

Four New Species of the Genus *Nazeris* (Coleoptera,  
Staphylinidae) from the Gaoligong Shan Mountains in  
Yunnan, Southwest China

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**Abstract** Four new species of the staphylinid genus *Nazeris* are described under the names *N. baihuaensis*, *N. nomurai*, *N. huanxipoensis* and *N. ishianus*. They are found from under dead leaves or the litter zones of the Gaoligong Shan Mountains and their vicinities in western Yunnan, Southwest China.

Eleven species of the genus *Nazeris* have hitherto been reported from China by KOCH (1939, pp. 156–161), ZHENG (1992, pp. 87–91) and WATANABE and XIAO (1993, p. 130; 1997, pp. 2–9). Of these, five species were reported from Yunnan.

In the course of the Sino-Japanese cooperative study on the soil fauna of tropical forests in Southwest China made in 1996, four species of the genus *Nazeris* were obtained from under dead leaves or in the litter layer on the Gaoligong Shan Mountains and their vicinities in western Yunnan, Southwest China. All of them may belong to the group of *N. wollastoni* (SHARP, 1874, p. 68) for the disappearance of the median carina before the base of the prosternum. However, one of the two species obtained at Baihua Ling seems to belong to the group of *N. optatus* (SHARP, 1889, p. 322) in having peculiar parameres which are remarkably shorter than the median lobe.

After a careful examination, it has become clear that these species are new to science, since secondary sexual characters of the abdominal sternites and configuration of the genital organ in the male are different from those of the known members of the genus. They will be described in the present paper.

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*Nazeris baihuaensis* sp. nov.

(Figs. 1, 2, 6–8)

Body length: 5.8–6.5 mm (from front margin of head to anal end); 3.2–3.4 mm (from front margin of head to elytral apices).

Body elongate, subparallel-sided and slightly convex. Colour reddish brown to reddish black and moderately shining, with labrum, mandibles, basal segments of antennae and coxae yellowish brown, the remaining antennal segments and legs yellowish.

Male. Head suborbicular, gently elevated medially though subdepressed in frontal part between antennal tubercles, slightly longer than broad (length/width=1.05), distinctly narrowed posteriorly and well constricted at the neck; front margin straight and glabrous, lateral sides arcuate behind and somewhat emarginate before compound eyes, with a groove for the reception of 1st antennal segment in front of each eye; surface coarsely and reticulately punctured, the punctures becoming larger and coarser in frontal part and covered with fine brownish bristles decumbent forwards; eyes weakly prominent, the longitudinal diameter of each eye less than a half as long as postocular part. Antennae slender, extending a little beyond the middle of pronotum and not thickened towards the apical segment, with two proximal segments polished, the remainings gradually becoming opaque towards the apical segment, 1st segment robust and cylindrical, conspicuously longer than broad (length/width=3.33), 2nd somewhat dilated apically, a little longer than broad (length/width=1.33) but remarkably shorter (2nd/1st=0.27) and distinctly narrower (2nd/1st=0.67) than 1st, 3rd elongate, markedly longer than broad (length/width=3.6) and much longer (3rd/2nd=2.25) but slightly narrower (3rd/2nd=0.83) than 2nd, 4th to 9th equal in width to one another and decreasing in length, though each segment is distinctly longer than broad, 10th longer than broad (length/width=2.17) but slightly shorter

