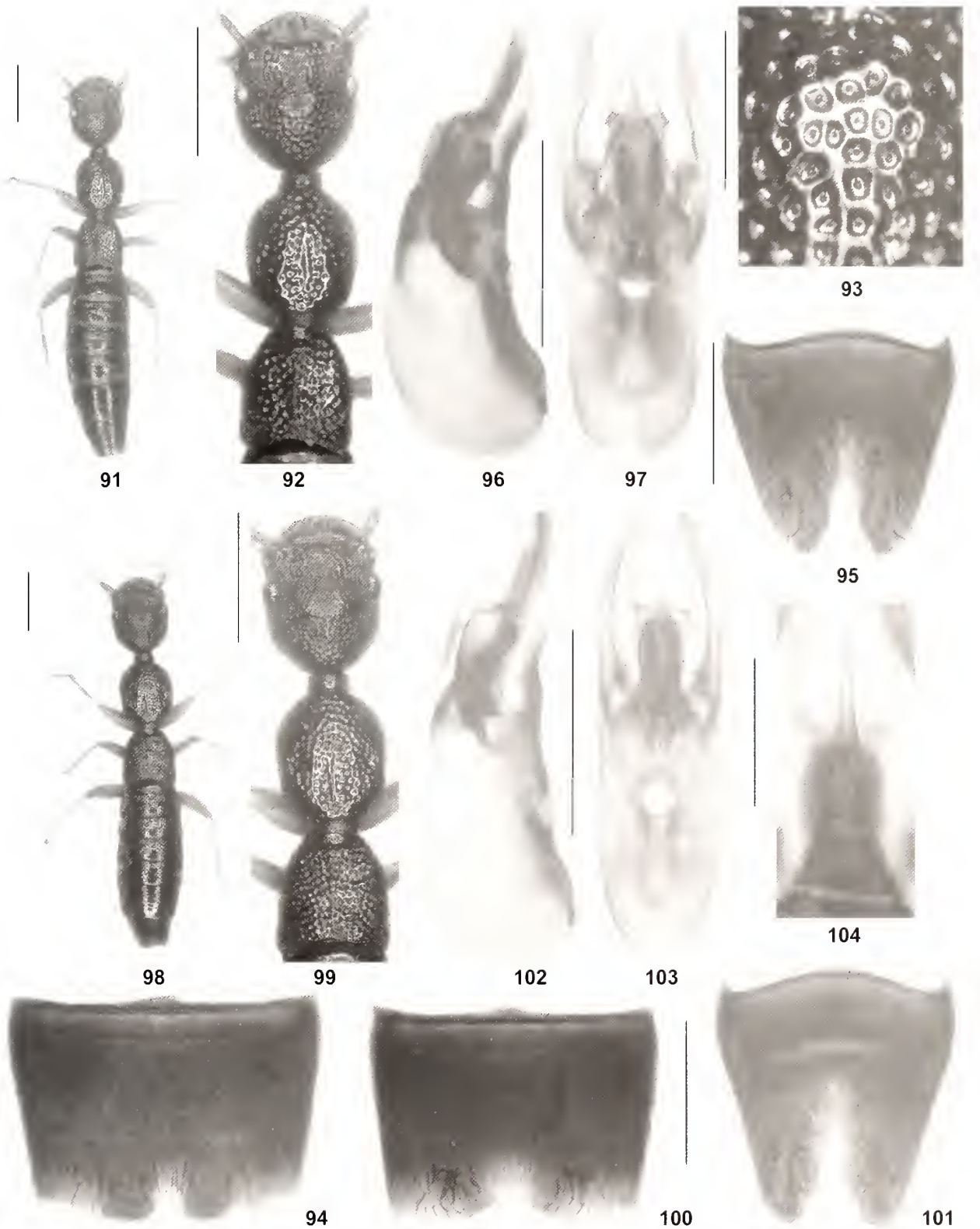
Elytra (Fig. 92) 0.60–0.65 times as long as pronotum; humeral angles obsolete; punctation dense, moderately defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.25 times as broad as elytra; punctation dense, defined, and moderately coarse on anterior tergites, gradually becoming less dense and finer towards posterior tergites, sparse and fine on tergite VII, even finer and sparser on tergite VIII; interstices without microsculpture on tergites III–VI, with very shallow microreticulation on tergites VII–VIII; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII weakly convex.

♂: sternite VII (Fig. 94) with posterior margin distinctly concave in the middle; sternite VIII (Fig. 95) approximately as long as broad, posterior excision deep and narrow, approximately 0.35 times as deep as length of sternite; aedeagus (Figs 96–97) 0.9–1.0 mm long; ventral process apically very acute in ventral view, laterally compressed; dorso-lateral apophyses rather short, slightly extending beyond apex of ventral process.

Comparative notes. *Nazeris cangicus* is distinguished from the syntopic *N. daliensis*, a species of similar size, by the coarser, deeper, and less dense punctation of the head, by the more or less distinctly elevated median portion of the head, by the shapes of the male sternites VII and VIII, as well as by the morphology of the aedeagus, particularly the much shorter dorso-lateral apophyses. For illustrations of the head and the male sexual characters of *N. daliensis* see Figs 61–64.

Together with several other species recorded from Yunnan, *N. cangicus* forms a group characterized by more or less blackish body colour, a male sternite VII mostly with a distinct posterior concavity and/or a postero-median impression, a male sternite VIII often with a median impression and a rather deep and narrow posterior excision, and an aedeagus with a slender, laterally more or less compressed, and apically acute ventral process and with short to moderately long dorso-lateral apophyses.



Figs 91–104. *Nazeris cangicus* **(91–97)** and *N. aculeatus* **(98–104). 91, 98:** habitus; **92, 99:** forebody; **93:** median dorsal portion of head; **94, 100:** male sternite VII; **95, 101:** male sternite VIII; **96–97, 102–103:** aedeagus in lateral and in ventral view; **104:** ventral process of aedeagus in ventral view. Scale bars: 91–92, 98–99: 1.0 mm; 94–97, 100–103: 0.5 mm, 93, 104: 0.2 mm.

Distribution and natural history. The type specimens were discovered in several localities in the Diancang Shan (Fig. 89). They were sifted from litter and moss in various kinds of forests and shrub habitats at altitudes of 2650–3100 m, partly together with *N. daliensis*.

Nazeris aculeatus sp. n. (Figs 89, 98–104)

Type material. Holotype ♂: "CHINA: Yunnan, Dali Bai Aut. Pref., Jizu Shan, summit plateau, 37 km NE Dali, 25°58'30"N, 100°21'36"E, 3150 m, mixed forest, sifted from litter, moss & mushrooms, 5.IX.2009, leg. M. Schülke [CH09-28] / Holotypus ♂ *Nazeris aculeatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♀: same data as holotype (cSch); 3♂, 1♀: "CHINA (Yunnan) Dali Bai Aut. Pref., Jizu Shan, summit plateau, 37 km NE Dali 3150 m, (mixed forest, sifted from litter, moss), 25°58'30"N, 100°21'36"E, 5.IX.2009 D.W. Wrase [28]" (cSch, cAss).

Etymology. The specific epithet (Latin, adjective: with sting) alludes to the very slender and apically acute ventral process of the aedeagus in ventral view.

Description. Body length 5.8–6.8 mm; length of forebody 3.1–3.4 mm. Habitus as in Fig. 98. Coloration: body blackish-brown to blackish; legs yellowish; antennae yellowish, with antennomere 1 slightly darker.

Head (Fig. 99) 1.05–1.10 times as long as broad; median dorsal portion weakly elevated; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.8 mm long.

Pronotum (Fig. 99) approximately 1.15–1.20 times as long as broad and 0.9 times as broad as head; punctation approximately as coarse as that of head, non-umbilicate, and dense; interstices distinctly narrower than diameter of punctures, glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 99) approximately 0.6 times as long as pronotum; humeral angles obsolete; punctation dense, moderately defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.2 times as broad as elytra; punctation dense, defined, and moderately coarse on anterior tergites, gradually becoming less dense and finer towards posterior tergites, sparse and fine on tergite VII, even finer and sparser on tergite VIII; interstices without microsculpture on tergites III–VI, with very shallow microreticulation on tergites VII–VIII; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: posterior margin of sternite VII with broadly V-shaped median excision (Fig. 100); sternite VIII (Fig. 101) approximately as long as broad, posterior excision deep and narrow, approximately 0.35 times as deep as length of sternite; aedeagus (Figs 102–104) approximately 1.0 mm long; ventral process narrow and apically very acute in ventral view, laterally compressed in dry preparation, lateral parts somewhat dilated in ventral view (in microscopic preparation); dorso-lateral apophyses of moderate length, slightly extending beyond apex of ventral process.

Comparative notes. Based on the similar external and particularly the similar male sexual characters, *Nazeris aculeatus* is closely related to, and probably the adelphotaxon of, *N. cangicus*, from which it differs by the less coarse and slightly denser punctation of the forebody, the shape of the posterior excision of the male sternite VII, and by the morphology of the aedeagus (ventral face of the ventral process basally more slender, lateral parts of ventral process of different shape). It is distinguished from the sympatric *N. jizushanensis* by the slightly more coarsely punctate and less matt head, the less densely and less coarsely punctate pronotum, the less coarsely and less densely punctate abdomen, the presence of shallow microsculpture on tergites VII and VIII (absent in *N. jizushanensis*), the completely different shapes of the male sternites VII and VIII, and by the different morphology of the aedeagus (shape of venrtral process both in ventral and in lateral view; dorso-lateral apophyses much shorter in relation to ventral process).

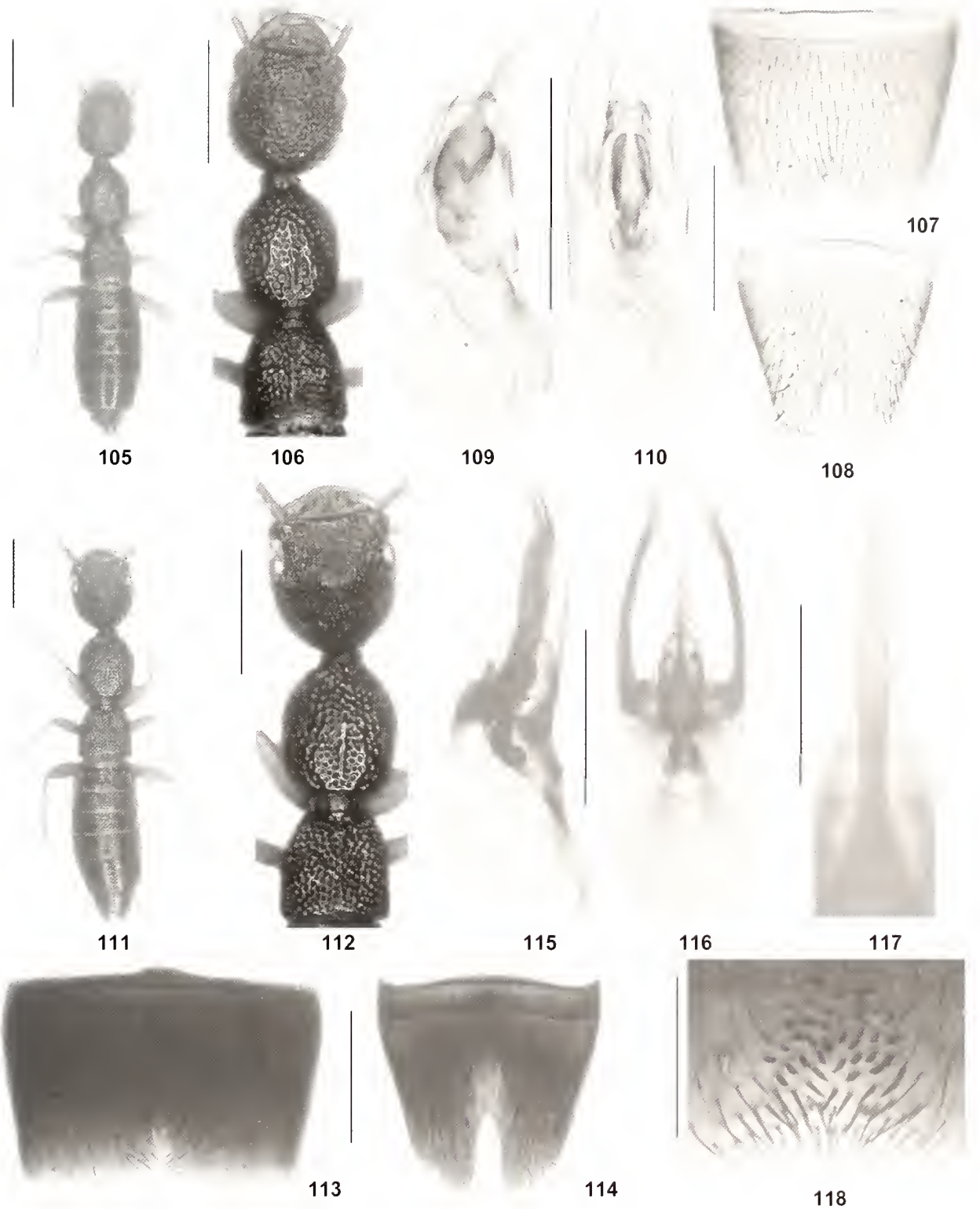
Distribution and natural history. The type locality is situated nearly 40 km to the northeast of Dali, on the summit of the Jizu Shan (Fig. 89) at an altitude of 3150 m. The specimens were sifted from litter and moss in a mixed forest.

