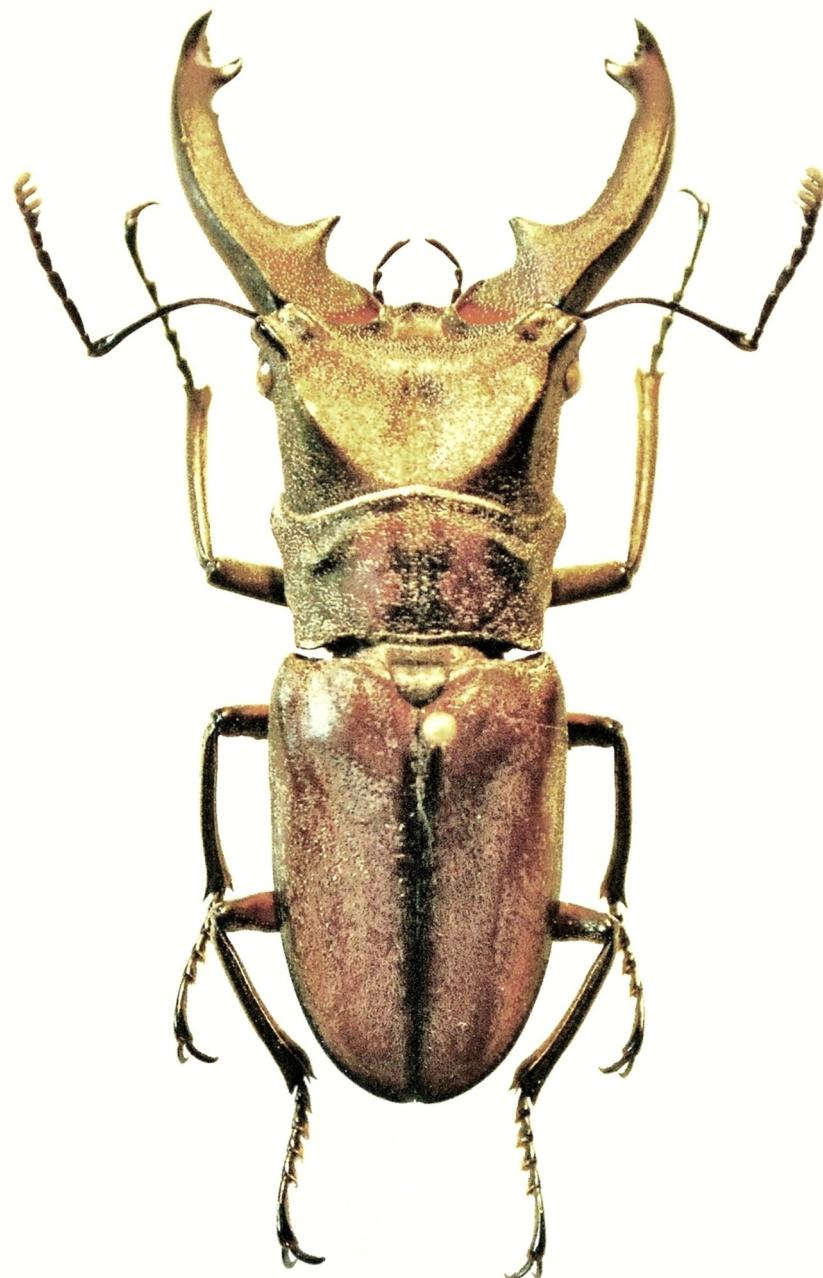


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Cover

Cyclommatus subtilis De Lisle, 1967

***Cyclommatus subtilis* De Lisle, 1967 - A rare taxon from Sumatra (Coleoptera, Lucanidae)**

Klaus-Dirk Schenk

Abstract

A big male of *Cyclommatus subtilis* De Lisle, 1967 from Sumatra Island is figured and compared for the first time to the holotype.

Key words

Coleoptera, Lucanidae, *Cyclommatus subtilis*, Indonesia, Sumatra Island

***Cyclommatus subtilis* De Lisle, 1967**

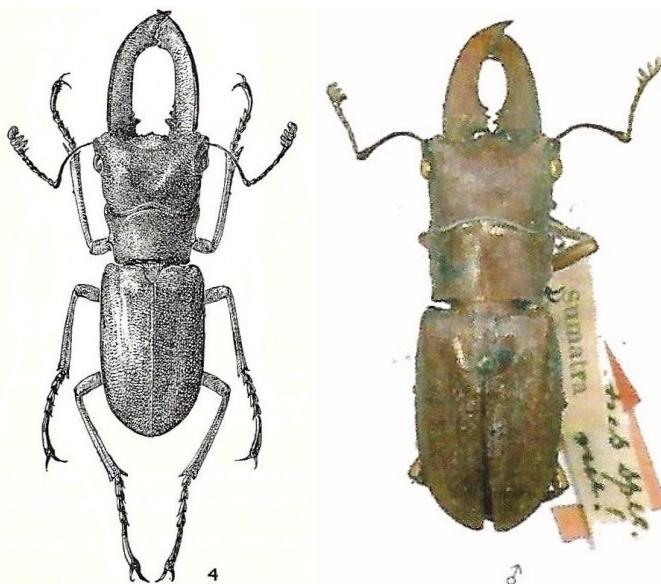


Fig. 1: ***Cyclommatus subtilis* De Lisle, 1967**

a) Hand drawing adapted from the original description

b) ♂, holotype, Sumatra, Intragiri, 1905, J. Bouchard leg. (adapted from Mizunuma et Nagai, 1994)

Melchior de Lisle described *Cyclommatus subtilis* in 1967 (DE LISLE, 1967) by a single, small male of 24.0 mm (fig. 1). The type was collected by J. Bouchard in 1905 at Intragiri (Riau), Sumatra Island. There are no further collecting records of this very rare species in the entomological literature since this early time. The author did receive some years ago a big male of the genus *Cyclommatus* identified as *C. canaliculatus* (fig. 2). This specimen was collected by Mr. Surbakti on July 10th 1984 near Padang, Sumatra Island, Indonesia.

The comparison with *C. canaliculatus* is showing clearly, that it must be a different taxon. In fact it is fitting by all morphological characters exactly the description of *Cyclommatus subtilis*, given by M. De Lisle in his original paper. Therefore, the specimen from Padang has been identified to be a large male of *Cyclommatus subtilis* De Lisle 1967.

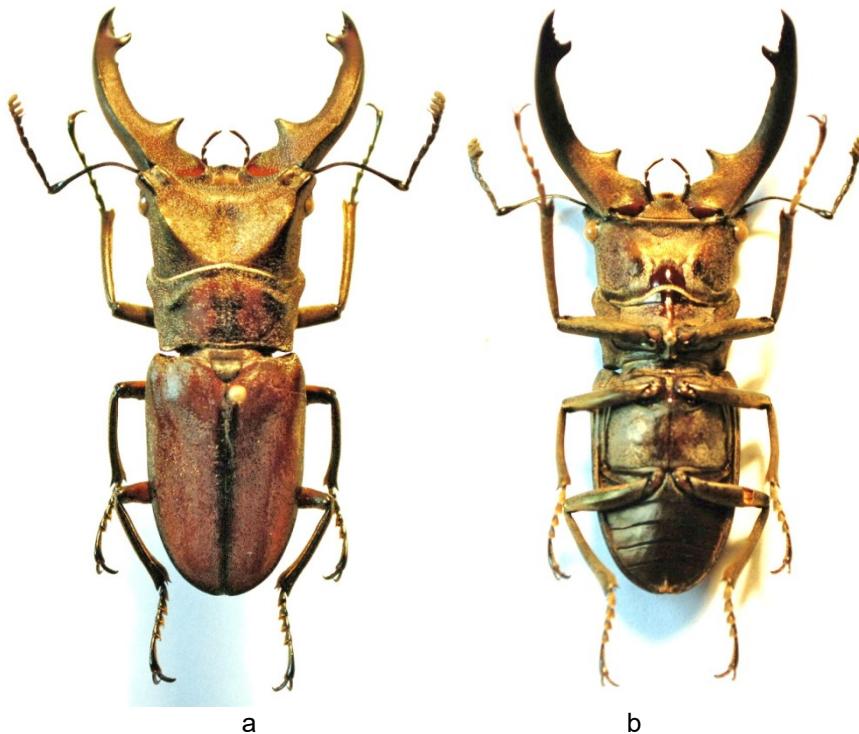


Fig. 2: *Cyclommatus* ♂ (48.5 mm) identified as ***Cyclommatus subtilis*** De Lisle, 1967
from Padang, Sumatra, a) dorsal view, b) ventral view,

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Description of the female of *Lucanus jibii* (Coleoptera, Lucanidae)

Klaus-Dirk Schenk

Abstract

The female of *Lucanus jibii* Okuda et Maeda, 2015 from north-east India, Arunachal Pradesh is described and first time figured.

Key words

Coleoptera, Lucanidae, *Lucanus jibii*, *Lucanus liupengyui*, India, Arunachal Pradesh

***Lucanus jibii* Okuda et Maeda, 2015, ♀**

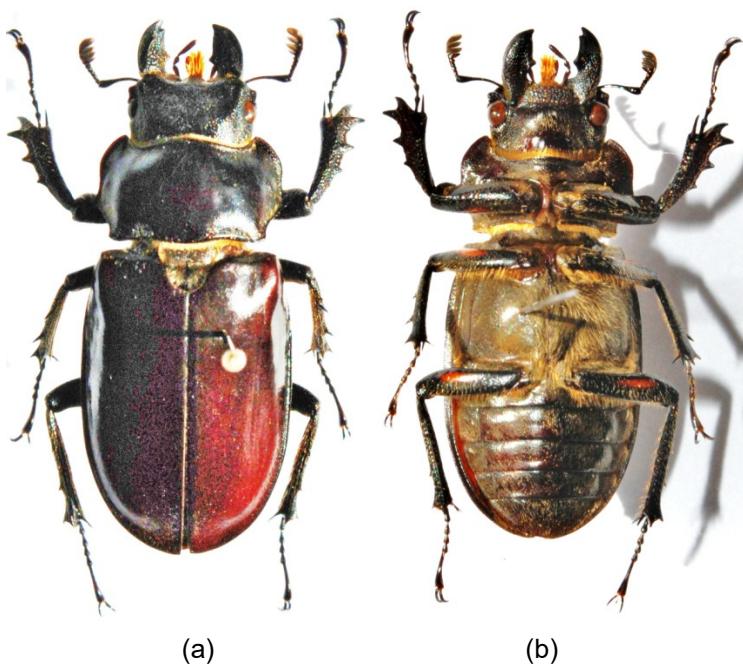


Fig. 1: ***Lucanus jibii* Okuda et Maeda, 2015, ♀** (allotype)
from north-east India, Arunachal Pradesh, Along District, dorsal (a) and ventral (b) view

The new species *Lucanus jibii* from north-east India, Arunachal Pradesh, lower Dibang Valley has been described by Okuda et Maeda in 2015 (OKUDA ET MAEDA, 2015). The ♂ holotype and 5 ♂ paratypes have been collected; but the ♀ was still unknown.

The author recently received five *Lucanus* females for identification from Rainer Wemcken, Germany. The collecting data are: NE India, Arunachal Pradesh, District Along, near Machuka, 2100m, 15.-16.VII. 2007, J. Bretschneider legit.

Those specimens have been determined now as ♀ of *Lucanus jibii* because they are very similar to the ♀ of the closely related *Lucanus liupengyui* Huang et Chen, 2017 (HUANG ET CHEN, 2017) from Tibet, environment of Motuo. This identification is supported by the geographically close locations lower Dibang Valley and Along, Machuka of Arunachal Pradesh.

The female of *Lucanus jibii* is characterised by the following morphological characters:

- elytrae reddish brown, pronotum and head somewhat darker
- posterior femora dorsally with reddish macula
- each femora ventrally with tiny reddish macula
- anterior angles of the head strongly angulated
- flat inner edge of the right mandible
- left mandible with a longitudinal median carina

Size of the allotype 32,2 mm, other females 31,3 - 32,7 mm.

References

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Revision of the Genus *Epidorcus* Séguy, 1954 (*Coleoptera, Lucanidae*)

Klaus-Dirk Schenk

Abstract

The taxa of the genus *Epidorcus* Séguy, 1954 are listed. Distribution, type locality and type depository are indicated. Taxonomical notes for some taxa are given.

Key words

Coleoptera, Lucanidae, genus Epidorcus, taxonomy

LUCANIDAE: Genus EPIDORCUS

Familia:

LUCANIDAE

Tribus:

DORCINI PARRY, 1864

Genus:

Epidorcus SÉGUY, 1954

(Type species = *Cladognathus piceipennis* WESTWOOD, 1855)

Species / Subspecies / Author / Year	Distribution / Type locality / Type depository	Size mm
andreasii (SCHENK, 2009) (<i>Prosopocoilus</i>)	China (Guangxi, Yunnan), n Vietnam TL: China (Guangxi, Dayao-shan) TD: AK	♂ 23,1 – 55,5 ♀ 22,0 – 25,4
bidentatus (BOMANS, 1978) (<i>Prosopocoelus</i>)	Laos China (sw Yunnan) Thailand Vietnam TL: Laos, Ban Van Heua TD: BMNH (ex coll. Bomans)	♂ 22,0 – 46,0 ♀ 19,0 – 22,4
crenulidens (FAIRMAIRE, 1895) (<i>Cladognathus</i>)	n Vietnam n Thailand Myanmar n Laos s China (w Yunnan) TL: Tonkin TD: BMNH (CT)	♂ 19,3 – 49,5 ♀ 17,3 – 22,6
denticulatus denticulatus (BOILEAU, 1901) (<i>Prosopocoelus</i>)	n Vietnam, Laos, s China (s Yunnan, Guangxi) TL: Haut Tonkin, nw of Bao-Lac TD: MNHN (LT) (type pictured by Zhong et all. 2014)	♂ 24,4 – 52,3 ♀ 19,0 – 22,6

denticulatus katsurai (FUJITA, 2010) (<i>Prosopocoilus</i>)	n Vietnam TL: n Vietnam, Ha Tyen TD: NSMT	♂ 31,1 – 49,0 ♀ 28,9
gracilis (SAUNDERS, 1854) (<i>Cladognathus</i>)	China (Zhejiang, Fujian, Guangdong, Guangxi, Jiangxi, Sichuan, Chongqing, Guizhou, Yunnan, Hainan) n Vietnam (Vinh Phuc P., Ha Giang P., Lai Chau P., Lap Cai P.) c Vietnam (Nghe An P., Ha Tinh P.), Laos TL: tea district of China (=Zhejiang and Fujian) TD: MNHN (LT ex Museum Parry) (type pictured by Zhong et all., 2014)	♂ 26,0 – 48,0 ♀ 22,0 – 26,1
guerlachi (DIDIER et SÉGUY, 1952) (<i>Prosopocoelus</i>)	c and s Vietnam, s Laos, ne Cambodia TL: Cochinchin TD: MNHN	♂ 40,0 – 52,4 ♀ 24,0 – 26,6
nagaii (FUJITA, 2010) (<i>Prosopocoilus</i>)	n Myanmar TL: n Myanmar, Sagaing TD: NSMT	♂ 31,1 – 49,0 ♀ 28,9
piceipennis (WESTWOOD, 1855) (<i>Cladognathus</i>)	s China (s Guanxi, s Yunnan) n Vietnam (Lai Chau P.) TL: China vel Thibeta (= China or Tibet) TD: MNHN, holotype (ex museum Parry) (type pictured by Zhong et all., 2014)	♂ 32,0 – 46,6 ♀ ?
rondoni (BOMANS et LACROIX, 1970) (<i>Prosopocoelus</i>)	Laos, China (s Yunnan), Vietnam ? TL: Laos, P.K. Khouai TD: BMNH (ex coll. Bomans)	♂ 33,0 – 46,0 ♀ 19,2 – 27,8
similis (SCHENK, 2009) (<i>Prosopocoilus</i>)	China (Yunnan, Guangxi, sw Guizhou ?) n Vietnam TL: China (se Yunnan, Funing) TD: KDS	♂ 20,0 – 59,0 ♀ 22,2 – 24,8
suevlei (BOMANS, 1993) (<i>Prosopocoelus</i>)	n Thailand TL: nw Thailand, Tak, Umphang TD: BMNH (ex coll. Bomans)	♂ 29,8 – 41,2 ♀ 21,6
tonkinensis (POUILLAUME, 1913) (<i>Prosopocoelus</i>)	n Vietnam s China (Guangdong, Guangxi, Hainan I.), TL: Tonkin TD: MHNH (type pictured by Zhong et all., 2014)	♂ 19,5 – 53,0 ♀ 19,0 – 22,0

Abbreviations:

HT:	Holotype
PT:	Paratype
ST:	Syntype
CT:	Cotype
LT:	Lectotype
TL:	Type locality
TD:	Type depository

Abbreviations used for museums and private collections:

Museums:

BMNH	Natural History Museum, London, England
MCNS	Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy
MNHN	Museum Nationale d'Histoire Naturelle, Paris, France
NSMT	National Museum of Nature and Science, Tokyo, Japan
SHNU	Department of Biology, Shanghai Normal University, Shanghai, China

Private collections:

AK	Andreas Kirchner, Neuburg / Donau, Germany
KDS	Klaus-Dirk Schenk, Wehretal, Germany

Taxonomical notes about some taxa of the genus *Epidorcus* Séguy, 1954

Séguy established the genus *Epidorcus* in 1954 with *Cladognathus piceipennis* Westwood, 1855 as type species. All of the taxa of the Genus *Epidorcus* Séguy, 1953 have been primarily described in other genera. The similarity of external morphological characters and of male and female genitalia which have been shown in recent works (HUANG ET CHEN, 2013, ZHONG ET ALL. 2014, HUANG ET CHEN, 2017) are strong indicators that the before listed taxa are belonging to the same genus and are separate from other genera of the tribe *Dorcini* Parry, 1864.

Following some type specimen, rare and recently described taxa of the Genus *Epidorcus* Séguy, 1953 are pictured and the taxonomic rank is discussed.

***Epidorcus gracilis* (Saunders, 1854), *Epidorcus andreasi* (Schenk, 2009),
Epidorcus similis (Schenk, 2009), *Epidorcus tonkinensis* (Pouillaude, 1913),
Epidorcus piceipennis (Westwood, 1855), *Epidorcus crenulidens* (Fairmaire, 1895),
Epidorcus denticulate denticulatus (Boileau, 1901) and
Epidorcus denticulatus katsurai (Fujita, 2010)**

Epidorcus tonkinensis (=*Prosopocoilus tonkinensis*) (Fig. 1, 3) has been treated by Didier (1928) and by Zhong et all. (2014) as a synonym of *Epidorcus crenulidens* (=*Cladognathus crenulidens*). Unfortunately the type specimen(s) of *C. crenulidens* could not be found in the museums and maybe are lost. But Huang et Chen (2013, p. 146) are stating that "*Epidorcus tonkinensis* does not possess most of the diagnostic characters of *E. crenulidens*, thus cannot be the same species". We follow this conclusion and are listing here *E. crenulidens* and *E. tonkinensis* as separate species.

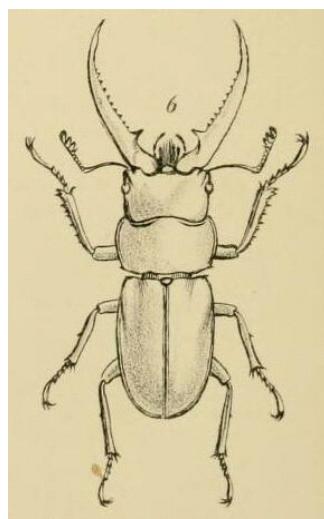
Further Zhong at all. (2014, p. 147) are placing *E. katsurai* Fujita, 2010 as a junior synonym of *E. denticulatus* by writing "Also, the recently-published species, *P. katsurai* Fujita, 2010 is purposed as a new junior synonym of *P. denticulatus* during this study. Holotype picture of *P. katsurai* in Fujita's illustration surely is as same as that of *P. denticulatus*. Also, all of them come from N. Vietnam, type locality of *P. katsurai* is Dong Van County, Ha Tuyen, where is not far from the locality of *P. denticulatus* (Bao-Lac County)." Further Huang et Chen are stating that *E. denticulatus* and *E. tonkinensis* do not fit the description of *E. crenulidens* and are writing "Therefore both *denticulatus* and *tonkinensis* cannot be synonyms of *crenulidens*. It is very possible that *Prosopocoilus katsurai* Fujita, 2010 is a junior synonym of *Epidorcus crenulidens* (Fairmaire, 1895)." (HUANG ET CHEN 2013, p. 143 -144).

It is obvious that *E. denticulatus denticulatus* and *E. denticulatus katsurai* are very similar in external morphological characters and maybe fall into the intraspecific variation of only one species. But the genitalia have not yet compared and therefore we prefer to list here *E. denticulatus katsurai* as a subspecies until further research will clarify the taxonomical status.



Fig. 1: Type specimens:

1. Lectotype of *Cladognathus gracilis* Saunders, 1854.
 2. Holotype of *Cladognathus piceipennis* Westwood, 1855
 3. Holotype of *Prosopocoelus tonkinensis* Pouillaude, 1913
 4. Lectotype of *Prosopocoelus denticulatus* Boileau, 1901 (all in MNHN).
- Scale bars = 10 mm (adapted from Zhong et all., 2014)

Fig. 2: *Cladognathus piceipennis* Westwood, 1855
hand drawing adapted from the original description

Cladognathus piceipennis Westwood, 1855 (Fig 1, no. 2 holotype and Fig. 2 hand drawing) and its closely related taxa have been discussed before in detail (SCHENK, 2013, SCHENK, 2015). *Cladognathus piceipennis* Westwood, 1855, *Cladognathus gracilis* Saunders, 1854, *Prosopocoelus andreasii* Schenk, 2009 and *Prosopocoelus similis* Schenk, 2009 are placed here into the genus

Epidorus Séguay, 1954 following the treatment of Séguay and Huang et Chen (HUANG ET CHEN, 2013).

Zhong et all., 2014 published a photo of the holotype of *Cladognathus piceipennis* Westwood, 1855 (ex coll. Parry, now deposited in MNHN) (Fig. 1, no. 2). The photo of the holotype (total length 46,6 mm) and the hand-drawing in the original publication of Westwood are showing clearly that the mandibles of *C. piceipennis* have no sharp subapical tooth (same as *C. gracilis* Saunders, 1854). Further there is no subapical tooth mentioned in the original description of *C. piceipennis* also. Despite those clear facts Zhong et all. (2014, p. 142) misidentified *P. andreasi* as *C. piceipennis* and are writing wrongly "The apex (of *C. piceipennis*) sharp, with a marked subapical tooth". Huang et Chen 2013 also wrongly identified *E. andreasi* respectively *E. similis* as *E. piceipennis* simply by ignoring that the mandibles of *E. piceipennis* have no sharp subapical tooth. In fact the mandibles of *Epidorus andreasi* (=*Prosopocoilus andreasi*) and *Epidorus similis* (=*Prosopocoilus similis*) always have a strong and sharp subapical inner tooth. We did examine 43 ♂ specimens of *E. andreasi* and 67 ♂ specimens of *E. similis* of different size; all did have a sharp subapical tooth.

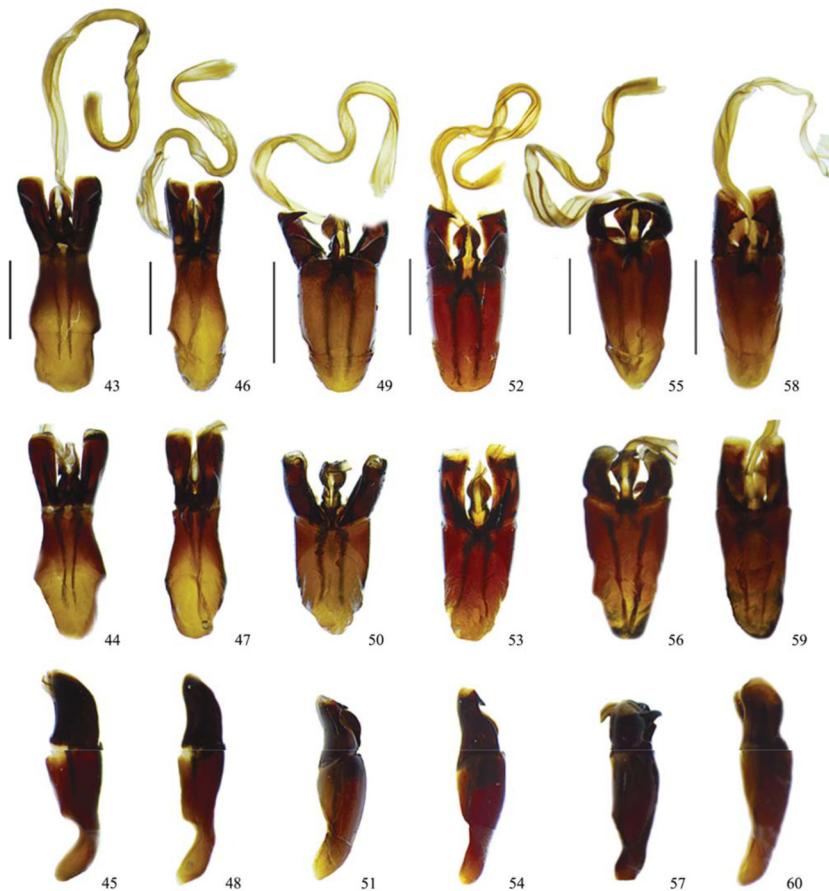


Fig 3: Aedeagus in ventral view, dorsal view and lateral view. 43–48. *Epidorus gracilis*. 43–45. Specimen from Fujian. 46–48. Specimen from Yunnan. 49–51. *Epidorus similis*. 52–54. *Epidorus andreasi* (misidentified by Zhong et all. as *Prosopocoilus piceipennis*). 55–57. *Prosopocoilus tonkinensis* (identified by Zhong et all. as *Prosopocoilus crenulidens*): 58–60. *Prosopocoilus denticulatus*. Scale bars = 1 mm.
(Figure adapted from Zhong et all., 2014)

The comparison of the aedeagus of *E. piceipennis* taken from a specimens collected in northern Vietnam, Lai Chau Prov. (Fig. 4) with the aedeagus of *E. andreasi* (Fig. 3, 52-54) and *E. similis* (Fig. 3, 46-48) published by Zhong et all., 2014 show significant differences. The aedeagus of *E. piceipennis* is more similar to the aedeagus of *E. gracilis* from Yunnan (Fig. 4, 46-48). The aedeagi of *E. andreasi* and *E. similis* are different in some characters (ZHONG ET ALL., 2014) indicating that *E. andreasi*

and *E. similis* are two different species which are maybe sympatric distributed in some areas of southern China. The new records of *E. piceipennis* from Lai Chau in north-western Vietnam and in China, southern Guangxi, Shiwanda-shan (SCHENK, 2015) are further indicators that *E. andreasi* and *E. similis* cannot be synonyms of *E. piceipennis* as wrongly stated before (HUANG ET CHEN, 2013).

In the recently published book "Stag beetles of China III" (HUANG ET CHEN 2017) *Epidorcus andreasi* has been confirmed by the authors to be a valid species. But *E. similis* is regarded despite some differences in genital to be the apical tooth form of *E. andreasi*.



Fig. 4: *Epidorcus piceipennis*, aedeagus of a specimen from north-west Vietnam, Lai Chau Province in dorsal, lateral and ventral view (preparation of the genital by T. Q. Nguyen, Hanoi, Vietnam)

In conclusion there are by our opinion the following 4 different but closely related *Epidorcus*-species:

Epidorcus piceipennis (Westwood, 1855) (*Cladognathus*)

Type locality (Holotype): Tibet vel China (= Tibet or China)

Further records: 1 ♂, Vietnam, Lam Dung, Bhu San, 1320m, 10.VII.2002, (SCHENK, 2013), 3 ♂, Vietnam, Lai Chau Province, VI. 2015, T.Q. Nguyen leg. (NGUYEN ET ALL. 2015), China, Southern Guangxi, Jiuwanda-shan, 2.VII.2015, K.-D. Schenk leg. (NGUYEN ET ALL., 2015).

Epidorcus gracilis (Saunders, 1854) (*Cladognathus*)

Type locality (Lectotype): China

Further records: This taxon is widely distributed in China (Sichuan, Hainan, Jiangsu, Fujian, Zhejiang, Chongqing, Guangxi, Guizhou, Yunnan) (HUANG ET CHEN, 2013 and ZHONG ET AL. 2014), northern Vietnam (Vinh Phuc, Ha Giang, Lai Chau, Lap Cai), central Vietnam (Nghe An, Ha Tinh), northern Laos.

Epidorcus andreasi (Schenk, 2009) (*Prosopocoilus*)

Type locality (Holotype): southern China, Guangxi, Dayao-Shan, VI.2008 (Holotype and 28 ♂ paratypes)

Further records: 4 ♂, China, Guangxi, Jinxiu, Mt. Dayao, VII. 2006, local collector (ZHONG ET ALL., 2014), 2 ♂, China, Guangxi, Baise, Leye, Tongle Forest Farm, VI. and IX.1981 (ZHONG ET ALL., 2014), 2 ♂, China, Guangxi, Linjiang, VII. 2003 (FUJITA, 2010, fig. 604-1 and 2), 1 ♂ Northern Vietnam, Cao Bang Province, Mt. Pia Oak, VI.-VII., 1998.

Records not differentiating between *E. andreasi* and *E. similis*: China, Guangxi, Jingxi City, Liu-zhao-shan, near Yunnan border, VIII. 2008, China, Yunnan, Wenshan Pref., no exact locality, China, Guizhou, no exact locality, VII. 2007 (HUANG ET CHEN, 2013).

Epidorcus similis (Schenk, 2009) (*Prosopocoilus*)

Holotype and 32 ♂ paratypes, China, Yunnan, Funing, VII.-VIII. 2008 (SCHENK, 2009) China, Guangxi, Ley county, Baise city (HUANG ET CHEN, 2017)

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Revision of the Genus *Kirchnerius* Schenk, 2009 (*Coleoptera, Lucanidae*)

Klaus-Dirk Schenk

Abstract

The taxa of the genus *Kirchnerius* Schenk, 2009 are listed. Distribution, type locality and type depository are indicated. Taxonomical notes for some taxa are given.

Key words

Coleoptera, Lucanidae, genus Kirchnerius, taxonomy

LUCANIDAE: Genus KIRCHNERIUS

Familia: LUCANIDAE
Tribus: DORCINI PARRY, 1864
Genus: Kirchnerius SCHENK, 2009
(Type species = *Kirchnerius guangxii* SCHENK, 2009)

Species / Subspecies / Author / Year	Distribution / Type locality / Type depository	Size mm
bulbosus (HOPE, 1840) (<i>Lucanus</i>)	n India (Meghalaya) TL: Assam TD: MNHN	♂ 22,0 – 36,5 ♀ 18,9 – 24,2
<i>= Lucanus punctiger HOPE, 1840</i>		
boreli (BOILEAU, 1904) (<i>Prosopocoelus</i>)	ne India, Tibet TL: Assam TD: MNHN	♂ 37,0 ♀ ?
<i></i>		
ciliipes (THOMSON, 1862) (<i>Cladognathus</i>)	ne India n Myanmar TL: India oriental TD: MNHN (ex coll. Oberthür)	♂ 20,0 – 39,0 ♀ 22,0 – 26,0
<i></i>		
crassimaxillaris (BOMANS, 1967) (<i>Prosopocoelus</i>)	n Laos TL: Laos, Ban van Heua TD: BMNH (ex coll. Bomans)	♂ 20,1 – 28,3 ♀ 19,5 – 23,5
<i></i>		
cyclommatooides (LACROIX, 1978) (<i>Prosopocoelus</i>)	n Vietnam TL: n Vietnam, Tam Dao TD: MNHN (ex coll. Lacroix)	♂ 31,5 – 58,8 ♀ 24,5 – 26,1

dentifer (Deyrolle, 1865) (<i>Cladognathus</i>)	n India, Nepal TL: Inde TD: MNHN (ex coll Oberthür)	♂ 24,0 – 32,8 ♀ 20,0 – 25,5
feai (BOILEAU, 1902) (<i>Prosopocoelus</i>)	n Myanmar n Thailand TL: Birmanie, Carin Cheba TD: MCSN (ST)	♂ 24,6 – 39,3 ♀ 14,0 – 14,3
forceps forceps (SNELLEN VAN VOLLENHOVEN) (<i>Prosopocoelus</i>)	Sumatra TL: Sumatra TD: RMNH (LT)	♂ 26,9 – 48,0 ♀ 24,0 – 26,6
forceps eligmonotus (LACROIX, 1982) (<i>Prosopocoelus</i>)	Malay Peninsula TL: Malaysia TD: MNHN (ex coll Lacroix)	♂ 40,4 – 49,2 ♀ 25,1 – 26,2
forceps nakamotoi (MIZUNUMA, 1994) (<i>Prosopocoilus</i>)	Borneo TL: Singkawang, Mt. Bawang TD: NSMT	♂ 23,1 – 47,2 ♀ 22,9 – 30,4
fuscocinctus (DE LISLE, 1973) (<i>Prosopocoelus</i>)	Nepal TL: Nepal (no exact locality) TD: MHNG	♂ 27,0 ♀ unknown
guangxii SCHENK, 2009	China (Guangxi) TL: China, Guangxi TD: AK	♂ 25,0 – 55,0 ♀ 26,0 – 28,0
laminifer (BOILEAU, 1905) (<i>Prosopocoilus</i>)	Sumatra TL: Medan, Dolok-Baras TD: MNHN (ST)	♂ 21,0 – 34,4 ♀ 19,7 – 20,1
marginatus (LACROIX et RATTI, 1973) (<i>Prosopocoelus</i>)	n India (Meghalaya) TL: Khasi Hills, Shillong TD: coll. Ratti, Italy	♂ 20,0 ♀ unknown
parryi (BOILEAU, 1913) (<i>Prosopocoelus</i>)	n India Nepal, Bhutan, Pakistan ? TL: Darjeeling TD: ?	♂ 22,8 – 37,5 ♀ 20,0 – 25,0
passaloides (HOPE et WESTWOOD, 1845) (<i>Lucanus</i>)	Java, Sumatra, s Borneo, Malay Peninsula, Andaman Islands TL: Java TD: OXUM (HT ♀)	♂ 19,2 – 32,3 ♀ 19,1 – 20,3
simianshanus (HUANG et CHEN, 2011) (<i>Prosopocoilus</i>)	China (Chongqing) TL: China, Chongqing, Jiangjin County, Mt. Simianshan TD: SHNU	♂ 24,0 – 51,0 ♀ 22,0 – 28,0
spencii spencii (HOPE, 1840) (<i>Lucanus</i>)	ne India, nw Myanmar, Tibet TL: Assam TD: OXUM	♂ 23,0 – 46,5 ♀ 27,0 – 29,0

= <i>Prosopocoilus crenicollis</i> THOMSON, 1862 <i>India borealis</i> , Arrow 1950
= <i>Prosopocoelus laticeps</i> MÖLLENKAMP, 1904, Arrow 1950
= <i>Prosopocoelus mordax</i> BOILEAU, 1904, Arrow 1950

spencii mandibularis (MÖLLENKAMP, 1902) (<i>Prosopocoelus</i>)	n Vietnam, China (Sichuan ?, s Yunnan, Guangxi) n Thailand n Laos ? TL: Tonkin, Montibus Mauson TD: ?	♂ 24,6 – 51,7 ♀ 27,6 – 30,3
suzumurai (NAGAI, 2000) (<i>Prosopocoilus</i>)	n Myanmar TL: Myanmar, Kachin Hills TD: coll. Suzumura, Japan	♂ 28,1 – 29,2 ♀ 15,4
tigrinus (DIDIER, 1928) (<i>Prosopocoelus</i>)	n Borneo TL: Borneo TD: MNHN	♂ 17,1 – 27,5 ♀ 19,0 – 19,4
trichopezus (DE LISLE, 1975) (<i>Prosopocoelus</i>)	Malay Peninsula s Myanmar (Tenasserim) TL: Pahang, Cameron Highlands TD: MNHN	♂ 19,4 – 40,5 ♀ 15,4 – 16,8
wemkeni (SCHENK, 2017) (<i>Prosopocoilus</i>)	ne India se Tibet TL: ne India, Arunachal Pradesh, District Along TD: KDS	♂ 20,8 – 37,7 ♀ 16,2 – 16,8
yangi (FUKINUKI, 2004) (<i>Prosopocoilus</i>)	China (Jiangxi, Fujian, Chongqing, Guizhou, Hubei) TL: Jiangxi, Leanshin county, Jumbonshan TD: ?	♂ 20,0 – 39,0 ♀ 22,0 – 26,0

Abbreviations:

HT:	Holotype
PT:	Paratype
ST:	Syntype
CT:	Cotype
LT:	Lectotype
TL:	Type locality
TD:	Type depository

Abbreviations used for museums and private collections:

Museums:

BMNH	Natural History Museum, London, England
MCNS	Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy
MNHN	Museum Nationale d'Histoire Naturelle, Paris, France
NSMT	National Museum of Nature and Science, Tokyo, Japan
RMNH	Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands
SHNU	Department of Biology, Shanghai Normal University, Shanghai, China

Private collections:

AK	Andreas Kirchner, Neuburg / Donau, Germany
KDS	Klaus-Dirk Schenk, Wehretal, Germany

Taxonomical notes about some taxa of the genus *Kirchnerius* Schenk, 2009

Schenk established the genus *Kirchnerius* in 2009 with *Kirchnerius guangxii* Schenk, 2009 as type species (SCHENK 2009).

Most of the taxa of the genus *Kirchnerius* have been primarily described in other genera. Huang and Chen first placed *Kirchnerius guangxii* Schenk, 2009 as a new synonym of *Prosopocoilus cyclommatooides* Lacroix, 1978 and the new genus *Kirchnerius* as a synonym of the genus *Prosopocoilus* Hope, 1845 (HUANG ET CHEN 2011). Later on, they changed their mind and published a „redefinition“ of the genus *Kirchnerius* mainly based on genital characters and did transfer several other taxa into this new genus (HUANG ET CHEN 2013, p. 72-73 and 122-129).

In the recently published book “Stag beetles of China III” Huang et Chen again modified the genus *Kirchnerius* in some generic characters (HUANG ET CHEN 2017, p. 28) and *Prosopocoilus suzumurai* Nagai, 2000, *Prosopocoelus marginatus* Lacroix et Ratti, 1973 and *Prosopocoilus wemkeni* Schenk, 2017 have been moved into the genus *Kirchnerius*.

We mainly follow here those systematic changes by using dominantly similarities of external morphological characters for the taxonomical classification.

***Kirchnerius cyclommatooides* (Lacroix, 1978)**



Fig. 1: ***Kirchnerius cyclommatooides*** (Lacroix, 1978)
(= *Prosopocoilus cyclommatooides*)
specimen from north-western Vietnam, Lai Chau, VI.2015

Kirchnerius cylommatooides has many external morphological characters in common with *Kirchnerius guangxii* and therefore has to be placed without doubt into the genus *Kirchnerius*. In particular the “contracted wrinkles” at the sutures of head and prothorax are characteristic.

Kirchnerius simianshanus (Huang et Chen, 2011)

Fig. 2: *Kirchnerius simianshanus* (Huang et Chen, 2011)
Chongqin, Jiangjin County, Simian-shan, 10.VI.2013

The males of this recently described species are similar to *E. denticulatus* by external morphological characters. Huang et Chen (HUANG ET CHEN 2013, p. 129) are stating that *simianshanus* is sharing important characters of the genital with *Kirchnerius yangi* (Fukinuki, 2004) and *Kirchnerius guangxii* Schenk, 2009 and are placing this taxon into the genus *Kirchnerius* Schenk, 2009 (sensu redefinition of Huang et Chen).

K. bulbosus (Hope, 1840), ***K. crassimaxillaris*** (Bomans, 1967), ***K. dentifer*** (Deyrolle, 1865),
K. forceps forceps (S. van Vollenhoven, 1861), ***K. forceps eligmonotus*** (Lacroix, 1982),
K. forceps nakamotoi (Mizunuma, 1994), ***K. spencii spencii*** (Hope, 1840),
K. spencii mandibularis (Möllenkamp, 1902) and ***K. parryi*** (Boileau, 1913)

Those taxa can be combined in a “species group”. They all have several external morphological characters in common with *K. guangxii* and are placed here into the genus *Kirchnerius* also. Further Huang et Chen are stating that *K. spencii* is differing from *Prosopocoilus*-species by several genital characters proving this species as a member of the genus *Kirchnerius* (HUANG ET CHEN 2013, p. 125).

K. boreli (Boileau, 1904) and ***K. yangi*** (Fukinuki, 2004)

P. boreli Boileau, 1904 and *P. yangi* Fukinuki, 2004 have been transferred to the genus *Kirchnerius* by Huang et Chen also (HUANG ET CHEN 2013, p. 127-129). We follow here this treatment.

K. marginatus (Lacroix et Ratti, 1973), ***K. suzumurai*** (Nagai, 2000) and
K. wemkeni (Schenk, 2017)

Those taxa have been transferred to the genus *Kirchnerius* by Huang et Chen also (HUANG ET CHEN 2017, p. 28). We follow here this treatment. But based on the obvious morphological differences we consider *K. wemkeni* as a separate species and not as a subspecies of *K. suzumurai*.

K. laminifer (Boileau, 1905), ***K. passalooides*** (Hope et Westwood, 1845) and
K. tigrinus (Didier, 1928)

Those taxa are morphologically close to *K. boreli* and therefore have been transferred to the genus *Kirchnerius* also.

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Adiciones a la distribución de *Cantharolethrus luxerii infexus* Boileau y de *Cantharolethrus steinheili* Parry (Coleoptera-Lucanidae) en Colombia

Additions to the distribution of *Cantharolethrus luxerii infexus* Boileau and *Cantharolethrus steinheili* Parry (Coleoptera-Lucanidae) in Colombia

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Abstract / Resumen

The genus *Catharolethrus* Thompson presents 8 species and subspecies for Central and South America, of which two species have been recorded for Colombia, the little information available motivated this note whose purpose was to provide more accurate data on the taxa recorded, their distribution and biological data in Colombia. The research was supported in the literature review and the analysis of the specimens of the Pardo-Locarno Family Collection-CFPL-COL. The distribution of species of the genus was recorded for Colombia as follows: *Cantharolethrus luxerii luxerii* (Buquet 1843) known from Valle del Cauca and Bajo Magdalena, *C. luxerii infexus* Boileau 1899 from Chocó and Antioquia and *C. steinheili steinheili* Parry 1875 from Cauca, Valle, Caldas and Antioquia. The most probable altitudinal ranges are discussed according to the field data and it is concluded that the biology of the species remains very little known.

El género *Catharolethrus* Thompson, presenta 8 especies y subespecies para centro y Suramérica, de las cuales dos se han registrado para Colombia, la poca información disponible motivó esta nota cuyo propósito fue aportar datos más precisos sobre los taxa registrados, su distribución y datos biológicos en Colombia. La investigación se soportó en la revisión de literatura y el análisis de los ejemplares de la Colección Familia Pardo-Locarno-CFPL-COL. Se logró registrar para Colombia una distribución de las especies del género como sigue: *Cantharolethrus luxerii luxerii* (Buquet 1843) conocida desde el Valle del Cauca y Bajo Magdalena, *C. luxerii infexus* Boileau 1899 de Chocó y Antioquia y *C. steinheili steinheili* Parry 1875 de Cauca, Valle, Caldas y Antioquia.

Key words / Palabras clave:

Scarabaeidae, Distribution, Altitudinal range, Colombia / escarabajos, distribución, rango altitudinal, Colombia

Introduction / Introducción. Los ciervos volantes (Coleoptera: Lucanidae), conforman un distintivo grupo entre los Scarabaeoidea, debido, entre otros atributos, a su pronunciado dimorfismo sexual, que incluye alometría e hipertrofia mandibular de los machos (Didier & Seguy, 1953). A nivel mundial esta familia registra 108 géneros y cerca de 1500 especies (Krajcik, 2001; Maes 1992; Paulsen, 2017). En el continente americano se registran 41 géneros y 233 especies (Paulsen, 2017), siendo la región Neotropical la más diversa con 30 géneros y 174 especies (Paulsen, 2017). Mientras que en Colombia se registran aproximadamente 23 especies y seis géneros Pardo-Pardo-Locarno, 1997; Pardo-Locarno & Villalobos, 2016), resaltando la mayor diversidad en el género *Sphaenognathus* Buquet, cuya cifra exacta todavía se encuentra en estudio y ha sido estimada en 14 especies (Pardo-Locarno & Villalobos, 2016). En ese escenario *Catharolethrus* Thompson, que incluye 7 especies para centro y Suramérica (Blackwelder, 1944; Didier & Seguy, 1953) solo registra para Colombia dos especies: *Cantharolethrus luxerii* (Buquet 1843) y *Cantharolethrus steinheili* Parry 1875.

A nivel nacional existe muy poca información sobre la distribución específica o aspectos biológicos de estas especies, mas allá de la registrada en catálogos u obras clásicas (Pardo-Locarno, 1997). A lo anterior debe sumarse la exigua representación de estas especies en colecciones nacionales (Pardo-Locarno, 1997). Esta situación motivó esta nota, con el propósito de aportar información un poco más detallada sobre la distribución y datos biológicos de las especies de *Cantharolethrus* para Colombia.

Methodology / Metodología. Para la elaboración de esta investigación el autor se apoyó en la revisión de la literatura y el análisis de los ejemplares de la Colección Familia Pardo-Locarno-CFPL-COL, que presenta una modesta representación de este grupo.

Results / Resultados. El análisis de ejemplares permite registrar para Colombia una distribución de las especies del género como sigue: *Cantharolethrus luxerii luxerii* (Buquet 1843), *C. luxerii inflexus* Boileau 1899 y *C. steinheili steinheili* Parry 1875. Aunque se mantiene el registro de las dos especies de este género para Colombia como lo han expresado la mayoría de los autores (Blackwelder, 1944; Didier & Seguy, 1953; Krajcik, 2001; Paulsen, 2017), las nuevas propuestas taxonómicas planteadas a nivel de subespecies permiten replantear los registros inicialmente planteados por el autor (Pardo-Locarno, 1997).

En primer lugar, *C. luxeri* se haya representada por dos subespecies. La primera de ellas *Cantharolethrus luxerii luxerii* (Buquet 1843), ha sido tradicionalmente registrada para Colombia, Panamá y Costa Rica (Blackwelder, 1944; Didier & Seguy, 1953; Krajcik, 2001; Paulsen, 2017). En Colombia esta subespecie es la más conocida y la mejor representada en algunas colecciones nacionales y foráneas (Figura 1A), anotando que los ejemplares estudiados por el autor se encuentran localizados en las Cuencas Calima y Anchicayá, Valle del Cauca, a altitudes entre los 950 (Campoalegre, Calima y 1950 msnm en Las Quebradas La Cristalina, El Cuzumbo (Río Calima) y La Palmera, Río Bravo, Calima, Valle (+40 ejemplares ♂♂♀♀ CFPL-COL). Este rango de distribución se asemeja un poco al mencionado para Ecuador que va desde los 500-800 m (Pichincha, Alluquirín) a 1800 msnm (Cotopaxi, Saguambi) en Ecuador (Bartolozzi et al., 1991). La mayoría de los ejemplares ha sido observada en localidades de la vertiente oeste de la Cordillera Occidental del Valle del Cauca y existe un ejemplar, con datos no confirmados, de Territorio Vásquez, Río Minero, Bajo Magdalena, entre Boyacá y Antioquia (1♂ CFPL-COL). Lo anterior precisa un poco lo anotado antes para esta especie de la cual se comentó "se distribuye preferiblemente en las montañas selváticas del Chocó Biogeográfico, en altitudes intermedias en el costado Oeste de la Cordillera Occidental, en las selvas húmedas y de niebla. La mayoría de individuos se han colectado entre los 800-1450 m.s.n.m. Es posible que se encuentren poblaciones en los sistemas montañosos del bajo Cauca o en la cuenca baja del Río Magdalena ..." Pardo-Locarno, 1997).

Sobre los aspectos biológicos solo se ha logrado precisar que los adultos son estacionales y se observan en grupos en árboles de aguacate (Pardo-Locarno, 1997), lo que permite reafirmar los dicho por Bartollozzi et al (1991) que la biología permanece desconocida.

La segunda subespecie *Cantharolethrus luxerii inflexus* Boileau 1899 fue descrita con ejemplares de Costa Rica. En 1997 se planteó por primera vez a *C. inflexus* Boileau 1899 como nuevo registro para Colombia (Pardo-Locarno, 1997), ello con un interrogante que dejaba la coincidencia morfológica del ejemplar obtenido con la descripción original que realizó Boileau (1899) o la posibilidad de tratarse de una nueva especie; Esta duda se aclaró posteriormente cuando el autor tuvo la oportunidad de visitar la colección del INBIO en Costa Rica (Ángel Solís Curador) y revisar algunos ejemplares no identificados pero de idéntica morfología, los cuales se asumieron como *C. inflexus* fácilmente, dejando sin piso la posibilidad de una nueva especie y asumiéndose la ampliación de la distribución de la especie para Colombia.

Sin embargo, esta especie fue revisada por Maes & Solis (2002) y asumida como la subespecie *C. luxerii inflexus* (Boileau 1899) y ampliada su distribución desde Costa Rica hasta Panamá (Maes & Solis, 2002). El análisis de varios ejemplares macho permitió aclarar y confirmar así un **nuevo registro** para Colombia y precisar su distribución para Antioquia y Chocó (Figura 1B), en varias localidades que incluyen el Parque Nacional Natural Katios (5♂♂ CFPL-COL). El único registro previo para esta subespecie para Colombia anotaba que “*C. aff. inflexus* Boileau ... es una especie registrada para Costa Rica, donde está representada en la Colección Nacional y en la del IMBIOS. En los últimos años se ha logrado colectar algunos ejemplares que se asemejan a la descripción que realizó Boileau en 1899; desafortunadamente esta es muy general y no se ha logrado examinar ejemplares adecuadamente identificados. Se trata de ciervos volantes similares a *C. luxerii* (Buquet) pero más robustos, con pequeñas diferencias en la masa antenal, mandíbulas mas cortas, punteadas y sinuosas. La región dorsal de la cabeza es mas punteada” (Pardo-Locarno, 1997). De otro lado en el mismo documento se anotó que “En las regiones montañosas al norte del Chocó Biogeográfico (Chocó) se ha colectado una cuarta especie, similar a *C. elongatus* La Croix (conocida desde el Perú), pero con arquitectura mandibular diferente ...” señalando la foto respectiva (Pardo-Locarno, 1997), sin embargo, el estudio de dichos ejemplares, de menor porte, confirmó que también pertenecen a este taxón y extendieron la distribución del registro al departamento del Chocó. Los pocos ejemplares estudiados de la subespecie presentan una distribución altitudinal poco precisa, cercana a los 1000 msnm, con un rango entre los 950 y 1200 msnm en Chocó y Antioquia, la cual podría en parte coincidir con el rango de 800-1200 msnm planteado por Maes & Solis (2002) para Costa Rica. Solo se le conoce desde ejemplares preservados y no existe información sobre la biología de esta especie.

Cantharolethrus steinheili Parry 1875, fue descubierto y registrado inicialmente para Colombia y ampliada su distribución para Perú (Maes & Solis, 2002; Mizunuma & Nagai, 1994). Los estudios de Schenk (2017) plantearon un nuevo arreglo taxonómico para la especie, dejando a *C. steinheili steinheili* solo para Colombia (Figura 1C). Sin embargo, este registro, basado en ejemplares antiguos de museos europeos plantea datos ambiguos, como el de ejemplares colectados en la zona montañosa entre Cartago y Manizales, otro registro del “Alto de las Cruces” cerca a Medellín y un dato más preciso de Papallacta, Baeza, Ecuador (Schenk, 2017); la subespecie *Cantharolethrus steinheili kirchneri* Schenk 2017 se registró para seis localidades de Perú (Schenk, 2017). La información disponible precisa un rango altitudinal entre los 1800 y 2200 msnm, en los Farallones de Cali, Valle y Munchique, Cauca, en los Andes Occidentales de Colombia (14 ♂♂♀♀ CFPL-COL). Notas previas alusivas a este taxón comentaban “*C. steinheili* Parry ... especie registrada para Colombia y Perú (Maes, com. pers.) se distribuye en la selva de niebla de la Cordillera Occidental, se desconoce sobre la distribución en las mismas formaciones ecológicas de las otras cordilleras ...” la nota adjunta una foto de la especie (Pardo-Locarno, 1997); La poca disponibilidad de ejemplares en colecciones nacionales impide plantear un mapa más preciso para *C. steinheili steinheili* Parry en Colombia, más allá de su registro para Antioquia, Caldas, Cauca y Valle del Cauca, sin embargo, con base en los ejemplares de la colección CFPL-COL podría estimarse un rango altitudinal entre 1800 y 2250 msnm, altitud que se presenta los datos de colecta de la especie en el Cerro de la Horqueta, en San Antonio, Saladito, Valle.

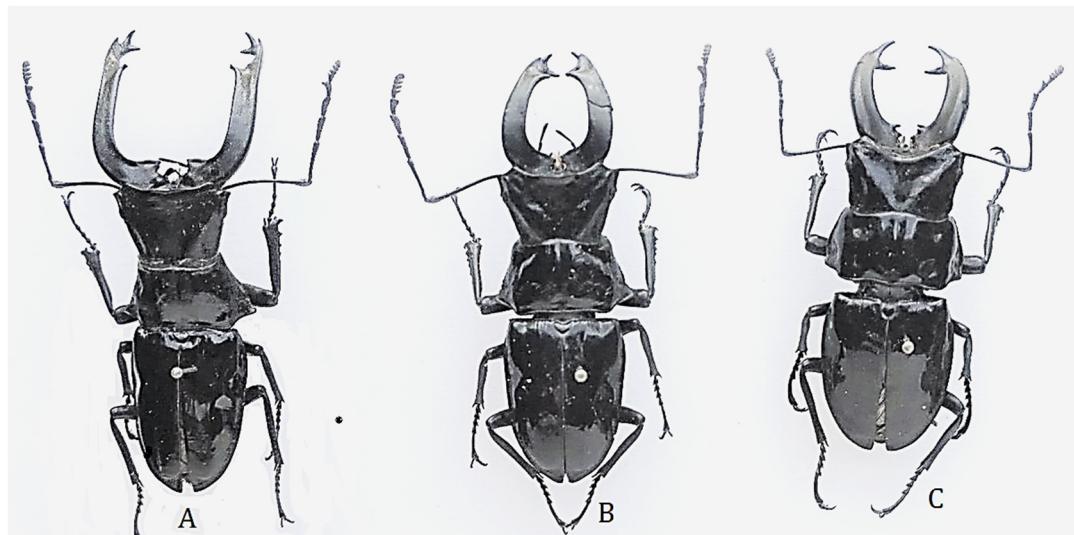


Figura 1. Machos de A: *Cantharolethrus luxerii luxerii* (Buquet 1843), B: *C. luxerii inflexus* Boileau 1899 y C: *C. steinheili steinheili* Parry (L. C. Pardo-Locarno Fot.)

Fig. 1: ♂ of *Cantharolethrus luxerii luxerii* (Buquet, 1843) (A), *Cantharolethrus luxerii inflexus* Boileau, 1899 (B) and *Cantharolethrus steinheili steinheili* Parry (photos by L. C. Pardo-Locarno)

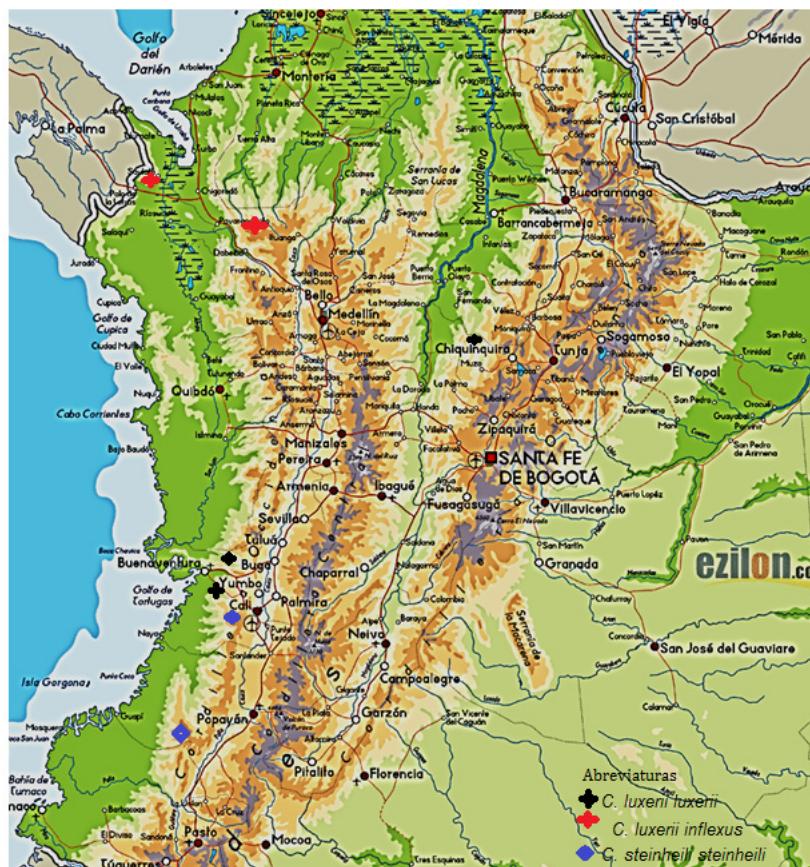


Figura 2. Distribución aproximada de las especies y subespecies de *Cantharolethrus* en Colombia. Mapa modificado desde ezilom.com

Fig. 2: Approximate distribution of the species and subspecies of *Cantharolethrus* in Colombia.
Modified map of ezilom.com

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