

**New species of *Ixorida* J. Thomson from south Vietnam  
(Coleoptera: Scarabaeidae: Cetoniinae)**

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**Taxonomy, new species, Coleoptera, Scarabaeidae, Cetoniinae, Taenioderini, *Ixorida*, Vietnam**

**Abstract.** *Ixorida (Ixorida) aureovittata* sp. nov. is described from southern part of Vietnam. New species is accommodated into nominotypical subgenus of *Ixorida* J. Thomson. It's external morphology and male genitalia of the new species are compared with characters of all it's congeners flying in Indochina and surrounding countries. Updated list of all representatives of nominotypical subgenus *Ixorida* is given.

## INTRODUCTION

Genus *Ixorida* was described by James Thomson in 1880. *Macronota mouhoti* Wallace, 1867 was designated by author as a type species of newly described, at that time, monotypical genus. Newly described generic name stayed completely ignored by all following authors: Gestro (1888, 1891), Schoch (1895), Arrow (1910), placing *Ixorida mouhoti* into different genera of „Macronotides“. First, who listed *Ixorida* Thomson as a valid genus was Schenkling (1921). Schenkling listed two species, *Ixorida mouhoti* Wallace, 1867 and *Ixorida philippinensis* Waterhouse, 1841. Surprisingly name *Ixorida* Thomson stayed continuously ignored also after Schenkling's catalogue by several other authors.

It was Mikšič (1970), who provided us with first revision of *Ixorida* Thomson. At that time Mikšič listed 4 different species. Later Mikšič (1972) described *Pseudomecinonota* as a subgenus of *Ixorida* Thomson and accommodated three species into this subgenus. Other important taxonomical steps in *Ixorida* Thomson have been made by Antoine (1986, 1994), author declined *Mecinonota* Kraatz, 1892, *Aurelia* Thomson, 1880 and *Oncosterna* Thomson, 1880 to subgeneric level of *Ixorida* Thomson.

Nine species and one subspecies of Taenioderini are currently placed in nominotypical subgenus of *Ixorida* Thomson. Three new species have been described since Mikšič's revision (1970), by Antoine (1986), Arnaud (1989), Jákl (2011). In this paper one new species from southern Vietnam is added.

## MATERIAL AND METHODS

Following codens of institutional and private collections are used in the text:  
BMNH Natural History Museum, London, United Kingdom;  
CMCP private collection of J.-C. Mille, Marignane, France;

- KSCP private collection of Kaoru Sakai, Tokyo, Japan;  
 PLCP private collection of Jean-Philippe Legrand, Dammarie sur Loing, France;  
 QCCC private collection of Jian-Yue Qiu, Chongqing, China;  
 SJCP private collection of Stanislav Jákl, Praha, Czech Republic.

Specimens of newly described species are provided with red and yellow printed labels, red for HOLOTYPE, yellow for PARATYPE. Holotype or paratypes are labelled with sex symbol, number of paratype (on paratype label) and words St.Jákl & J.-P.Legrand det. 2017. Label data are cited for the material examined, individual labels are indicated by a double slash (//), individual lines by a single slash (/).

## TAXONOMY

### *Ixorida (Ixorida) J. Thomson, 1880*

*Ixorida* J. Thomson, 1880: 277 (original description); Schenkling 1921: 144 (catalogue); Mikšič 1970: 120 (revision); Mikšič 1976: 185 (monography); Krikken 1984: 63 (generic key); Ma 1995: 43; Krajčík 1998: 90 (catalogue).  
*Ixorida (Ixorida)* J. Thomson: Antoine, 1986: 10, 1994b: 8 (new descriptions, taxonomical notes); Sakai & Nagai 1998: 397 (iconography); Krajčík 2011: 57 (Cetoniidae of China); Bezděk in Löbl & Löbl 2016 (Palearctic catalogue).