Nazeris zhemoicus sp. n. (Figs 89, 105–110)

Type material. Holotype ♂ [teneral]: "CHINA: Yunnan, Dali Bai Aut. Pref., Zhemo Shan, 7 km SW Xiaguan, 25°32-33'N, 100°10-11'E, 2870–2970 m, scrub with bamboo, oaks & Rhododendr., litter sifted, 18.IX.2009, leg. M. Schülke [CH09-60] / Holotypus ♂ *Nazeris zhemoicus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 2♀: same data as holotype (cSch, cAss).

Etymology. The specific epithet is an adjective derived from the name of the mountain where the species is probably endemic.

Description. Body length 5.4–5.7 mm; length of forebody 3.0–3.1 mm. Habitus as in Fig. 105. External characters (Fig. 106) as in *N. cangicus*.



Figs 105–118. *Nazeris zhemoicus* **(105–110)**, *N. pungens* **(111–117)**, and *N. peniculatus* **(118)**. **105, 111:** habitus; **106, 112:** forebody; **107, 113:** male sternite VII; **108, 114:** male sternite VIII; **109–110, 115–116:** aedeagus in lateral and in ventral view; **117:** ventral proeess of aedeagus in ventral view; **118:** postero-median portion of male sternite VII. Seale bars: 105–106, 111–112: 1.0 mm; 107–110, 113–116: 0.5 mm, 117–118: 0.2 mm.

♂: sternite VII (Fig. 107) with small postero-median impression, posterior margin with distinct excision in the middle; sternite VIII (Fig. 108) approximately as long as broad and with oblong median impression, posterior excision deep and rather narrow, approximately one third as deep as length of sternite; aedeagus (Figs 109–110) approximately 0.9 mm long; ventral process short, laterally somewhat compressed; dorso-lateral apophyses simple, distinctly extending beyond apex of ventral process.

Comparative notes. As can be inferred from the highly similar external and particularly the male sexual characters (sternite VII with posterior impression and medially excised posterior margin; sternite VIII with deep and narrow posterior excision; morphology of the aedeagus), *N. zhemoicus* is closely related to *N. cangicus*, from which it differs by the smaller aedeagus with a differently shaped ventral process and with the dorso-lateral apophyses longer in relation to the ventral process.

Distribution and natural history. The type locality is situated in the Zhemo Shan to the southwest of Xiaguan in Yunnan (Fig. 89). The specimens were sifted from leaf litter in a shrub habitat with oak, bamboo, and rhododendron at an altitude of 2870–2970 m, together with two females of a presumably undescribed species. The holotype is distinctly teneral.

Nazeris pungens sp. n. (Figs 89, 111–117)

Type material. Holotype ♂: "CHINA: Yunnan, Lincang Pref., Xue Shan, 11 km ENE Lincang, 2510 m, 23°55'01"N, 100°11'17.5"E, second. pine forest with Rhodod., small cleft with water, litter & mushrooms sifted, 10.IX.2009, leg. M. Schülke [CH09-39] / Holotypus ♂ *Nazeris pungens* sp. n. det. V. Assing 2013" (cAss). Paratypes: 21♂, 17♀ [partly teneral]: same data as holotype (cSch, cAss); 5♂, 4♀ [partly teneral]: "CHINA (Yunnan) Lincang Pref., Xue Shan, 11 km ENE Lincang, 2510 m, 23°55'01"N, 100°11'17.5"E (second. pine forest with Rhodod., small cleft with water, litter sifted) 10.IX.2009 D.W. Wrase [39]" (ZFMK, cSch, cAss).

Etymology. The specific epithet is the present participle of the Latin verb pungere (to sting) and refers to the sting-shaped (ventral view) ventral process of the aedeagus.

Description. Body length 5.5–6.5 mm; length of forebody 3.2–3.6 mm. Habitus as in Fig. 111. Coloration: body black; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 112) 1.03–1.09 times as long as broad; median dorsal portion weakly elevated; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture; eyes moderately small, less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 1.9–2.0 mm long.

Pronotum (Fig. 112) 1.15–1.20 times as long as broad and approximately 0.9 times as broad as head; punctation dense and non-umbilicate, distinctly coarser than that of head; interstices glossy, forming narrow ridges; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 112) approximately 0.55 times as long as pronotum; humeral angles obsolete; punctation similar to that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.20–1.25 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, finer and sparser on tergites VII and VIII; interstices without microsculpture and glossy; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

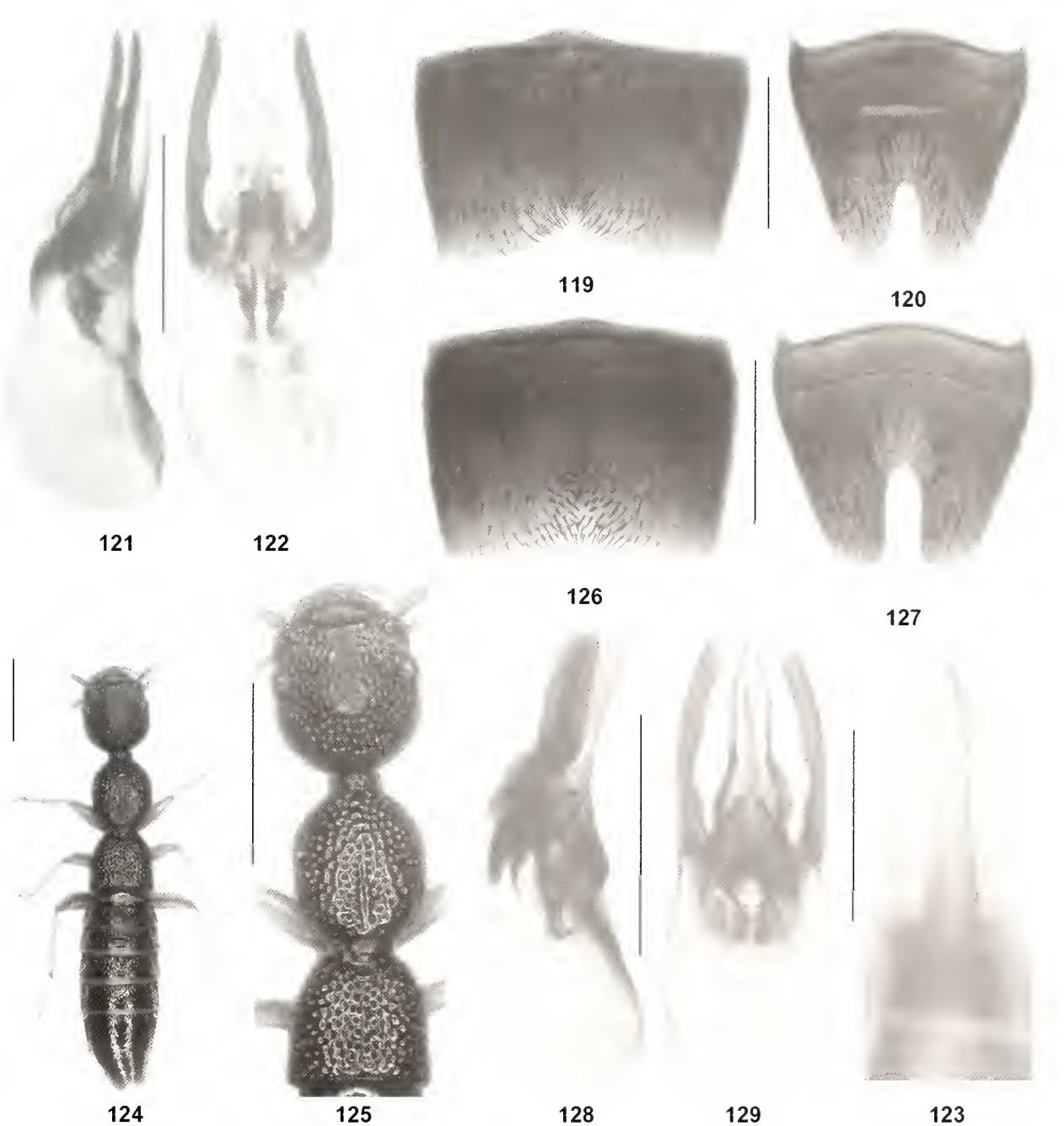
♂: sternite VII (Fig. 113) with small and shallow postero-median impression, this impression with a cluster of rather sparse black setae directed postero-mediad, posterior margin weakly concave in the middle; sternite VIII (Fig. 114) approximately 1.1 times as broad as long, posterior excision deep and narrow, approximately 0.35 times as deep as length of sternite; aedeagus (Figs 115–117) approximately 1.05 mm long; ventral process long, conspicuously narrow and apically very acute in ventral view, laterally compressed; dorso-lateral apophyses long and slender, subapically bent and with lamellate dilatation, distinctly extending beyond apex of ventral process.

Comparative notes. The shape and chaetotaxy of the male sternite VII and the deep, narrow posterior excision of the male sternite VIII suggest that *N. pungens* belongs to the group of species allied to *N. cangicus*. Unlike the above species of this group, the dorso-lateral apophyses of the aedeagus are much longer and more slender.

Distribution and natural history. The type locality is situated in the Xue Shan to the east-northeast of Lincang (Fig. 89). The partly teneral type specimens were sifted from litter in a secondary pine forest with rhododendron at an altitude of 2510 m.

Nazeris lanuginosus sp. n. (Figs 89, 118, 119–123)

Type material. Holotype ♂: "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] / Holotypus ♂ *Nazeris lanuginosus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 3♀ [1 teneral]: same data as holotype (cSch).