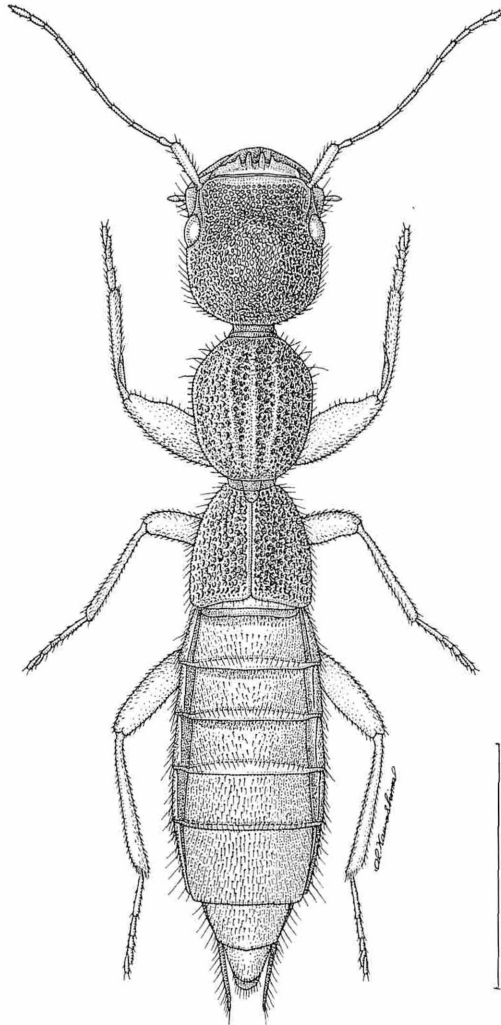
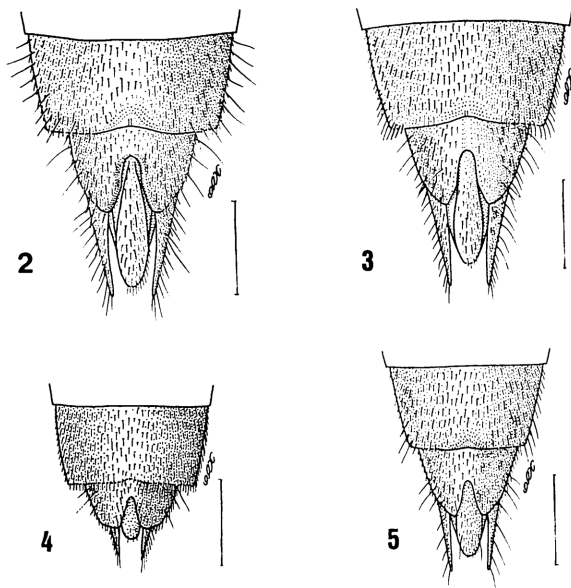


Fig. 1. *Nazeris baihuaensis* sp. nov., ♂, from Baihua Ling of the Gaoligong Shan Mts. in the Baoshan area of western Yunnan, SW. China. Scale: 2.0 mm.

(10th/9th=0.94) though a little broader (10th/9th=1.15) than 9th, 11th fusiform, more than twice as long as broad and a little longer (11th/10th=1.20) and slightly broader (11th/10th=1.09) than 10th.

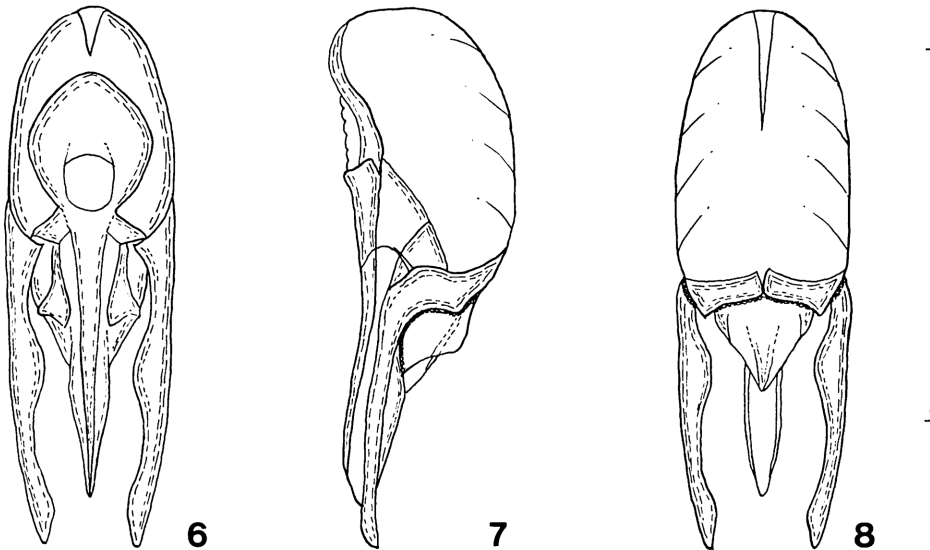
Pronotum semioval and convex medially, distinctly longer than broad (length/width=1.21), as long as but a little narrower than head (pronotum/head=0.86), widest at anterior third and more strongly narrowed posteriad than anteriorly; lateral sides arcuate in anterior two-thirds and nearly straight in posterior third as seen from dorsal side, anterior margin nearly straight though only the median part is visible from