**Type species.** *Macronota mouhoti* Wallace, 1867.

## DESCRIPTION

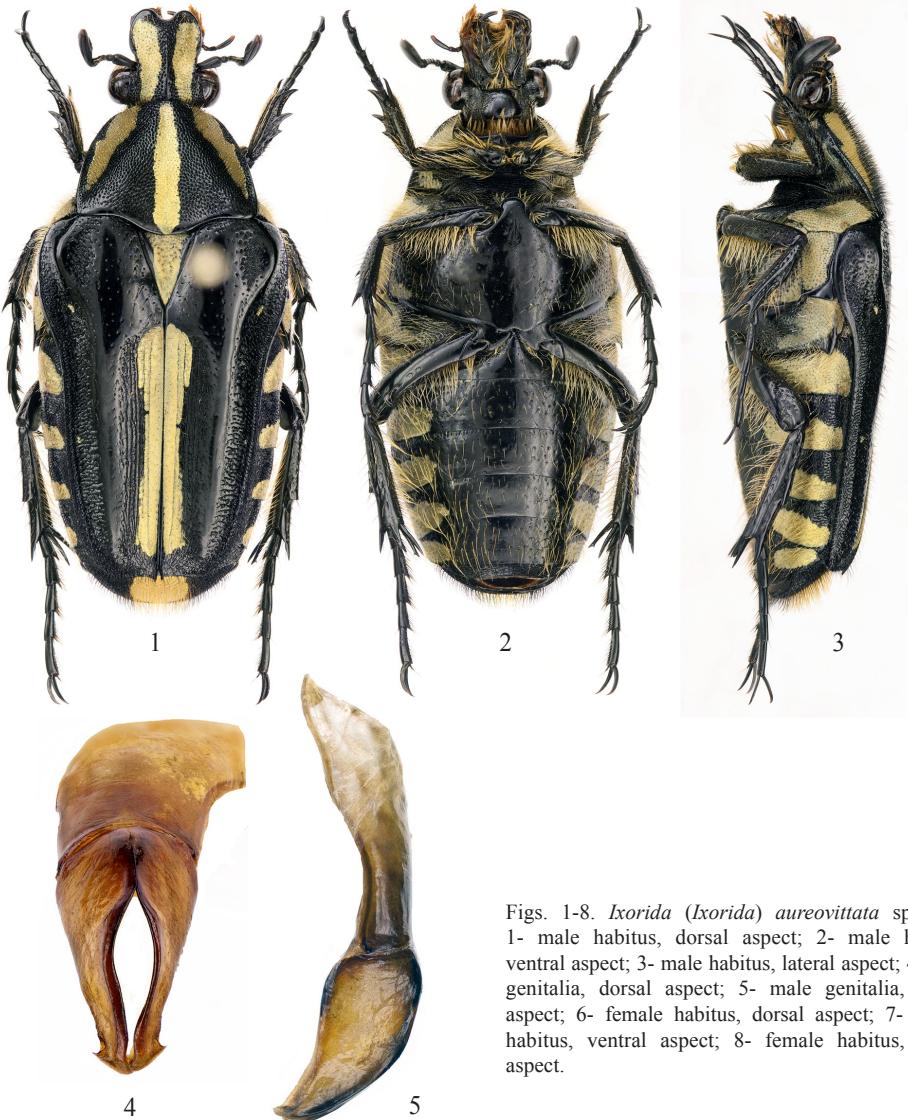
### *Ixorida (Ixorida) aureovittata* sp. nov. (Figs. 1-8)

**Type locality.** South Vietnam, Lam Dong Province, Bao Loc.

**Type material.** Holotype male (SJCP) labelled: S. VIETNAM/Lam Dong prov./Bao Loc, IV.2017/local collector leg; paratype Nos. 1-3 males (SJCP) labelled: same as holotype; paratype Nos. 4-5 males and 6-7 females (SJCP) labelled: S VIETNAM/Lam Dong Prov./Maria past., V.2017/local collector leg; paratype Nos. 8-9 males (SJCP) labelled: C.VIETNAM/Maria past./Lam Dong, V.2016/local collector leg; paratype No. 10 male (KSCP) labelled: Bao Loc/S Vietnam/1.-8.V.2004(Masao Ito leg; paratype No.11 female (KSCP) labelled: Bao Loc/S Vietnam/1. VI.2004/M. Ito leg; paratype Nos. 12 male and 13 female (QCCC) labelled: V.2016, Lam Dong, S.Vietnam; paratype No. 14 male (QCCC) labelled: IV.2017, Bao Loc, Lam Dong, S.Vietnam, paratype No. 15 male and No. 16 female (PLCP) labelled: Vietnam, Lam Dong Maria past, V.2017; paratype No. 17 male (PLCP) labelled: Vietnam, Bao Loc, Lam Dong, IV.2017; paratype No. 18 female (CMCP) labelled: Maria past, Lam Dong province, V-2016, coll. J.-C. Mille.

