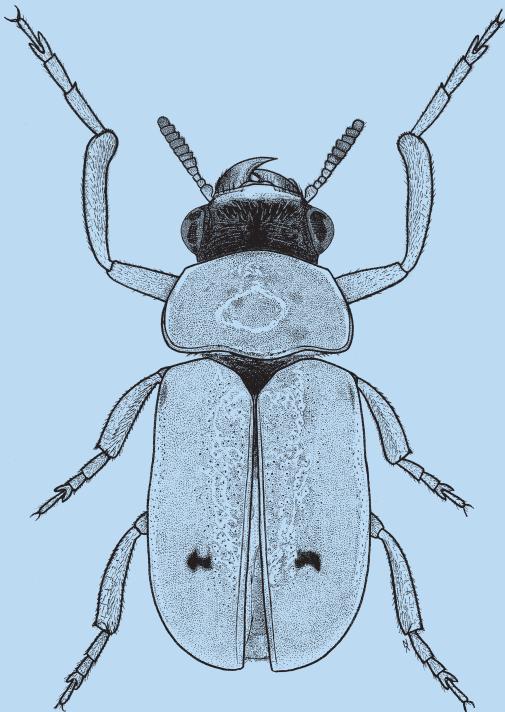




NÁRODNÍ  
MUZEUM

# ACTA ENTOMOLOGICA

MUSEI NATIONALIS PRAGAE



**Identity of species-group taxa of  
the Western Palaearctic Clytrini  
(Coleoptera: Chrysomelidae)  
described by Maurice Pic  
and Louis Kocher**

**55(suppl.)  
2015**

Jan Bezděk & Renato Regalin



# Acta Entomologica Musei Nationalis Pragae

Volume 55 (supplementum)

Date of issue: November 15, 2015

**Chairman of the  
editorial board:**

Josef Jelínek (Czech Republic)

**Editor-in-chief:**

Petr Kment (Czech Republic)

**Associate editors:**

Martin Fikáček (Czech Republic)

Igor Malenovský (Czech Republic)

Lukáš Sekerka (Czech Republic)

Michal Tkoč (Czech Republic)

**English language editors:**

Jitka Aldhoun (United Kingdom)

Leonidas R. Davranoglou (United Kingdom)

Grey T. Gustafson (USA)

**Advisory board:**

Michael Balke (Germany)

Lubomír Masner (Canada)

Jan Bezděk (Czech Republic)

Wolfram Mey (Germany)

David S. Boukal (Czech Republic)

Ricardo Palma (New Zealand)

Freddy Bravo (Brazil)

Dávid Rédei (China)

Gregory R. Curler (USA)

†Carl W. Schaefer (USA)

Vladimir M. Gnezdilov (Russia)

Aleš Smetana (Canada)

Jiří Hájek (Czech Republic)

Alexey Yu. Solodovnikov (Denmark)

Petr Kočárek (Czech Republic)

Pavel Štys (Czech Republic)

Zdeněk Laštůvka (Czech Republic)

Sonja Wedmann (Germany)

Published biannually by the National Museum, Václavské náměstí 68, CZ-115 79 Praha 1, Czech Republic.

**Scope of the journal:** *Acta Entomologica Musei Nationalis Pragae* (AEMNP) publishes entomological papers focused on taxonomy, nomenclature, morphology, bionomics and phylogeny as well as catalogues.

**Manuscripts should be sent to:** aemnp.editors@gmail.com (or to: Department of Entomology, National Museum, Cirkusová 1740, CZ-193 00 Praha 9 – Horní Počernice, Czech Republic).

**Journal web page:** <http://www.aemnp.eu>

Typeset & design: M. Fikáček.

Printed by Tiskárna Kleinwächter, Čajkovského 1511, 738 01 Frýdek-Místek, Czech Republic.

Distributed by the Department of Entomology, National Museum, Praha.

Indexed in Biological Abstracts, EBSCO, Entomology Abstracts, SCOPUS, Zoological Record and Scientific Citation Index Expanded and Web of Science.

ISI Impact Factor (2015): 0.659

**ISSN 0374-1036 (Print)**

© Národní muzeum, Praha – 2015

**ISSN 1804-6487 (Online)**

Volume 55/2015 is published with financial support provided by the Český literární fond Foundation, Prague.