Figs 119–129. *Nazeris lanuginosus* **(119–123)** and *N. peniculatus* **(124–129). 119, 126:** male sternite VII; **120, 127:** male sternite VIII; **121–122, 128–129:** aedeagus in lateral and in ventral view; **123:** ventral process of aedeagus in ventral view; **124:** habitus; **125:** forebody. Scale bars: 124–125: 1.0 mm; 119–122, 126–129: 0.5 mm, 123: 0.2 mm.

Etymology. The specific epithet is an adjective derived from the Latin noun lanugo (downy beard, downy pubescence) and alludes to the postero-median cluster of setae on the male sternite VII.

Description. Body length 5.8–6.2 mm; length of forebody 3.4–3.5 mm. Head weakly oblong, 1.01–1.06 times as long as broad. Other external characters as in *N. pungens*.

♂: sternite VII (Fig. 119) with postero-median impression, this impression with a cluster of dense black setae

directed postero-mediad, posterior margin distinctly concave in the middle; sternite VIII (Fig. 120) 1.05 times as broad as long, posterior excision deep and narrow, 0.34 times as deep as length of sternite; aedeagus (Figs 121–123) 1.05 mm long; ventral process long, narrow and apically very acute in ventral view, laterally compressed; dorso-lateral apophyses moderately long, stout, strongly sclerotized, slightly dilated at basal third, and distinctly extending beyond apex of ventral process.

Comparative notes. Based on the shapes and chaetotaxy of the male sternites VII and VIII, as well as on the morphology of the aedeagus, *N. lanuginosus* is most closely related to *N. pungens*, from which it differs by the less oblong head, the denser postero-median cluster of black setae and the pronounced posterior concavity of the male sternite VII, and by the morphology of the aedeagus (shapes of the ventral process and of the dorso-lateral apophyses).

Distribution and natural history. The type locality is situated in the Laobie Shan (Fig. 89). The partly teneral type specimens were sifted from litter in a secondary deciduous forest at an altitude of 2375 m, together with *N. secatus*.

Nazeris peniculatus sp. n. (Fig. 89, 118, 124–129)

Type material. Holotype ♂: "CHINA: Yunnan [CH07-31], Dali Bai Auton. Pref., mtn. range N Er Hai, 42 km N Dali, 26°04'53"N, 100°09'39"E, 2500–2550 m, NE slope with oaks, litter sifted, 12.VI.2007, M. Schülke / Holotypus ♂ *Nazeris peniculatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 10♂, 11♀: same data as holotype (ZFMK, cSch, cAss).

Etymology. The specific epithet is an adjective derived from the Latin noun peniculus (brush) and refers to the conspicuous cluster of modified setae on the male sternite VII.

Description. Small species; body length 4.7–5.7 mm; length of forebody 2.5–2.9 mm. Habitus as in Fig. 124. Coloration: body black; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 125) as long as broad or weakly oblong; median dorsal portion weakly elevated; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.5 mm long.

Pronotum (Fig. 125) approximately 1.15 times as long as broad and 0.9 times as broad as head; punctures dense and non-umbilicate, of similar diameter as those of head, but distinctly deeper; interstices glossy, forming narrow ridges; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 125) approximately 0.6 times as long as pronotum; humeral angles obsolete; punctation similar to that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, much finer and sparser on tergites VII and VIII than on tergite VI; interstices without microsculpture and glossy; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

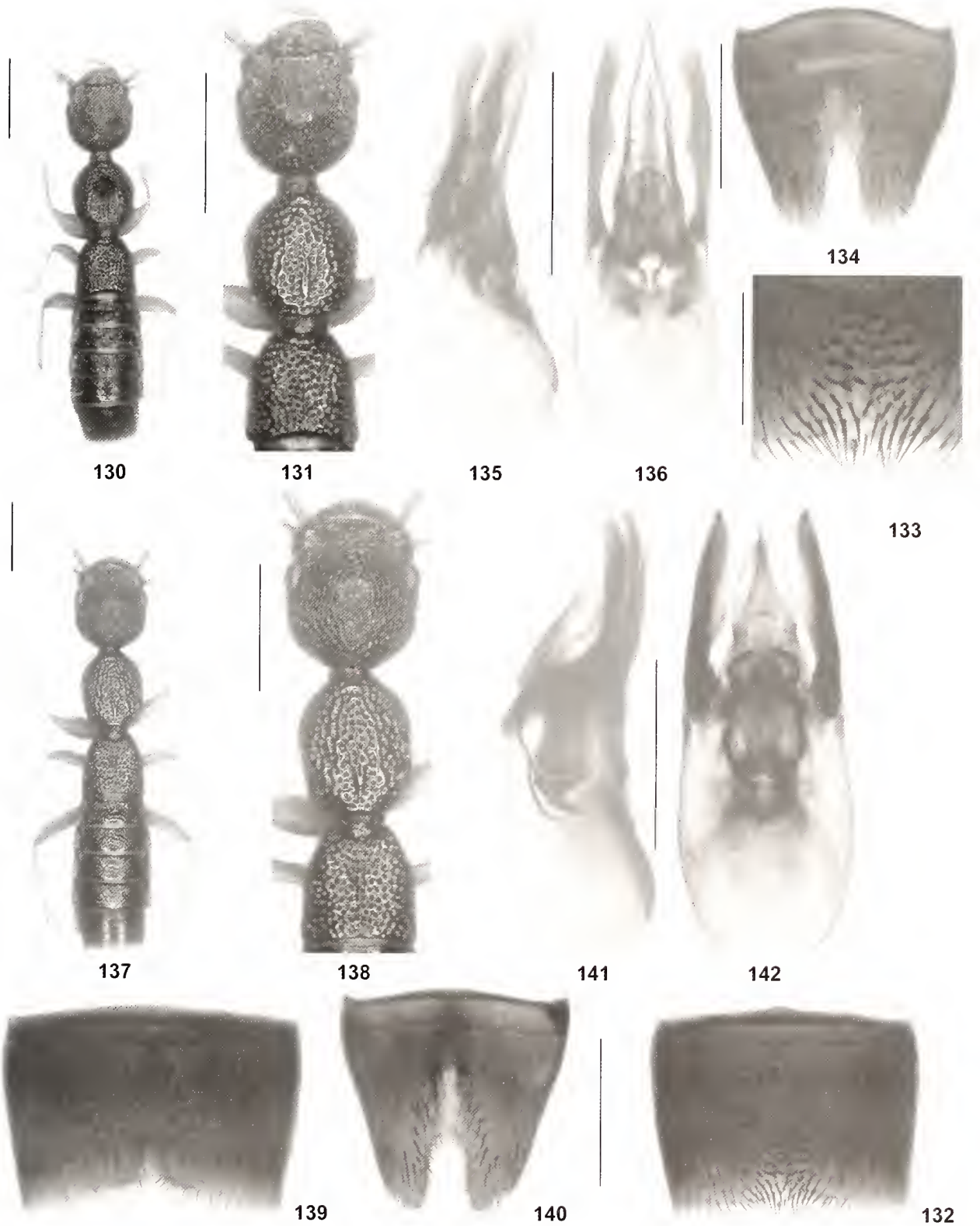
♂: sternite VII (Fig. 126) with postero-median impression, this impression with a conspicuous cluster of distinctly modified short and stout black setae (Fig. 118), posteriorly with dense long black setae, posterior margin distinctly concave in the middle; sternite VIII (Fig. 127) weakly transverse, posterior excision very deep and narrowly U-shaped, approximately 0.4 times as deep as length of sternite; aedeagus (Figs 128–129) approximately 0.95 mm long; ventral process long, narrow and apically very acute in ventral view; dorso-lateral apophyses slender, somewhat sinuate at basal 2/5, apically obliquely truncate, and not reaching apex of ventral process.

Comparative notes. Based on the external (punctation of the forebody) and the male sexual characters (sternite VII with postero-median impression and with concave posterior margin; sternite VIII with deep and narrow posterior excision; ventral process of aedeagus slender, apically acute, and extending beyond the apices of the dorso-lateral apophyses), *N. peniculatus* belongs to the group of species allied to *N. cangicus*. It is distinguished from them particularly by the deeper posterior excision of the male sternite VIII, the morphology of the aedeagus, and (except for *N. barbatus*) by the conspicuous chaetotaxy of the male sternite VII.

Distribution and natural history. The type locality is situated in a mountain range to the north of the Er Hai lake (Fig. 89). The specimens were sifted from oak leaf litter at an altitude of 2500–2550 m.

Nazeris barbatus sp. n. (Figs 89, 130–136)

Type material. Holotype ♂: "CHINA: Yunnan, Dali Bai Aut. Pref., Wuliang Shan, 20 km NW Weishan, 25°19'58"N, 100°07'59"E, 1900 m, creek valley, litter & old flood debris sifted, 17.IX.2009, leg. M. Schülke [CH09-58] / Holotypus ♂ *Nazeris barbatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♂, 1♀: same data as holotype (cSch).



Figs 130–142. *Nazeris barbatus* **(130–136)** and *N. firmilobatus* **(137–142). 130, 137:** habitus; **131, 138:** forebody; **132, 139:** male sternite VII; **133:** postero-median portion of male sternite VII; **134, 140:** male sternite VIII; **135–136, 141–142:** aedeagus in lateral and in ventral view. Scale bars: 130–131, 137–138: 1.0 mm; 132, 134–136, 139–142: 0.5 mm, 133: 0.2 mm.

Etymology. The specific epithet (Latin, adjective: bearded) refers to the conspicuous cluster of modified setae on the male sternite VII.

Description. Body length 5.2–5.7 mm; length of forebody 2.8–3.1 mm. Habitus as in Fig. 130. Coloration: forebody dark-brown; abdomen blackish-brown; legs yellowish; antennae yellowish, with antennomere I slightly darker. Other external characters (Fig. 131) as in *N. peniculatus*, except for the on average shallower punctation of the head.

♂: sternite VII (Fig. 132) with postero-median impression, this impression with a cluster of distinctly modified short and stout black setae (Fig. 133), posteriorly with dense long black setae, posterior margin in the middle with distinct concavity, middle of this concavity with a triangular projection; sternite VIII (Fig. 134) approximately as long as broad, posterior excision deep and narrowly U-shaped, approximately one third as deep as length of sternite; aedeagus (Figs 135–136) approximately 1.05 mm long; ventral process long, narrow and apically very acute in ventral view; dorso-lateral apophyses slender, somewhat dilated in the middle, apically obliquely truncate, and not reaching apex of ventral process.

Comparative notes. As can be inferred from the similar external and particularly the similar male sexual characters, above all the similarly derived chaetotaxy of the male sternite VII (unique among the *Nazeris* species known from Yunnan) and the similarly derived morphology of the aedeagus (long and slender ventral process), *N. barbatus* is most closely related to *N. peniculatus*, from which it differs by the median projection in the posterior concavity of the male sternite VII, the less deep posterior excision of the male sternite VIII, and the longer aedeagus with differently shaped dorso-lateral apophyses.

Distribution and natural history. The type locality is situated in the Wuliang Shan, to the northwest of Weishan, Yunnan (Fig. 89). The specimens were sifted from litter and old flood debris at an altitude of 1900 m.

***Nazeris firmilobatus* sp. n.** (Figs 90, 137–142)

Type material. Holotype ♂: "P.R. CHINA, Yunnan, E slope N Gaoligongshan, N27°45'40.8" E098°35'03.2", 03.vi.2010, 2536 m, sifting 27, V. Grebennikov / Holotypus ♂ *Nazeris firmilobatus* sp. n. det. V. Assing 2013" (CAS). Paratypes: 2♂, 3♀: same data as holotype (CAS, cSme, cAss); 2♂, 3♀: "P.R. CHINA, Yunnan, E slope N Gaoligongshan, N27°45'27.1" E098°35'34.5", 02.vi.2010, 2600 m, sifting26, V. Grebennikov" (CAS, cSme, cAss); 2♂, 1♀: "P.R. CHINA, Yunnan, E slope N Gaoligongshan, N27°46.8' E098°33.1', 12–15.vi.2009, 2000–3000 m, sifting I–7, V. Grebennikov" (CAS, cSme, cAss).