Figs. 2-5. Last three abdominal sternites in male of *Nazeris* spp.; *N. baihuaensis* sp. nov. (2), *N. nomurai* sp. nov. (3), *N. huanxipoensis* sp. nov. (4), and *N. ishiiianus* sp. nov. (5). Scale: 0.5 mm.

above, posterior margin truncate or slightly emarginate at the middle, anterior angles more broadly rounded than posterior ones, the former being invisible from above; surface densely, more or less irregularly covered with very coarse and setiferous punctures, the bristles similar to those on head, provided with a median longitudinal carina which is abbreviated at anterior third or anterior half, and obscurely depressed on each side of the carina in posterior half; prosternum strongly and longitudinally carinate at the middle, though the carina disappears behind anterior margin. Scutellum subtriangular, uneven on the surface. Elytra subtrapezoidal, dilated posteriad and subdepressed above, slightly longer than broad (length/width=1.05), distinctly shorter than (elytra/pronotum=0.87) though as broad as pronotum; lateral sides feebly arcuate, posterior margin emarginate at the middle, posterior angles rounded; surface densely and setiferously punctured, the punctures less coarse than on pronotum, and covered with bristles similar to those on pronotum. Legs moderately long, profemur thickened though abruptly constricted at apical fourth and excavated in apical half on the inner face; protibia hollowed in about basal third on the inner margin and closely beset with minute yellowish setae on the underside of the hollow; meso- and metatibiae normal; basal four protarsal segments not much dilated.

Abdomen elongate and subcylindrical, gradually dilated from 3rd to 7th segments and then abruptly narrowed towards the apical end; 3rd to 6th tergites each shallowly and transversely depressed along the base, densely and coarsely punctured, the punctures remarkably smaller and much less coarse than those on elytra, 7th tergite less



Figs. 6–8. Male genital organ of *Nazeris baihuaensis* sp. nov.; dorsal view (6), lateral view (7), and ventral view (8). Scale: 1.0 mm.

densely and less coarsely punctured than in the preceding tergites; all the tergites covered with fine brownish pubescence; 8th sternite deeply excised in a U-shape at the middle of posterior margin and depressed in front of the excision, surface of the depression smooth and glabrous; 7th sternite shallowly and broadly emarginate at the middle of posterior margin and semicircularly depressed before the emargination, the depression being provided with a short sulcus just before the posterior margin.

Genital organ well sclerotized except for membranous ventral side of median lobe, trilobed and almost symmetrical. Median lobe constricted at the middle, and then strongly dilated basad though gently narrowed apicad. Parameres distinctly longer than median lobe, each widened at the middle and obliquely truncated at the apex.

Female. Similar in general appearance to male, but four protarsal segments are less dilated, the 8th abdominal sternite is simply rounded at the middle of posterior margin and the 7th sternite is simple.

*Type series.* Holotype: ♂, allotype: ♀, Baihua Ling, Gaoligong Shan Mts., Baoshan area, western Yunnan, SW. China, 17-X-1996, S. UENO leg. Paratypes: 4♂♂, same data as for the holotype; 1♂, same locality and date as above, S. NOMURA leg.; 3♂♂, 2♀♀, same locality and collector as above, 16-X-1996; 3♂♂, 2♀♀ (teneral), same locality and date as for the holotype, K. ISHII *et al.* leg. The type specimens are deposited at present in the collection of the National Science Museum (Nat. Hist.), Tokyo, except for three pair of the paratypes which are preserved in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture.

*Distribution.* Southwest China (Yunnan).

*Remarks.* The present new species is similar in facies and body size to *N. alpinus* Y. WATANABE et XIAO N. (1997, p. 5) from the Diancang Shan Mountains in Yunnan, but different from the latter in the following points: head somewhat dilated anteriorly in anterior half and much more coarsely punctured on the surface; pronotum less than 1.5 times as long as broad, its surface covered with much deeper and much larger punctures; elytra slightly longer than broad and as broad as pronotum, much more coarsely punctured on the surface; and different configuration of secondary sexual characters of abdominal sternites and genital organ in the male.

