



Two new species of *Cylindera* (*Ifasina*) from South-East Asia and comments on two other taxa (Coleoptera: Cicindelidae)

Jürgen WIESNER¹, Andrey MATALIN^{2,3} & Miroslav KLÍCHA⁴

¹Am Zellberg 6, D-38527 Meine, Germany, E-mail: jurgen.wiesner@gmail.com,
<https://orcid.org/0000-0002-7824-166X>

²Moscow State Pedagogical University, Education-Scientific Centre of Ecology & Biodiversity, Kibalchicha str. 6, build. 3, 129164 Moscow, Russia, E-Mail: andrei-matalin@yandex.ru, <https://orcid.org/0000-0002-7790-8709>

³Pirogov Russian National Research Medical University, Institute of Biology and Human Pathology, Department of Biology, Ostrovitianova str. 1, 117997 Moscow, Russia

⁴Nad kaplickou 16, CZ-1000 Praha 10, Czech Republic, E-Mail: miroslav.klicha@seznam.cz

Abstract. *Cylindera* (*Ifasina*) *paralesnei* sp. n. and *Cylindera* (*Ifasina*) *bandinellii* sp. n. are described as new to science, *Cylindera* (*Ifasina*) *decolorata* (Horn, 1907) is redescribed and a lectotype is designated, *Cylindera* (*Ifasina*) *lesnei* (Babault, 1923) is discussed, and *Cylindera* (*Ifasina*) *ilonae* Matalin, 2015 is placed in synonymy. A key is given to the Vietnamese members of *Cylindera* (*Ifasina*) Jeannel, 1946.

Riassunto. Due nuove specie di cicindele (Coleoptera: Cicindelidae) del sud-est asiatico e commenti su altre due. Vengono descritte *Cylindera* (*Ifasina*) *paralesnei* sp. n. e *Cylindera* (*Ifasina*) *bandinellii* sp. n. Viene ridescritta e viene designato il lectotipo di *Cylindera* (*Ifasina*) *decolorata* (Horn, 1907); viene discussa *Cylindera* (*Ifasina*) *lesnei* (Babault, 1923) e messa in sinonimia *Cylindera* (*Ifasina*) *ilonae* Matalin, 2015. Viene fornita una chiave dicotomica per i membri vietnamesi di *Cylindera* (*Ifasina*) Jeannel, 1946.

Tóm tắt. Hai loài bọ cánh cứng hồ trùng mới (Coleoptera: Cicindelidae) từ Đông Nam Á và thảo luận về hai loài khác. *Cylindera* (*Ifasina*) *paralesnei* sp. n. và *Cylindera* (*Ifasina*) *bandinellii* sp. n. được mô tả, *Cylindera* (*Ifasina*) *decolorata* (Horn, 1907) được mô tả lại và một mẫu lectotype được chỉ định, *Cylindera* (*Ifasina*) *lesnei* (Babault, 1923) được thảo luận và *Cylindera* (*Ifasina*) *ilonae* Matalin, 2015 được đặt trong danh pháp đồng nghĩa. Một khóa định loại được xây dựng cho các loài Việt Nam của *Cylindera* (*Ifasina*) Jeannel, 1946.

Key words. *Cylindera*, *Ifasina*, *bandinellii*, *paralesnei*, *decolorata*, *ilonae*, taxonomy, new species, Vietnam, China, Oriental Region.

Introduction

HORN (1907: 24) described *Cicindela psilica decolorata*, based on a male specimen from Yunnan, Vietnam. SCHILDER (1953: 548) listed *decolorata* as a species distinct from *psilica* Bates, 1866 in the genus *Cylindera* Westwood, 1831, subgenus *Jansenia* Chaudoir, 1865. RIVALIER (1961: 142) placed *decolorata* in the genus *Cylindera* Westwood, 1831, subgenus *Ifasina* Jeannel, 1946. A closely related species was described by BABAULT (1923: 7) based on three females from Tonkin as *Cicindela lesnei*, which was also included in the subgenus *Ifasina* of the genus *Cylindera* by RIVALIER (1961: 142). MATALIN (2015: 409) described another related species as *Cylindera* (*Ifasina*) *ilonae* based on a male from Na Hang (Vietnam). We have now obtained access to material from Vietnam and China for examination, including the syntype of *Cylindera* (*Ifasina*) *decolorata*, the holotype of *Cylindera* (*Ifasina*) *ilonae*, and a photograph of the holotype of *Cylindera* (*Ifasina*) *lesnei*. The following results of the study are presented. *Cylindera* (*Ifasina*) *ilonae* is placed in synonymy with *Cylindera* (*Ifasina*) *lesnei*. A lectotype of *Cylindera* (*Ifasina*) *decolorata* is designated, while *Cylindera* (*Ifasina*) *bandinellii* sp. n. and *Cylindera* (*Ifasina*) *paralesnei* sp. n. are described as new to science. An identification key of the Vietnamese *Cylindera* (*Ifasina*) species is also introduced.

Materials and Methods

All measurements were made with an ocular-micrometer on stereomicroscope Motic SMZ 171 as follows:

- TL total body length without labrum (from anterior margin of clypeus to the elytral apex along the suture);
HW width of head (in widest place);
LL length of labrum with apical teeth (along the midline);
LW width of labrum (in the widest place);
PL length of pronotum (along the midline);
PW width of pronotum (in the widest place);
EL length of elytra (from the base of scutellum to the apex along the suture);
EW width of the left elytron (in the widest place).

The label data of the type specimens are reported in order from pinhead to pinpoint in quotations marks with label sides divided by a single slash and separate labels indicated by a double slash.