Cover: *Coptocephala normandi* Pic, 1914 (Coleoptera: Chrysomelidae). Orig. by Z. Kejval.

**Identity of species-group taxa  
of the Western Palaearctic Clytrini  
(Coleoptera: Chrysomelidae)  
described by Maurice Pic  
and Louis Kocher**

Jan BEZDĚK  
Renato REGALIN

ACTA ENTOMOLOGICA MUSEI NATIONALIS PRAGUE  
volume 55 (supplementum)

National Museum, Prague  
2015



# Identity of species-group taxa of the Western Palaearctic Clytrini (Coleoptera: Chrysomelidae) described by Maurice Pic and Louis Kocher

Jan BEZDĚK<sup>1)</sup> & Renato REGALIN<sup>2)</sup>

<sup>1)</sup> Mendel University, Department of Zoology, Zemědělská 1, CZ-613 00 Brno, Czech Republic;  
e-mail: bezdek@mendelu.cz

<sup>2)</sup> Viale Papa Paolo VI, 11, I-20081 Abbiategrasso, Italy; e-mail: renato.regalin@unimi.it

**Abstract.** The species-group taxa of the Western Palaearctic Clytrini described by Maurice Pic (132 taxa) and Louis Kocher (11 taxa) are reviewed. The primary type specimens of almost all taxa were examined. The following new taxonomical changes are proposed: *Chilotomina maroccana* (Pic, 1936), comb. nov. (from *Smaragdina*) = *Ch. erberi* Warchałowski, 2000, syn. nov.; *Clytra atraphaxidis* (Pallas, 1773) = *C. atraphaxidis* var. *nigromaculata* Pic, 1897, syn. nov.; *Clytra duodecimmaculata* (Fabricius, 1775) = *C. bicoloriceps* Pic, 1933, syn. nov.; *Clytra deficiens* Heyden, 1892 = *C. nigrocincta* var. *graeca* Pic, 1915, syn. nov. = *C. nigrocincta* var. *multipunctata* Pic, 1920, syn. nov. = *C. nigrocincta* var. *subinterrupta* Pic, 1920, syn. nov.; *Coptocephala destinoi* Fairmaire, 1884 = *C. fallaciosa* var. *tambei* Pic, 1942, syn. nov.; *Coptocephala massiliensis* Pic, 1914, stat. nov. = *C. linnaeana* Petitpierre & Alonso-Zarazaga, 2000, syn. nov.; *Coptocephala perrisi* (Desbrochers des Loges, 1870), comb. nov. (from *Tituboea*) = *C. kerimii* Fairmaire, 1875, syn. nov. = *C. bleusei* Pic, 1897, syn. nov. = *C. sexstigma* Pic, 1918, syn. nov. = *C. kerimi* f. *rubriceps* Roubal, 1948, syn. nov. = *C. holoxantha* Peyerimhoff, 1949, syn. nov. = *C. schrammi* Kocher, 1959, syn. nov.; *Coptocephala sefrensis* Pic, 1897 = *C. metalliconotata* Pic, 1933, syn. nov. = *C. metalliconotata* var. *theryi* Pic, 1936, syn. nov. = *C. rotroui* Kocher, 1969, syn. nov.; *Labidostomis centrisculpta* Pic, 1920 = *L. alaiensis* Pic, 1920, syn. nov.; *Lachnaia* (*Barathraea*) *straminipennis* (Lucas, 1845) = *Barathraea octomaculata* Pic, 1895, syn. nov. = *Lachnea separata* Pic, 1897, syn. nov.; *Otiothraea rotroui* (Kocher, 1961), comb. nov. (from *Cheilotoma*); *Smaragdina affinis manicata* (Lacordaire, 1848) = *Gynandrophthalma manicata* Lefèvre, 1872, syn. nov. = *Chilotoma reyi* var. *lucidipes* Pic, 1897, syn. nov.; *Smaragdina persica* (Pic, 1911) = *S. mirabilis* Romantsov, 2012, syn. nov.; *Smaragdina scutellaris* (Lefèvre, 1872) = *S. furthi* Erber & Medvedev, 1999, syn. nov. = *S. jordanica* Medvedev & Katbeh-Bader,