**Description of holotype:** Black, slender, with mild lustre, bearing golden-yellow dorsal and ventral ornament. Body size 17.0 mm (excluding pygidium), maximum humeral width 8.4 mm.

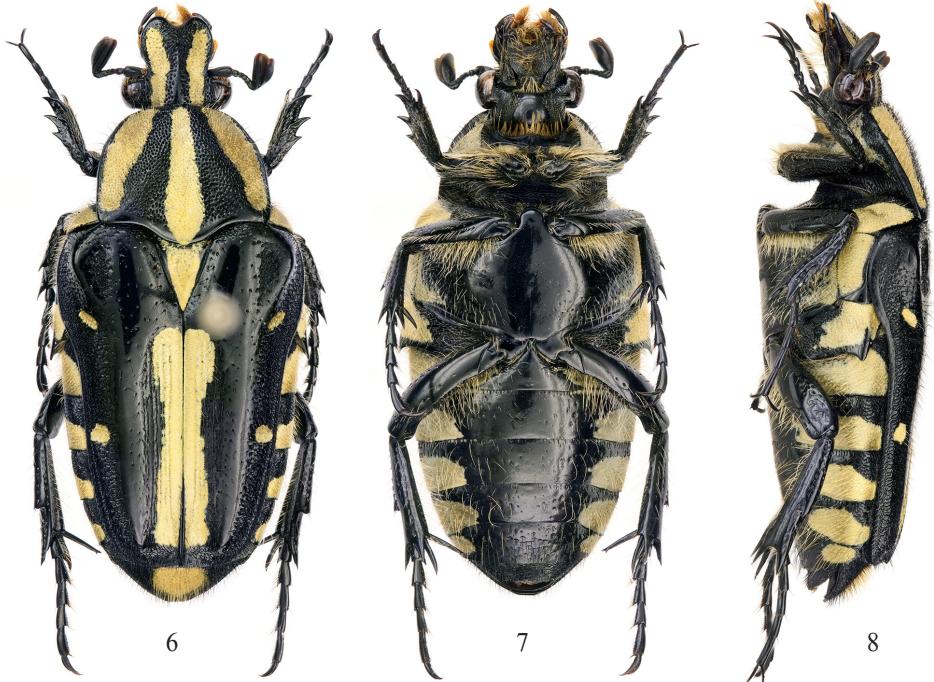
Head. Black with broad lateral yellow vittae. Sides of frons running in parallel. Clypeus widening from eye canthus, its widest point approximately in clypeal midlength. Clypeal apex bilobed, midlength deeply incised. Punctuation of frons and clypeus dense, but simple. Most of punctures diameters approximately circularly shaped, interspaces much smaller than



Figs. 1-8. *Ixorida (Ixorida) aureovittata* sp. nov.:  
1- male habitus, dorsal aspect; 2- male habitus,  
ventral aspect; 3- male habitus, lateral aspect; 4- male  
genitalia, dorsal aspect; 5- male genitalia, lateral  
aspect; 6- female habitus, dorsal aspect; 7- female  
habitus, ventral aspect; 8- female habitus, lateral  
aspect.

punctures dimeters. Yellowish setation present throughout total length of broad, ornamented sides. Antennae short, club shorter than stalk. Coloration of antennae dark brown to black, tip of club paler.

Pronotum. Black with one central and two lateral golden/yellowish longitudinally running vittae. Central vitta reaching both margins, laterally running vittae reaching anterolateral margins, but not posterolateral margins. Punctuation very dense and deep, denser than in head. Setation moderately long and dense, its coloration following colour of blackish



or yellowish pronotal parts. Lateral border indistinctly developed, mainly in posterior half.

Scutellum. Triangularly shaped, apex elongated and very sharp. Excepting sides in anterior third, completely covered with golden ornament.