Etymology. The specific epithet is an adjective composed of the Latin adjectives firmus (stout, firm) and lobatus (lobed). It refers to the stout dorso-lateral apophyses of the aedeagus.

Description. Body length 6.0–7.0 mm; length of forebody 3.3–3.6 mm. Habitus as in Fig. 137. Coloration: body blackish-brown to blackish; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 138) approximately 1.05 times as long as broad; median dorsal portion more or less distinctly elevated; punctation coarse, dense, and umbilicate; interstices without microsculpture; eyes moderately small, less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 2.0 mm long.

Pronotum (Fig. 138) approximately 1.2 times as long as broad and 0.85 times as broad as head; punctation very dense, coarser than that of head, non-umbilicate; interstices glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 138) approximately 0.6 times as long as pronotum; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.25 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, less dense and less coarse on tergite VII, finer and sparser on tergite VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: sternite VII (Fig. 139) with small postero-median impression, posterior margin distinctly concave in the middle; sternite VIII (Fig. 140) approximately as long as broad, with narrow, but long and distinct median impression, posterior excision deep and rather narrow, approximately one third as deep as length of sternite; aedeagus (Figs 141–142) approximately 1.1 mm long; ventral process narrow and apically acute in ventral view, laterally compressed; dorso-lateral apophyses stout, somewhat extending beyond apex of ventral process.

Comparative notes. *Nazeris firmilobatus* is readily distinguished from the four previously described species distributed in the Gaoligong Shan by the distinctly stouter and nearly straight dorso-lateral apophyses of the aedeagus.

Distribution and natural history. The species was found in three geographically close localities in the northern Gaoligong Shan (Fig. 90). The specimens with specified altitudes on the labels were sifted at elevations of approximately 2540 and 2600 m.

***Nazeris spiculatus* sp. n.** (Figs 90, 143–149)

Type material. Holotype ♂: "CHINA: Yunnan [CH07-19], Dehong Dai Aut. Pref., mountain range 31 km E Luxi, 2280 m, 24°29'31"N, 98°52'58"E, secnd. pine forest with old decid. trees, litter sifted, 3.VI.3007, M. Schülke / Holotypus ♂ *Nazeris spiculatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♂, 3♀: same data as holotype (cSch, cAss); 2♂, 1♀: same data, but leg. A. Pütz (cPüt, cAss).

Etymology. The specific epithet is an adjective derived from the Latin noun spiculum (thorn, spine) and refers to the shape of the ventral process of the aedeagus in ventral view.

Description. Body length 6.2–7.3 mm; length of forebody 3.4–3.8 mm. Habitus as in Fig. 143. Coloration: body blackish-brown to blackish, with the elytra occasionally paler; legs yellowish; antennae yellowish, with antennomere I slightly darker. External characters (Fig. 144) as in *N. firmilobatus*, except for the denser punctation of the abdominal tergite VII.

♂: sternite VII (Fig. 145) with small postero-median impression, posterior margin distinctly concave; sternite VIII (Fig. 146) approximately as long as broad, with distinct median impression, posterior excision deep and narrowly U-shaped, approximately one third as deep as length of sternite; aedeagus (Figs 147–149) approximately 1.1 mm long; ventral process narrow and apically acute in ventral view, laterally strongly compressed; dorso-lateral apophyses basally strongly dilated and apically slender, just reaching the apex of the ventral process.

Comparative notes. The similar external and male sexual characters suggest that *N. spiculatus* is closely allied to *N. firmilobatus*, *N. curvus*, and allied species, from which it is reliably distinguished only by the shapes of the male sternites VII and VIII, as well as by the morphology of the aedeagus.

Distribution and natural history. The type locality is situated to the east of Luxi, western Yunnan (Fig. 90). The specimens were sifted from litter in a secondary pine forest with old deciduous trees at an altitude of 2280 m.

***Nazeris curvus* sp. n.** (Figs 89, 150–155)

Type material. Holotype ♂: "CHINA (Yunnan) Baoshan Pref., Gaoligong Shan nr. Xiaoheishan N.R., 35 km SE Tengchong, 2110 m, 24°50'16"N, 98°45'43"E (prim. decid. forest, litter, sifted) 30.V.–14.VI.2007 D.W. Wrase [11] / Holotypus ♂ *Nazeris curvus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♂: "CHINA: Yunnan [CH07-13A], Baoshan Pref., Gaoligong Shan, E pass, 36 km SE Tengchong, 2200 m, 24°49'32"N, 98°46'06"E, decid. forest, litter, wood, fungi sifted, 4.VI.2007, M. Schülke" (cSch); 1♀: same data, but "[CH07-13] ... 31.V.2007" (cSch); 1♀: "CHINA: Yunnan, Baoshan Pref., Gaoligong Shan, 32 km SE Tengchong, 2150–2250 m, 24°51-53'N, 98°45'E, devast. prim. and second. forest, litter, dead wood, mushrooms sifted, 26.VIII.2009, leg. M. Schülke [CH09-08/09]" (cSch); 1♀: "CHINA: Yunnan, Baoshan Pref., Gaoligong Shan, W pass 35 km SE Tengchong, 2100 m, 24°50'18"N, 98°45'43"E, devast. prim. dec. forest, litter, wood, mushrooms sifted, 28.VIII.2009, leg. M. Schülke [CH09-06a]" (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" (cAss); 1♀: "CHINA: Yunnan [CH07-15], Baoshan Pref., Gaoligong Shan, 29 km ESE Tengchong, 2350 m, 24°55'37"N, 98°45'09"E, dev. decid forest, litter, wood, fungi sifted, 1.VI.2007, leg. A. Pütz" (cPüt).

Etymology. The specific epithet (Latin, adjective: curved) alludes to the strongly curved dorso-lateral apophyses of the aedeagus.

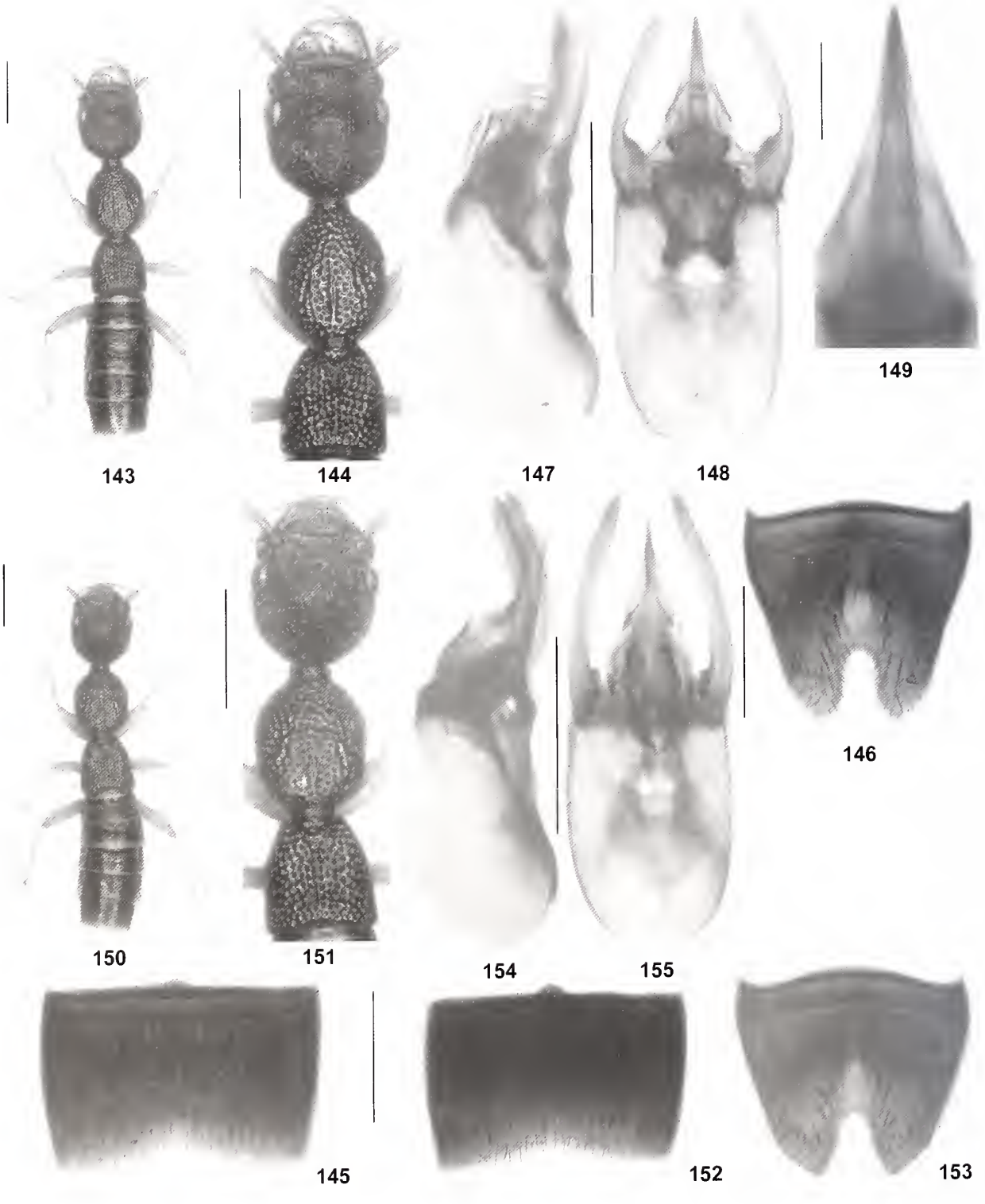
Description. Body length 6.0–6.6 mm; length of forebody 3.1–3.5 mm. Habitus as in Fig. 150. Coloration: body blackish-brown to black; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 151) weakly oblong, 1.01–1.03 times as long as broad; median dorsal portion elevated; punctation moderately coarse and shallow, very dense, and distinctly umbilicate; interstices without microsculpture, reduced to very narrow ridges; eyes rather small, less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 2.0 mm long.

Pronotum (Fig. 151) approximately 1.15–1.20 times as long as broad and 0.85–0.90 times as broad as head; punctation very dense, coarse, much coarser than that of head, non-umbilicate; interstices glossy, but very narrow; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 151) approximately 0.55 times as long as pronotum; humeral angles nearly obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation very dense, defined, and coarse on tergites III–VI, only slightly less dense and less coarse on tergite VII, finer and sparser on tergite VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.



Figs 143–155. *Nazeris spiculatus* (**143–149**) and *N. curvus* (**150–155**). **143, 150:** habitus; **144, 151:** forebody; **145, 152:** male sternite VII; **146, 153:** male sternite VIII; **147–148, 154–155:** aedeagus in lateral and in ventral view; **149:** ventral proeess of aedeagus in ventral view. Seale bars: 143–144, 150–151: 1.0 mm; 145–148, 152–155: 0.5 mm, 149: 0.1 mm.

♂: sternite VII (Fig. 152) with small postero-median impression, posterior margin weakly concave; sternite VIII (Fig. 153) approximately 1.05 times as broad as long and with oblong median impression, posterior excision rather deep and moderately narrow, approximately 0.3 times as deep as length of sternite; aedeagus (Figs 154–155) approximately 1.05 mm long; ventral process narrow and apically acute in ventral view, laterally somewhat compressed; dorso-lateral apophyses stout, strongly curved in lateral view, and slightly extending beyond apex of ventral process.