2002, syn. nov.; *Smaragdina xanthaspis* (Germar, 1824) = *Cyaniris bicoloripes* Pic, 1922, syn. nov.; *Tituboea arabica* (Olivier, 1808) = *T. mokattamensis* Pic, 1912, syn. nov. = *T. subabbreviata* Pic, 1912, syn. nov. = *T. subabbreviata* var. *notaticeps* Pic, 1912, syn. nov. = *T. subabbreviata* var. *robustior* Pic, 1912, syn. nov. = *T. subabbreviata* var. *bisbinotata* Pic, 1912, syn. nov.; *Tituboea atriceps* Pic, 1924, stat. nov. = *Antipa minor* var. *decemmaculata* Pic, 1937, syn. nov. = *Antipa israelita* Medvedev, 1992, syn. nov.; *Tituboea biguttata* (Olivier, 1791) = *Antipa bicoloripes* Pic, 1942, syn. nov.; *Tituboea cingulata* (Lefèvre, 1883) = *Antipa arabica* var. *donceeli* Pic, 1929, syn. nov.; *Tituboea lefevrei* (Pic, 1894), comb. nov. (from *Coptocephala*) = *Antipa arabica* var. *palaestina* Pic, 1929, syn. nov. = *A. chikatunovi* Lopatin, 1995, syn. nov.; *Tituboea mecheriensis* Pic, 1895, stat. nov. = *T. octopunctata* var. *hypomelaena* Bedel, 1921, syn. nov. = *T. tredecimpunctata* var. *kocheri* Pic, 1949, syn. nov. = *Macrolenes janczyki* Cobos, 1956, syn. nov. = *Antipa urikkana* Tomov, 1983, syn. nov.; *Tituboea paykullii* (Lacordaire, 1848) = *Antipa testaceipes* Pic, 1939, syn. nov. = *A. hirsutula* Kocher, 1959, syn. nov.; *Tituboea saadensis* (Pic, 1894) = *Coptocephala volatifica* Normand, 1949, syn. nov. = *C. adrarensis* Pic, 1942, syn. nov. = *Antipa reymondi* Kocher, 1956, syn. nov.; *Tituboea tredecimpunctata* (Desbrochers des Loges, 1870) = *T. peyerimhoffi* Pic, 1902, syn. nov. Moreover, *Coptocephala rubicunda* var. *massiliensis* Pic, 1914, *Antipa arabica* var. *lacordairei* Pic, 1929, *Titubaea minor* var. *atriceps* Pic, 1924 and *Titubaea octopunctata* var. *mecheriensis* Pic, 1895 are elevated to species rank. *Coptocephala dilatipes* Pic, 1923, whose status was doubtful for many decades, is confirmed as a valid species. Seven species: *Coptocephala dilatipes* Pic, 1923; *C. normandi* Pic, 1914; *Tituboea atriceps* Pic, 1924; *T. lacordairei* (Pic, 1929); *T. lefevrei* (Pic, 1894); *T. saadensis* (Pic, 1894) and *T. testaceiventris* Pic, 1913 are redescribed. A lectotype is designated for *Clythra perrisi* Desbrochers des Loges, 1870. The following varieties are treated as unavailable infrasubspecific entities as they were described in papers containing also descriptions of subspecies: *Antipa biguttata* var. *legionis* Kocher, 1959; *Clytra atraphaxidis* var. *quinquemaculata* Pic, 1920; *C. nigrocincta* var. *cyprica* Pic, 1918; *C. nigrocincta* var. *multipunctata* Pic, 1920; *C. nigrocincta* var. *subinterrupta* Pic, 1920; *C. novempunctata* var. *juncta* Pic, 1920; *C. valeriana* var. *drurei* Pic, 1920; *C. valeriana* var. *subjuncta* Pic, 1920; *Coptocephala melanocephala* var. *andalusiaca* Pic, 1918; *C. melanocephala* var. *espanoli* Pic, 1933; *C. melanocephala* var. *theryi* Pic, 1918; *C. rubicunda* var. *dalmatina* Pic, 1918; *C. sextigma* var. *impressiceps* Pic, 1918; *Labidostomis arcuata* var. *arisi* Pic, 1920; *L. centromaculata* var. *lineata* Pic, 1920; *L. centromaculata* var. *obliterata* Pic, 1920; *L. centromaculata* var. *suturella* Pic, 1920; *L. elegans* var. *inhumeralis* Pic, 1920; *L. hybrida* var. *atlasica* Kocher, 1959; *L. rufomarginata* var. *reymondi* Kocher, 1959; *Titubaea chobauti* var. *semijuncta* Pic, 1918 and *T. macropus* var. *armeniaca* Pic, 1918. Infrasubspecific *Lachnaea lucidicollis* var. *peyerimhoffi* Kocher, 1953 was validated with original authorship by CODINA PADILLA (1958) who adopted *L. peyerimhoffi* as a species name. Infrasubspecific *Coptocephala kerimi* var. *rubriceps* Pic, 1916 and *Labidostomis elegans* var. *luristanica* Pic, 1920 were validated by ROUBAL (1948)

