



A review of the genus *Nadezhdiella* Plavilstshikov, 1931 (Coleoptera: Cerambycidae: Cerambycinae: Cerambycini), with the description of a new species from Xizang, China

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Abstract

The genus *Nadezhdiella* Plavilstshikov, 1931 is preliminarily reviewed and a new species, *N. hekaijii* Lin, He & Li, **sp. nov.** from Mêdog County, Xizang, China, is described. Illustrations of the habitus and genitalia of *N. hekaijii* and its two congeners, *N. cantori* (Hope, 1842) and *N. fulvopubens* (Pic, 1933), are provided. Additionally, new locality records for *N. cantori* and a key to the six known species of the genus are included.

Key words: taxonomy, distribution, Oriental Region

Introduction

The genus *Nadezhdiella* Plavilstshikov, 1931 was established with *Hamaticherus cantori* Hope, 1842, from Zhejiang, China as its type species. It currently comprises five valid species distributed across China, Japan, the Ryukyu Islands, Vietnam, Laos, Thailand and Malaysia (Tavakilian & Chevillotte 2025). The most recent taxonomic treatment on *Nadezhdiella* was conducted by Vitali (2020), who described a new species from Yunnan, China based on a single female holotype.

During our examination of material collected from Mêdog County, Xizang, China, we identified two species of the genus *Nadezhdiella*. One represents the first record of the genus from Xizang, and the other is described herein as a new species. We used this opportunity to conduct a preliminary review of the genus, reporting new localities and compiling an identification key to all six known species.

Material and Methods

The genitalia were prepared by extracting them with forceps from fresh specimens without removing the abdomen. They were then cleared in 10% KOH at room temperature for 24 hours, subsequently transferred to distilled water for rinsing, and examined for observation and photography. Finally, they were preserved in polyethylene genitalia vials filled with glycerin, and pinned beneath the corresponding specimens.

Photographs of both the habitus and most genitalia shown in this paper were captured with a Canon 50D DSLR camera equipped with a Canon EF 100 mm f/2.8L IS USM lens and a dual LED fill light as the light source. Images from different focal planes were merged using Zerene Stacker 1.04 or Helicon Focus 8 stacking software. Adobe Photoshop CS5 was used for post-processing. Photographs of the genitalia of *N. fulvopubens* (Pic, 1933) and

additional images of some terminalia examined were taken with a Keyence VHX-1000C large depth-of-field 3D Digital Microscope.

Specimens studied are deposited in the following institutional museums and private collections; abbreviations as used in the text:

CCCC collection of Chang-Chin Chen, Tianjin, China;
CLHC collection of Li He, Chengdu, Sichuan, China;
CSJB collection of Jian Sun, Beijing, China;
CZBC personal collection of Cheng-Zhi Bian, Shandong, China
CZMY collection of Ming-Yu Zhu, Guangzhou, Guangdong, China;
CZWC collection of Zhen Wang, Chengdu, Sichuan, China;
IZCAS Institute of Zoology, Chinese Academy of Sciences [= NACRC National Animal Collection Resource Center], Beijing, China;
IZGAS Institute of Zoology, Guangdong Academy of Sciences, Guangzhou, Guangdong, China;
MYNU collection of Mianyang Normal University, Mianyang, Sichuan, China;
SYSU National Animal Collection Resource Center Sun Yat-sen University (The Museum of Biology), Guangzhou, China.

Taxonomy

Nadezhdiella Plavilstshikov, 1931

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Nadezhdiella Plavilstshikov, 1931: 71. Type species: *Hamaticherus cantori* Hope, 1842, by original designation.

Redescription. Head deeply grooved from vertex to middle of occiput; eyes coarsely faceted. Antennae much longer in male, shorter in female than body length; scape compressed-cylindrical; median antennomeres with or without internal spines. Prothorax distinctly broader than long, narrowly constricted behind apex and before base, with sharply toothed lateral tubercle on each side; pronotum coarsely vermiculate. Elytra slightly to obviously broader than prothorax, subparallel-sided, rounded externally at apices, with short sutural spine; surface smooth and thinly clothed with even pubescence. Procoxal cavities strongly angulate externally; prosternal intercoxal process nearly as high as coxae; mesoventral process also as high as coxae and angularly emarginate at apex.

Diagnosis. This genus resembles *Pseudaolesthes* Plavilstshikov, 1931 in having a laterally and sharply toothed prothorax and a similar elytral shape, but differs by having the anterior coxal cavities strongly angulate externally (vs. rounded in *Pseudaolesthes*) and the elytra evenly pubescent (vs. unevenly pubescent). It is also similar to *Neoplocaederus* Sama, 1991 (= *Plocaederus* Thomson, 1861) in having the prothorax with laterally and sharply toothed tubercles and the anterior coxal cavities strongly angulate externally. However, it can be distinguished from *Neoplocaederus* by the following combination of features: the occiput is deeply grooved between the eyes (vs. weakly carinate), the antennal scape is compressed-cylindrical (vs. arched and swollen subapically), and the elytra are subparallel-sided and rounded externally at the apices (vs. stouter and truncated and toothed externally at the apices).

Distribution. China, Japan, Ryukyu Islands, Vietnam, Laos, Thailand, Malaysia.

Nadezhdiella hekaijii Lin, He & Li, sp. nov.

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(Figs 1A–D, 2A, B, 3A–J, 9A, D, G, 10A)

Type material. HOLOTYPE: CHINA: male, Xizang, Nyingchi City, Mêdog County, Zhaibung Town, Geling Village (西藏自治区林芝市墨脱县背崩乡格林村), alt. 1780 m, 2025.VI.10, leg. Yuan Li (MYNU). PARATYPE: CHINA: 1 male, Xizang, same data as holotype but 2025.VII, leg. local collector (CLHC); 1 female, same data but

alt. 1753 m, 2023.VII.18–30, leg. Yao-Nan Zhang (IZCAS). 1 female, **Xizang**, Mêdog County (西藏墨脱), 80 k, alt. 2200m, 2020.VII (CZBC).

Description. Body length 55.0–65.9 mm, humeral width 15.0–19.0 mm. Body black to blackish-brown, covered with yellow brown pubescence. Head with nearly uniform pubescence. All antennomeres blackish-brown and pubescent, with pubescence sparser on apical three antennomeres in males, without fringe of setae underneath. Male: antennae exceeding elytral apices by approximately middle of antennomere 8 (Fig. 1A, B); scape stout, subequal to half of antennomere 3 in length, smooth in dorsal view while with irregular rugose sculptures in ventral view; antennomere 3 slightly longer than 5, 4 slightly longer than scape but much shorter than 5; antennomeres 5 to 10 gradually and slightly longer in length apically; 7 subequal to 3; antennomere 8 longer than 3; antennomere 11 longest, slightly longer than 9 and 10 combined; antennomeres 4 to 10 with minute internal spines at apices; antennomeres 5 to 11 with two ridges and one groove underneath. Female: antennae barely reaching apical fourth of elytra (Fig. 1C, D); scape stout, subequal to antennomere 4 in length, antennomere 3 longest; antennomere 5 shorter than 3, but longer than 4; antennomere 6 slightly shorter than 5; antennomeres 5 to 10 gradually shorter in length apically; antennomere 11 longer than 10, subequal to 8; antennomeres 7 to 11 flatter but not slender; antennomeres 6 to 10 with short outer teeth at apices; antennomeres 4 to 10 with minute internal spines at apices; antennomeres 5 to 11 with two lateral ridges and wide groove underneath.

Head with deep median groove between eye lobes, extending to margin of occiput; ventral surface between lower eye lobes regularly wrinkled, with straight transverse grooves (Fig. 9A). Eye deeply emarginate, lower lobe very large. Mandible moderately sized, curved and sharp apically, bearing two blunt mesal teeth. Pronotum 1.67 and 1.86 times as wide as long in male and female, respectively; distinctly wider at base than at apex; sides conspicuously constricted at apex and base, with short lateral tubercles behind middle, tubercles short and forming narrow, straight tooth apically (Fig. 9D, G); disk with coarse and irregular grooves (mostly transverse near middle), intersected by discernible median longitudinal sulcus throughout its length (Fig. 9D); surface densely covered with yellowish-brown pubescence, fringed with short brown setae along anterior and posterior margins, and with few long, erect setae scattered on sides. Scutellum tongue-shaped, with blunt apex, covered with yellowish-brown pubescence

Elytra moderately elongate, 2.37–2.42 times as long as humeral width; sides approximately parallel from base to apical third, then slightly narrowed to apices, which are rounded externally and bearing short sutural spine; disk entirely and evenly covered with recumbent pubescence.

Prosternum features two deep transverse grooves before middle; prosternal intercoxal process as high as procoxae, expanded apically; procoxal cavities closed posteriorly. Mesoventral intercoxal process with median longitudinal groove, bilobed at apex, clearly wider than prosternal process. Metaventricle with very sharp longitudinal median groove. Abdominal ventrites entirely scattered with pubescence except along apical margins of basal four ventrites (Fig. 1B, D). Legs blackish-brown, moderately long; femora quite robust while tibiae slender; metatarsomere 1 subequal to tarsomeres 2 and 3 combined. Last visible abdominal sternite at apex with shallow emargination in male, widely rounded in female. Last visible abdominal tergite at apex widely rounded in male, narrowly and shallowly emarginate in female.

Male genitalia (Fig. 3A–H): Tergite VIII (Fig. 3A) transverse, strongly emarginated in middle, setae shorter and sparser in middle. Tegmen rhombic in ventral view (Fig. 3G), strongly curved in lateral view (Fig. 3H); parameres (= lateral lobes in Lin *et al.* 2009) stout (length/width less than 2) though narrowed apically, with rounded apex, with apical setae moderately long, about half length of parameres. Median lobe slightly curved in lateral view (Fig. 3E); median struts more than half length of median lobe; ventral plate blunt and emarginate at apex (Fig. 3D). Internal sac with 2 pieces of crest-shaped basal armature (Fig. 3C, D). Female genitalia: tignum (Fig. 3I, J) slightly shorter than one third of abdomen in length; spermathecal tube very long; spermathecal capsule crescent-shaped, looking like long question mark (Fig. 10A).

Diagnosis. *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** is morphologically close to *N. hefferni* Vitali in having the 4th antennomere with a short internal spine at the apex. It can be easily distinguished from *N. hefferni* Vitali by the coloration on the antennae (uniformly black vs. black on the first two antennomeres and reddish brown on the remainder), elytra and legs (black vs. reddish brown), the pronotum structures (with VS. lacking median longitudinal line and transverse grooves), the relative length of antennomeres (antennomere 4 longer than two thirds of antennomere 3 in length of females vs. antennomere 4 slightly shorter than two thirds of antennomere 3 in length of females). The new species resembles *N. cantori* (Hope) and *N. japonica* Hayashi in its black brown coloration, yellow brown pubescence, and short lateral tubercles of pronotum. However, it can be easily distinguished from them by the median antennomeres with minute internal spines at their apices.

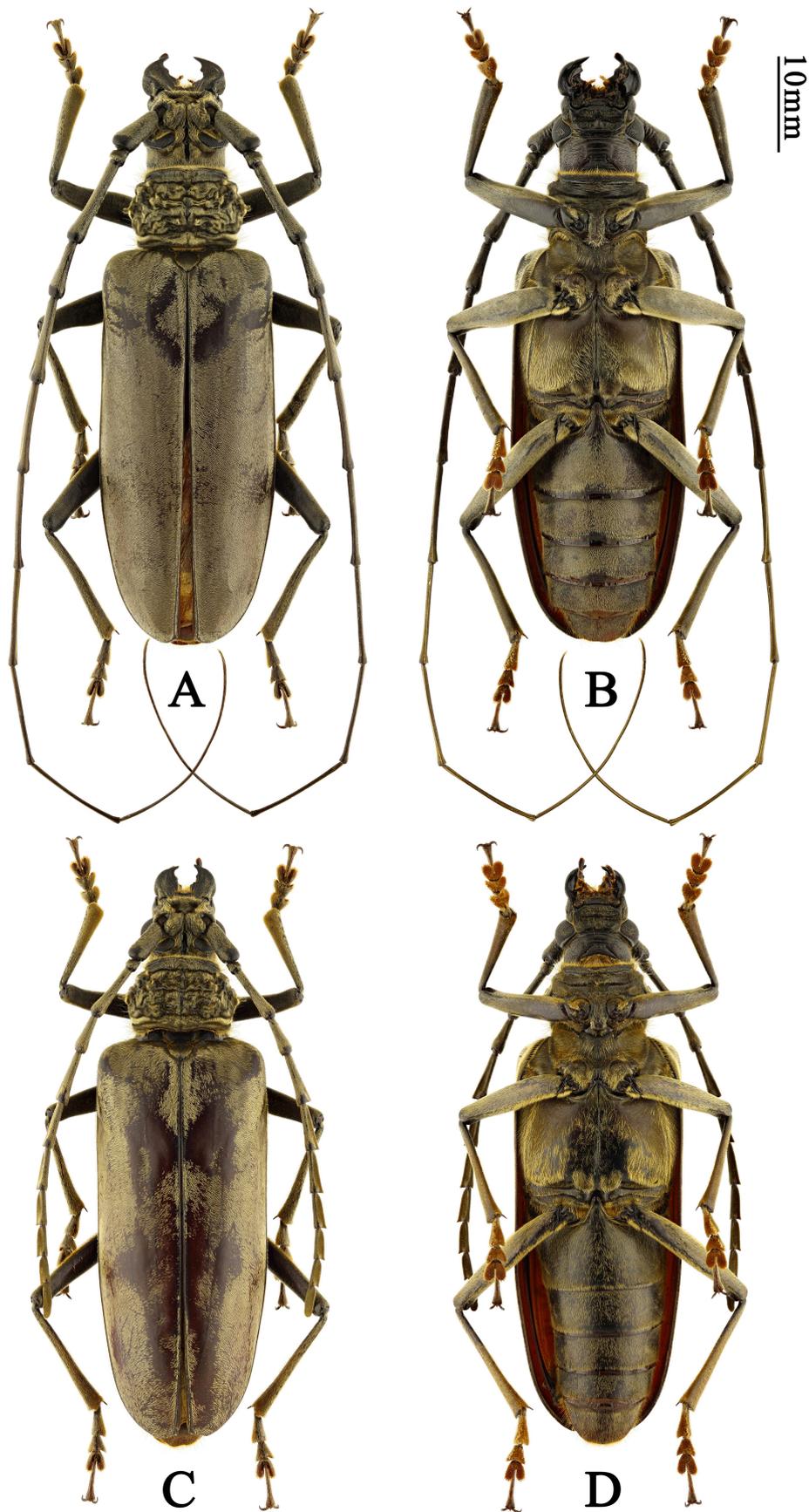


FIGURE 1. Habitus of *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** A–B. Male, holotype, from Xizang, China. C–D. Female, paratype, from Xizang, China. (A, C. Dorsal view. B, D. Ventral view).



FIGURE 2. Habitus of *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** in Mêdog County, Xizang. **A, B.** Habitus of holotype, attracted to light trap. Photographed by Yuan Li.

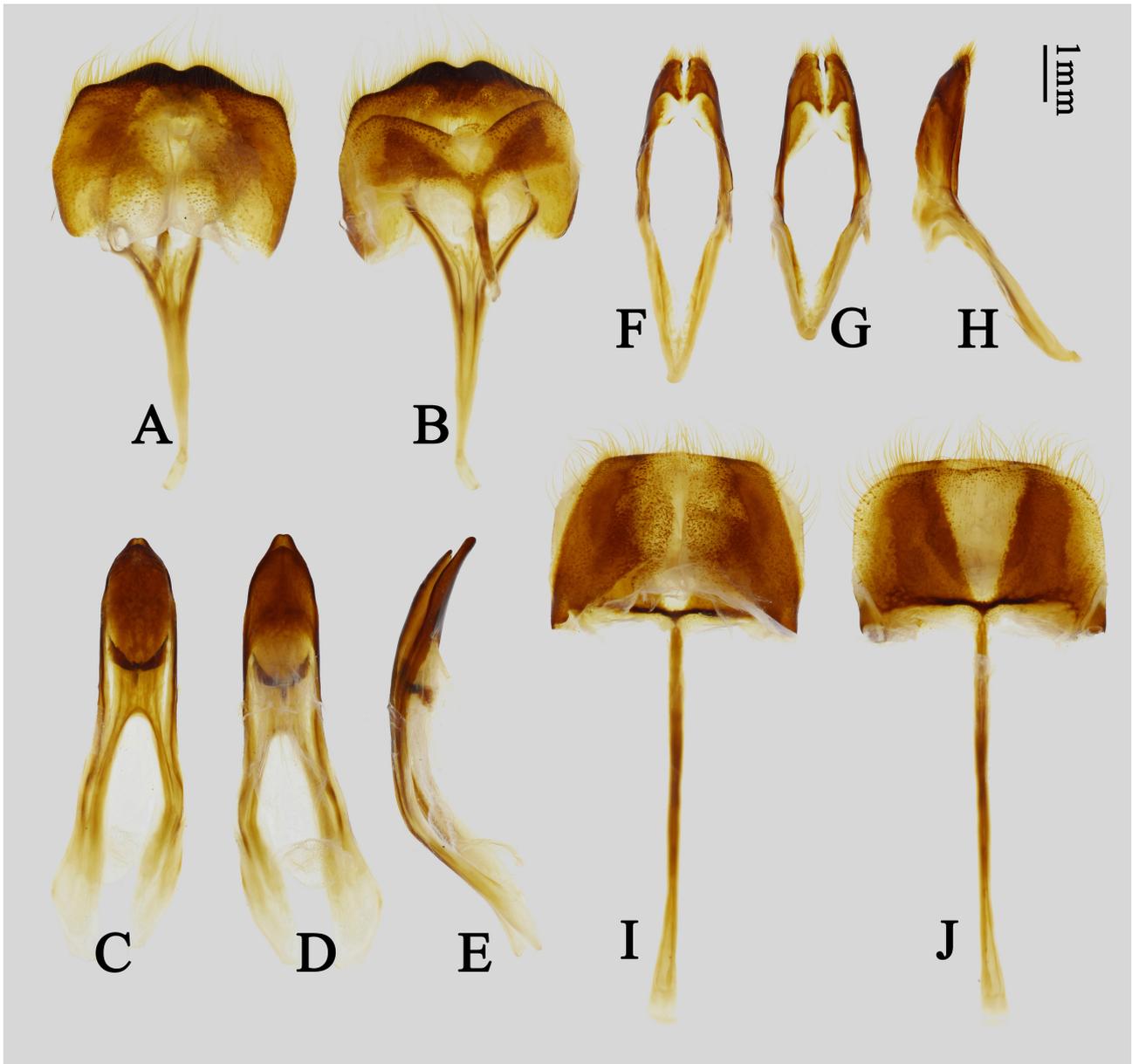


FIGURE 3. Terminalia of *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** (A–H. Male. I–J. Female). **A, B.** Tergite VIII with sternites VIII & IX. **C–E.** Median lobe. **F–H.** Tegmen. **I, J.** Tignum. (A, C, F, I. Dorsal view. B, D, G, J. Ventral view. E, H. Lateral view).

Etymology. The new species is dedicated to the late Mr. Kai-Ji He, father of the second author. The name is a noun in the genitive case.

Distribution. China: Xizang.

Remarks. *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** is morphologically close to *N. fulvopubens* (Pic), *N. spadix* Holzschuh and *N. hefferni* Vitali in median antennomeres with minute internal spines at apices.

***Nadezhdiella cantori* (Hope, 1842)**

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(Figs 4A–D, 5A, B, 6A–J, 9B, E, H, 10B)

Hamaticherus cantori Hope, 1842: 61.

Hammaticherus scabricollis Chevrolat, 1852: 416. Synonymized by Gahan 1890: 249.

Neocerambyx cantori: Lacordaire 1868: 251, nota 2.

Cerambyx cantori: Gahan 1890: 249.

Cerambyx lucasi Brongniart, 1891: 238. Synonymized by Gressitt 1939: 12.

Nadezhdiella cantori: Plavilstshikov 1931a: 71.

Additional description. Male genitalia (Fig. 6A–H): Tergite VIII (Fig. 6A) transverse, moderately projected in middle and doubly emarginated at two sides, setae moderately long and quite even for whole apical margin. Tegmen rhombic in ventral view (Fig. 6G), slightly curved in lateral view (Fig. 5H), parameres stout (length/width less than 2), slightly narrowed apically, with rounded apex, with apical setae long, more than half of parameres, lateral setae much shorter. Median lobe slightly curved in lateral view (Fig. 6E), median struts more than half length of median lobe. Ventral plate bluntly projected at apex (Fig. 6D). Internal sac with 2 pieces of crest-shaped basal armature (Fig. 6C, D). Female genitalia: tignum (Fig. 6I, J) subequal to one fourth of abdomen in length, spermathecal tube long, spermathecal capsule crescent-shaped, stouter than other two congeners and with sharper apex (Fig. 10B).

Material examined. China (**Shaanxi**): 1 female, Langao County, Changchungongshe (岚皋长春公社), host plant: *Citrus* (桔), 1981.VI.16, leg. Ming Li (IZCAS); 1 female, Xunyang (旬阳), host plant: *Morus alba* L. (桑), 1980.VII (IZCAS). China (**Shanghai**): 1 female, Zi-Ka Wei, VI.21 (IZCAS). China (**Zhejiang**): 1 male, Zhoushanshi, Ruijiacun (舟山市芮家村附近), 123 m, 30°01'35.14"N, 122°14'48.87"E, 2017.VI.29, leg. Yan-Dong Chen, Yi-Xiang Zhang (IZCAS); 1 female, Zhoushan (舟山), 1931.VI.14 (IZCAS); 1 female, Chusan, 1931.VI.10, leg. O. Piel (IZCAS); 1 female, same data but 1931.VI.30; 1 female, same data but 1931.VIII.9; 1 male, Lin'an, Xitianmushan (临安西天目山), 1999.VI.6, leg. Hui Xiao (IZCAS). China (**Hubei**): 1 male, Badongsanxialinchang (巴东三峡林场), 180 m, 1994.V.14, leg. You-Wei Zhang (IZCAS); 1 male, same data but 255 m, 1993.VI.26, leg. Jian Yao. China (**Jiangxi**): 1 female, Shanggao (上高), 1980.V.9 (IZCAS); 1 female, Chongren (崇仁), 1992.V.26 (IZCAS); 1 male, Kiangsi, Kingan (IZCAS). China (**Hunan**): 1 female, Xiangjiang (湘江), 1981.VII.30 (IZCAS); 1 male, Changsha (长沙) (IZCAS); 1 female, Hunan (IZCAS). China (**Fujian**): 1 male, Fuzhou, Meifeng (福州梅峰), 1959.VI.9, leg. Wang (IZCAS); 1 female, Fuzhou, Kuiqi (福州魁岐), 1955.VI.15 (IZCAS); 1 female, same data but 1955.VI.11; 1 male 2 females, same data but 1955.VI.19-21; 2 males 1 female, same data but 1955.VII.6-8; 1 male, same data but 1955.VIII.12; 1 female, same data but 1955.V.26; 1 male 1 female, same data but 1955.V.4-5; 1 male, Fukien, Foochow (IZCAS); 1 female, Jian'ou (建瓯), 1933.V.14 (IZCAS). China (**Taiwan**): 1 male, Taidong County, Darenxiang, Shouka (台东县达仁乡寿埕), 400 m, 2005.IV.8, leg. Wenhsin Lin at night (IZCAS). China (**Guangdong**): 1 male, Lingnan Campus, Host plant: *Citrus*, 1949.V.2, leg. Leunghing (SYSU); 1 female, Guangzhou, Kangle (广州康乐), 1959.III.26, leg. De-Xin Liu (SYSU); 1 female, same data but 1959.IV.10, leg. Li-Zhong Hua (SYSU, Ce-002103); 1 male, Guangzhou, Shipai (广州石牌), 1958.III.26, leg. Bao-Lin Zhang (IZCAS); 1 female, Guangzhou (广州), 1936 (IZCAS); 1 female, Longshanlinchang (龙山林场), host plant: *Citrus* (柑桔), 1981.VI.2 (IZCAS); 1 male, Lianzhou, Yao'an (连县瑶安), 1965.VI.26, leg. Yu-Liang Luo (IZCAS); 1 male, Ruyuan, Tianjingshan, Daping (乳源天井山大坪), 1974.VI.6, leg. Cheng Liao (SYSU, Ce-002116); 1 male, Renhua, Danxianshan (仁化丹霞山), 2017.IV.22, photographed by Qian-Le Lu; 1 male, Yingde (英德), 1959.V (SYSU, Ce-002118). China (**Hainan**): 1 male, Lingshui County, Diaoluoshan (陵水县吊罗山), 960 m, 2011.V.7, leg. Wenhsin Lin (IZCAS); 1 female, Wuzhishan, Nat. Rev. office (五指山保护区管理局), 708 m, 2010.IV.9-11, leg. Wenhsin Lin by light trap (IZCAS); 1 male, Wuzhishan (五指山), 2008.IV.1, leg. Yu-Xia Yang (IZCAS); 1 female, Yinggeling, Baisha County, Hongxincun (鹦哥岭白沙县红新村), 432 m, 19.08067°N, 109.52127°E, 2008.XI.16, leg. Mei-Ying Lin (IZCAS); 1 male, Wenchang, Touyuanzhen, Houganghongshulin (文昌头苑镇后港红树林), 1 m, 19.62550°N, 110.79247°E, 2009.V.24, leg. Ke-Qing Song (IZCAS); 1 male, Wanning (万宁), 10 m, 1960.V.9, leg. Suo-Fu Li (IZCAS); 1 female, Hainan, 1934.III.2, leg. Ho Chi (何琦) (IZCAS); 2 males 1 female, same data but 1934.X.27. China (**Guangxi**): 1 male, Guilin, Liangfeng (桂林良丰), 1952.III.8 (IZCAS); 2 males, same date but 1952.IV.27; 1 male 2 females, same date but 1952.V.2-3; 1 male, same data but 1952.V.6; 3 males 1 female, same data but 1952.V.16-17; 1 male, same data but 1952.V.29; 2 males 1 female, Guilin, Yanshan (桂林雁山), 1976.VII.17, leg. Bao-Lin Zhang (IZCAS); 1 male, Guilin, Yanshan (桂林雁山), 1953.VI.18 (IZCAS); 1 female, Guilin (桂林), 1952.V.5 (IZCAS); 1 female, Xiang'an, Maoershan, Gaozhai (兴安猫儿山高寨), 2011.VI.2, leg. Xin-Lei Huang (IZCAS); 2 males, 1 female, Guilin City, Xing'an County, Mao'ershan (兴安县猫儿山), 2022.V, leg. local collector (CLHC); 1 female, Longzhou, Daqingshan (龙州大青山), 360 m, 1962.IV.18, leg. Yong-Shan Shi (IZCAS); 1 male, Chongzuo, Nalong (崇左那隆), 290 m, 1998.III.20, leg. Fu-Sheng Huang (IZCAS); 1 male 1 female, Rong'an (融安), 1957.IV.26-28, leg. Bo-Liang Wu (SYSU); 1 male, Rong'an, Longmiao (融安龙妙), 1959.IV.26 (SYSU, Ce-002078), 1 female, Luocheng (罗城), 1928.V.27 (IZCAS); 1 male, Quanzhou County, Sanli (全

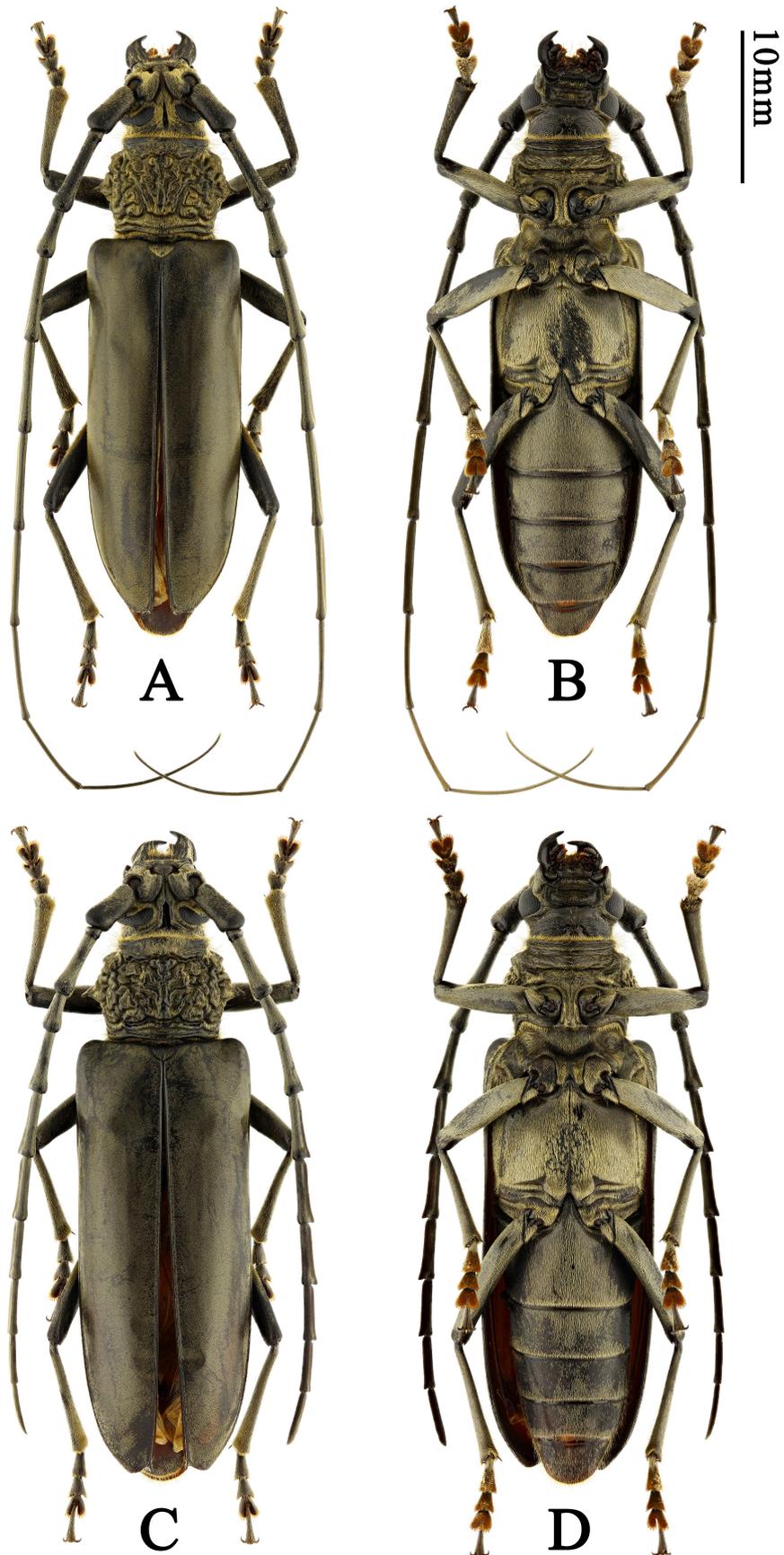


FIGURE 4. Habitus of *Nadezhdiella cantori* (Hope, 1842). A–B. Male, from Guangxi, China. C–D. Female, from Guangxi, China. (A, C. Dorsal view. B, D. Ventral view).

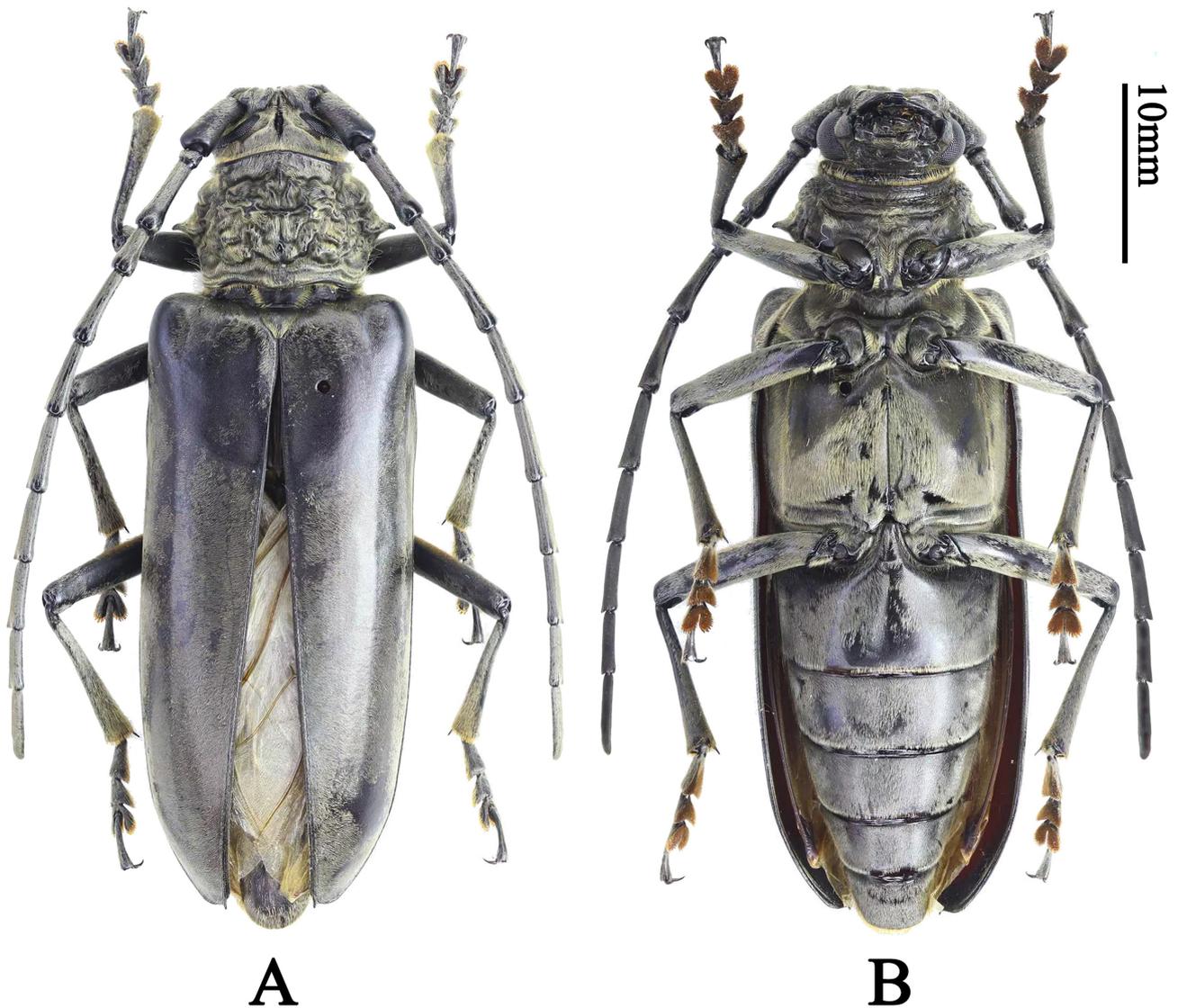


FIGURE 5. Habitus of *Nadezhdiella cantori* (Hope, 1842), female, from Xizang, China. (A. Dorsal view. B. Ventral view).

州县三立), 1959.V.17, leg. Bo-Liang Wu (SYSU); 1 male, 1 female, Guangyang, Wenshi (灌阳文市), 1959.V.25, leg. Guangxi Team (SYSU, Ce-003510 & 3511); 1 female, Yangshuo (阳朔), 1959.V.25, leg. Li-Zhong Hua (SYSU, Ce-002127). China (**Chongqing**): 1 female, Beibei (北碚), 1945.V.1 (IZCAS). China (**Sichuan**): 1 male, 1 female, Chengtu (= Chengdu, 成都), leg. K. O. Lieu (IZCAS); 1 male, Wenjiang (温江), 1981.VI.5, leg. Ya-Jiang Liu (IZCAS); 1 female, Emeishan (峨眉山), 1982.VI.24 (IZCAS); 1 male, Emeishan (峨眉山), 1986.VI.24 (IZCAS); 1 male, Yongshun (永顺), 1982.VI.22, leg. Liang-Cheng Hu (IZCAS). China (**Guizhou**): 1 male, Panxianlaochang (盘县老厂), host plant: *Prunus persica* (L.) Batsch (桃树), 1980.VI, leg. Shu-Xian Feng (IZCAS); 1 female, Ma'anshan (马鞍山), host plant: *Citrus* sp. (柑桔), 1979.VI.15, leg. Ling Deng (IZCAS); 1 female, Sanhe (三合), 1930.VIII.8 (IZCAS). China (**Yunnan**): 1 female, Xishuangbanna, Mengla County, Longmencun (西双版纳勐腊县龙门村), 913 m, 21°16'54.5"N, 101°32'14.2"E, 2010.IV.10, leg. Ding-Jie Zhang by light trap (IZCAS); 1 female, Xishuangbanna, Damenglong (西双版纳大勐龙), 650 m, 1958.VII.19, leg. Yi-Ran Zhang (IZCAS); 1 male, same data but 1957.IV.11, leg. Qiu-Zhen Liang; 1 male 1 female, Jinping, Mengla (金平猛喇), 400 m, 1956.IV.27, leg. Ke-Ren Huang *et al.* (IZCAS); 1 male, Hekou (河口), 80 m, 1956.VI.10, leg. Ke-Ren Huang *et al.* (IZCAS). China (**Xizang**): 1 female, Mêdog County, Zhaibung Town, Jiangxin Village (墨脱县背崩乡江新村), 2 km of the road, 830.01 m, 29.23245°N, 95.14609°E, 2021.VI.21, leg. Hong Liu & Man Qin by light trap (IZCAS, IOZ(E)2538331). **Vietnam**: 2 males, Tonkin, Hoabinh, 1959.X, leg. A de Cooman (IZCAS); 1 female, same data but 1940.VII; 1 male 1 female, Tonkin, Hoabinh, leg. A de Cooman (IZCAS); 1 male, Tonkin, Vinh Guang, leg. Cornillev (IZCAS).

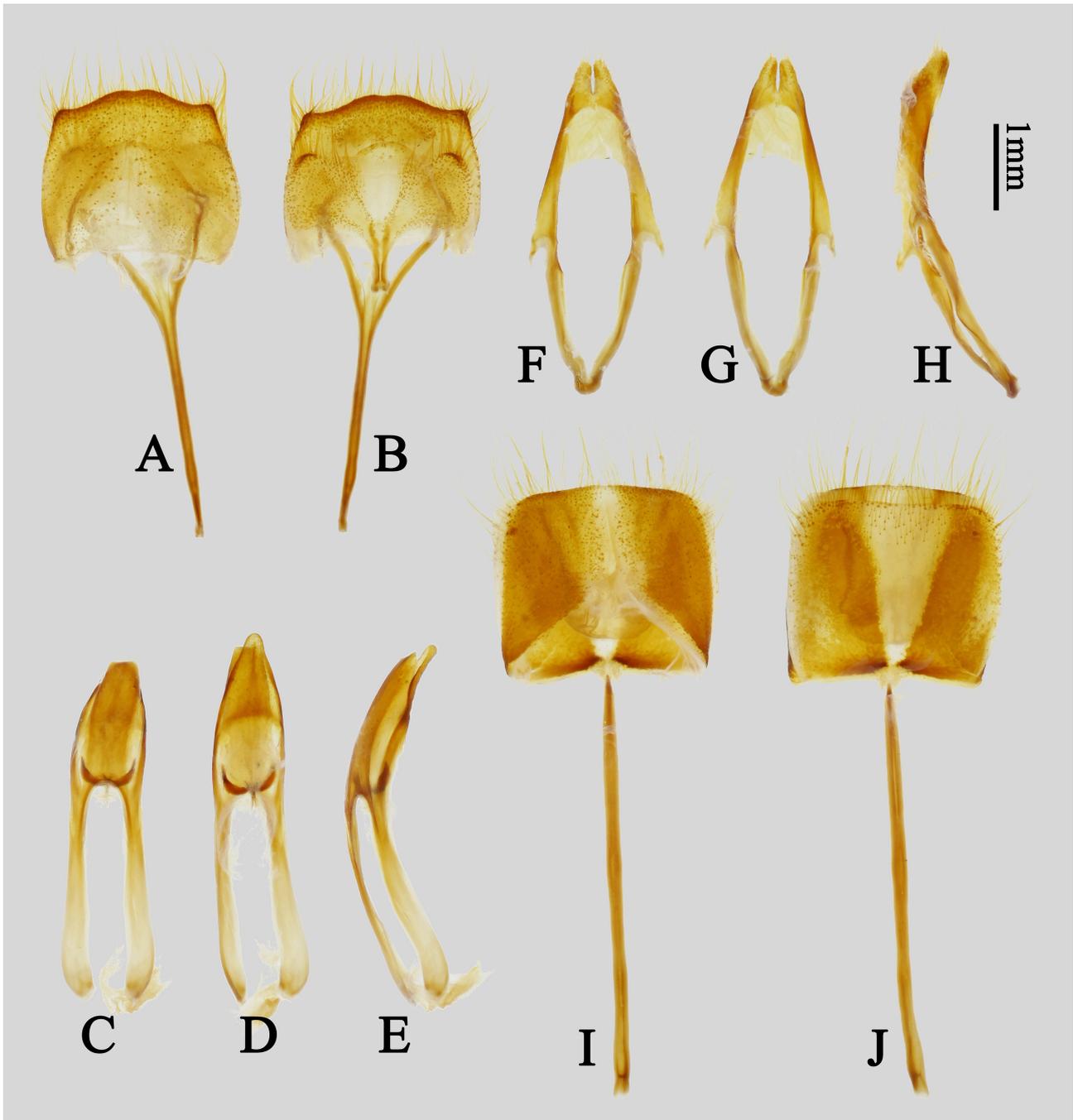


FIGURE 6. Terminalia of *Nadezhdiella cantori* (Hope, 1842). (A–H. Male. I–J Female). **A, B.** Tergite VIII with sternites VIII & IX. **C–E.** Median lobe. **F–H** Tegmen. **I, J.** Tignum. (A, C, F, I. Dorsal view. B, D, G, J. Ventral view. E, H. Lateral view).

Distribution. China: Shandong, Henan, Shaanxi, Gansu, Jiangsu, Shanghai, Zhejiang, Hubei, Jiangxi, Hunan, Fujian, Taiwan, Guangdong, Hainan, Hong Kong, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Xizang (**new record**). Vietnam; Laos; Thailand.

Host plants. *Ananas comosus* Merrill; *Artocarpus* sp.; *Citrus aurantifolia* Swingle; *Citrus grandis* Osbeck; *Citrus limonia* Osbeck; *Citrus maxima* Merrill; *Citrus sinensis* (Linnaeus) Osbeck; *Citrus tangerina* Hortulanorum ex Tanaka; *Morus alba* L.; *Olea europaea* Linnaeus; *Populus* sp.; *Prunus persica* (L.) Batsch; *Quercus* sp.; *Salix* sp.; *Sapium sebiferum* Roxburgh; *Tectona grandis* Linnaeus; *Vernicia fordii* (Hemsley) Airy Shaw; *Vitis vinifera* Linnaeus.

Remarks. The species is recorded from Xizang, China for the first time.

It shares localities with *N. fulvopubens*, such as Shaanxi, Zhejiang, Hubei, Jiangxi, Hunan, Fujian, Guangdong, Hainan, Guangxi, Sichuan, all confirmed by the examined material in this study. It shares locality of Xizang, Mêdog with *N. hekaijii* sp. nov. too. In addition, it shares host plant with *N. fulvopubens*, such as *Prunus persica* (L.) Batsch.

Gressitt (1951) reported six species of *Citrus* as its host plants; while Hua (2002) reported three species of *Citrus* and another 9 genera; then Ernstsons *et al.* (2021) gathered all those host plants and added *Sapium sebiferum*. *Morus alba* L. and *Prunus persica* (L.) Batsch are here newly reported based on label information of specimens from Shaanxi and Guizhou Provinces respectively.

***Nadezhdiella fulvopubens* (Pic, 1933)**

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(Figs 7A–D, 8A–J, 9C, F, I, 10C)

Plocaederus fulvopubens Pic, 1933: 27.

Nadezhdiella aureus Gressitt, 1937: 91. Synonymized by Holzschuh 2005: 4.

Nadezhdiella conica Chiang, 1942: 254, figs. 1, 2. Synonymized with *Nadezhdiella aureus* by Gressitt 1951: 139.

Nadezhdiella aurea: Gressitt 1951, 139, pl. 4, fig. 7.

Nadezhdiella fulvopubens: Holzschuh 2005: 4.

Additional description. Male genitalia (Fig. 8A–H): Tergite VIII (Fig. 8A) subquadrate, widely rounded at apex, setae short and almost even in length for whole apical margin. Tegmen rhombic in ventral view (Fig. 8G), strongly curved in lateral view (Fig. 8H), parameres very stout (length/width ca. 1), with widely rounded apex; with apical setae long, longer than parameres, lateral setae much shorter. Median lobe slightly curved in lateral view (Fig. 8E), median struts slightly longer than half length of median lobe. Ventral plate strongly projected at apex (Fig. 8D). Internal sac with 2 pieces of crest-shaped basal armature (Fig. 8C, D). Female genitalia: tignum (Fig. 8I, J) subequal to one fourth of abdomen in length, spermathecal tube very long, spermathecal capsule crescent-shaped, looking like question mark (Fig. 10C).

Material examined. China (**Shaanxi**): 1 female, Ningshan County, Laocheng, Nanmennongjiale (宁陕老城南门农家乐), 814 m, 33.353435°N, 108.319957°E, 2013.VII.14, leg. Zhi-Shun Song, Qiang-Feng Zheng by light trap (IZCAS). China (**Zhejiang**): 1 female, Tienmushan (天目山), 1935.VIII.15 (IZCAS). China (**Hunan**): 2 female, Yongzhou, Shuangpai County, Yangmingshan (永州双牌县阳明山), 2025.VI.20, leg. Ming-Yu Zhu (CZMY). China (**Guangdong**): 1 male, 2 females, Maomingshi, Xinyishi, Datian Ding (茂名市信宜市大田顶), 2025.V.22, leg. Ming-Yu Zhu (CZMY). China (**Guangxi**): 1 male, Guilin, Liangfeng (桂林良丰), 1952.VI.7 (IZCAS); 1 female, same data but 1952.V.6; 1 male, Guilin, Yanshan (桂林雁山), 1957.V.25 (IZCAS); 1 female, Kwangsi, Yaoshan, leg. S. Y. T. (IZCAS); 1 male, Jinxiu, Linhaishanzhuang (金秀林海山庄), 1000 m, 2000.VII.2, leg. Jun Chen (IZCAS); 1 female, Jinxiu, Jinzhonggonglu (金秀金忠公路), 1100 m, 1999.V.12, leg. Wen-Zhu Li (IZCAS); 1 female, Quanxian, Qiyidadui (全县七一大队), 1959.V.15, leg. Bo-Liang Wu (SYSU); 1 female, Xiang'an, Jinshi, Guiyan (兴安金石鬼岩), 1 229 m, 2016.VI.28, leg. Yan-Quan Lu by light trap (CCCC); 1 male, Lingui, Guangfuding (临桂广福顶), 1 350 m, 2020.VII.1, leg. Yan-Quan Lu by light trap (CCCC); 1 female, Liucheng, host plant: *Prunus persica* (L.) Batsch (桃树), 1959.IV.5, leg. Bo-Liang Wu (SYSU); 2 females, Nanning, Wuming, Damingshan (武鸣大明山), 2014.VI.2, leg. Chao Li (CSJB). China (**Sichuan**): 1 male, 1 female, Chengtu (= Chengdu, 成都), 1940. VI.25–27, leg. K. O. Lieu (IZCAS); 2 females, same data but without collecting date; 1 male 1 female, Chengdu City, Dujiangyan, Longchizhen, Lingyanguanyinshan scenic area (成都市都江堰市龙池镇灵岩观音山风景区), alt. 1005 m, 29.54019°N, 103.61454°E, 2024.VI.13, leg. Yuan Li & Chao Zhou (CLHC); 1 female, same data but 2025.VI.15, leg. Zhen Wang (CZWC); 1 female, Linshui (邻水), host plant: *Malus pumila* Mill. (苹果), 1981.VI.19, leg. Yu-Xue Zhang (IZCAS); 1 male, Linshui (邻水), 1981.VI.5 (IZCAS); 1 male, same data but 1981.VI.7, leg. Kuan-Yuan Zhang; 1 female, Emeishan, Qingyinge (峨眉山清音阁), 800–1000 m, 1957.VII.15, leg. Ke-Ren Huang (IZCAS). **Vietnam**: 1 male, 2 females, Tinh Nghê An, 2024.VI, local collector leg. (CLHC); 1 male, 2 females, Yên Bái, Mù Cang Chải, 2025.V–VI, local collector leg. (CSJB).

Distribution. China: Liaoning, Henan, Shaanxi, Jiangsu, Zhejiang, Hubei, Jiangxi, Hunan, Fujian, Guangdong, Hainan, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan. Vietnam, Laos, Thailand.

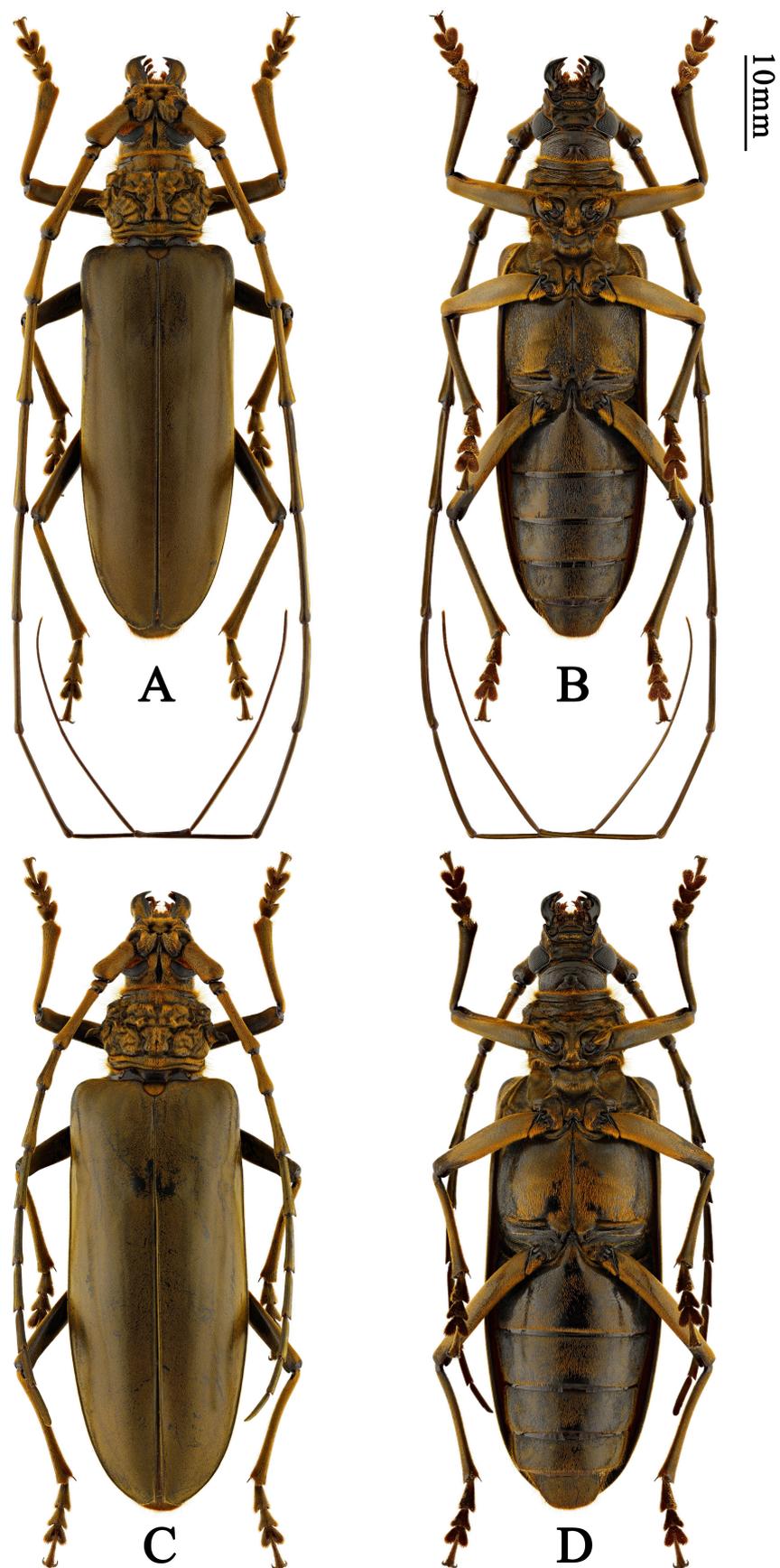


FIGURE 7. Habitus of *Nadezhdiella fulvopubens* (Pic, 1933). A–B, male, from Sichuan, China; C–D, female, from Sichuan, China. (A, C. Dorsal view. B, D. Ventral view).

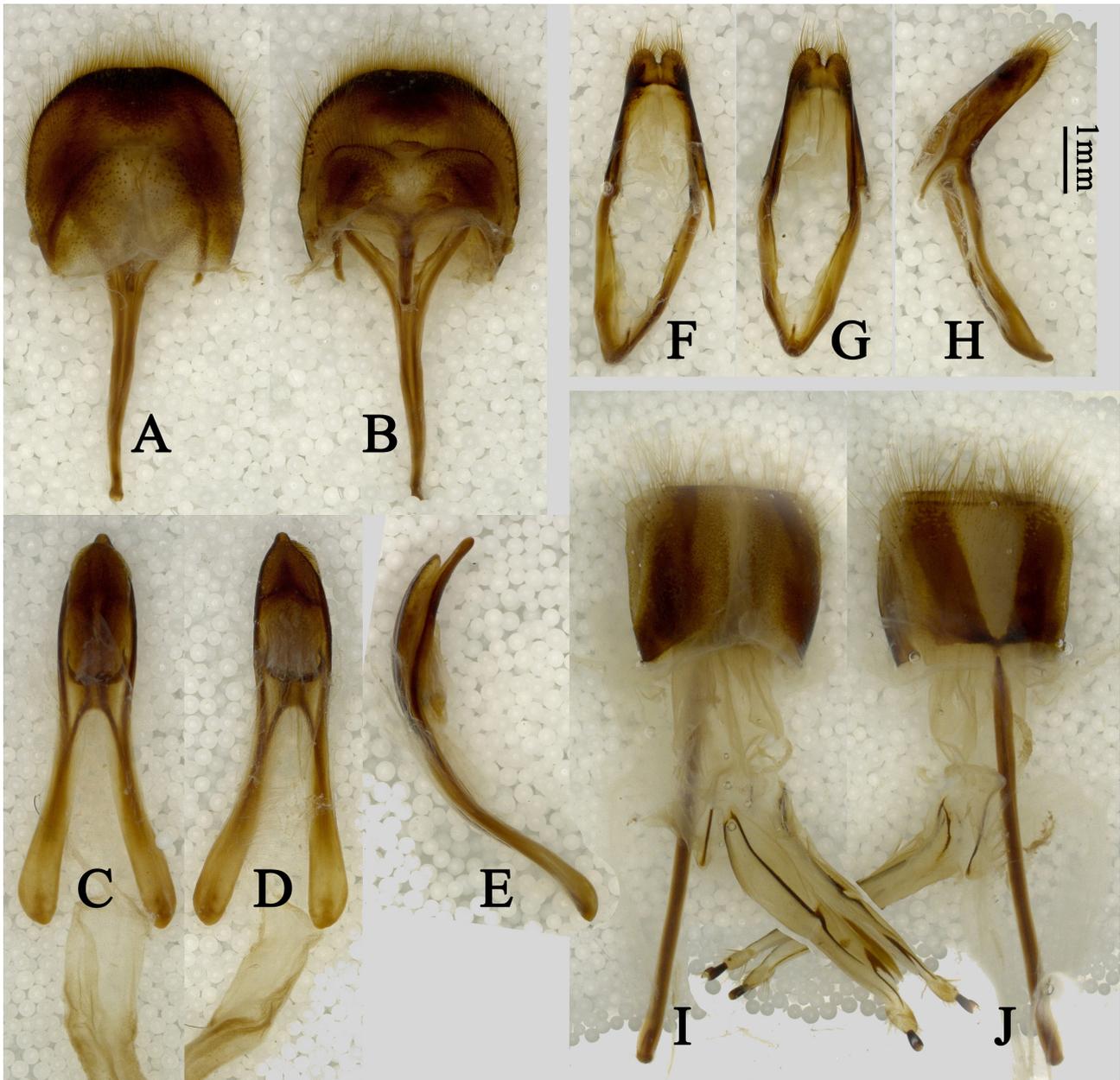


FIGURE 8. Terminalia of *Nadezhdiella fulvopubens* (Pic, 1933). (A–H. Male. I–J Female). **A, B.** Tergite VIII with sternites VIII & IX. **C–E.** Median lobe. **F–H** Tegmen. **I, J.** Tignum. (A, C, F, I. Dorsal view. B, D, G, J. Ventral view. E, H. Lateral view).

Host plants. *Eucalyptus* sp.; *Malus pumila* Mill. (firstly reported based on label information); *Morus alba* Linnaeus; *Prunus persica* (Linnaeus) Batsch.; *Prunus salicina* Lindley; *Pyrus* sp.; *Quercus glauca* Thunberg.

Remarks. Gressitt (1951) synonymized *Nadezhdiella conica* Chiang, 1942 with *Nadezhdiella aurea* Gressitt, 1937, while Holzschuh (2005) synonymized *N. aurea* with *Plocaederus fulvopubens* Pic, 1933, and made the correct combination based on the holotype specimen and other specimens from Vietnam, Laos, and Thailand. Gressitt (1951) reported two host plants, *Prunus persica* (Linnaeus) Batsch. and *Pyrus* sp. for *N. aurea*; while Hua (2002) reported *Eucalyptus*, *Morus alba*, *Prunus salicina*, *Pyrus* and *Quercus glauca* except for that. *Malus pumila* Mill. is here newly reported based on label information of one specimen from Sichuan Province.

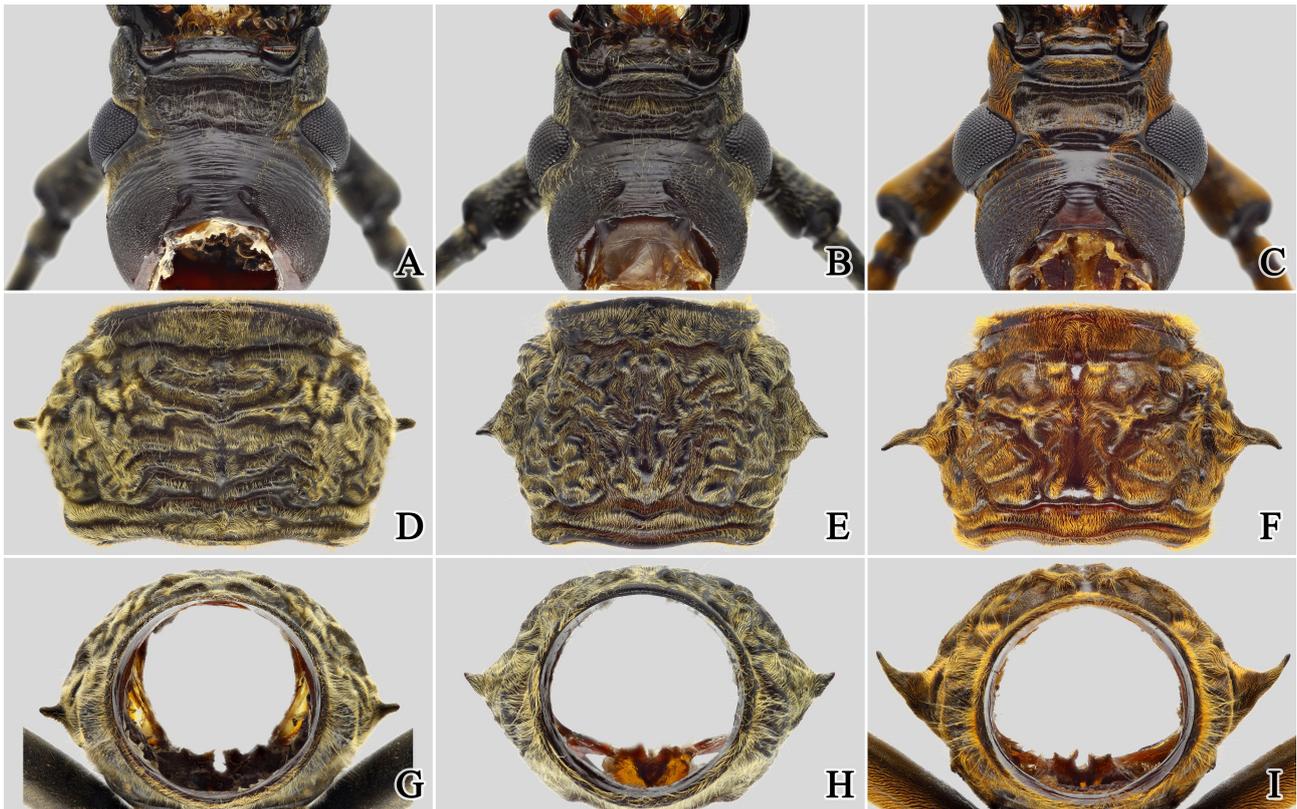


FIGURE 9. Head and prothorax, males. **A–C.** Head, in ventral view. **D–I.** Prothorax. (**D–F.** Dorsal view. **G–I.** Frontal view). **A, D, G.** *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** **B, E, H.** *Nadezhdiella cantori* (Hope, 1842). **C, F, I.** *Nadezhdiella fulvopubens* (Pic, 1933). Not to scale.



FIGURE 10. Female, spermathecal capsule and tube. **A.** *Nadezhdiella hekaijii* Lin, He & Li, **sp. nov.** **B.** *Nadezhdiella cantori* (Hope, 1842). **C.** *Nadezhdiella fulvopubens* (Pic, 1933). Not to scale.

Nadezhdiella hefferni Vitali, 2020

赫弗褐天牛

Nadezhdiella hefferni Vitali, 2020: 45, fig. 1a, b.

Distribution. China: Yunnan.

Remarks. Vitali (2020) wrote: “*Nadezhdiella hefferni* n. sp. looks more closely related to *N. spadix*, sharing with it similar pronotal tubercles (long bowed spines in *N. fulvopubens*), relatively smaller body size (up 60 mm in *N. fulvopubens*), colour of the tegument (pitch-brown in *N. fulvopubens*) and fine pronotal ridges. However, it differs from both species in the spined antennomere 4 and in the regular pronotal ridges.” It is most similar to *N. hekaijii* **sp. nov.** in the spined antennomere IV, but can be distinguished from it by the pronotum without a recognizable median longitudinal line.

Nadezhdiella japonica Hayashi, 1972

日本褐天牛

Nadezhdiella japonica Hayashi, 1972: 27.

Distribution. Japan.

Remarks. Hayashi (1972) wrote: “This new species differs from the type species of the genus, *N. cantori* (Hope) from Taiwan, Hainan, South China and Thailand, in having the smaller, chestnut brown body, shorter antennae having terminally less dilated apical joints, shallower both excavations on posterior half of occiput, duller vermiculations and closely set small tubercles on pronotum, almost parallel-sided elytra, even in male, having longer pubescence, etc.” From literature, there were one male holotype in the original description (Hayashi 1972), one female picture in the Japanese fauna book (Ohbayashi & Niisato 2007), and several fresh specimens with additional locality records in another Japanese fauna book (Fujita *et al.* 2018). Without examining any specimen, we followed Hayashi (1972) to separate it from *N. cantori* in the key.

Nadezhdiella spadix Holzschuh, 2005

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Nadezhdiella spadix Holzschuh, 2005: 4, fig. 3.

Distribution. Malaysia: Sabah.

Remarks. Holzschuh (2005) wrote: “*N. fulvopubens* unterscheidet sich von der neuen Art durch den sehr langen Seitendorn des Halsschildes, dunkle Färbung, weniger rötliche Behaarung, gerade Querfurchen auf der Unterseite des Kopfes zwischen den Augenloben, ziemlich glatten und etwas glänzenderen Halsschildkragen, deutlicher seifenglänzende Flügeldecken sowie spitzigere und längere Außenbecken der Fühlerglieder 5-10.” Only two female specimens and no male specimen were known (Holzschuh 2005).

Key to the six known species of *Nadezhdiella* Plavilstshikov, 1931

- 1 Median antennomeres lacking minute internal spines at apices 2
- Median antennomeres with minute internal spines at apices 3
- 2 Antennae longer, 1.5 times as long as body in male, reaching apical fifteenth of elytra in female; apical antennomeres having longer outer apical teeth; both excavations on posterior half of occiput deeper *N. cantori* (Hope, 1842)
- Antennae shorter, 1.25 times as long as body in male, reaching apical seventh of elytra in female; apical antennomeres having shorter outer apical teeth; both excavations on posterior half of occiput shallower *N. japonica* Hayashi, 1972
- 3 Antennomere with short internal spine at apex 4
- Antennomere without short internal spine at apex 5
- 4 Tegument chestnut-brown, entirely covered with recumbent sulphurous pubescence; pronotum irregularly and roughly vermiculate, without median longitudinal line; antennomere 4 slightly shorter than two thirds of antennomere 3 in females (fig. 1a in Vitali 2020) *N. hefferni* Vitali, 2020
- Tegument blackish-brown, entirely covered with recumbent yellow brown pubescence; pronotum with coarse, irregular (but in middle disc regions largely transverse) grooves, with median longitudinal throughout Figs 1A, C, 9D); antennomere 4 longer than two thirds of antennomere 3 in females *N. hekaijii* Lin, He & Li, sp. nov.
- 5 Prothorax with lateral spines extremely long and obviously bended upwards and backwards . (Fig. 9F, I); ventral side between lower eye lobes with straight transverse grooves (Fig. 9C); pubescence yellowish brown, less reddish *N. fulvopubens* (Pic, 1933)
- Prothorax with lateral spines shorter than those of *N. cantori*; ventral side between lower eyelobes irregularly wrinkled; pubescence uniformly reddish brown. *N. spadix* Holzschuh, 2005

Acknowledgments

We thank Tatsuya Niisato (Kokubunji City, Tokyo, Japan) and Gérard Luc Tavakilian (Muséum National d’Histoire Naturelle, Paris France) for improving this manuscript, Kui-Yan Zhang (张魁艳) and Si-Qin Ge (葛斯琴) (IZCAS), Bing-Lan Zhang (张兵兰) (SYSU), Ji-Huan Zheng (郑基焕) (IZGAS) for giving access to the collections, and

Kui-Yan Zhang (张魁艳) (IZCAS) for assistance to take images with a large depth of field 3D Digital Microscope (Keyence VHX-1000C). We thank Yao-Nan Zhang (张耀楠) and Chen Jin (金宸) (Beijing, China) for donating the female paratype specimen to IZCAS, Ming-Yu Zhu (朱铭宇) (CZMY), Jian Sun (孙剑) (CSJB), Zhen Wang (王震) and Chao Zhou (周超) (all Chengdu, Sichuan, China) for providing the fresh specimens of *Nadezhdiella fulvopubens*. The second author would like to express his sincere gratitude to Ze-Yu Li (李泽雨) (Panzhuhua, Sichuan, China), Rong-Chuan Tao (陶容川) (Ya'an, Sichuan, China) for their constant research assistance. The third author would like to thank Li-Gui Tang (唐立贵) (Ziyang, Sichuan, China) and Di-Hao Wu (吴帝豪) (Bijie, Guizhou, China) for their assistance during the investigation in Médog County, Xizang. This research was supported by a start-up fund from Mianyang Normal University (grant no. QD2023A30), the Institute of Zoology, Guangdong Academy of Sciences (grant no. GZGK23P138A0437Z), Mianyang Science and Technology Program (2023ZYDF076) and the Second Tibetan Plateau Scientific Expedition and Research Program (STEP, grant no. 2024QZKK0200).

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西藏褐天牛属*Nadezhdiella*一新种（鞘翅目：天牛科：天牛亚科：天牛族）

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摘要: 对褐天牛属*Nadezhdiella*进行了初步系统厘定, 记述西藏墨脱县1新种—开基褐天牛*N. hekajii* **sp. nov.**; 提供了开基褐天牛和同属2种即褐天牛*N. cantori*和桃褐天牛*N. fulvopubens*的整体和外生殖器图; 还报道褐天牛新分布信息并提供该属6已知种检索表。

关键词: 分类; 分布; 东洋区