Comparative notes. The only other species with strongly curved dorso-lateral apophyses in the Gaoligong Shan is the geographically close *N. nomurai* Watanabe & Xiao, 2000 (type locality: "Lujiangba, Gaoligong Shan Mts., Baoshan area"), from which *N. curvus* differs by the much more slender ventral process (ventral view) and by the apically only weakly modified dorso-lateral apophyses. Based on the illustrations provided by Watanabe & Xiao (2000), it seems likely that the types of *N. nomurai* and specimens from "Dabei" listed as additional material, but not included in the type series, are not conspecific.

Distribution and natural history. The known distribution of *N. curvus* is confined to several geographically close localities to the southeast of Tengchong in the Gaoligong Shan (Fig. 89). The specimens were sifted from leaf litter in primary and secondary deciduous forests at altitudes of 2100–2350 m, in one locality together with *N. circumclusus*.

***Nazeris infractus* sp. n.** (Figs 90, 156–162)

Type material. Holotype ♂: "CHINA: Yunnan [CH07-30], Nujiang Lisu Aut. Pref., Nu Shan, 7 km NNW Coajian, 25°43'29"N, 99°07'57"E, 2420 m, second. pine forest with shrubs, litter, bark sifted, 11.VI.2007, M. Schülke / Holotypus ♂ *Nazeris infractus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 2♀: same data as holotype (cSch); 1♀: same data, but leg. Wrase (cSch); 1♀: same data, but leg. Pütz (cPüt).

Etymology. The specific epithet is the past participle of the Latin verb infringere (to bend, to break) and alludes to the apically abruptly bent dorso-lateral apophyses of the aedeagus.

Description. Body length 6.0–6.2 mm; length of forebody 3.2–3.5 mm. Habitus as in Fig. 156. Coloration: body blackish; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 157) as broad as long or weakly oblong; median dorsal portion elevated; punctation moderately coarse and shallow, very dense, and distinctly umbilicate; interstices without microsculpture, reduced to very narrow ridges; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 2.0 mm long.

Pronotum (Fig. 157) approximately 1.15–1.20 times as long as broad and approximately 0.85 times as broad as head; punctation very dense, much coarser than that of head, non-umbilicate; interstices glossy, but narrow; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

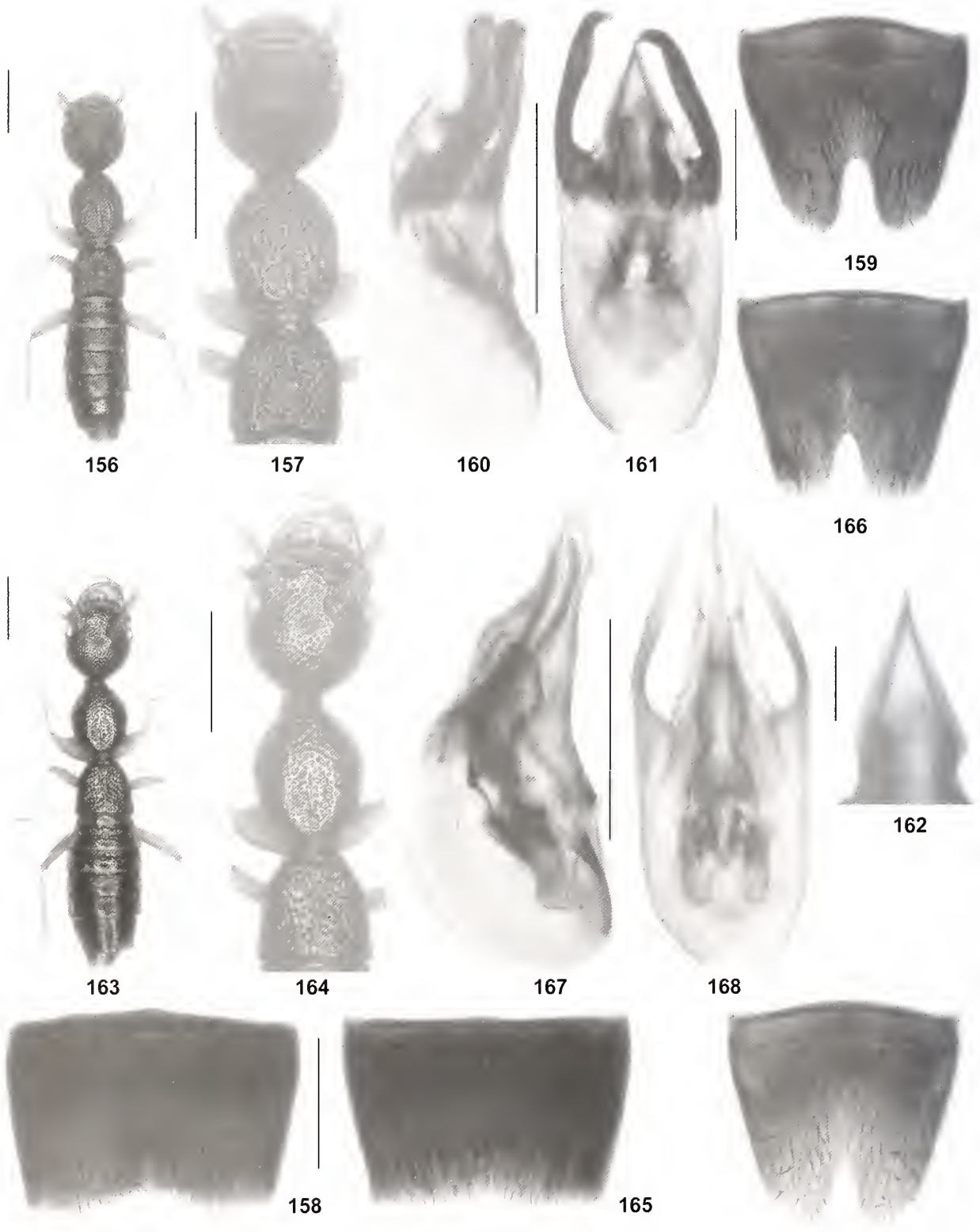
Elytra (Fig. 157) approximately 0.55 times as long as pronotum; humeral angles nearly obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation very dense, defined, and coarse on tergites III–VI, only slightly less dense and less coarse on tergite VII, finer and sparser on tergite VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 158) with postero-median impression, posterior margin distinctly concave in the middle; sternite VIII (Fig. 159) approximately 1.1 times as broad as long and with oblong median impression, posterior excision rather deep and narrowly V-shaped, approximately one third as deep as length of sternite; aedeagus (Figs 160–162) 0.95 mm long; ventral process basally of moderate width and apically acute in ventral view, laterally somewhat compressed; dorso-lateral apophyses stout, apically abruptly bent, and slightly extending beyond apex of ventral process.

Comparative notes. In external morphology, this species is highly similar to *N. curvus*. It is distinguished from all its congeners particularly by the conspicuous shape of the dorso-lateral apophyses of the aedeagus, from *N. curvus* additionally by the medially distinctly concave posterior margin of the male sternite VII, the deeper and differently shaped posterior excision of the male sternite VIII, and by the much broader ventral process of the smaller aedeagus.

Distribution and natural history. The type locality is situated in the Nu Shan, to the north-northwest of Coajian (Fig. 90). The specimens were sifted from leaf litter in a secondary pine forest with shrubs at an altitude of 2420 m. One of the females is teneral.



Figs 156–169. *Nazeris infractus* **(156–162),** *N. subdentatus* **(163–168),** and *N. vexillatus* **(169). 156, 163:** habitus; **157, 164:** forebody; **158, 165:** male sternite VII; **159, 166, 169:** male sternite VIII; **160–161, 167–168:** aedeagus in lateral and in ventral view; **162:** ventral process of aedeagus in ventral view. Scale bars: 156–157, 163–164: 1.0 mm; 158–161, 165–169: 0.5 mm, 162: 0.1 mm.

***Nazeris subdentatus* sp. n.** (Figs 89, 163–168)

Type material. Holotype ♂: "CHINA: Yunnan, Nujiang Lisu Pref., Gaoligong Shan, "Cloud pass" 21 km NW Liuku, 3150 m, 25°58'21"N, 98°41'01"E, shrubs & bamboo, litter sifted, 2.IX.2009, leg. M. Schülke [CH09-22] / Holotypus ♂ *Nazeris subdentatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 1♂: same data as holotype (cSch); 2♀: "CHINA: Yunnan [CH07-27], Nujiang Lisu Aut. Pref., Gaoligong Shan, creek valley 20 km NW Liuku, 25°58'49"N, 98°41'48"E, 3000 m, bamboo, shrubs, litter sifted, 9.VI.2007, M. Schülke" (cSch, cAss); 1♂ [slightly teneral]: "CHINA: Yunnan [CH07-28], Nujiang Lisu Aut. Pref., Gaoligong Shan, side valley 19 km NW Liuku, 25°59'02"N, 98°42'43"E, 2730 m, devast. prim. forest, litter sifted, 9.VI.2007, leg. A. Pütz" (cPüt).

Etymology. The specific epithet (Latin, adjective) alludes to the dentate ventral process of the aedeagus, a character distinguishing this species from all its geographically close congeners.

Description. Body length 6.2–7.5 mm; length of forebody 3.5–5.7 mm. Habitus as in Fig. 163. Coloration: body black; legs yellowish; antennae yellowish, with antennomere 1 slightly darker.

Head (Fig. 164) 1.05–1.10 times as long as broad; median dorsal portion elevated; punctation coarse, moderately dense, and non-umbilicate; interstices without microsculpture, glossy; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 2.0–2.3 mm long.

Pronotum (Fig. 164) small in relation to head, approximately 1.15 times as long as broad and 0.80–0.85 times as broad as head; punctation similar to that of head, but slightly less dense; interstices glossy; midline with very short elevated impunctate band posteriorly.

Elytra (Fig. 164) approximately 0.6 times as long as pronotum, of conspicuously trapezoid shape, i.e., posteriorly strongly dilated and with completely obsolete humeral angles; punctation dense, defined, and somewhat coarser than that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.25 times as broad as elytra, strongly widened from segment III to segment VI; punctation dense, defined, and coarse on tergites III–VI, only slightly less dense and less coarse on tergite VII, finer and sparser on tergite VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: posterior margin of sternite VII with small median concavity (Fig. 165); sternite VIII (Fig. 166) approximately 1.1 times as broad as long, posterior excision deep and narrowly V-shaped, approximately one third as deep as length of sternite; aedeagus (Figs 167–168) approximately 1.05 mm long; ventral process narrow in basal half, sharply edged in apical half, and apically very acute in ventral view, with small subapical tooth in lateral view; dorso-lateral apophyses simple, rather short, not reaching apex of ventral process.