Species mentioned here are deposited in:

- ABIC collection of Aligi Bandinelli, Firenze, Italy
CKGC collection of Christian Kerkering, Emsdetten, Germany
JWGC collection of Jürgen Wiesner, Meine, Germany
MNHN Muséum National d'Histoire Naturelle, Paris, France
MKCC collection of Miroslav Klícha, Praha, Czech Republic
MSPU Moscow State Pedagogical University, Moscow, Russia
SDEI Senckenberg Deutsches entomologisches Institut, Müncheberg, Germany
ZIN Zoological Institute of Russian Academy of Science, St. Petersburg, Russia
ZSM Zoologische Staatssammlung, München, Germany

Results

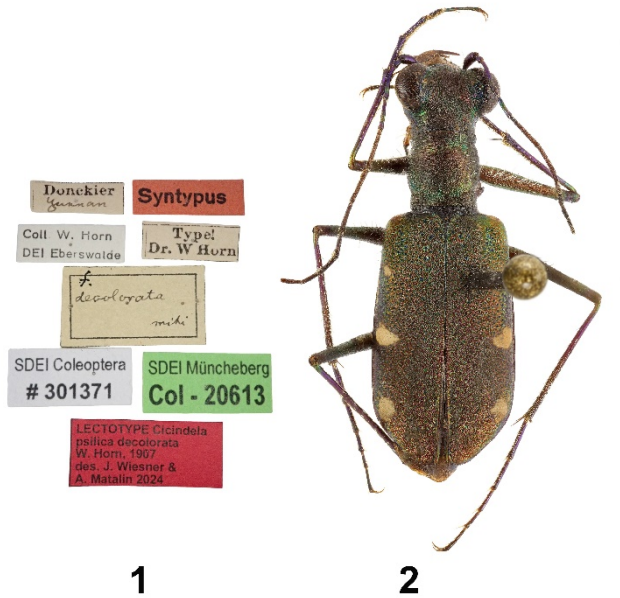
Cylindera (Ifasina) decolorata (Horn, 1907) (Fig 1-3)

Cicindela psilica decolorata: Horn 1907: 24.

Cylindera (Jansenia) decolorata: Schilder 1953: 548.

Cylindera (Ifasina) decolorata: Rivalier 1961: 142.

Examined material. Lectotype male (here designated) (SDEI), "Donckier / Yunnan [handwritten] // Type! / Dr. W. Horn // Syntypus [printed, red] // Coll. W. Horn / DEI Eberswalde// SDEI Coleoptera / # 301371 // f. decolorata mihi [handwritten] // SDEI Müncheberg / Col – 20613 [printed, green] // LECTOTYPE *Cicindela / psilica decolorata / W. Horn, 1907 / des. J. Wiesner & A. Matalin 2024* [printed, red]"; 3 females (SDEI), Mai 1927, S-Ymsha, Sz'Tschwan, Hwa-Shin-Shan, Hurchow-Ching = King Friedrich; 2 females (SDEI), Shin-Guy-Foo, Chine, Novembre; 1 male, 1 female (SDEI), Shin-Guy-Foo, Chine, Novembre. 2 females (JWGC), 7.6.1995, China, Prov. Sichuan, You-yang, ex coll. Lee J. Kha; 1 female (JWGC), 29.6.-6.7.2001, China, Guizhou, Jiangkou Co., ca. 50 km SW Jiangkou, surr. of Shidu vill., 27°32.83'N 108°36.45'E, ca. 650 m, leg. Wang & Schillhammer; 1 male, 1 female (JWGC), 8.2003, China, Yunnan, Tongbiguan, Yingjiang, leg. Ying; 1 male, 1 females (JWGC), vi.2023, Vietnam, Ha Giang town env., Song Lo Riv., Ha Giang Pr., leg. V. Dang; 3 males, 2 females (CKGC), v.2022, Vietnam, Ha Giang town environment, Song Lo Riv., Ha Giang Pr., leg. V. Dang; 1 male, 2 females (CKGC), vi.2023, Vietnam, Ha Giang town env., Song Lo Riv., Ha Giang Pr., leg. V. Dang.



Figures 1-2. *Cylindera (Ifasina) decolorata* (Horn, 1907). Scale = 5 mm. 1) Labels of lectotype male (SDEI). 2) Habitus of lectotype male (SDEI).

Diagnosis. The species can be distinguished from *Cylindera (Ifasina) bandinellii* sp. n. by the unicolorous femora and the setose pronotum; from *Cylindera (Ifasina) paralesnei* sp. n. by the narrow dark (blue-violet) lateral margin of the elytra and the olive-green elytral ground color; and from the other Vietnamese species of the subgenus *Ifasina* by the body size, the non-metallic labrum and the elytra pattern reduced to four marginal spots.

Redescription. TL = 7.5-10.7 mm, mean 8.7 mm, n = 13. Head glabrous except for two setae anteriorly and centrally on orbital plates near orbital margin; clypeus and frons blackish green, smooth; orbital plates blackish green, longitudinally furrowed; vertex longitudinally furrowed, olive brown with coppery luster; genae transversely furrowed, glabrous, blackish green. Labrum (Fig 10-13) dark brown and variably light-colored (broadly light to completely brown), transverse, 2.1 times as broad as long, LL = 0.50 mm, LW = 1.01 mm, with six to nine submarginal setae, middle part slightly drawn out, with acute triangular central tooth and right and left each with a flat projection. Mandibles light, teeth brownish. Labial and maxillary palpi light, apical segment dark brown with metallic luster. Antennae slender, reaching posteriorly to half the length of the elytra in males, somewhat shorter in females; antennomeres one to four shiny black with violet luster, scape with long sensitive hair, antennomeres two to four glabrous, antennomeres five to eleven dull black, finely and evenly hairy. Pronotum (PL = 1.7 mm, PW = 1.6 mm) 1.1 times longer than wide, slightly rounded above, distinctly rounded laterally, distinctly furrowed transversely in front and behind, midline flat, distinctly furrowed transversely in front of anterior constriction and on lateral margin, less furrowed on upper side, with a small hump on posterior lateral margin; olive brown, with green luster in furrows and midline; lateral margins sparsely furnished with white hairs, never glabrous. Elytra (Fig 28-31, EL = 5.4 mm, EW = 1.5 mm) 1.8 times as long as wide, slightly widened behind the middle, coppery brown, covered with green pore points; the shoulders beyond the basal dot are shiny brass-colored; in females, there is a closely spaced group of pore points in the discal area that resemble a mirror spot; lateral margins blue violet; the light elytra

pattern consists of a humeral, a posthumeral, a sublateral-median and an anteapical dot. The scutellum is dull green. The apex of the elytra is slightly retracted, with microserration and a short, pointed suture tooth. The epipleura are blackish brown.