and WARCHALOWSKI (2004) with new authorships. The publication year is corrected for *Camptolenes cingulata* Lefèvre, 1883 (not 1884) and *Gynandrophthalma vaulogeri* Pic, 1894 (not 1895). The identities of *Tituboea fasciaticeps* (Pic, 1929) and *T. minor* Fairmaire, 1894 are uncertain, and because the deposition of their type specimens is unknown, we treat them as nomina dubia. Because Kocher's collection of Clytrini (now part of the private collection of Pierre Jolivet) comprises some type specimens of Kocher's contemporaries Maurice Antoine and Antonio Cobos whose deposition was unknown, their list is also presented. We provide new distribution records for the following countries: Iraq, Israel, Jordan, Morocco, Oman, Saudi Arabia, Syria, and Tunisia.

**Key words.** Coleoptera, Chrysomelidae, Cryptocephalinae, Clytrini, taxonomy, new synonymy, new combination, redescription, lectotype designation, western Palaearctic Region, Maurice Pic, Louis Kocher

## Contents

Introduction .....	4
Material and methods .....	5
Review of species described by M. Pic and L. Kocher .....	7
West Palaearctic Clytrini described by M. Pic with their current status .....	64
Clytrini described by L. Kocher with their current status .....	67
Clytrini types in Kocher's collection described by other authors .....	67
Acknowledgements .....	69
References .....	70
Plates .....	77

## Introduction

Maurice Pic (1866–1957) (Figs 71–72), a French coleopterist, described about 20.000 new species and varieties as well as several hundreds, if not more than a thousand, of new genera across many families of Coleoptera (VILLIERS 1958). Most of these descriptions are written in a brief and uninformative style and without explicit family assignment, sometimes making it difficult to determine their family affiliation based on the literature (POLLOCK 2005). In Clytrini, Pic described 203 new species and additional 183 varieties worldwide (in Palaearctic 59 species and 95 varieties) altogether. Nowadays, Pic's collection is a large component of the Coleoptera collection in the Muséum national d'Histoire naturelle, Paris (VILLIERS 1958).

While many of Pic's new species of Clytrini have already been examined by subsequent authors and their status more or less clarified, most of the varieties have been either overlooked, ignored, or placed under their nominative taxa as simple synonyms. During the preparation of the sixth volume of the Palaearctic catalogue (LÖBL & SMETANA 2010), the varieties of Clytrini, originally listed in the manuscript, were deleted by the editors without informing the authors about that decision. The varieties were added again in Errata in the next volume (LÖBL & SMETANA 2011).

Louis Kocher (1894–1972) started entomological studies during his military career while visiting many Mediterranean countries. After the World War II he became a head of Laboratoire d'Entomologie de l'Institut Scientifique Chérifien in Rabat, Morocco. During 20 years of work in this institution he collected extensive material of Coleoptera as a foundation for 12 fascicles of 'Catalogue des Coléoptères du Maroc' and he himself became a respected specialist in Chrysomelidae (BAILLY-CHOUMARA 1973). A major part of his Coleoptera collection is probably still deposited in the Institut Scientifique Chérifien in Rabat; however, the Chrysomelidae part (except Alticini) was excluded after his death and now it is deposited in the private collection of Pierre Jolivet in Paris.