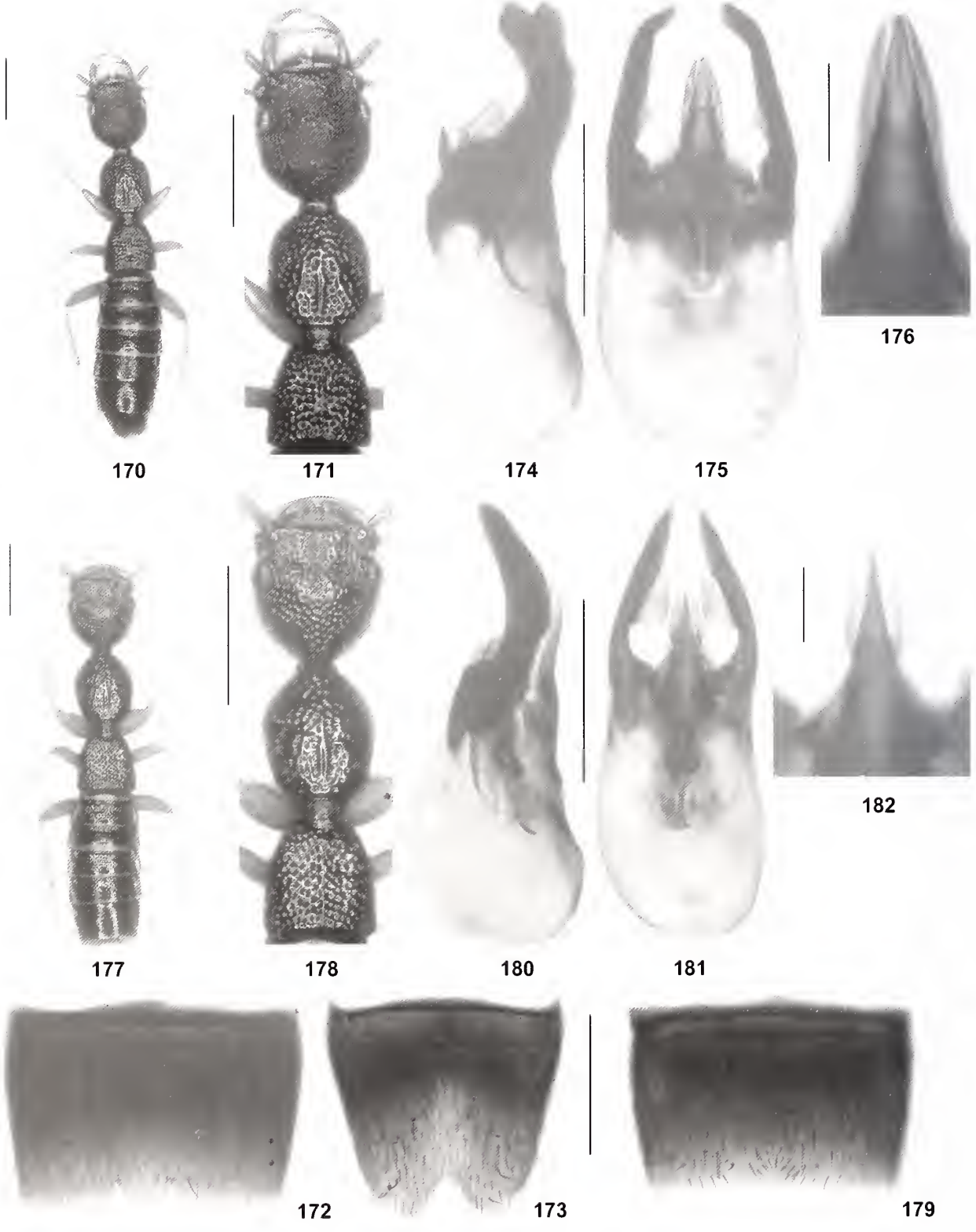
Comparative notes. *Nazeris subdentatus* is distinguished from all its geographically close congeners by the conspicuously trapezoid shape of the elytra, by the shape of the male sternite VIII, and particularly by the shape of the ventral process of the aedeagus (extending beyond dorso-lateral apophyses; ventral portion sharply edged in apical half; subapically dentate in lateral view).

Distribution and natural history. The species was found in two geographically close localities in the northern Gaoligong Shan, to the northwest of Liuku (Fig. 89). The specimens were sifted from leaf litter in vegetation composed of shrubs and bamboo and in a degraded primary forest at altitudes of 2730–3150 m.

***Nazeris meilicus* sp. n.** (Figs 90, 170–176)

Type material. Holotype ♂: "CHINA: N-Yunnan [C2005-07A], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28°25.30'N, 98°48.47'E / small creek valley, mixed forest with bamboo, leaf litter, moss, dead wood, sifted, 13.VI.2005, leg. M. Schülke [C2005-07A] / Holotypus ♂ *Nazeris meilicus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 2♀: same data as holotype (cSch, cAss); 1♂: "CHINA (N-Yunnan) Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28°25.30'N, 98°48.47'E, creek valley (mixed forest, under wood, stones, in litter/soil) 9.&13.VI.2005, D.W. Wrase [07]" (cSch); 1♂, 2♀: "CHINA: N-Yunnan [C2005-09], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 14 km W Deqin, 2580 m / 28°27.47'N, 98°46.35'E, creek valley below glacier, mixed forest, leaf litter, moss, dead wood, sifted, 11.VI.2005, leg. M. Schülke [C2005-09]" (cSch); 1♂, 2♀: "CHINA: N-Yunnan Diqing Tibet. Aut. Pr. Deqin Co. Meili Xue Shan E-side 12 km SW Deqin, 28°25.30'N, 98°48.47'E 2890 m, 13.VI.2005 A. Smetana [C160]" (cSme, cAss); 1♂: same data, but "9.VI.2005 ... [C156]" (cAss); 1♀: "CHINA: N-Yunnan Diqing Tibet. Aut. Pr. Deqin Co. Meili Xue Shan E-side 14 km W Deqin, 28°27.47'N, 98°46.35'E 2580 m, 11.VI.2005 A. Smetana [C158]" (cSme).

Etymology. The specific epithet is an adjective derived from the name of the mountain where this species was discovered.



Figs 170–182. *Nazeris meilicus* (**170–176**) and *N. vexillatus* (**177–182**). **170, 177:** habitus; **171, 178:** forebody; **172, 179:** male sternite VII; **173:** male sternite VIII; **174–175, 180–181:** aedeagus in lateral and in ventral view; **176, 182:** ventral process of aedeagus in ventral view. Scale bars: 170–171, 177–178: 1.0 mm; 172–175, 179–181: 0.5 mm, 176, 182: 0.1 mm.

Description. Body length 5.5–6.7 mm; length of forebody 3.3–3.5 mm. Habitus as in Fig. 170. Coloration: forebody dark-brown to black; abdomen black; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 171) 1.05–1.10 times as long as broad; median dorsal portion weakly elevated; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture, forming very narrow ridges; eyes relatively weakly convex, weakly projecting from lateral contours of head, less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 2.0 mm long.

Pronotum (Fig. 171) approximately 1.2 times as long as broad and 0.85 times as broad as head; punctation very dense, much coarser than that of head, non-umbilicate; interstices glossy, forming narrow ridges; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 171) approximately 0.6 times as long as pronotum; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, distinctly finer and sparser on tergites VII and VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: sternite VII (Fig. 172) with weakly concave posterior margin, otherwise unmodified; sternite VIII (Fig. 173) approximately 1.1 times as broad as long, posterior excision broadly V-shaped, approximately 0.2 times as deep as length of sternite; aedeagus (Figs 174–176) approximately 1.0 mm long; ventral process moderately short and slender, apically acute in ventral view; dorso-lateral apophyses stout, strongly sclerotized, triangularly dilated in the middle, curved dorsad in lateral view, and distinctly extending beyond apex of ventral process.

Comparative notes. This species is characterized particularly by the moderately deep and broadly V-shaped posterior excision of the male sternite VIII and by the distinctive shape of the dorso-lateral apophyses of the aedeagus. The morphology of the aedeagus, in particular the stout and subapically abruptly bent dorso-lateral apophyses, is most similar to that of *N. infractus*, but the shapes of the male sternites VII and VIII are rather different.

Distribution and natural history. *Nazeris meilicus* was collected in two localities in the Meili Xue Shan in western Yunnan (Fig. 90). The specimens were sifted from litter in mixed forests at altitudes of 2580 and 2890 m.

***Nazeris vexillatus* sp. n.** (Figs 90, 169, 177–182)

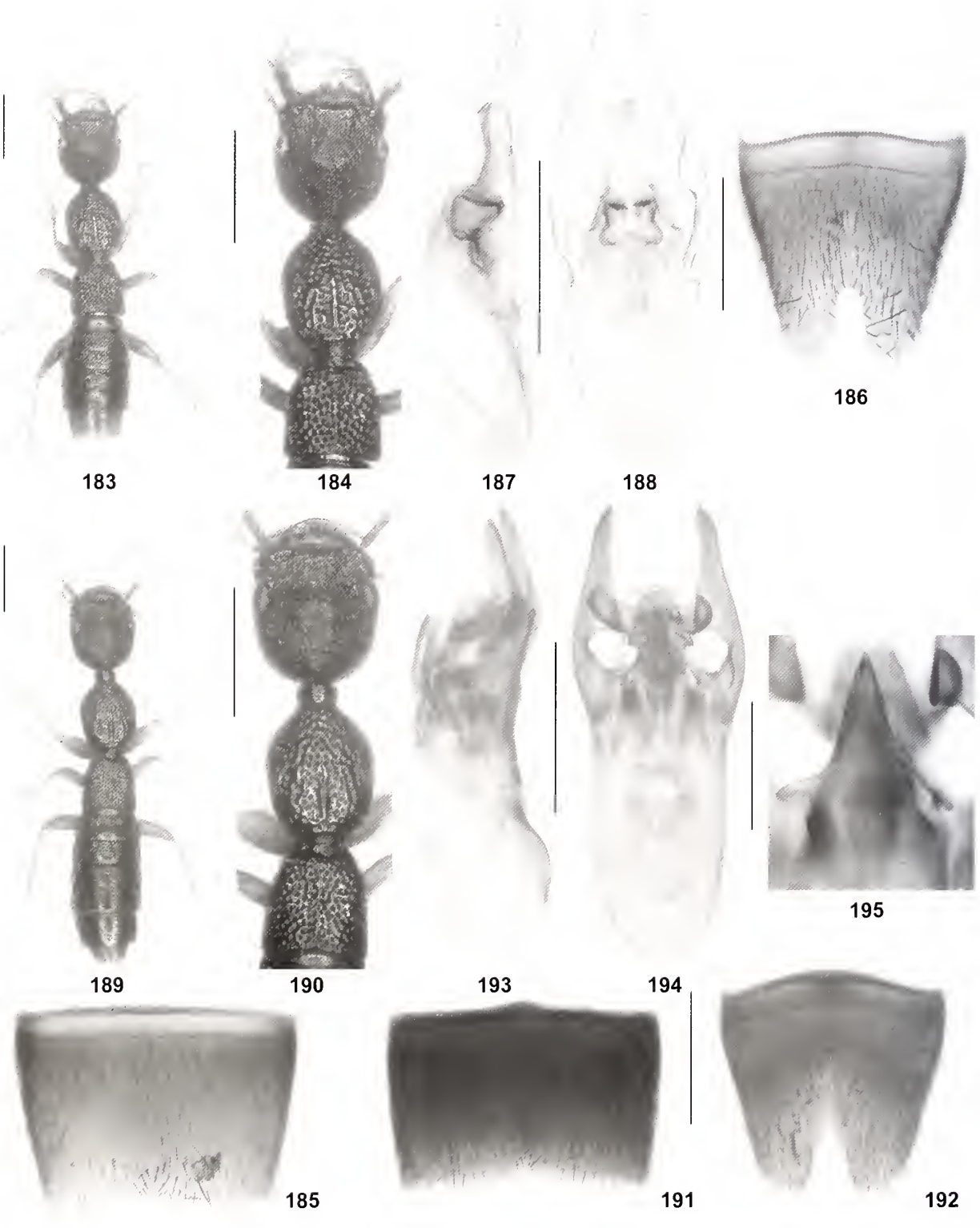
Type material. Holotype ♂: "CHINA: Yunnan, Lujiang Lisu Pref., Gaoligong Shan, "Cloud pass", 21 km NW Liuku, 25°58'21"N, 98°41'01"E, 3150 m, shrubs & bamboo, litter sifted, 3.IX.2009, leg. M. Schülke [CH09-22a] / Holotypus ♂ *Nazeris vexillatus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 4♂, 1♀: same data as holotype (cSch, cAss); 1♀: "CHINA (Yunnan) Lujiang Lisu Pref., Gaoligong Shan "Cloud pass" 3150 m, 21 km NW Liuku (shrubs, *Vaccinium*, bamboo, litter sifted) 25°58'21"N, 98°41'01"E, 2.IX.2009 D.W. Wrase [22A]" (cSch); 1♂: "CHINA: Yunnan, Lujiang Lisu Pref., Gaoligong Shan, "Cloud pass", 21 km NW Liuku, 25°58'21"N, 98°41'01"E, 3150 m, shrubs & bamboo, litter sifted, 2.IX.2009, leg. M. Schülke [CH09-22]" (cAss); 1♂, 2♀: "CHINA: Yunnan [CH07-28A], Nujiang Lisu Aut. Pref., Gaoligong Shan, side valley 19 km NW Liuku, 25°59'02"N, 98°42'23"E, 2730 m, devast. prim. for., litter sifted, 10.VI.2007, M. Schülke" (cSch, cAss); 1♂: "CHINA: Yunnan [CH07-28], Nujiang Lisu Aut. Pref., Gaoligong Shan, side valley 19 km NW Liuku, 25°59'02"N, 98°42'23"E, 2730 m, devast. prim. forest, litter sifted, 9.VI.2007, M. Schülke" (cSch); 1♀: "CHINA: Yunnan [CH07-27], Nujiang Lisu Aut. Pref., Gaoligong Shan, creek valley 20 km NW Liuku, 25°58'49"N, 98°41'48"E, 3000 m, bamboo, shrubs, litter sifted, 9.VI.2007, M. Schülke" (cAss); 1♂ [teneral]: "CHINA (Yunnan) Lujiang Lisu Pref., Gaoligong Shan E pass 20 km NW Liuku, 3000 m (creek valley with devast. prim. forest, ferns, litter and moss sift.) 25°58'49"N, 98°41'48"E, 3.IX.2009 D.W. Wrase [25]" (cSch).