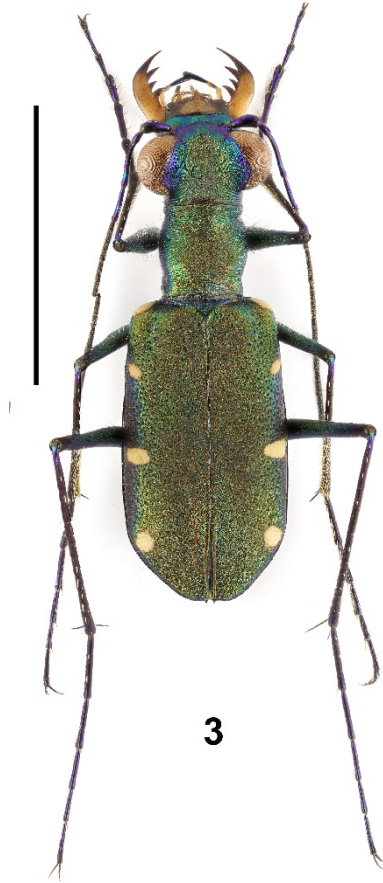


Figure 3. *Cylindera (Ifasina) decolorata* (Horn, 1907).
Scale = 5 mm. Habitus of male, Vietnam, Ha Giang
(CKGC).

Proepisterna black, glabrous; sternites of thorax black, with greenish luster; pro- and mesosterna glabrous, metasterna with white hairs on lateral margin, metepisterna and mesepimeron completely covered with white hairs; mesepisterna only sparsely covered with white hairs on posterior lower lateral margin; in females the mesepisterna shows a long and shallow longitudinal furrow in the posterior third. Ventrites of the abdomen blackish brown, with greenish luster, evenly short and white setose. Legs black except for pale trochanters, with metallic luster; femora with three rows of white hairs. Aedeagus (Fig 22, 23) AL = 2.6 mm, 0.5 times as long as the elytra; slender, middle part enlarged noticeably, apex elongate and gradually drawn out to a blunt tip.

Distribution. Vietnam (Ha Giang), China (Guizhou, Sichuan, Yunnan).

Remarks. The report of *Cylindera (Ifasina) decolorata* from Vietnam (Bac Giang) by WIESNER *et al.* 2017: 64 proved to be a misidentification. These specimens proved to be *Cylindera (Ifasina) bandinellii* sp. n. The report of *Cylindera (Ifasina) decolorata* from Hong Kong by ASTON 2016: 210 was also a misidentification. These specimens are instead *Cylindera (Ifasina) paralesnei* sp. n. There are first records of *Cylindera (Ifasina) decolorata* from the province of Ha Giang. The distribution data of *Cylindera (Ifasina) decolorata* in China (WIESNER 2020: 280) must also be corrected insofar as the reports from Fujian, Guangdong, and Hong Kong refer to *Cylindera (Ifasina) paralesnei* sp. n.

***Cylindera (Ifasina) bandinellii* Wiesner & Kliča sp. n. (Fig. 5)**

Examined material. Holotype male (JWGC, long term loan of ZSMC), "Vietnam – Bac Giang Prov. – Son / Dong Distr., Tay Yen Tu Nat. / Res., Mt. Yen Tu (N21,170- / E106,719°) // 450 m, 06.VI.2022 / leg. A. Bandinelli, E. Orbach, / G. Sabatinelli & Pham Van Phu // HOLOTYPE / *Cylindera (Ifasina) / bandinellii* sp. nov. / des. J. Wiesner & / M. Kliča 2024 [printed, red]". 8 males, 7 females (ABIC), 2 males (JWGC), 1 paratype female (MKCC), "Vietnam – Bac Giang Prov. – Son / Dong Distr., Tay Yen Tu Nat. / Res., Mt. Yen Tu (N21,170- / E106,719°) // 450 m, 06.VI.2022 / leg. A. Bandinelli, E. Orbach, / G. Sabatinelli & Pham Van Phu // PARATYPE / *Cylindera (Ifasina) / bandinellii* sp. nov. / des. J. Wiesner & / M. Kliča 2024 [printed, red]". 2 females (JWGC), "N Vietnam, Bac Giang, / 200m, Tay Yen Tu Nat. Res., / 6 km SW Thanh So'n, N21°10.830 E106°43.427", / 18.v.2015, leg. R. Gerstmeier [printed, yellow] // PARATYPE / *Cylindera (Ifasina) / bandinellii* sp. nov. / des. J. Wiesner & / M. Kliča 2024 [printed, red]".

Diagnosis. This new species can be distinguished from *Cylindera (Ifasina) paralesnei* sp. n. and *Cylindera (Ifasina) decolorata* by the light-colored femora at the base and the completely glabrous pronotum, and from the other Vietnamese species of the subgenus *Ifasina* by the body size, the non-metallic labrum and the elytra pattern reduced to four marginal spots.

Etymology. The species is named in honor of the well-known Italian coleopterologist and one of the collectors of this new species, Aligi Bandinelli.

Description. TL = 7.1-7.8 mm, mean 7.6 mm, n = 18. Head glabrous except for two setae anteriorly and centrally on orbital plates near orbital margins; clypeus and frons blackish blue, smooth; orbital plates blackish blue, longitudinally furrowed; vertex longitudinally furrowed, blue-green in center, brighter laterally, with brass-colored reflections; genae transversely furrowed, glabrous, green. Labrum (Fig 14-17) medium brown, lighter inside in some specimens, transverse, 2.0 times as wide as long, LL = 0.50 mm, LW = 0.98 mm, with six to eight submarginal setae, middle part slightly drawn out, with pointed triangular central tooth and right and left side each with a shallow protrusion.