Elytra. Black, mildly reflected. Disc with longitudinal, golden vitta nearly reaching scutellar apex and apex of elytra. Disc of each elytron with 5-6 longitudinally running striolae lines. Elytral disc (excepting striolated part) reflected, its punctuation very fine and simple. Lateral ridge with deep and dense horizontally running striolation. Humeral and apical calli moderately developed, nearly impunctate. Sutural ridge very obtuse, slightly drawn out over elytral apex. Setation moderately long and dense, its coloration copying colour of elytral parts.

Pygidium. Black, granulated throughout total length. Its midlength with yellowish, circularly shaped spot. Colour of setation copying colour of pygidial parts.

Ventrum. Black with yellowish setation and ornament at sides. Abdomen completely missing central impression, only with very mild constriction between 4th and 5th ventrites. Abdominal sides with golden/yellowish ornament placed in posterior half of each ventrite. Abdominal setation present throughout total length, but in midlength much thinner and shorter. Abdominal punctuation moderately dense. Metasternum black, sides with yellowish ornament. Metasternal punctuation and setation present mainly in sides. Mesometasternal process short, its apex widely rounded. Metepimeron and metepisternum with cover of golden/yellowish ornament and setation. Prosternum black, its sides covered with yellowish ornament. Mentum black, its ornament absent.

Legs. Slender and rather long, completely black. Femurs and tibia with yellowish setation, especially on inner sides. Femurs slightly curved. Protibia tridentate, central and posterior tooth staying closer. Meso- and metatibia carinate in posterior half.

Genitalia. Similarly shaped as in other representatives of nominotypical subgenus of *Ixorida* Thomson. Apex with small, but sharply developed hook (Figs. 4-5).

**Variability.** Size range 16.1-18.6 mm. In all other respects males more or less same as holotype.

**Sexual dimorphism.** Size of females 16.8-17.5 mm. Protibia of females slightly more robust and shorter, protibial teeth nearly equidistant. Abdominal constriction missing. Punctuation of last abdominal ventrite much more abundant and deeper. In all other respects same as males.

**Differential diagnosis.** Newly described species is very distinct and easy to distinguish from other representatives of *Ixorida* (s. str.). Closest species, flying in the same area is *Ixorida* (*Ixorida*) *magnierei* Bourgoin, 1917. It can be separated from newly described species by following characters: I. elytral, sutural vitta in *I. magnierei* absent, usually only with two orange spots; II. Scutellum in *I. magnierei* shorter, not elongated and not so sharp; III. elytral punctuation in disc much denser in *I. magnierei*; IV. pygidium usually completely covered with orange ornament in *I. magnierei*, but with golden/yellow central spot in newly described species; V. ornament and setation of whole body orange in *I. magnierei*, but golden/yellow in new species; VI. male aedeagus more robust and shorter with less developed apical hook in *I. magnierei*, but more elongate, slenderer with more distinct apical hook in new species.

**Etymology.** Named after typical golden/yellow vitta in sutural part of elytra.

**Distribution.** South Vietnam, Lam Dong Province, Bao Loc.

***Ixorida* (*Ixorida*) *magnierei* (Bourgoin, 1917)**  
(Figs. 9-16)

*Macronota Magnierei* Bourgoin, 1917: 321 (original description); Schenckling 1921: 139 (catalogue).

*Coiloderma magnierei* (Bourgoin): Paulian 1960: 156 (Scarabaeidae of Indochina).

*Ixorida magnierei* (Bourgoin): Mikšič, 1976: 188 (monography); Krajčík 1998: 90 (catalogue).