Within the frame of Synthesys No. FR-TAF-3479 the first author had the possibility to spend two weeks in the collections of MNHN where Pic's collection is deposited. During this time also the type specimens of all Clytrini described by L. Kocher were examined. Because the taxa described by both Pic and Kocher often refer to the same species we decided to accumulate the reviews of both collections into one publication.

The taxonomy of some genera of Clytrini (e.g. *Tituboea* Lacordaire, 1848 or *Coptocephala* Chevrolat, 1836) is complicated by large variability of colouration, wide range of body length, or male characters strongly developed in large males while less developed in smaller ones. The species with wider distribution often form local populations, or some characters gradually change through the range. Often the specimens from opposite parts of the range were described as separate species or at least varieties. Also, many forms were described as species or varieties although they are nothing but colour aberrations or smaller/larger specimens of other species. For the above mentioned reasons it was necessary to examine the type specimens of the relevant taxa and compare them with as large an amount of material from their range as possible. This study resulted in many taxonomical changes presented below.

## Material and methods

All measurements were made using an ocular grid mounted on an MBS-10 stereomicroscope (at 16× magnification for the body length and 32× magnification for the remaining measurements). Photographs of specimens were taken with a Canon EOS 550D digital camera with a Canon MP-E 65 mm lens. Images of the same specimen at different focal planes were combined using Helicon Focus 5.3 software.

The examined material is housed in the following collections:

- BMNH The Natural History Museum, London, United Kingdom (Michael Geiser, Maxwell V. L. Barclay);  
 CIUC Centro Interdipartimentale dell'Università, Museo di Storia Naturale e del Territorio, Calci, Italy (Marco Dellacasa);  
 DSCC Davide Sassi collection, Castelmarte (Como), Italy;  
 JBCB Jan Bezděk collection, Brno, Czech Republic;  
 FFCJ Frank Fritzlar collection, Jena, Germany;  
 FKCC František Kantner collection, České Budějovice, Czech Republic;  
 GMNH Goulandris Museum of Natural History, Kifissia near Athens, Greece (Maria Dimaki);  
 HKCH Horst Kippenberg collection, Herzogenaurach, Germany;  
 LMCM Lev N. Medvedev collection, Moscow, Russia;  
 MDCV Mauro Daccordi collection, Verona, Italy;  
 MNCN Museo Nacional de Ciencias Naturales, Madrid, Spain (Mercedes París);  
 MNHN Muséum National d'Histoire Naturelle, Paris, France (Antoine Mantilleri);  
 MSNG Museo Civico di Storia Naturale 'Giacomo Doria', Genova, Italy (Fabio Penati, Roberto Poggi);  
 MSNM Museo Civico di Storia Naturale, Milano, Italy (Carlo Leonardi, Fabrizio Rigato);  
 MSNT Museo Civico di Storia Naturale, Trieste, Italy (Sergio Dolce, Andrea Colla);  
 MSNV Museo Civico di Storia Naturale, Verona, Italy (Mauro Daccordi, Leonardo Latella);  
 MZBS Natural History Museum of Barcelona, Spain (Berta Caballero López);  
 NHMB Naturhistorisches Museum, Basel, Switzerland (Matthias Bohrer);  
 NMPC Národní Muzeum, Praha, Czech Republic (Jiří Hájek);  
 NHMW Naturhistorisches Museum, Wien, Austria (Harald Schillhammer);  
 PJCP Pierre Jolivet collection, Paris, France;  
 RRCM Renato Regalin collection, Milano, Italy;  
 SDEI Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany (Stephan Blank, Lutz Behne);  
 SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany (Wolfgang Schwaller);  
 TAU Tel Aviv University, Tel Aviv, Israel (Laibale Friedman);  
 USNM National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA (Alexander S. Konstantinov);  
 ZMHB Museum für Naturkunde der Humboldt-Universität, Berlin, Germany (Johannes Frisch, Joachim Willers);  
 ZMUC Zoological Museum, University of Copenhagen, Copenhagen, Denmark (Alexey Solodovnikov).