*Bionomics.* The type specimens were obtained from under dead leaves in an evergreen broadleaved forest consisting of *Rhododendron* sp. and *Lithocarpus leucostachys* at an altitude of 2,550 m.

*Etymology.* The specific epithet is given after the type locality "Baihua Ling".

*Nazeris nomurai* sp. nov.

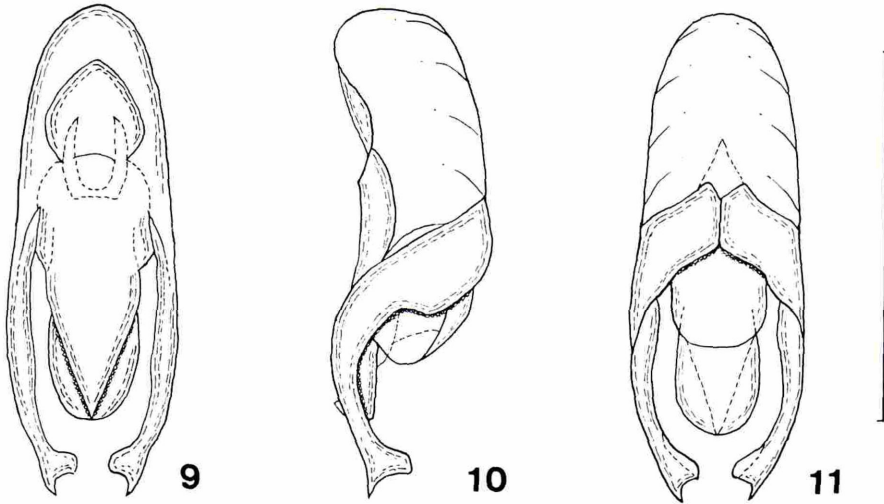
(Figs. 3, 9–15)

Body length: 6.1–7.0 mm (from front margin of head to anal end); 3.2–3.3 mm (from front margin of head to elytral apices).

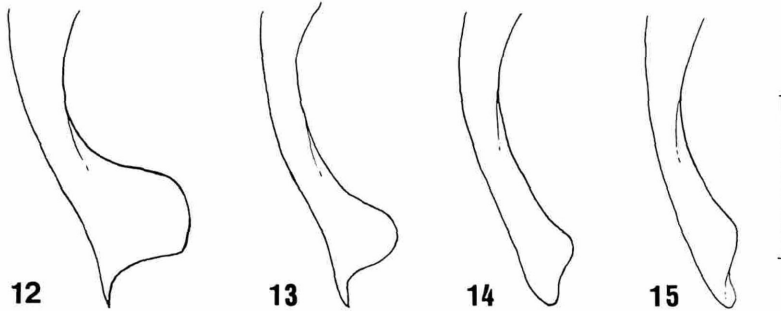
Male and female. In facies and body size similar to the preceding species, but different from it in the following points: head more strongly narrowed posteriorly in basal third, surface more finely punctured, postocular part about 2.2 times as long as longitudinal diameter of each eye; pronotum subpentagonal and relatively short (length/width=1.17), slightly shorter than head (pronotum/head=0.95), and less coarsely punctured on the surface; elytra almost as long as broad, though slightly narrower than pronotum (elytra/pronotum=0.97), surface slightly less coarsely punctured; abdomen in male with 7th sternite slightly emarginate at the middle of posterior margin and feebly semicircularly depressed in front of the emargination, surface of the depression more closely setose than the other parts and with a very minute longitudinal sulcus at the middle of posterior margin, 8th sternite provided with a deep V-shaped excision at the middle of posterior margin and more shallowly, longitudinally depressed at the middle before the excision than in the preceding species.

Male genital organ elliptical and almost symmetrical, well sclerotized with the exception of ventral part of median lobe. Median lobe lingulate though slightly widened before posterior margin which is broadly rounded as seen from ventral side. Parameres distinctly longer than median lobe, each strongly curved ventrad in apical half, abruptly dilated in apical part and distinctly emarginate at the apical margin.