Etymology. The specific epithet is an adjective derived from the Latin noun vexillum (small flag, banneret) and alludes to the conspicuous lamellate processes of the dorso-lateral apophyses of the aedeagus.

Description. Body length 5.2–6.7 mm; length of forebody 2.9–3.4 mm. Habitus as in Fig. 177. Coloration: head and pronotum reddish-brown to dark-brown; elytra reddish to dark-reddish; abdomen dark-brown to blackish-brown; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 178) approximately 1.05 times as long as broad; median dorsal portion more or less distinctly elevated; punctation coarse, dense, and moderately umbilicate; interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 1.7–1.9 mm long.

Pronotum (Fig. 178) approximately 1.15 times as long as broad and 0.85 times as broad as head; punctation coarser and somewhat sparser than that of head, non-umbili-



Figs 183–195. *Nazeris circumclusus* (**183–188**) and *N. hastatus* (**189–195**). **183, 189:** habitus; **184, 190:** forebody; **185, 191:** male sternite VII; **186, 192:** male sternite VIII; **187–188, 193–194:** aedeagus in lateral and in ventral view; **195:** ventral process of aedeagus in ventral view. Scale bars: 183–184, 189–190: 1.0 mm; 185–188, 191–194: 0.5 mm, 195: 0.2 mm.

cate; interstices glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 178) approximately 0.6 times as long as pronotum; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense, defined, and moderately coarse on tergite III, gradually becoming less dense and finer towards posterior tergites, moderately sparse and fine on tergite VII, even finer and sparser on tergite VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 179) with truncate posterior margin; sternite VIII (Fig. 169) weakly transverse, posterior excision moderately deep and rather narrowly V-shaped, approximately 0.25 times as deep as length of sternite; aedeagus (Figs 180–182) 0.9–1.0 mm long; ventral process gradually narrowed apicad, apically acute, and basally with lateral projections in ventral view, laterally compressed; dorso-lateral apophyses long, distinctly extending beyond apex of ventral process, flattened, and strongly dilated, in the middle with conspicuous lamellate processes (ventral view).

Comparative notes. This species is characterized by its brownish coloration and particularly by the highly distinctive morphology of the aedeagus, above all by the conspicuous processes of the dorso-lateral apophyses. Together with the following two species, *N. vexillatus* forms a group characterized by the coloration (body not black), the coarse punctation of the pronotum and the elytra, a weakly modified male sternite VII (without postero-median impression, posterior margin weakly concave), the shape of the male sternite VIII (approximately as long as broad; posterior excision moderately deep), and particularly by the morphology of the aedeagus (ventral process short and of triangular shape in ventral view; dorso-lateral apophyses modified: long, distinctly extending beyond the apex of the ventral process, and dilated in various ways).

Distribution and natural history. *Nazeris vexillatus* is currently known only from the region to the northwest of Liuku in the Gaoligong Shan (Fig. 90). The specimens were sifted from leaf litter and moss in degraded primary forests and in shrub habitats with bamboo at altitudes of 2730–3150 m. One male collected in the beginning of September is teneral.

Nazeris circumclusus sp. n. (Figs 90, 183–188)

Type material. Holotype ♂ [teneral]: "CHINA: Yunnan, Baoshan Pref., Gaoligong Shan, 32 km SE Tengchong, 2150–2250 m, 24°51-53'N, 98°45'E, devast. prim. and second. forest, litter, dead wood, mushrooms sifted, 26.VIII.2009, leg. M. Schülke [CH09-08/09] / Holotypus ♂ *Nazeris circumclusus* sp. n. det. V. Assing 2013" (cAss).

Etymology. The specific epithet (Latin, adjective: enframed, surrounded) alludes to the ventral process of the aedeagus, whose ventral portion is enframed by the posterior portion in ventral view.

Description. Body length 5.8 mm; length of forebody 3.3 mm. Habitus as in Fig. 183. Coloration (note that the holotype is teneral): body brown, with the apex of the abdomen paler; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 184) 1.05 times as long as broad; median dorsal portion weakly elevated; punctation rather shallow, dense, and distinctly umbilicate; interstices without microsculpture; eyes moderately small, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 2.0 mm long.

Pronotum (Fig. 184) 1.17 times as long as broad and 0.85 times as broad as head; punctation distinctly coarser and somewhat irregularly spaced in postero-lateral portions, non-umbilicate; interstices glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 184) nearly 0.6 times as long as pronotum; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense, defined, and moderately coarse on anterior tergites, distinctly sparser and finer on tergite VII than on tergite VI; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII produced in the middle, obtusely angled.

♂: sternite VII (Fig. 185) with weakly concave posterior margin; sternite VIII (Fig. 186) approximately as long as broad, posterior excision rather deep and narrowly U-shaped, approximately 0.3 times as deep as length of sternite; aedeagus (Figs 187–188) 0.93 mm long; ventral process short, apically acute, and ventral portion conspicuously enframed by the ovoid posterior portion in ventral view; dorso-lateral apophyses long, at basal third with dilatation, and distinctly extending beyond apex of ventral process.

Comparative notes. Based on the external (coarse punctation, body not black) and the male sexual characters (weakly modified sternites VII and VIII; sternite VIII without median impression; aedeagus with short ventral process and with long, partly dilated dorso-lateral apophyses), *N. circumclusus* is closely allied to *N. vexillatus*, from

which it differs by the relatively larger and less convex head, the punctation of the head (less coarse, denser, and distinctly umbilicate), the longer and more slender antennae, the U-shaped posterior excision of the male sternite VIII, and by the morphology of the aedeagus (shapes of ventral process and of the dorso-lateral apophyses).

Distribution and natural history. The type locality is situated in the Gaoligong Shan, to the southeast of Tengchong (Fig. 90). The teneral holotype was sifted from leaf litter in a degraded mixed primary and secondary forest at an altitude of 2150–2250 m, together with *N. curvus*.

Nazeris hastatus sp. n. (Figs 90, 189–195)

Type material. Holotype ♂: "CHINA (Yunnan) Nujiang Lisu Aut. Pref., Gaoligong Shan, side valley 18 km NW Liuku, 2590 m, 25°58'10"N, 98°42'27"E (devast. prim. forest, litter sifted) 9–10.VI.2007 D.W. Wrase [29] / Holotypus ♂ *Nazeris hastatus* sp. n. det. V. Assing 2013" (cAss).

Etymology. The specific epithet (Latin, adjective: armed with a spear) refers to the spear-shaped dorso-lateral apophyses of the aedeagus.

Description. Body length 6.2 mm; length of forebody 3.4 mm. Habitus as in Fig. 189. Coloration: body dark-brown, with the elytra paler brown; legs yellowish; antennae yellowish, with antennomere I slightly darker.

Head (Fig. 190) 1.05 times as long as broad; median dorsal portion elevated; punctation moderately coarse, dense, and weakly umbilicate; interstices without microsculpture; eyes of moderate size, approximately one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna 2.0 mm long.

Pronotum (Fig. 190) 1.2 times as long as broad and 0.85 times as broad as head; punctation distinctly coarser and somewhat irregularly spaced in postero-lateral portions, non-umbilicate; interstices glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 190) 0.57 times as long as pronotum; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.25 times as broad as elytra; punctation dense, coarse on tergites III–V, somewhat finer on tergite VI, only slightly finer and sparser on tergite VII than on tergite VI; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: sternite VII (Fig. 191) with weakly concave posterior margin; sternite VIII (Fig. 192) approximately as long as broad, posterior excision moderately deep and nearly U-shaped, 0.24 times as deep as length of sternite; aedeagus (Figs 193–195) 1.1 mm long; ventral process short, of triangular shape, and apically acute; dorso-lateral apophyses long and spear-shaped, strongly triangularly dilated in the middle, and distinctly extending beyond apex of ventral process.

Comparative notes. As can be inferred from the external (coarse punctation, body not black) and the male sexual characters (weakly modified sternites VII and VIII; sternite VIII without median impression; aedeagus with short ventral process and with long, partly dilated dorso-lateral apophyses), *N. hastatus* is closely related to *N. vexillatus* and *N. circumclusus*. It is distinguished from these species by the different punctation of the head (coarser than in *N. circumclusus*, less coarse and denser than in *N. vexillatus*), by the shape of the posterior excision of the male sternite VIII, and particularly by the morphology of the aedeagus, above all the conspicuous shape of the dorso-lateral apophyses.

Distribution and natural history. The type locality is situated in the Gaoligong Shan, to the northwest of Liuku (Fig. 90). The holotype was sifted from leaf litter in a degraded primary forest at an altitude of 2590 m.