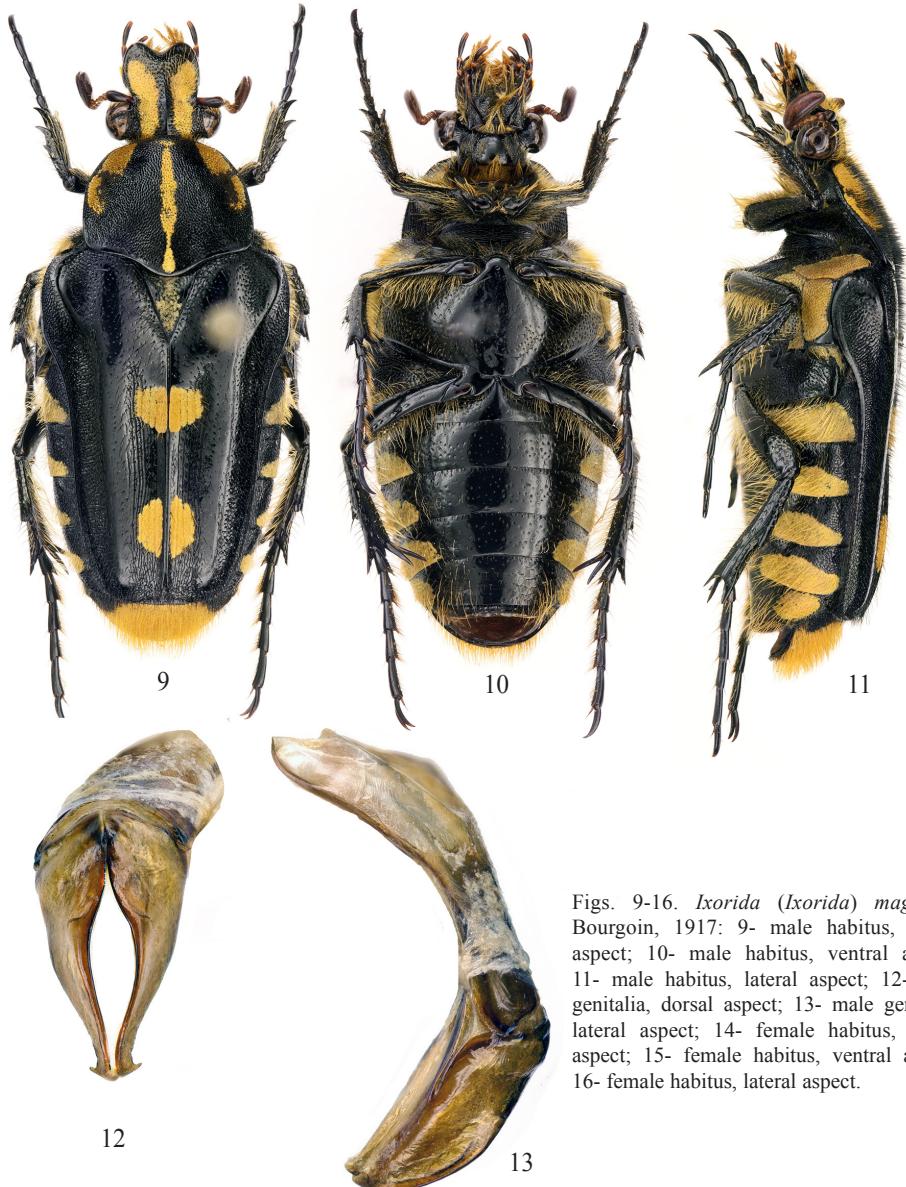
*Ixorida* (*Ixorida*) *magnierei* (Bourgoin): Sakai & Nagai 1998: 352, pl. 133, fig. 1580-male (iconography).

**Type locality.** Laos: Plateau du Tranninh, de Piahat á Tathom.

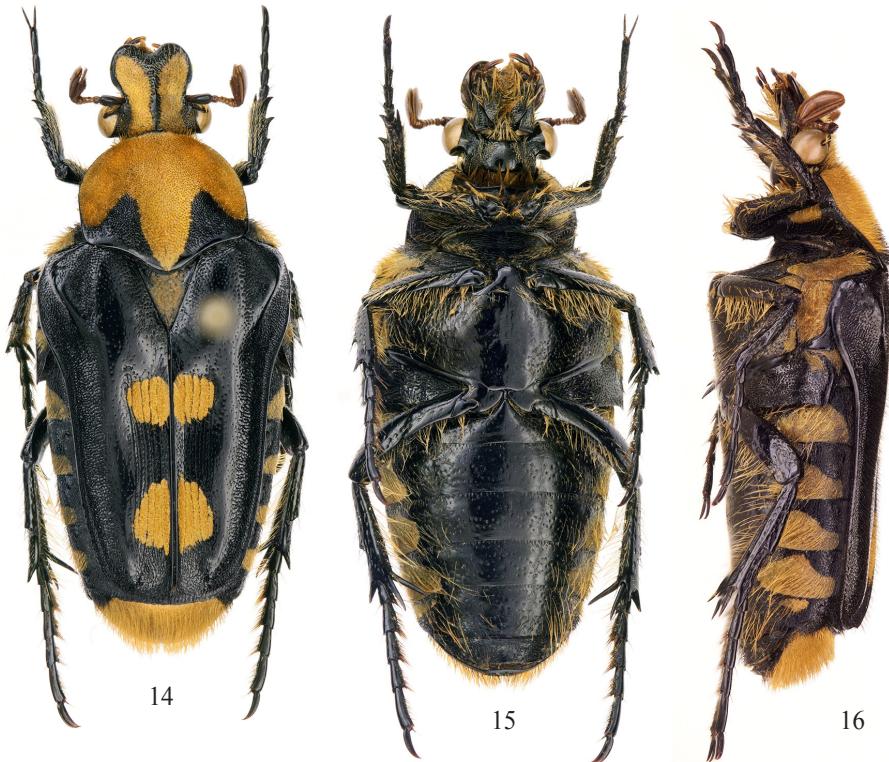
**Type material.** Holotype (♀) is deposited in BMNH (ex coll. Bourgoin).

**Additional examined material:** 1 ♀ (SJCP) labelled: NW THAILAND/Chiang Mai Prov./DOI SUTHEP mt./Sv. Bílý leg, 1.V. 1996; 2 ♂♂ (SJCP) labelled: Laos - Xieng Khouang pr./route no.6 60 km N of Phongsavan, 1.-10. IV./2010, local collectors lgt; 2 ♂♂ and 2 ♀♀ (SJCP) labelled: NE LAOS, May 2007/Hua Phan Prov./MT. PHU PAN/1350-1900m/Lao collector leg; 6 ♂♂ and 5 ♀♀ (SJCP) labelled: Laos, Attapeu prov./Annam HighlandsMts. Dong Amphan/NBCA ca 1160m NONG FA (crater lake) env./15°05,9' M 107°25,6' E/St. Jákl lgt, 30.4. - 6.5.2010.

**Distribution.** Thailand, Laos, Vietnam.



Figs. 9-16. *Ixorida (Ixorida) magnierei* Bourgoin, 1917: 9- male habitus, dorsal aspect; 10- male habitus, ventral aspect; 11- male habitus, lateral aspect; 12- male genitalia, dorsal aspect; 13- male genitalia, lateral aspect; 14- female habitus, dorsal aspect; 15- female habitus, ventral aspect; 16- female habitus, lateral aspect.



#### UPDATED LIST OF *IXORIDA* (*IXORIDA*) SPECIES

- I. (Ixorida) albonotata* (Blanchard, 1842) - South India
- I. (Ixorida) aureovittata* sp. nov. - South Vietnam
- I. (Ixorida) basilanensis* Jákl, 2011 - Philippines: Basilan I.
- I. (Ixorida) florenti* Arnaud, 1989 - Philippines: Romblon I., Sibuyan I.
- I. (Ixorida) guentheri* Schurhoff, 1934 - Philippines: Panaon I., Samar I.
- I. (Ixorida) heinrichi* Antoine, 1986 - Indonesia: Sulawesi I.
- I. (Ixorida) magnierei* (Bourgoin, 1917) - Thailand, Laos, Vietnam
- I. (Ixorida) mouhoti* (Wallace, 1867) - Thailand, Laos, Cambodia, Vietnam, China, Myanmar, NE India
- I. (Ixorida) philippinensis* (Waterhouse, 1841) - Philippines: Luzon I., Masbate I.
- I. (Ixorida) philippinensis nigripennis* Mikšič, 1970 - Philippines: Panay I.
- I. (Ixorida) propinqua* (Mohnike, 1873) - Philippines: Mindanao I.

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## REFERENCES

- ANTOINE P. 1986: Sur la tribu Taenioderini remarques taxonomiques et description d'espèces nouvelles. *Bulletin de la Société Sciences Nat Compiègne* 49: 9-20.
- ANTOINE P. 1994: Quelques espèces nouvelles ou peu connues de la famille Cetoniidae IV. (Coleoptera, Scarabaeoidea). *Bulletin de la Société Sciences Nat Compiègne* 82: 5-11.
- ARNAUD P. 1989: Nouvelles cétoines des Philippines. *Bulletin de la Société Sciences Nat Compiègne* 62: 1-3.
- ARROW G. J. 1910: Coleoptera Lamellicornia (Cetoniinae and Dynastinae). In: *Fauna of British India* 1. London: Taylor & Francis, 322 pp., 2 pls.
- BEZDÉK A. 2016: Cetoniinae. In: LÖBL I. & LÖBL D. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 3. Scarabaeoidea - Scirtoidea - Dascilloidea - Buprestoidea - Byrrhoidea. Revised and Updated Edition*. Stenstrup: Brill, 983 pp.
- BOURGOIN A. 1917: Trois espèces nouvelles de *Macronota*. *Bulletin de la Société Entomologique de France* 1917: 321-325.
- GESTRO R. 1888: Viaggio di Leonardo Fea in Birmania e regioni vicine. IV. Nuove specie di Coleotteri. *Annali del Museo Civico di Storia Naturale di Genova (Serie 2)* 6: 93-99.
- GESTRO R. 1891: Viaggio di Leonardo Fea in Birmania e regioni vicine XXXVII. Enumerazione delle Cetonie. *Annali del Museo Civico di Storia Naturale di Genova (Serie 2)* 10: 835-876, pl. II.
- JÁKL S. 2011: A contribution to knowledge of the Cetoniinae beetles from Philippines with descriptions of five new species (Coleoptera: Scarabaeidae: Cetoniinae. *Studies and Reports, Taxonomical Series* 7(1-2): 207-218.
- LEGRAND J.-P. 2017: Notes sur le genre *Ixorida* J. Thomson 1880, et son sous-genre *Mecinonota* Kraatz 1892, aux Philippines et description d'espèces nouvelles. *Cetoniimania NS*, 10: 53-60.
- KRAJČÍK M. 1998: *Cetoniidae of the world, Catalogue Part I. Zlatohlávkovití světa, Katalog-část I*. Most: Krajčík (published privately by the author), 96 + 36 pp.
- KRIKKEN J. 1984: A new key to the suprageneric taxa in the beetle family Cetoniidae, with annotated lists of the known genera. *Zoologische Verhandelingen Leiden* 210: 3-75.
- MA W.-Z. 1995: Coleoptera: Cetoniidae, Trichiidae and Valgidae. *Economic Insect Fauna of China* 46 1995: I- X, 1-210.
- MIKŠIĆ R. 1970: Revision der Gattung *Ixorida* J. Thoms. *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen* 22(4): 119-125.
- MIKŠIĆ R. 1972: Revision der gattung *Mecinonota* Kraatz. *Mitteilungen der Münchner Entomologischen Gesellschaft München* 62: 87-128.
- MIKŠIĆ R. 1976: *Monographie der Cetoniinae der palearctischen und orientalischen Region. Coleoptera: Lamellicornia. Band 2. Systematischer Teil: Gymnetini Teil*. Zagreb: Graficki závod Hrvatske, 444 pp.
- SAKAI K. & NAGAI S. 1998: *The Cetoniinae beetles of the World*. Pp. 1-6 + 7-150 unpag. (pls. 1-144) + 151-421 + 3 unpag. In: FUJITA H. (ed.): Mushi-Sha's iconographic series of insects 3. Mushi-Sha, Tokyo, 2 unpag. + 342 + 5 unpag. (in Japanese and English).
- SCHENKLING S. 1921: *Scarabaeidae, Cetoniinae. Pars 72*. In: JUNK W. & SCHENKLING S. (eds.): *Coleopterorum Catalogus*. Berlin: W. Junk, 431 pp.
- SCHOCH G. 1895: *Nachtrag zu den Gattungen und Arten meiner Cetoniidensammlung I*. Zurich: Zurcher & Furrer, 68-82.
- THOMSON J. 1880: Diagnoses de genres nouveaux de la famille des Cétonides. *Le Naturaliste* 2: 269-278.
- WALLACE A. R. 1867: A catalogue of the Cetoniidae of the Malayan Archipelago, with descriptions of the new species. *Proceedings of the Entomological Society London* 3: 92-97 (xcii-xcvii).
- WALLACE A. R. 1868: A catalogue of the Cetoniidae of the Malayan Archipelago, with descriptions of the new species. *Transactions of the Entomological Society of London* 3(4): 519-601.

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