*Type series.* Holotype: ♂, allotype: ♀, Lujiangba, Gaoligong Shan Mts., Baoshan area, western Yunnan, SW. China, 10–X–1996, S. NOMURA leg. Paratypes: 10 ♂♂ (3 teneral), 7 ♀♀ (2 teneral), same data as for the holotype. The type specimens are at present deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo, except for five pair of the paratypes which are preserved in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture.



Figs. 9–11. Male genital organ of *Nazeris nomurai* sp. nov.; dorsal view (9), lateral view (10), and ventral view (11). Scale: 1.0 mm.



Figs. 12–15. Apical part of paramere of *Nazeris nomurai* sp. nov., from Lujiangba on the Gaoligong Shan Mountains in the Baoshan area (12); that of a specimen from Dabei of the Gaoligong Shan Mts. in Tengchong Xian (13–15). Scale: 0.25 mm.

*Further specimens examined.* 10♂♂, 4♀♀, Dabei, Gaoligong Shan Mts., Tengchong Xian, western Yunnan., SW. China, 11–X–1996, S. NOMURA leg.; 3♂♂, 2♀♀, same locality and date as above, S. UENO leg.; 3♂♂, 4♀♀, same locality and date as above, K. ISHII *et al.* leg.

The specimens obtained at Dabei on the Gaoligong Shan Mountains are somewhat different from the type specimens in configuration of the apical part of parameres of the male genital organ, but the difference can be regarded as an infraspecific variation.

*Distribution.* Southwest China (Yunnan).

*Bionomics.* The type specimens were obtained from under dead leaves in a mixed forest of deciduous and evergreen trees, consisting of *Viburnum cylindricus*, *Camellia* sp., *Berberis* sp., and *Rubus pirifollius*, at an altitude of 1,720 m.

*Etymology.* The specific epithet is given after Dr. Shûhei NOMURA, National Science Museum (Nat. Hist.), Tokyo, who collected all the type specimens.

*Nazeris huanxipoensis* sp. nov.

(Figs. 4, 16–18)

Body length: 6.3–6.6 mm (from front margin of head to anal end); 3.1–3.5 mm (from front margin of head to elytral apices).

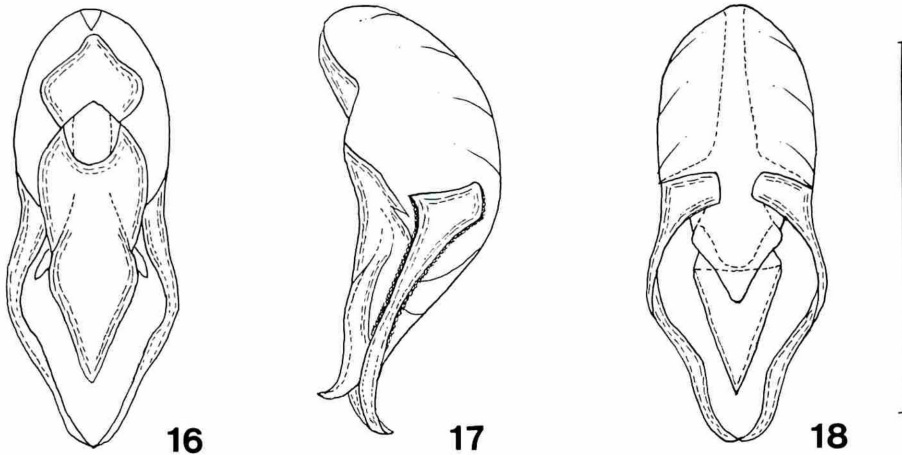
Male and female. Similar in general appearance and body size to the two preceding species, but can be distinguished from them by configuration of the secondary sexual characters of abdominal sternites and of the genital organ in the male.

Head more or less elliptical and gently convex medially, somewhat longer than broad (length/width=1.09), more distinctly narrowed posteriad in basal fourth than in the preceding species, *N. nomurai*, and well constricted at neck, front margin straight, lateral sides slightly more strongly arcuate, postocular part relatively long, about 2.4 times as long as longitudinal diameter of each eye; surface densely and reticulately punctured, the punctures slightly finer than those of *N. nomurai*. Antennal articulation similar to that in the two preceding species.