Mandibles light, teeth brownish. Labial and maxillary palpi light, apical segment dark brown with a metallic luster. Antennae slender, in males reaching posteriorly half the length of the elytra, in females somewhat shorter; antennomeres one to four shiny black with a blue-green luster, scape with a long sensitive hair, antennomeres two to four glabrous, antennomeres five to eleven dull black, finely and evenly setose. Pronotum (PL = 1.4 mm, PW = 1.3 mm) 1.1 times longer than wide, glabrous, slightly rounded above, distinctly rounded laterally, distinctly transversely furrowed anteriorly and posteriorly, midline shallow, distinctly transversely furrowed in front of the anterior constriction and on the lateral margins, less strongly furrowed on the upper side, with a small hump on the posterior lateral margins; black-green to dull black, with a coppery or blue-green luster in the transverse furrows and on the lateral margin humps. Elytra (Fig 32-35, EL = 4.7 mm, EW = 1.3 mm) 1.8 times as long as wide, slightly widened behind the middle, matt black, covered with fine pore points, with a reddish-copper, green-edged border of variable extent starting from the middle suture; below the light humeral dot there is a reddish-coppery spot; the light elytra pattern consists of a humeral, a post humeral, a sublateral-median and an antepical dot, the latter of which can be small or absent. In females, there is a closely spaced group of pore points in the discal area, which resemble a mirror spot when closely grouped. The

scutellum is dull black. The elytral apex is not or only slightly retracted, with microserration and a short, pointed suture tooth. The epipleura are blackish brown. Proepisterna black-blue, glabrous; sternites of thorax black, with greenish luster; pro- and mesosterna glabrous, metasterna with white setae on lateral margins, metepisterna and mesepimeron completely covered with white setae; mesepisterna only sparsely covered with white setae on posterior lower lateral margins; in females, mesepisterna has a short groove at upper tip directed towards center. Sternites of abdomen black-brown, with greenish luster, evenly short and white setose. Trochanters light; femora with several white hairs in three rows, basal third to basal half of femora light, remainder blackish brown; tibiae medium brown; tarsi medium brown, blackish brown at apical end. Aedeagus (Fig 24) AL = 2.6 mm, 0.6 times as long as the elytra; slender, middle part little enlarged, apex elongate and drawn out to a short blunt tip.

Distribution. Vietnam (Bac Giang).

Remarks. The report of *Cylindera (Ifasina) decolorata* from Vietnam (Bac Giang) by WIESNER *et al.* 2017: 64 proved to be a misidentification. Instead, these specimens are *Cylindera (Ifasina) bandinellii* sp. n.

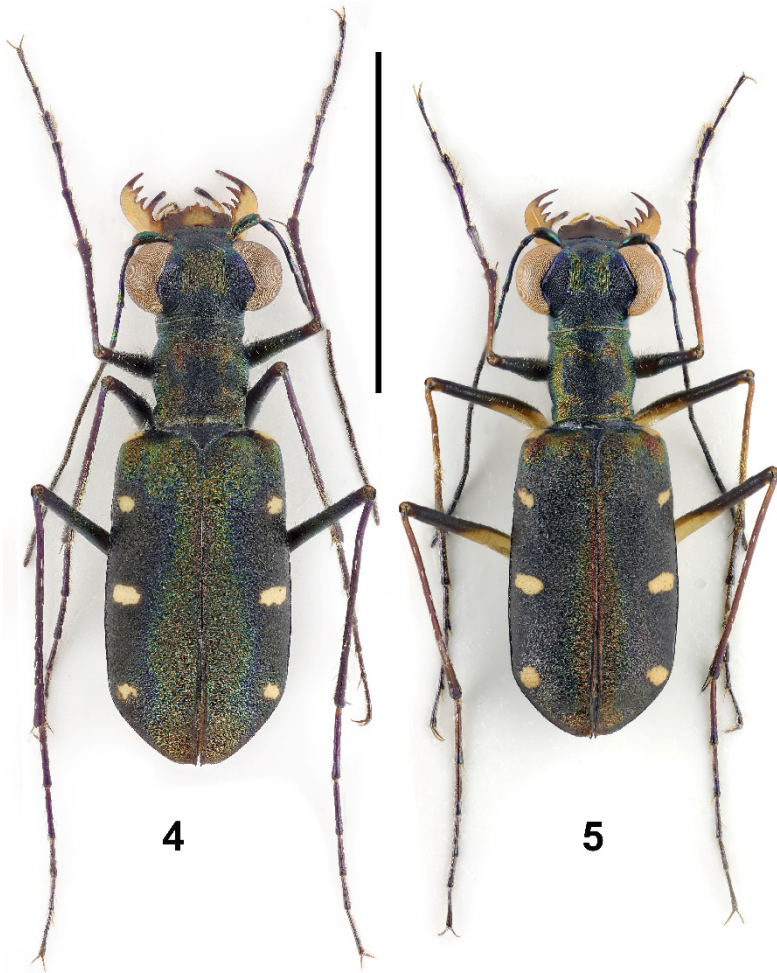
***Cylindera (Ifasina) paralesnei* Wiesner & Matalin sp. n. (Fig. 4)**

Examined material. Holotype male (JWGC), "VIETNAM-N (Na Hang) / 160km NNW Hanoi, / NE env. of Na Hang, / h=150-200m, 2-9.VI.1996, / leg. A. Napolov // HOLOTYPE / *Cylindera (Ifasina) paralesnei* / des. J. Wiesner & / A. Matalin 2024 [printed, red]". Paratypes, all with identic type label "PARATYPE / *Cylindera (Ifasina) paralesnei* / des. J. Wiesner & / A. Matalin 2024 [printed, red]"; 2 females (SDEI), "Kuantung, S. China"; 1 female (SDEI), "China – Canton, Mell S. V."; 1 male (SDEI), "Kuantung, Drachenkoof, Mell, 12.vii.17"; 4 males, 4 females (MSPU), "N Vietnam, 160 km NNW Hanoi, NE env. of Na Hang, h ~ 150–200 m, 1–5.VI.1996, leg. A. Napolov // *Cylindera (Ifasina) lesnei* (Babault), det. A.V. Matalin, 2010"; 1 female (JWGC), "2-9.vi.1996, Vietnam, Na Hang, 160 km NNW Hanoi, NE env. of Na Hang, 150-200m, leg. A. Napolov"; 1 male (MSPU), "Vietnam – N (Na Hang), 160 km NNW Ha Noi, NE env. of Na Hang, 1–5.VI.1996, h ~ 150–200 m, Lg. A. Napolov & I. Roma // *Cylindera (Ifasina) lesnei* Bab., det. V. Tscherkasov, 1996"; 18 males, 16 females (JWGC), "1.-10.8.2006, China, Hunan, Chengbu county, Mt. Nan-Shan-Ding, via Li Jingke"; 3 males, 2 females (JWGC), "18.5.2010, China, Hong Kong S.A.R., Tai Po Kau Forest reserve, leg. P. Aston"; 1 female (JWGC), "28.6.2010, China, Guangxi, Baise"; 2 males (JWGC), "13.vi.2013, China, centr. Guangdong prov., Yunjishan Nat. Res., 700-1300 m, 24°06-07'N, 114°10'E, Jatua leg."; 1 male, 2 females (JWGC), "3.vi.2014, China, SE Guangdong prov., Lianhuashan, 250-570m, 23°02'N 115°15'E, Jatua leg."; 1 male, 1 female (ABIC), 3 females (JWGC), "31.v.-18.vi.2015, China, NE Guangdong prov., Quifeng Shan, 900-1200m, 23°51'N 115°21'E, Jatua leg."; 7 males, 5 females (CKGC), "05/2018, China, Guangxi, Jinxiu, Mt. Dayaoshan, 100 m, local collector";

Diagnosis. This new species is distinguished from *Cylindera (Ifasina) bandinellii* sp. n. by the unicolored femora and the setose pronotum; from *Cylindera (Ifasina) decolorata* by the dark (blue-violet) lateral margins of the elytra always enclosing the light dots and usually extending far over the area of the elytra; and from the other Vietnamese species of the subgenus *Ifasina* by the body size, the non-metallic labrum and the elytra pattern reduced to four marginal spots.

Etymology. As the new species was considered *lesnei* by authors in the past, it is named *paralesnei*

Description. TL = 6.6-8.8 mm, mean 8.0 mm, n = 48. Head glabrous except for two setae anteriorly and centrally on orbital plates near orbital margins; clypeus and frons blackish blue, smooth; orbital plates blackish blue, longitudinally furrowed; vertex longitudinally furrowed, brassy in middle and to posterior margins, blue-green laterally from middle; genae transversely furrowed, glabrous, blackish blue, with purple or blue-green luster. Labrum (Fig 18-21) medium brown to dark brown, the center lightened in some specimens, transverse, 2.0 times as broad as long time, LL = 0.50 mm, LW = 1.02 mm, with six to nine submarginal setae, middle part slightly drawn out, with acute triangular central tooth and right and left each with a flat projection.



Figures 4-5. Habitus of holotypes males. Scale = 5 mm. 4) *Cylindera (Ifasina) paralesnei* Wiesner & Matalin sp. n. (JWGC). 5) *Cylindera (Ifasina) bandinellii* Wiesner & Kliča sp. n. (JWGC).

Mandibles light, teeth brownish. Labial and maxillary palps light, apical segment light brown to dark brown with metallic luster. Antennae slender, reaching posteriorly half the length of the elytra in males, somewhat shorter in females; antennomeres one to four shiny black with blue-green luster, scape with long sensitive hair, antennomeres two to four glabrous, antennomeres five to eleven dull black, finely and evenly hairy. Pronotum (PL = 1.5 mm, PW = 1.5 mm) as long as broad, slightly rounded above, distinctly rounded laterally, distinctly furrowed transversely in front and behind, midline flat, distinctly furrowed transversely in front of anterior constriction and on lateral margins, less furrowed on upper side, with a small hump on posterior lateral margins; blackish green to dull black, with coppery luster in transverse furrows and on lateral margin humps; lateral margins sparsely furnished with white hairs, never glabrous. Elytra (Fig 36-39, EL = 5.1 mm, EW = 1.4 mm) 1.9 times as long as wide, slightly

widened behind the middle, dull black, covered with fine pore points; the dull black coloration extends from the lateral margins at least to the area between posthumeral and antepical dot that are completely enclosed by it, at most the dull black coloration extends to the middle suture, the protruding area is olive-greenish, the middle suture coppery; the light elytra pattern consists of a humeral, a posthumeral, a sublateral-median and an antepical dot. The scutellum is dull black. The apex of the elytra is not or only slightly retracted, with microserration and a short, pointed suture tooth. The epipleura are blackish brown. Proepisterna blackish blue, glabrous; sternites of thorax black, with greenish luster; pro- and mesosterna glabrous, metasterna with white hairs on lateral margins, metepisterna and mesepimeron completely covered with white hairs; mesepisterna only sparsely covered with white hairs on posterior lower lateral margins; in females the mesepisterna shows a pit of variable depth and length in the center of the posterior third. Sternites of the abdomen blackish brown, with greenish luster, evenly short and white setose. Legs black except for the pale trochanters, with metallic luster; femora with three rows of white hairs. Aedeagus (Fig 25, 26) AL = 2.5 mm, 0.5 times as long as the elytra; slender, middle part slightly or not enlarged, apex tapered, tip slightly incurved.

Distribution. Vietnam (Na Hang), China (Guangdong, Guangxi, Hongkong, Hunan).

Remarks. The report of *Cylindera (Ifasina) decolorata* from Hong Kong by ASTON 2016: 210 proved to be a misidentification. These specimens instead are *Cylindera (Ifasina) paraleisnei* sp. n. The dark base color of the lateral margins of the elytra varies from dark blue to black. Their extent also varies from narrow, covering only the light-colored spots, to broad, covering almost the entire elytra. Such specimens with almost black-colored elytra are distributed in the Chinese provinces of Guangdong and Hong Kong, while specimens in Hunan, Guangxi and Vietnam (Na Hang) have narrower dark elytra margins.

***Cylindera (Ifasina) lesnei* (Babault, 1923) (Fig. 6, 7)**

Cicindela Lesnei Babault 1923: 7.

Cylindera (Jansenia) lesnei: Schilder 1953: 548.

Cylindera (Ifasina) Lesnei: Rivalier 1961: 142.

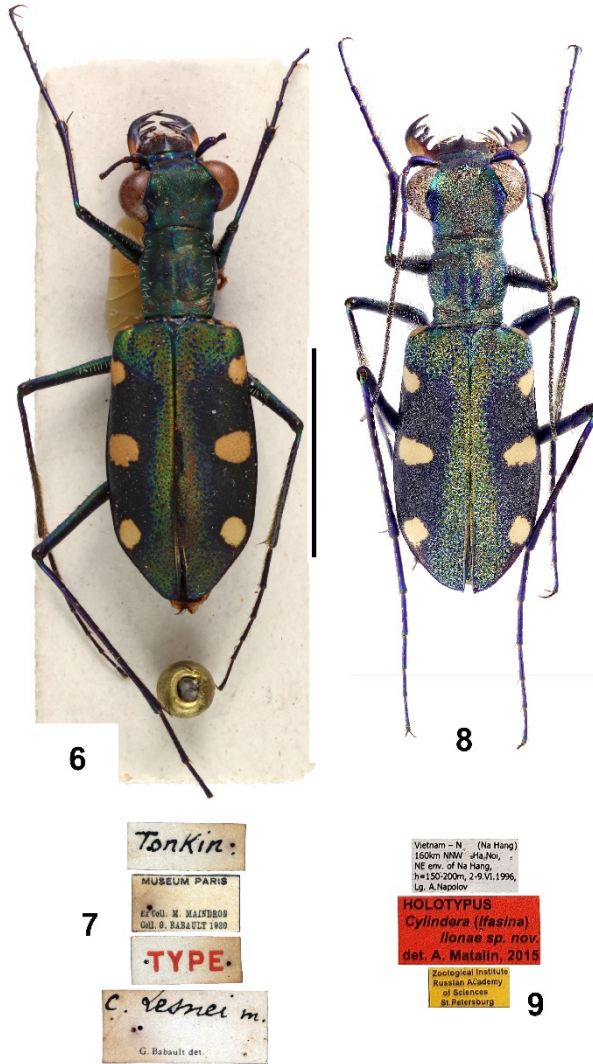
Cylindera (Ifasina) ilonae Matalin 2015: 409, syn. n. (Fig. 8, 9, 27)

Examined material. Holotype female (MNHN), "Tonkin [handwritten] // MUSEUM PARIS / Ex Coll. M. MAINDRON / Coll. G. BABAULT 1930 // TYPE [printed, red letters] // "C. lesnei mihi [handwritten] / G. Babault det". 1 male (SDEI), "C. lesnei mihi [handwritten] / G. Babault det. // SDEI Müncheberg / Col – 20628". Holotype male of *Cylindera (Ifasina) ilonae* Matalin, 2015 (ZISP), "Vietnam N, (Na Hang) / 160 km NNW Ha Noi / NE env. of Na Hang, / h = 150–200 m, 2-9.VI.1996, / leg. A. Napolov // HOLOTYPUS / *Cylindera (Ifasina) ilonae* sp. nov. / det. A. Matalin, 2015 [printed, red]".

Distribution. Vietnam (Tuyên Quang).

Remarks. *Cylindera (Ifasina) ilonae* was described from a male with a body length of 10.4 mm (MATALIN 2015: 409-411), which differs from *Cylindera (Ifasina) lesnei* particularly in its small size (total length 6.6-8.5 mm) and the shape and size of the aedeagus.

A female used by Babault to describe *Cylindera (Ifasina) lesnei* and labeled as a type (preserved in MNHN) measures 10.5 mm and a male preserved in the Horn collection (in SDEI) (also determined as *Cylindera (Ifasina) lesnei* by Babault, unfortunately with a damaged aedeagus) measures 10.8 mm. The size of Babault's two *Cylindera (Ifasina) lesnei* specimens shows that the body length specification in his description (BABAULT 1923: 7) of 8-9 mm does not correspond to the present data. *Cylindera (Ifasina) lesnei* is much larger. In fact, it is as large as *Cylindera (Ifasina) ilonae*.



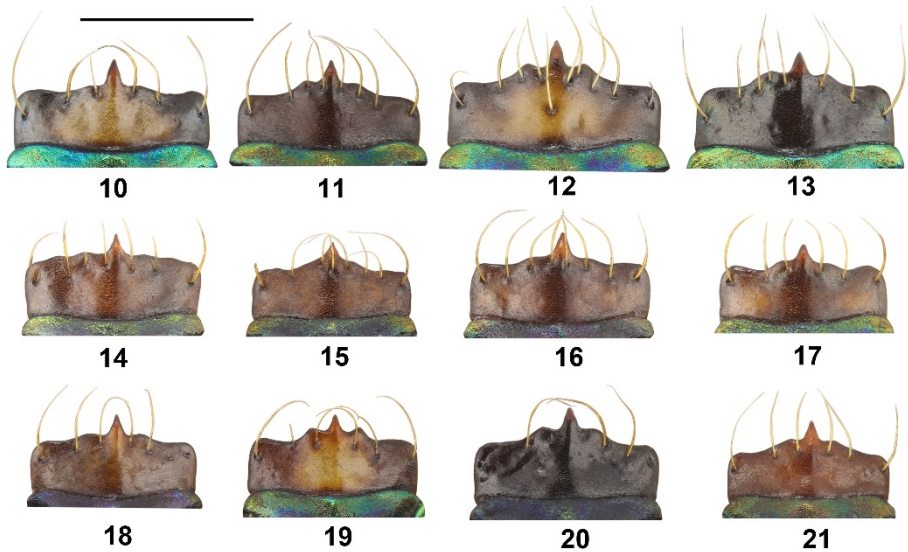
Figures 6-9. Scale = 5 mm. 6-7. Female holotype of *Cylindera (Ifasina) lesnei* (Babault, 1923) (MNHN). 6) Habitus. 7) Labels. 8-9. Male holotype of *Cylindera (Ifasina) ilonae* Matalin, 2015 (ZIN). 8) Habitus. 9) Labels.

Moreover, the preserved part of the aedeagus of *Cylindera (Ifasina) lesnei* from the SDEI resembles the aedeagus of the holotype of *Cylindera (Ifasina) ilonae* (Fig. 27). Therefore, a new synonymy is established here: *Cylindera (Ifasina) lesnei* (Babault, 1923) = *Cylindera (Ifasina) ilonae* Matalin, 2015.

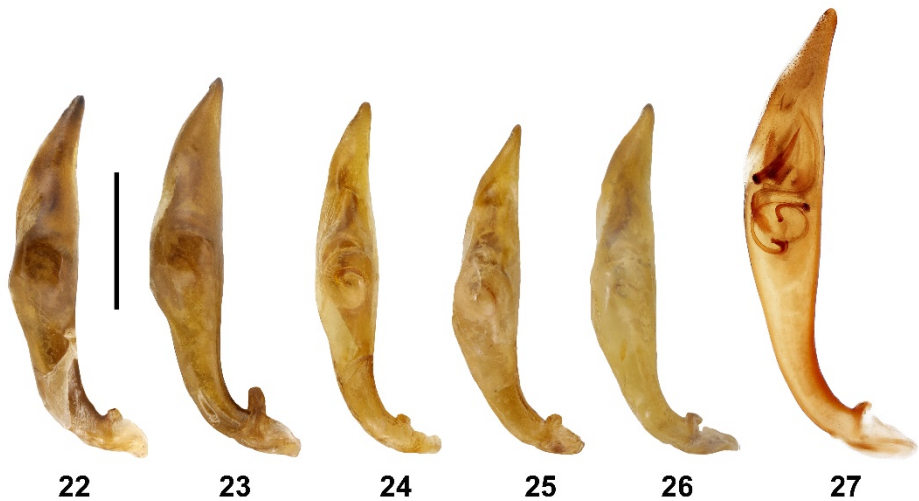
Key to the *Cylindera* species of the subgenus *Ifasina* of Vietnam

The key given by MATALIN 2015: 411, 412 is modified and extended.

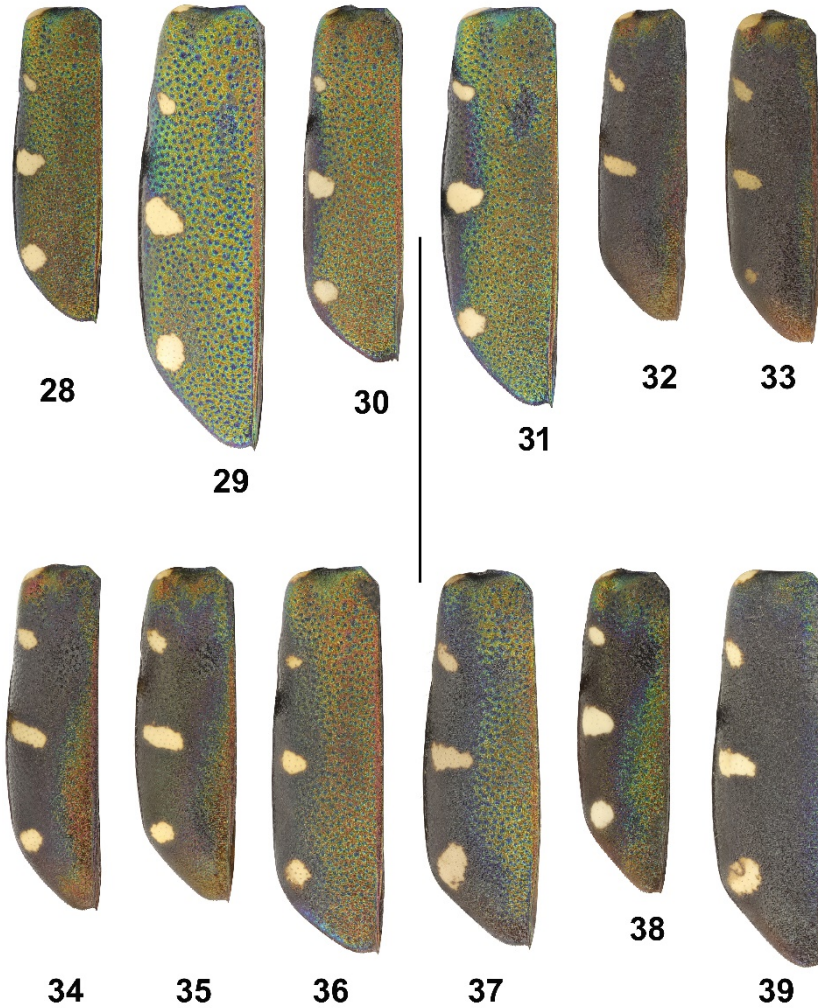
1. Elytra black or dark brown, immaculate, with coarse and distinctive surface sculpture *Cylindera (Ifasina) foveolata* (Schaum, 1863)
- Elytra maculate, surface sculpture not coarse or distinctive **2**
- 2(1). Labrum entirely bright metallic **3**
- Labrum non-metallic **5**
- 3(2). Elytra with three white spots: basal and apical portion of middle band, and basal portion of apical lunule; apical portion of middle band situated on long dull black stripe parallel to the suture; in some specimen middle band complete but with thin central section *Cylindera (Ifasina) viduata* (Fabricius, 1801)
- Elytra with four white spots: apical portion of humeral lunule, basal and apical portion of middle band, and basal portion of apical lunule; without longitudinal dull black stripe **4**
- 4(3). Shoulders and lateral margin of elytra with slight metallic blue-green iridescence; white elytral spots small; aedeagus slender and not expanded apically *Cylindera (Ifasina) fallaciosa* (Horn, 1897)
- Shoulders with bright metallic green-golden-bronze iridescence; white elytral spots large; aedeagus expanded apically *Cylindera (Ifasina) somnuki* Naviaux, 1991
- 5(2). Body length >10.0 mm *Cylindera (Ifasina) lesnei* (Babault, 1923)
- Body length ≤9.0 mm **6**
- 6(5). Elytra with isolated apical spot *Cylindera (Ifasina) psilica psilica* (Bates, 1866)
- Apical spot missing **7**
- 7(6). Elytra with roundish or missing anteapical spot **9**
- Anteapical spot comma-shaped drawn out **8**
- 8(7). The extension of the anteapical spot covers the corner of the middle suture *Cylindera (Ifasina) decempunctata* (Dejean, 1825)
- The extension of the anteapical spot ends far in front of the suture corner *Cylindera (Ifasina) kaleea kaleea* (Bates, 1866)
- 9(7). Middle band complete or divided in submarginal and discal spots **10**
- Middle band reduced to a submarginal spot **11**
- 10(9). White elytral pattern distinct, apical lunule reduced to a basal spot, lateral margin of elytra with bright metallic blue-green reflection *Cylindera (Ifasina) spinolae spinolae* (Gestro, 1889)
- White elytral pattern indistinct, very thin, apical lunule tick-shaped, lateral margin of elytra without bright metallic reflection *Cylindera (Ifasina) pronotalis* (Horn, 1922)
- 11(9). Metafemora bicolored, basal third light *Cylindera (Ifasina) bandinellii* sp. n.
- Metafemora unicolored, dark **12**
- 12(11). The dark (blue-violet) lateral margin of the elytra small, not completely covering the light-colored spots *Cylindera (Ifasina) decolorata* (Horn, 1907)
- The dark (blue-violet) lateral margin of the elytra always encloses the light dots and usually extends far over the area of the elytra *Cylindera (Ifasina) paraleisnei* sp. n.



Figures 10-21. Labrum. Scale = 1 mm. 10-13. *Cylindera (Ifasina) decolorata* (Horn, 1907). 10) Male, Vietnam, Ha Giang (CKGC). 11-13. Female. 11) China, Yunnan (JWGC). 12) China, Sichuan (JWGC). 13) Vietnam, Ha Giang (CKGC). 14-17. *Cylindera (Ifasina) bandinellii* Wiesner & Klícha sp. n., Vietnam, Bac Giang (JWGC). 14, 15) Paratype male. 16, 17) Paratype female. 18-21. *Cylindera (Ifasina) paraleznei* Wiesner & Matalin sp. n. 18) Paratype male, China, Guangdong (JWGC). 19) Holotype male, Vietnam, Na Hang (JWGC). 20-21. Paratype female. 20) China, Guangdong (JWGC). 21) Vietnam, Na Hang (JWGC).



Figures 22-27. Left lateral view of aedeagus. Scale = 1 mm. 22-23. *Cylindera (Ifasina) decolorata* (Horn, 1907). 22, 23) Vietnam, Ha Giang (CKGC). 24) *Cylindera (Ifasina) bandinellii* Wiesner & Klícha sp. n., paratype, Vietnam, Bac Giang (JWGC). 25-26. *Cylindera (Ifasina) paraleznei* Wiesner & Matalin sp. n., paratype. 25) Vietnam, Na Hang (ZIN). 26) China, Hunan (JWGC). 27) Holotype of *Cylindera (Ifasina) ilonae* Matalin, 2015 syn. n. (ZIN) = *Cylindera (Ifasina) lesnei* (Babault, 1923).



Figures 28-39. Left elytron. Scale = 5 mm. **28-31.** *Cylindera (Ifasina) decolorata* (Horn, 1907). **28)** Male, Vietnam, Ha Giang (CKGC). **29-31.** Female. **29)** China, Sichuan (JWGC). **30)** China, Yunnan (JWGC). **31)** Vietnam, Ha Giang (CKGC). **32-35.** *Cylindera (Ifasina) bandinellii* Wiesner & Kliča sp. n., Vietnam, Bac Giang (JWGC). **32,33)** Paratype male. **34, 35)** Paratype female. **36-39.** *Cylindera (Ifasina) paralesei* Wiesner & Matalin sp. n. **36)** Paratype male, China, Hunan (JWGC). **37-39.** Paratype female. **37)** China, Guangdong (JWGC). **38)** Vietnam, Na Hang (JWGC). **39)** China, Guangdong (JWGC).

Acknowledgements

We are indebted to Aligi Bandinelli (Firenze, Italy), Christian Kerkering (Emsdetten, Germany), and Mandy Schröter (Müncheberg, Germany) for loan of material; to Olivier Montreuil (Paris, France) for the photo of holotype of *Cylindera (Ifasina) lesnei*; to Boris Kataev (St. Petersburg, Russia) for the photo of type labels of *Cylindera (Ifasina) ilonae*; to Peter Schüle (Herrenberg, Germany) for the fine pictures; and to David L. Pearson (Tempe, Arizona, USA) for revising the manuscript and the English text.

References

- ASTON P., 2016. Catalogue and bibliography of the Hong Kong Carabidae Latreille, 1802 (Coleoptera: Adepaga), with notes on the historic boundaries of Hong Kong as related to zoological collections. *Zootaxa* 4121 (3): 201-257.
- BABAULT G., 1923. Description d'une nouvelle espèce de Cicindèle du Tonkin (Col.). *Bulletin de la Société entomologique de France* 28 (1): 7-9.
- HORN W., 1907. Zur Kenntnis der Gattung *Cicindela*. (Col.) *Deutsche Entomologische Zeitschrift*, 20-25.
- MATALIN A.V., 2015. A new species of tiger beetles of genus *Cylindera* Westwood, 1831 (Coleoptera, Carabidae: Cicindelinae) from northern Vietnam. *Journal of Asia-Pacific Entomology* 18: 409-412.
- RIVALIER E., 1961. Démembrement du genre *Cicindela* L. (Suite) (1). IV. Faune indomalaise. *Revue française d'Entomologie* 28 (3): 121-149.
- SCHILDER F.A., 1953. Studien zur Evolution von *Cicindela*. *Wissenschaftliche Zeitschrift der Martin-Luther-Universität Halle-Wittenberg* 3 (2): 539-576.
- WIESNER J., BANDINELLI A. & MATALIN A.V., 2017. Notes on the tiger beetles (Coleoptera: Carabidae: Cicindelinae) of Vietnam. 135. Contribution towards the knowledge of Cicindelinae. *Insecta Mundi* 0589: 1-131.
- WIESNER J., 2020: Checklist of the Tiger Beetles of the World, 2nd Edition. *Winterwork, Borsdorf*, 1-540.

Received: 01 July 2024

Accepted: 30 July 2024