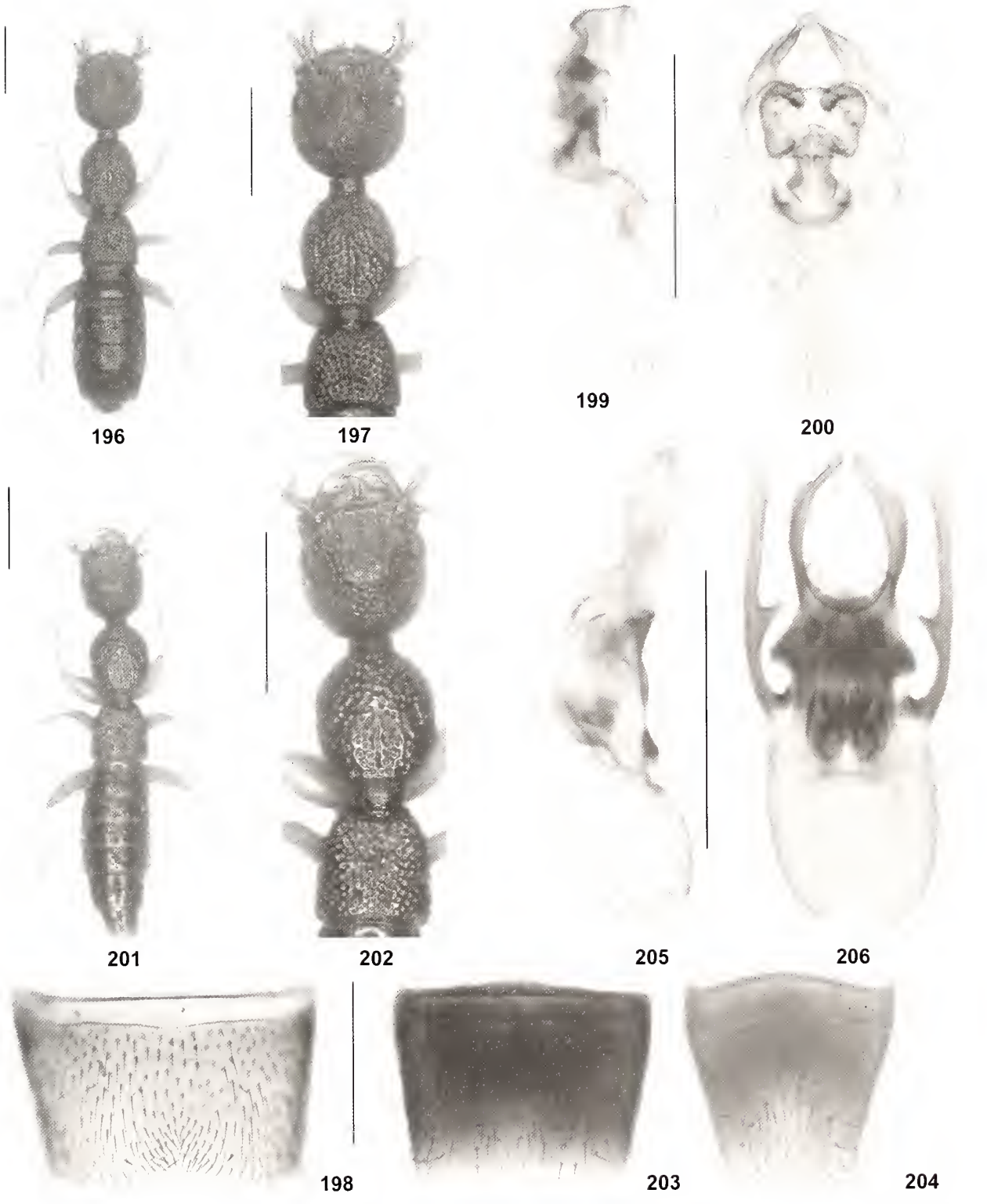
Nazeris bangmaicus sp. n. (Figs 90, 196–200)

Type material. Holotype ♂ [teneral]: "CHINA: Yunnan, Lincang Pref., Bangma Shan, 20 km NW Lincang, 2210 m, 23°58'25"N, 99°54'36"E, water reservoir, devast. forest with ferns, litter & ferns sifted, reservoir bank, 9.IX.2009, leg. M. Schülke [CH09-37] / Holotypus ♂ *Nazeris bangmaicus* sp. n. det. V. Assing 2013" (cAss). Paratype: 1♀: same data as holotype (cSch).

Etymology. The specific epithet is an adjective derived from the name of the mountain where this species was discovered.

Description. Body length 5.6–5.7 mm; length of forebody 3.1–3.3 mm. Habitus as in Fig. 196. Coloration: forebody blackish-brown; abdomen black; legs yellowish; antennae yellowish, with antennomere 1 slightly darker.

Head (Fig. 197) indistinctly transverse, 1.01–1.03 times as broad as long, of subcircular outline in dorsal view; median dorsal portion very weakly elevated; punctation moderately coarse, dense, and umbilicate; interstices without microsculpture, forming very narrow ridges; eyes relatively small, weakly projecting from lateral contours of head, distinctly less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.8 mm long.



Figs 196–206. *Nazeris bangmaicus* (**196–200**) and *N. fissus* (**201–206**). **196, 201:** habitus; **197, 202:** forebody; **198, 203:** male sternite VII; **199–200, 205–206:** aedeagus in lateral and in ventral view; **204:** male sternite VIII. Scale bars: 196–197, 201–202: 1.0 mm; 198–200, 203–206: 0.5 mm.

Pronotum (Fig. 197) approximately 1.15 times as long as broad and 0.85 times as broad as head; punctation very dense, much coarser than that of head, non-umbilicate; interstices glossy, forming narrow ridges; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 197) very short, approximately 0.5 times as long as pronotum; humeral angles obsolete; punctation dense, defined, and approximately as coarse as that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen 1.25–1.30 times as broad as elytra; punctation dense, defined, and coarse on tergites III–VI, somewhat less dense and less coarse on tergite VII, finer and sparser on tergite VIII; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex.

♂: sternite VII (Fig. 198) with small postero-median depression, this depression with denser setae directed diagonally postero-mediad, posterior margin weakly concave in the middle; sternite VIII transverse, posterior excision moderately deep and V-shaped; aedeagus (Figs 199–200) probably approximately 1.05 mm long (basal portion of aedeagus of the teneral holotype somewhat deformed); ventral process short and broad, with ventral portion of triangular and dorsal portion of semi-circular outline in ventral view; dorso-lateral apophyses short, strongly dilated in apical three fourths (ventral view), and somewhat extending beyond apex of ventral process.

Comparative notes. This species is characterized particularly by the conspicuously short elytra and by the distinctive shapes of the ventral process and of the dorso-lateral apophyses of the aedeagus. Closer affiliations to other species known from Yunnan are not evident.

Distribution and natural history. The type locality is situated in the Bangma Shan to the northwest of Lincang, Yunnan (Fig. 90). The specimens were sifted from leaf litter in a degraded forest at an altitude of 2210 m. The holotype is distinctly teneral.

Nazeris fissus sp. n. (Figs 90, 201–206)

Type material. Holotype ♂: "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, moss, grass roots sifted), 13.IX.2009 D.W. Wrase [48] / Holotypus ♂ *Nazeris fissus* sp. n. det. V. Assing 2013" (cAss). Paratypes: 7♂, 8♀ [partly teneral]: "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]" (ZFMK, cSch, cAss); 1♂: "CHINA: Yunnan, Lincang/Dali Pref., Wuliang Shan, old pass road, N pass, 24°45'16.4"N, 100°29'50.3"E, 2350 m, forest litter & tea plantation, litter, mushrooms, grass sifted, 16.IX.2009, leg. M. Schülke [CH09-55]" (cAss).

Etymology. The specific epithet (Latin, adjective: split, divided) alludes to the conspicuously bifid ventral process of the aedeagus.

Description. Small and slender species; body length 4.5–5.5 mm; length of forebody 2.5–2.8 mm. Habitus as in Fig. 201. Coloration: forebody dark-reddish to dark-brown, with the pronotum usually slightly darker; abdomen blackish-brown; legs yellowish; antennae yellowish, with antennomere 1 slightly darker.

Head (Fig. 202) 1.05–1.08 times as long as broad; median dorsal portion indistinctly elevated; punctation coarse, dense, and umbilicate; interstices without microsculpture, forming narrow ridges; eyes moderately small, distinctly less than one third as long as the distance from posterior margin of eye to posterior constriction of head. Antenna approximately 1.5 mm long.

Pronotum (Fig. 202) 1.11–1.15 times as long as broad and 0.93–1.00 times as broad as head; punctures rather dense and non-umbilicate, nearly of similar diameter as those of head, but much deeper; interstices glossy; midline punctate in anterior half, impunctate and narrowly elevated in posterior half.

Elytra (Fig. 202) approximately 0.6 times as long as pronotum; humeral angles obsolete; punctation dense, somewhat less coarse than that of pronotum; interstices glossy. Hind wings completely reduced.

Abdomen approximately 1.2 times as broad as elytra; punctation dense and coarse on tergite III, gradually becoming less dense and less coarse towards tergite IV–VI, fine and sparse on tergites VII and VIII; interstices without microsculpture and glossy; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 203) unmodified, posterior margin truncate; sternite VIII (Fig. 204) as long as broad, posterior excision small and V-shaped, approximately 0.13 times as deep as the length of sternite VIII; aedeagus (Figs 205–206) 0.85–0.87 mm long and of highly distinctive morphology; ventral process completely divided into two lamellae; dorso-lateral apophyses almost straight and slender, at basal third with a distinct process directed mediad, not reaching apex of ventral process.

Comparative notes. *Nazeris fissus* is readily distinguished from other congeners known from Yunnan by the completely divided ventral process of the aedeagus, the shape of the dorso-lateral apophyses, from most species also by small body size in combination with brownish coloration of the forebody. Based on the synapomorphically derived

morphology of the aedeagus (ventral process completely divided), this species is undoubtedly most closely related to *N. caoi* Hu et al., 2011 from the Nabanhe Nature Reserve.

Distribution and natural history. The species was recorded from two localities, the type locality in the Ailao Shan and one locality in the Wuliang Shan, Yunnan (Fig. 90). The specimens were sifted from litter in two forest habitats at altitudes of 2300 and 2350 m, on both occasions together with *N. sagittifer*. Some of the type specimens are teneral.

Unnamed and presumably undescribed species

Four species were represented in the examined material only by females:

Nazeris sp. 4: 1♀: "CHINA: Yunnan, Baoshan Prcf., Gaoligong Shan, 78 km N Tengchong, 2000 m, 25°44'49"N, 98°33'29"E, cleft with creek and forest remnant, litter & dead wood sifted, 1.IX.2009, leg. M. Schülke [CH09-21]" (cSch).

Based on the external characters, this species is probably closely related to *N. curvus* and allied species of the *N. cangicus* group.

Nazeris sp. 5: 1♀: "CHINA: Yunnan prov., 1.3–2.0 km S of Haba, 17–20.VI.2007, Haba Xueshan Mts., 2830–3000 m, 27°22.1'N, 100°08.2'E, Hájek & Růžička leg." (cSch).

This species, too, probably belongs to the *N. cangicus* group.

Nazeris sp. 6: 2♀: "CHINA: Yunnan, Dali Bai Aut. Pref., Zhemo Shan, 7 km SW Xiaguan, 25°32-33'N, 100°10-11'E, 2870–2970 m, scrub with bamboo, oaks & Rhododendr., litter sifted, 18.IX.2009, leg. M. Schülke [CH09-60]" (cSch).

Based on the external characters, this species is closely related to *N. daliensis* and allied species. It is readily distinguished from the syntopic *N. zhemoicus* by a larger and more robust body, a less oblong head with a practically completely matt surface and less coarse punctation, and the denser punctation of the abdomen.

Nazeris sp. 7: 3♀: "CHINA: Yunnan, Dali Bai Aut. Pref., Mao Jiao Shan, E pass, 58 km NE Dali, 25°56'41"N, 100°40'05"E, 2525 m, second. mixed forest, litter, moss & mushrooms sifted, 4.IX.2009, leg. M. Schülke [CH09-26]" (cSch).

This species, too, is presumably closely related to *N. daliensis* and allied species, as is suggested by the similar external characters.

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