Pronotum long oval, more strongly elevated medially than in *N. nomurai*, apparently longer than broad (length/width=1.28), as broad as but slightly narrower (pronotum/head=0.85) than head, widest just before the middle and narrowed both in front and behind, lateral sides more strongly arcuate than in *N. nomurai*; surface densely covered with much less coarse punctures than those of *N. nomurai* and median longitudinal carina obscure; prosternum provided with a longitudinal carina at the middle as in *N. nomurai*. Elytra trapezoidal and dilated posteriad, subdepressed above, as long as broad, a little shorter (elytra/pronotum=0.75) and slightly narrower (elytra/pronotum=0.96) than pronotum; lateral sides arcuate, posterior margin more deeply emarginate at the middle than in *N. nomurai*; surface densely covered with much less coarse punctures than in *N. nomurai*. Legs as in the two preceding species. Abdomen subcylindrical, gradually dilated from 3rd to 7th segments, and then abruptly narrowed towards the apical end; all the tergites more densely though less coarsely punctured than in *N. nomurai*; in male, 7th sternite devoid of definite secondary sexual characters, 8th sternite deeply excised in a V-shaped at the middle of posterior margin.

Male genital organ more closely similar in configuration to that of *N. nomurai* than to that of *N. baihuaensis*, but different from it in the following points: median lobe subtriangular in posterior half and pointed at the apex which is curved dorsad in lateral view; parameres remarkably longer than median lobe, each strongly curved inwards at the middle and abruptly narrowed towards the pointed apex as seen from dorsal side.





Figs. 16–18. Male genital organ of *Nazeris huanxipoensis* sp. nov.; dorsal view (16), lateral view (17), and ventral view (18). Scale: 1.0 mm.

*Type series.* Holotype: ♂, Huanxipo, Tengchong Xian, western Yunnan, SW. China, 14–X–1996, S. UENO leg.; allotype, ♀, same locality and date as the holotype, S. NOMURA leg. Paratype: 1 ♂, same data as for the holotype; 3 ♂♂, 2 ♀♀, same data as for the allotype; 1 ♂, same locality and date as for the allotype, K. ISHII *et al.* leg.

*Distribution.* Southwest China (Yunnan).

*Bionomics.* The type specimens were obtained from under dead leaves in a mixed forest of coniferous and broadleaved trees, consisting of *Pinus armandi*, *Lithocarpus variolosus* and *Rhus chinensis* at an altitude of 1,950 to 1,960 m.

*Etymology.* The specific epithet is derived from the name of the type locality “Huanxipo”.

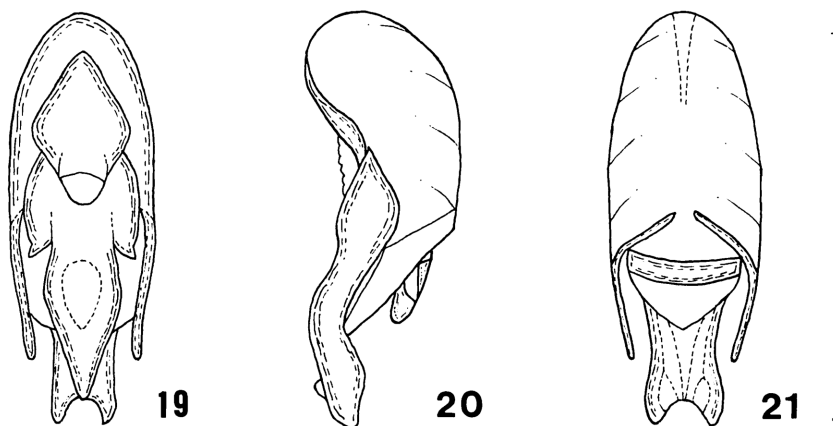
#### *Nazeris ishiianus* sp. nov.

(Figs. 5, 19–21)

Body length: 5.1–5.9 mm (from front margin of head to anal end); 3.0–3.4 mm (from front margin of head to elytral apices).

*Male and female.* The present new species is similar to the three preceding species in facies and coloration, but can be readily distinguished from them by the relatively small body and remarkably shorter parameres of the male genital organ.