Exact label data are cited for all type specimens; a double slash (//) divides the data on different labels, and a single slash (/) divides the data in different rows. Type localities are cited in the original spelling. Other comments and remarks are placed in square brackets: [p] – preceding data are printed, [h] – preceding data are handwritten, [w] – white label, [r] – red label, [b] – blue label.

In MNHN, most of the Clytrini specimens are accumulated in three cabinets (Clytrinae 1, 2 and 3), except for several important collections placed still separately (e.g. the collections of Olivier, Rapilly, Peyerimhoff, and Lucas). Some collections were dispersed, and the specimens can be found everywhere now (e.g. the collections of Lacordaire or Desbrochers des Loges).

In the Clytrini cabinets the boxes originating from collections of various authors are ordered alphabetically according to the authors' names and followed by boxes of 'collection generale' arranged by the late Nicole Berti. In the past the specimens were frequently transferred to other boxes (e.g. Lefèvre's types can be found in Pic's boxes, type specimens of some genera were transferred to the general collection, etc.). Due to such troubles we list the depositions of the type specimens found as exactly as possible.

The taxonomy of several Clytrini genera or subgenera badly needs comprehensive revision, which is out of the scope of this paper. Thus, for *Clytra* subgenus *Ovoclytra* Medvedev, 1961, most of *Otiocephala* Lefèvre, 1872 and/or some *Coptocephala* Chevrolat, 1836 (particularly the species with completely metallic dorsum) we follow the arrangement published in the Palaearctic Catalogue (REGALIN & MEDVEDEV 2010b). The same publication is also the basis for the generic concept of Palaearctic Clytrini.

Status of type specimens. Type specimens by Pic are treated as syntypes except for the cases where a holotype (or, equivalently, type) or only one specimen available was explicitly mentioned in the original description or in subsequent Pic's publications. The only lectotype designated in this paper is that for *Clythra perrisi* Desbrochers des Loges, 1870. The type specimens in Kocher's collection are frequently labelled as holotype (or allotype, paratype). These labels were usually added subsequently by P. Jolivet. In cases when this information cannot be found in the description we treat the specimens as syntypes. In several taxa (*Clytra opaca* Jakobson, 1898; *Coptocephala rungsi* var. *kocheri* Pic, 1953; *Labidostomis mairei* Peyerimhoff, 1922; *Barathraea octomaculata* Pic, 1895; *Lachnea (Barathraea) separata* Pic, 1897) the specimens bear the label 'Lectotype' or 'Paralectotype' but the lectotype designations have never been published. We transcript all the labels of the examined type specimens including lectotype/paralectotype labels; however, giving such information is not the act of designation of lectotypes in the sense of ICBN (1999).

During the work on this manuscript we found all the varieties described in Pic (1916b, 1918a,c, 1920a, 1933c) and Kocher (1959) to be unavailable infrasubspecific entities in accordance with Article 45.6.4 of the Code (ICBN 1999). All mentioned publications include at least one description of subspecies, thus, the varieties published in these papers become infrasubspecific as the author himself stated for these varieties a lower level than the subspecific one. We also did not find any other publication prior to 1985 which could validate the names by application of Article 45.6.4.1 of the Code.

Under each species we list only the synonyms described by Maurice Pic and Louis Kocher, or newly synonymized taxa. For the complete list of synonyms see REGALIN & MEDVEDEV (2010b).

In this paper we revise only the Western Palaearctic clytrine taxa described by Pic. For the purposes of this publication, the Western Palaearctic Region covers Europe, North Africa, Russia west of the main ridge of the Ural mountains, Central Asia, Iran, Caucasus, Transcaucasia, Turkey, Near East, and the Arabian Peninsula.

## Review of species described by M. Pic and L. Kocher

### *Chilotomina maroccana* (Pic, 1936) comb. nov.

*Cyaniris* (*Cyaniris*) *maroccana* Pic, 1936: 26 (original description).

*Chilotomina erberi* Warchałowski, 2000: 577 (original description), **syn. nov.**

**Type localities.** *Cyaniris maroccana*: ‘Maroc’. *Chilotomina erberi*: ‘Forêt de la Mamora near Dar-Bel-Amri, prov. Rharb, Morocco’.

**Type material examined.** *Cyaniris maroccana*: SYNTYPE: ♂, ‘Si Allal Tazi / Maroc / A. Thery [w, p] // marocana / n. sp. [w, h] // differe de / alcarriense ... [rest illegible, w, h]’ (MNHN – coll. Pic).

*Chilotomina erberi*: Not examined.

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** In the Palaearctic catalogue (REGALIN & MEDVEDEV 2010b), *Cyaniris maroccana* is listed as a doubtful synonym of *Smaragdina rufimana* (Lacordaire, 1848). Examination of the type specimen proved that *Cyaniris maroccana* is a valid species and belongs to *Chilotomina* Reitter, 1913. Based on the original description (WARCHAŁOWSKI 2000) provided with sufficient drawings, *Chilotomina erberi* is proposed as its new junior subjective synonym.

### *Clytra (Clytraria) atraphaxidis atraphaxidis* (Pallas, 1773)

*Chrysomela atraphaxidis* Pallas, 1773: 725 (original description).

*Clythra atraphascidis* [sic!] var. *delagrangei* Pic, 1896a: 30 (nomen nudum).

*Elythra* [sic!] *atraphaxidis* var. *delagrangei* Pic, 1896b: 62 (original description).

*Clytra atraphaxidis* var. *nigromaculata* Pic, 1897a: 84 (original description), **syn. nov.**

*Clytra atraphaxidis* var. *quinquemaculata* Pic, 1920a: 7 (unavailable infrasubspecific name).

*Clytra atraphaxidis* var. *milliati* Pic, 1942b: 7 (original description).

**Type localities.** *Chrysomela atraphaxidis*: ‘Irtin [= western Siberia/Kazakhstan, Irtysh river]. *Clythra atraphaxidis* var. *delagrangei*: ‘Akbes’ [= Turkey near the city of İskenderun]. *Clytra atraphaxidis* var. *nigromaculata*: ‘Bakou’ [= Azerbaijan, Baku]. *Clytra atraphaxidis* var. *quinquemaculata*: ‘Turkestan et environs de Smyrne’. *Clytra atraphaxidis* var. *milliati*: ‘Liban’ [= Lebanon].

**Type material examined.** *Chrysomela atraphaxidis*: not examined.

*Clythra atraphaxidis* var. *delagrangei*: SYNTYPE: 1 ♂, ‘301 [w, h] // type. [w, h] // Delagrangei [w, h] // Akbès / n sp. ? [w, h] // Delagrangei Pic [w, h] // Titubaea / arabica / Akbes 94 [w, h] // TYPE [r, p] // v. Delagrangei Pic [grey label, h] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. generale).

*Clytra atraphaxidis* var. *nigromaculata*: SYNTYPES: 1 ♂, ‘type. [w, h] // atraphascidis / Baku [w, h] // v. nigromaculatus / Pic [w, h] // TYPE [r, p] // v. nigromaculata Pic [grey label, h] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. generale); 1 ♂, ‘type. [w, h] // Baku [w, h] // Clythra / atraphaxidis [w, h] // atrapascidis / v. nigromaculatus [w, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. generale).

*Clytra atraphaxidis* var. *milliati*: SYNTYPE: 1 ♀, ‘M... / Liban [partly illegible, w, h] // ex Milliat [w, h] // v. Milliati / mihi [w, h]’ (MNHN – coll. Pic).

**Original material of infrasubspecific entity.** *Clytra atraphaxidis* var. *quinquemaculata*: 1 ♂, ‘type [w, h] // v. 5 maculata / Pic [w, h] // Turkestan / Aulie-Ata / C. ARIS [w, p] // v. 5 maculata Pic [grey label, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. generale).

**Distribution.** South Europe, Caucasus, Near East, Central Asia (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** PIC (1896b, 1897a, 1920a, 1942b) described four varieties of *Clytra atraphaxidis*. Two of them, var. *delagrangei* and var. *milliati*, are correctly treated as colour aberrations and

synonyms of *C. atraphaxidis atraphaxidis* (e.g. REGALIN & MEDVEDEV 2010b). The additional two, var. *nigromaculata* and var. *quinquemaculata*, were listed as aberrations of *C. atraphaxidis* ssp. *maculifrons* Zubkov, 1833 by WINKLER (1929), which was followed also by REGALIN & MEDVEDEV (2010b). *Clytra atraphaxidis* ssp. *maculifrons* differs from the nominotypical subspecies in the head orange or orange with black spot on vertex and is distributed in Central Asia southernmost to Iran and Afghanistan and westernmost to Caucasus (REGALIN & MEDVEDEV 2010b). Because var. *nigromaculata* has head black as the nominotypical subspecies we transfer it as a new synonym of *C. atraphaxidis atraphaxidis*.

It is necessary to note that we have some doubts about the validity of ssp. *maculifrons*. *Clytra atraphaxidis* is a widely distributed species with very variable dorsal pattern. Nominotypical subspecies and ssp. *maculifrons* can be distinguished only by the colouration of the head, which, in view of colour variability throughout the whole range, seems to be an insufficient character to separate the subspecies. However, we leave this problem for future studies.

*Clytra atraphaxidis* var. *quinquemaculata* was described in the paper containing also description of subspecies (PIC 1920a), thus became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The original specimen of this variety is conspecific with *Clytra atraphaxidis atraphaxidis* as it has a black head.

*Clythra atraphaxidis* var. *delagrangei* was first mentioned by PIC (1896a) without a relevant description, and we treat it as a nomen nudum. The correct description was published by PIC (1896b).

### *Clytra (Clytra) duodecimmaculata duodecimmaculata* (Fabricius, 1775)

*Cryptocephalus duodecimmaculata* Fabricius, 1775: 106 (original description).

*Clytra bicoloriceps* PIC, 1933a: 3 (original description), **syn. nov.**

**Type localities.** *Cryptocephalus duodecimmaculatus*: ‘Capite bonae spei’ [= South Africa, Cape of Good Hope; patria falsa]. *Clytra bicoloriceps*: ‘Arabie’ [patria falsa].

**Type material examined.** *Cryptocephalus duodecimmaculata*: not examined.

*Clytra bicoloriceps*: SYNTYPE: 1 ♂, ‘488 [w, h] // Arabie [w, h] // ... / pres 12 maculata / tete bicolore [partly illegible, w, h] // type [w, h] // TYPE [r, p] // bicoloriceps sp n [w, h]’ (MNHN – coll. PIC).

**Distribution.** South China (GRESSITT & KIMOTO 1961), SE Asia (KIMOTO & GRESSITT 1981), Sumatra, Java (LACORDAIRE 1848).

**Comments.** Already PIC (1933a) doubted the type locality ‘Arabie’ of *C. bicoloriceps*. REGALIN & MEDVEDEV (2010b) listed this species as a doubtful synonym of *C. duodecimmaculata*. After examination of the relevant type material we definitely propose *C. bicoloriceps* to be a synonym of the Oriental *C. duodecimmaculata*.

*Clytra bicoloriceps* PIC, 1933 is also a primary junior homonym of *C. bicoloriceps* PIC, 1921 described from Khartoum, Sudan.

### *Clytra (Clytraria) jacobsoni* Semenov, 1903

*Clytra opaca* Jakobson, 1898: 191 (original description, primary homonym, nec *Clythra opaca* Rosenhauer, 1856, now in *Otiocephala*).

*Clythra jacobsoni* Semenov, 1903: 173 (new substitute name for *C. opaca* Jakobson).

*Clytra bucharica* PIC, 1915: 5 (original description).

*Clytra bucharica* var. *notatithorax* Pic, 1915: 5 (original description).

**Type localities.** *Clytra opaca*: ‘Bucharia or.: Baldschuan et Muminabad prope Kuldjab [= Boldzhan and Leningradsky near Kulob, Tajikistan]’. *Clytra bucharica*: ‘Bucharie’. *Clytra bucharica* var. *notatithorax*: ‘Bucharie’.

**Type material examined.** *Clytra opaca*: SYNTYPES: 1 ♂, ