## TWO NEW FLIGHTLESS SPECIES OF *LACON* LAPORTE, 1838 FROM YUNNAN, CHINA, WITH DISCOVERY OF THE FEMALE OF *L. HABASHANENSIS* PLATIA ET AL., 2023 (COLEOPTERA: ELATERIDAE: AGRYPNINAE)

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Two new flightless species of *Lacon* Laporte, 1838 are described from Yunnan, China: *L. taotie* sp. n. and *L. yejiei* sp. n. Key to the known species of flightless *Lacon* from China is also provided. Additional notes on the bionomics and morphology of recently described *L. habashanensis* Platia, Mertlik et Dušánek, 2023, including characters of previously unknown female, are given.

Key words: Hengduan Mountains, click beetle, Elateroidea, taxonomy, diversity.

## INTRODUCTION

Lacon Laporte, 1838 (Elateridae: Agrypninae) is a morphologically diverse and widely distributed genus containing approximately 150 described species (Kundrata et al. 2019a, b, Németh et al. 2020). About 20 species occur in China (JIANG & YANG 2023, PROSVIROV 2016a, PLATIA et al. 2020, 2023), but most of these species remain poorly known with still doubtful records (PROSVIROV 2016a). Most of Chinese species are fully winged and able to fly. However, species with strongly reduced or absent wings were also observed (PROSVIROV 2016a, b). Currently, two flightless species, i.e., L. lijiangensis Prosvirov, 2016 and L. digingensis Prosvirov, 2016, are known from high mountainous areas of Yunnan, China (Prosvirov 2016a). Here, we further report two new species of Lacon from Hengduan mountain ranges of Yunnan Province, China. These new species are similar to L. lijiangensis and L. digingensis in their habitus and the strongly reduced wings, but also clearly different in some characters, such as external morphology and genitalia. We compared these four flightless species and provided an identification key. Furthermore, we also discuss hitherto unknown morphology and bionomics of the recently described L. habashanensis Platia, Mertlik et Dušánek, 2023 from Yunnan.

#### MATERIAL AND METHODS

The studied specimens were cleaned with warm water; genital segments were dissected after treatment in 10% KOH (70–80°C for 10 minutes). Habitus, pronotum and antennae of the new species were photographed using a Canon® EOS RP + Mount Adapter EF-EOS R plus a Laowa 25 mm F2.8 2.5–5 × Ultra Macro Lens (for Canon EF); other diagnostic characters were photographed using the same camera in conjunction with a Mitutoyo M Plan Apo  $10 \times /0.28$  lens. Photographs of *L. habashanensis* were taken using a Leica M205A stereomicroscope plus Leica DFC 550. All figures were modified in Adobe Photoshop® CC 2019. Body length was measured from the anterior margin of head to the apex of elytra, pronotal length was measured at midline, pronotal width was measured at posterior angles, and width of body was taken at the widest place of elytra. The generic concept of flightless *Lacon* described herein follows that of PROSVIROV (2016*a*, *b*). The examined specimens are stored in the Invertebrate Collection of Mianyang Normal University, Mianyang, Sichuan, China (MYNU) (the new species and *L. habashanensis*) and the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZISP) (holotypes of *L. lijiangensis* and *L. diqingensis*).

## TAXONOMY Family Elateridae Subfamily Agrypninae Genus Lacon Laporte, 1838 鳞叩甲属

*Lacon* Laporte, 1838: 11. Type species: *Elater atomarius* Fabricius, 1798: 139, by subsequent designation (Hyslop 1921).

#### Lacon taotie sp. n.

### http://zoobank.org/urn:lsid:zoobank.org:act:ECFDF085-D859-4842-B2FC-297A778A1EF5 (Figs 1A–B; 2A-B, 2E–F; 3A–D)

Chinese Common name. 饕餮鳞叩甲

Type material – Holotype: male (MYNU), Lagaluohe River [拉嘎洛河], Zhonglu Township [中路乡], Weixi County [维西县], Diqing Tibetan Autonomous Prefecture [迪庆 藏族自治州], Yunnan, 2400–2600m, VI.2021, local collector leg.

Paratypes: 1 male (MYNU), Ahualuohe River [阿花洛河], Zhonglu Township, Weixi County, Diqing Tibetan Autonomous Prefecture, Yunnan, 2400–2800m, III–IV.2023, local leg.; 1 male (MYNU), ibid, but 2600–2800m, II.2023, local collector leg.

Diagnosis – This new species resembles *L. lijiangensis* (Fig. 1E) in the presence of indistinct foveae on pronotum, as well as the shape of posterior angles of pronotum, which are distinctly curved outwards and roundly pointed at apex (Prosvirov 2016*a*, *b*). *Lacon taotie* can be easily distinguished from *L. lijiangensis* by the pronotum more strongly narrowed in anterior half towards anterior angles, antennomeres 3–10 narrower, and by the presence of vestigial wings. Description – Male (holotype) (Fig. 1A). Body length 9.6 mm; width 2.8 mm. Body flattened, elongate. Integument almost matt, reddish brown; anterior margin of head, anterior margin and base of pronotum, prosternal process, base of hypomeron, scutellar shield along margin, anterior margin of mesoventrite, area around coxa, epipleural margin, meta-



**Fig. 1.** Habitus of *Lacon* species, dorsal view: A = *L. taotie* sp. n., holotype, male; B = *L. taotie* sp. n., paratype, male; C = *L. yejiei* sp. n., holotype, male; D = *L. yejiei* sp. n., paratype, female; E = *L. lijiangensis* Prosvirov, 2016, holotype, female; F = *L. diqingensis* Prosvirov, 2016, holotype, female: Scale bar: 2 mm

coxal plate, and basal margin of elytra somewhat darkened. Body covered with golden, dense, tapered, and recumbent scale-like pubescence; pubescence on dorsum (head, pronotum, scutellar shield and elytra) similar to that on ventral side of body.

Head. Wider than long (length/width 0.75). Frons widely and deeply depressed. Punctures coarse and dense; intervals between punctures shagreen, shorter than diameter of one puncture. Mandible with tooth; apical segment of maxillary palpus subtriangular, rounded apically. Antennae short (3.0 mm), reaching beyond middle of pronotum, very weakly serrate from antennomere 4 (Fig. 2E). Antennomere 1 robust and long; antennomere 2 shortest, almost globose; antennomere 3 just slightly longer than antennomere 2; antennomere 4 1.3 times longer than antennomere 2; antennomere 5–10 similar in shape, subequal in length, and longer than wide; last antennomere ovate, subapically very weakly tapered.

Thorax. Pronotum 1.9 times as wide as head, slightly longer than wide (length 2.9 mm; width 2.7 mm), widest at basal half, near middle (Fig. 2A). Sides narrowed toward anterior angles more sharply than toward posterior portion. Anterior angles of pronotum sharp in dorsal view, apices pointing slightly inwards. Lateral margins after middle very weakly concave, then slightly convex and narrowed before posterior angles. Posterior angles of pronotum in dorsal view depressed, rather short, bluntly angular at apex, constricted and slightly divergent, without carinae. Shallow impression groove throughout middle line, and bifurcate along anterior margin, two pairs of shallow foveae distributed laterally near middle and pos-



**Fig. 2.** Morphology of *Lacon* species: A–D = pronotum, dorsal view; E–H = antennae. A, E = *L. taotie* sp. n., holotype, male; B, F = *L. taotie* sp. n., paratype, male; C, G = *L. yejiei* sp. n., holotype, male; D, H = *L. yejiei* sp. n., paratype, female. Scale bars: 2 mm

terior portion. Punctures large, coarse, very deep and dense, slightly larger than or similar to those on head; intervals between punctures shagreen, mostly shorter or equal to half diameter of one puncture. Prosternum gradually narrowed towards base when observed in ventral



**Fig. 3.** Morphology of *Lacon* species, male: A–D. *L. taotie* sp. n., holotype; E–H. *L. yejiei* sp. n., holotype. A, E = Abdominal sternite IX, ventral view; B, F = abdominal tergites IX–X, dorsal view; C, G = abdominal sternite VIII and tergite VIII, ventral view; D, H = aedeagus, dorsal view. Scale bars: 1 mm

view. Pronotosternal sutures straight, deeply grooved from apices to basal thirds, then simply furrowed. Prosternal lobe broadly rounded, rather short, apex distinctly prominent beyond anterior angles of hypomeron, base with a transverse impression. Prosternal process in lateral view stick-like, ventral margin slightly narrowed towards apex, apex with small notch subapically, apex blunt. Prosternal punctures generally coarse, dense and deep, those in middle distinctly larger than on pronotum; intervals between punctures in middle subequal to diameter of half puncture; punctures on prosternal lobe smaller, intervals not wrinkled; punctures between procoxae smaller. Anterior and lateral parts of hypomeron with dense punctation, intervals between punctures on average smaller than diameter of one puncture; basal half of hypomeron with larger and sparser punctuation, intervals between punctures on average subequal to or greater than diameter of one puncture; intervals between punctures on hypomeron matt. Hypomeron basally with rather broad depression for insertion of profemora; this depression impunctate and with surface nearly smooth; hypomeron slightly impressed along prosternal suture. Mesoventrite and metaventrite punctate similarly, with deep but much smaller punctures than on prosternum, intervals between punctures mostly smaller than diameter of one puncture. Metaventrite without depressions. Metacoxal plates gradually narrowed from middle to lateral side. Scutellar shield tongue-shaped, basal margin straight, apex narrowed. Elytra length: 5.6 mm; width: 2.8 mm. Elytra elongate, sides subparallel, widest at apical third, slightly wider than pronotum, about 2.0 times as long as pronotum. Shoulders obtusely rounded, distinctly constricted and protruded anteriorly; sides of elytra slightly widened from base to middle, then narrowed from distal third, apical portion rounded. Disc of elytra flat, mildly convex at distal third, then sloping towards apex; without striae, more or less evenly punctate and setose; punctures smaller than those on head and pronotum, intervals between punctures mostly subequal to 1-2 diameters of one puncture. Hind wings strongly reduced, vestigial wings elongate, not reaching middle of elytra.

Abdomen. Punctation of abdomen deep but small, intervals between punctures less than or subequal to diameters of one puncture. Tergite VIII semi-oval, anterior margin well setose and less sclerotized, apex slightly narrowed (Fig. 3C); tergite IX with hind margin slightly concave, distal portion with two rounded lobes, median roundly concave; tergite X roundly protruded, slightly wider than long, anterior margin less sclerotized (Fig. 3B). Sternite VIII with two elongate, setose and well sclerotized portions laterally, anterior margin concave medially (Fig. 3C); sternite IX elongate, subquadrate at base, hind margin concave in middle, basal portion transparent, lateral margins constricted medially, distal portion tongue-shaped, pubescent, apex truncate, obtuse (Fig. 3A).

Male genitalia. Parameres longer than median lobe, straight at outer margin, apex roundly protruded, slightly narrowed, with large sharp processes subapically. Median lobe robust, apical portion sharply narrowed (Fig. 3D).

Variability. Body length of paratypes: 9.6–9.9 mm. The size of pronotum and length of antennae may vary to some degree in the males (Figs. 1A–B; 2A–B, E–F). In all other aspects they are similar to each other.

Female. Unknown.

Larva. Unknown.

Distribution. China: Yunnan.

Bionomics. This species was found in the east slope of Nushan mountain range [怒 山山脉] (2,400–2,800 m of the west side of Lancangjiang River). It inhabits the valleys of Ahualuohe and Lagaluohe, both of which are two close mountain streams, and are the tributaries of Lancangjiang River [澜沧江].

Etymology – The species epithet is a noun from Chinese Pinyin. "Taotie [饕餮]" is the name of a monster from Chinese mythology, which is a symbol of greed.

## Lacon yejiei sp. n. http://zoobank.org/urn:lsid:zoobank.org:act:C721BD04-1DCB-43DB-AD89-C7C98EE612F0 (Figs 1C–D; 2C–D, G–H; 3E–H; 4A–D)

Chinese Common name. 业杰鳞叩甲

Type material – Holotype: male (MYNU), Lagaluo Village [拉嘎洛村], Zhonglu Township, Weixi County, Diqing Tibetan Autonomous Prefecture, Yunnan, 2900–3200m, III.2020, Bai-Jun Li leg.

Paratype: 1 female (MYNU), Shiyueliang Township [石月亮乡], Fugong County [福 贡县], Nujiang Lisu Autonomous Prefecture [怒江傈僳族自治州], Yunnan, 2400–2700m, VI.2022, local collector leg.

Diagnosis – In general, this new species can be easily distinguished from all other flightless species (except for *L. taotie* sp. n., which is only known by males) by the shape of sclerotized plate in bursa copulatrix (with sparse and thinner spines on sclerotized plate, the spines at lateral sides longer or subequal to remaining parts) (Fig. 4D). This new species differs from the near zone distributed species L. taotie sp. n. by the enlarged distal portion of pronotum (while distinctly narrowed in *L. taotie* sp. n.) (Fig. 2A–D); two pairs of distinct foveae on pronotum (while indistinct in the latter); small and shallow punctures on ventral side (while large, deep and coarse in the latter); as well as the sinuate outer margin of the paramere (while straight in the latter) (Fig. 3D & H). The new species is similar in having two pairs of distinct foveae to *L. digingensis* (Fig. 1F) (PROSVIROV 2016*a*, *b*), but it can be easily distinguished from the latter by the much smaller body (9.5 mm versus 13.2 mm), notably narrower posterior part of pronotum, more elongate elytra, shape of pronotal posterior angles (more or less narrowly rounded in *L. yejiei*, but broadly rounded in *L. digingensis*), as well as by having the antennomeres 3–10 narrower than those in *L. digingensis*.

Description – Male (holotype) (Fig. 1C). Body length 9.5 mm; width 2.8 mm. Body flattened, elongate. Integument almost matt, reddish brown; anterior margin of head, anterior margin and base of pronotum, pronotosternal suture, prosternal process, base of hypomeron, scutellar shield along margin, anterior margin of mesoventrite, area of coxa, epipleuron margin, metacoxal plate, and basal margin of elytra somewhat darkened. Body covered with golden, dense, tapered, and recumbent scale-like pubescence; pubescence on dorsum (head, pronotum, scutellar shield and elytra) much larger and longer than on other parts of body (ventral side, legs and antennae).

Head. Wider than long (length/width 0.66). Frons moderately deeply depressed almost over entire width. Punctures coarse and dense; intervals between punctures shagreen, smaller than diameter of one puncture. Mandible with tooth; apical segment of maxillary palpus subtriangular, rounded apically. Antennae short (2.7 mm), reaching beyond middle of pronotum, weakly serrate from antennomere 4 (Fig. 2G). Antennomere 1 robust and long; antennomere 2 shortest, almost globose; antennomere 3 1.2 times as long as an

tennomere 2; antennomere 4 almost as long as antennomere 2, and 0.8 times shorter than antennomere 3; antennomeres 5–10 distinctly widened and similar in shape, each almost as wide as long; last antennomere ovate, subapically very weakly tapered.

Thorax. Pronotum 1.9 times as wide as head, slightly longer than wide (length 2.7 mm; width 2.6 mm), widest near apical third, narrowed toward anterior angles more sharply than toward posterior portion (Fig. 2C). Anterior angles sharp, apices pointing slightly inwards. Lateral margins in middle somewhat truncate, basal third weakly convex, then strongly narrowed before posterior angles. Posterior angles of pronotum depressed, rather short, rounded at apex, strongly constricted and directed backwards, without carinae. Shallow impression groove throughout middle line, and bifurcate along anterior margin, two pairs of distinct foveae distributed laterally near middle and posterior portion, middle ones larger than posterior ones. Punctures coarse, very deep and dense, on average slightly



Fig. 4. Morphology of *Lacon yejiei* sp. n., female: A = abdominal tergite VIII, dorsal view; B = abdominal sternite VIII, ventral view; C = ovipositor, ventral view; D = part of female genital tract (sac-like spermatophores removed). Scale bar: 1 mm

larger than those on head; intervals between punctures shagreen, mostly smaller or equal to half diameter of one puncture. Prosternum gradually narrowed towards base. Pronotosternal sutures straight, deeply grooved from apices to basal third, then simply furrowed. Prosternal lobe broadly rounded, rather short, apex slightly prominent beyond anterior angles of hypomeron, base with transverse impression. Prosternal process in lateral view tapered, ventral margin strongly sloped towards apex, with small notch subapically, apex blunt. Prosternal punctures generally coarse, dense but shallow, those in middle distinctly larger than on pronotum; intervals between punctures in middle slightly shorter than diameter of one puncture; punctures on prosteronal lobe distinctly denser and smaller, intervals wrinkled; punctures between procoxae much smaller. Anterior and lateral parts of hypomeron with dense punctation, intervals between punctures on average shorter than diameter of one puncture; basal half of hypomeron with larger and sparser punctuation, intervals between punctures on average subequal to or greater than diameter of one puncture; intervals between punctures on hypomeron matt. Hypomeron basally with rather broad and deep depression for insertion of profemur; this depression impunctate and with surface uneven; hypomeron slightly impressed along prosternal suture. Mesoventrite and metaventrite punctate similarly, intervals between punctures mostly equal to diameter of one puncture. Metaventrite without depressions. Metacoxal plates abruptly narrowed from middle to lateral side. Scutellum tongue-shaped, basal margin weakly concave, apex rounded. Elytra length: 5.8 mm; width: 2.7 mm. Elytra elongate, sides subparallel, widest from middle to near apical third, slightly wider than pronotum, 2.1 times as long as pronotum. Shoulders obtusely rounded, distinctly constricted and protruded anteriorly; sides of elytra slightly widened from base to middle, then parallel in middle, apical portion rounded. Elytral disc flat, distinctly sloping towards apex from distal third; without striae, more or less evenly punctate and setose; punctures smaller than those on head and pronotum, intervals between punctures mostly subequal to 1-2 diameters of one puncture. Hind wings strongly reduced, vestigial wings elongate, not reaching middle of elytra.

Abdomen. Punctation of abdomen small and shallow, intervals between punctures subequal to 1–2 diameters of one puncture. Tergite VIII semi-oval, anterior margin well setose and less sclerotized, apex rounded (Fig. 3G); tergite IX with hind margin slightly concave, distal portion with two rounded lobes only weakly protruded, median weakly concave; tergite X roundly protruding, wider than long, anterior margin less sclerotized (Fig. 3F). Sternite VIII with two elongate, oblique, setose and well sclerotized portions laterally, apex concave (Fig. 3G); sternite IX short, subquadrate at base, hind margin slightly concave in middle, basal portion transparent, lateral margins constricted near middle, distal portion tongue-shaped, pubescent, apex rounded (Fig. 3E).

Male genitalia. Parameres longer than median lobe, sinuate at outer margin medially (concaved near middle and convex at both base and distal portion), apex roundly protruded, slightly narrowed, with small sharp processes subapically. Median lobe robust, apical portion distinctly tapering, apex blunt (Fig. 3H).

Female. Similar to male (Fig. 1D), but body smaller (9.1 mm), antennae shorter (2.3 mm), with less serrated antennomeres (Fig. 2H). Pronotum with lateral margins concave at basal third, posterior angles pointed apically (Fig. 2D). Abdominal tergite VIII rounded, basal portion medially less sclerotized (Fig. 4A); sternite VIII greatly wider than long, apical portion rounded, spiculum ventrale slender, about 3 times as long as sternite VIII length (Fig. 4B). Ovipositor short; coxite moderately long, apical portion narrowed, sparsely pubescent laterally, stylus small, attached subapically (Fig. 4C). Bursa copulatrix with large sclerotized plate typical for this genus, covered with short spinules and long, usually thin spines, distally without small sclerotized plate (Fig. 4D); sac-like spermatophore inside bursa copulatrix.

Variability. The female shows slight differences in the shape of pronotum, the shape of antennomeres, as well as the length of antennae (Fig. 2C-D, G-H), but in all other respects female is similar to the male.

Larva. Unknown.

Distribution – China: Yunnan.

Bionomics – This species inhabits both sides of Nushan mountain range (2,400–3,200 m of West and East slopes) between Lancangjiang River and Nujiang River [怒江]. Its biology remains unknown.

Etymology – Named after Ye-Jie Lin (Beijing) for his continuous help with obtaining Elateridae specimens for the first author.



**Fig. 5.** Habitus of *Lacon habashanensis* Platia, Mertlik et Dušánek, 2023 from Lanping, Nujiang: A = male, dorsal view; B = female, dorsal view; C = female, lateral view. Scale bar: 2 mm

## KEY TO THE KNOWN FLIGHTLESS SPECIES OF *LACON* FROM CHINA

- 1. Metathoracic wings reduced, not reaching or reaching about the middle of elytra 2
- Metathoracic wings absent

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L. lijiangensis
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- Elytra more than twice as long as pronotum; disc of pronotum distinctly with two pairs of foveae
  3
- Elytra less than twice as long as pronotum; disc of pronotum with indistinct foveae
  *L. taotie* sp. n.
- 3. Body larger, 13.2 mm long and 4.3 mm wide; pronotum wide at posterior portion; elytra stout; pronotal posterior angles broadly rounded at apex; antennomeres 3–10 transverse; bursa copulatrix with dense and robust spines on a sclerotized plate, the spines at lateral sides distinctly shorter than remaining parts *L. diqingensis*
- Body smaller, 9.1–9.5 mm long and 2.8 mm wide; pronotum notably narrowed at posterior portion; elytra elongate; pronotal posterior angles more or less narrowly rounded at apex; antennomeres 3–10 narrowed; bursa copulatrix with sparse and thinner spines on a sclerotized plate, the spines at lateral sides longer or subequal in length to remaining parts

# Lacon habashanensis Platia, Mertlik et Dušánek, 2023 (Figs 5A–C, 6A–D)

Lacon habashanensis Platia, Mertlik et Dušánek, 2023: 84.

Chinese Common name. 哈巴鳞叩甲

The species was described only based on the male holotype. We have several specimens of *L. habashanensis* in our disposal, so here we add additional notes on bionomics, male morphology and characters of previously unknown female of *L. habashanensis*.

New material examined – 1 male (MYNU), Hexi Township [河西乡], Lanping County [兰坪县], Nujiang Lisu Autonomous Prefecture, Yunnan Province, 2750 m, 26°51'44''N, 107°11'01''E, 15.III.2018, local collector leg.; 2 females (MYNU), same data as holotype; 2 males and 2 females (MYNU), Paidi [拍底], Weideng Township [维登乡], Weixi County, Diqing Tibetan Autonomous Prefecture, Yunnan Province, 2500–2700 m, III.2020, local collector leg.; 1 male and 1 female (MYNU), Ahualuohe River, Zhonglu Township, Weixi County, Diqing Prefecture, 2300–2800 m, II.2023, local collector leg. Supplemental description – Male (Fig. 5A): body length 9.5–11.4 mm. Antennae from antennomere 3 on each with whitish area at serrated portion. Tergite VIII sub-triangular, anterior margin well setose, apex rounded; tergite IX with hind margin concave, distal portion with two rounded lobes only weakly protruded, median weakly concave; tergite X roundly protruded, nearly as wide as long, anterior margin distinctly pointed. Sternite VIII with two elongate, oblique, setose, and well sclerotized portions laterally, apex concave; sternite IX short, hind margin slightly concave in middle, posterior angles rounded, basal portion transparent, lateral margins constricted near middle, distal portion tongue-shaped, pubescent, apex rounded. Male genitalia (Fig. 6B): parameres longer than median lobe, outward from middle part, apex roundly protruded, narrowed, with small sharp processes subapically. Median lobe distinctly tapering, apex narrowed, blunt.

Female: similar to male (Fig. 5B–C), but body usually larger (10.5–12.5 mm); antennae similar to those of male with whitish apices of protruded portions from antennomere 3 on (Fig. 6A). Abdominal tergite VIII subtriangular, basal portion in middle less sclerotized, apex rounded; sternite VIII wider than long, apical portion rounded, spiculum ventrale slender, about 2.7 times as long as sternite VIII length. Ovipositor moderately long; coxite with apical portion narrowed, apically with spinous setae, lateral portions sparsely pubescent, sty-



**Fig. 6.** Morphology of *Lacon habashanensis* Platia, Mertlik et Dušánek, 2023 from Lanping, Nujiang: A = female antenna; B = aedeagus, dorsal view; C = part of female genital tract; D = ovipositor, ventral view. Scale bars: 1 mm

lus very small, attached subapically (Fig. 6D). Bursa copulatrix with large sclerotized plate typical for this genus, covered with short spinules and long, usually thick spines, median portion with sparser spines; distally without small sclerotized plate (Fig. 6C).

Distribution - China: Yunnan.

Bionomics - This species can be collected from rotten woods from February to March.

#### DISCUSSION

The flightless species of *Lacon* are some of the most understudied within the genus. They are very rarely present in collections unlike many other species of *Lacon*, which are often attracted to light and successfully gathered by other collection techniques. Consequently, bionomics of these species is also still little known. We believe that these species form a separate species group which preliminary includes the following species: *L. diqingensis*, *L. kabakovi* Prosvirov, 2016, *L. lijiangensis*, *L. taotie* sp. n., *L. yejiei* sp. n., and *L. monticola* (Candèze, 1897), sensu Platia, 2015 (PLATIA 2015, HOFFMANNOVA *et al.* 2023). Relationships of this species group within genus need further clarification. Interestingly, the known distribution of flightless *Lacon* species in China is limited to the Hengduan Mountain ranges, but we suppose that undescribed species of this group may be present in other mountain regions of China, as we have examples of related species from other distant mountain areas of Afghanistan and Pakistan (PLATIA 2015, PROSVIROV 2016*b*).

Generally, fauna of *Lacon* of China remains poorly studied, which is confirmed by descriptions of highly peculiar flightless species and species like *L. habashanensis*. Therefore, we could expect further new interesting discoveries of Chinese *Lacon* species in the future.

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