Head suborbicular and convex medially, similar in configuration to that of the preceding species, *N. huanxipoensis*, though less strongly narrowed in basal third, punctures on the surface similar to those of *N. huanxipoensis*. Antennal articulation as in *N. huanxipoensis*. Pronotum long oval, less convex than in *N. huanxipoensis* and distinctly shorter than head (pronotum/head=0.92), widest before the middle and more strongly narrowed posteriad than in *N. huanxipoensis*, surface covered with much



Figs. 19–21. Male genital organ of *Nazeris ishianus* sp. nov.; dorsal view (19), lateral view (20), and ventral view (21). Scale: 1.0 mm.

coarser punctures and provided with a longitudinal carina in basal half as in *N. baihuaensis*. Elytra somewhat broader than long (width/length=1.06), a little shorter (elytra/pronotum=0.82) but slightly longer than pronotum (elytra/pronotum=1.03), surface slightly more coarsely punctured than in *N. huanxipoensis*. Abdominal tergites less densely and more coarsely punctured than in *N. huanxipoensis*; in male, 7th sternite slightly emarginate at the middle of posterior margin, 8th sternite deeply subtriangularly excised at the middle of posterior margin.

Male genital organ considerably different in configuration from those of the three preceding species, as follows: median lobe subquadrate in apical third and semicircularly emarginate at the middle of posterior margin; paramere slender and remarkably shorter than median lobe.

*Type series.* Holotype: ♂, Baihua Ling, Gaoligong Shan Mts., Baoshan area, western Yunnan, SW. China, 16-X-1996, K. ISHII *et al.* leg.; allotype: ♀, same locality and date as for the holotype, S. NOMURA leg. Paratypes: 1 ♂, 1 ♀, same locality and date as for the holotype, S. NOMURA leg. The holo- and allotypes are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo, and paratypes are preserved in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture.

*Distribution.* Southwest China (Yunnan).

*Bionomics.* The type specimens were obtained from under dead leaves in a deciduous broadleaved forest consisting of *Alnus nepalensis* and *Rubus* sp. at an altitude of 2,100 m.

*Etymology.* The specific epithet of this new species is given after Dr. Kiyoshi ISHII, Dokkyo Medical University School of Medicine, Mibu, who collected the holotype.

## 要 約

渡辺泰明・肖宁年：中国云南省から採集されたアバタコバネハネカクシ属の4新種。——中国からは、アバタコバネハネカクシ属に含まれる種としてこれまでに11種が知られ、そのうちの5種が云南省から報告されている。1996年に実施された中日共同学術研究「中国南西部における土壤動物相の調査」によって、云南省高黎贡山で採集された本属の4種を検討した結果、新種と判定されたので下記のとおり命名・記載した。

1. *Nazeris baihuaensis* Y. WATANABE et XIAO N.

この種は、高黎贡山百花岭の標高2,550mの地点で採集された。体長および概観は云南省北西部に位置する点苍山から記載された。*N. alpinus*に類似しているが、頭部、前胸背板および翅鞘の形状が異なり、またより粗く点刻されること、さらに雄交尾器の形状の違いによって区別される。

2. *Nazeris nomurai* Y. WATANABE et XIAO N.

保山地区高黎贡山の潞江坝の標高1,720mの地点で採集された本種は、体長および概観が前種に類似している。しかし、前胸背板が頭部より短く、幅が翅鞘よりわずかに広いこと、前胸背板、翅鞘両者の点刻が前種のものほど粗くないこと、さらに雄交尾器の形状の違いなどによって区別される。

3. *Nazeris huanxipoensis* Y. WATANABE et XIAO N.

保山地区欢喜坡の標高1,950~1,960mの地点で採集された本種は、外部形態が前種に類似しているが、前胸背板は上方により強く膨隆し、中央の縦条は不明瞭であり、翅鞘は長さと同幅が等しく、後縁中央はより深く湾入すること、さらに雄交尾器側片末端の形状の違いによって区別される。

4. *Nazeris ishiianus* Y. WATANABE et XIAO N.

高黎贡山百花岭の標高2,100mの地点で採集された本種は、上記3種よりやや小型であること、雄交尾器側片が顕著に細く、しかも中葉よりいちじるしく短い独特の形状を呈していることで容易に区別される。

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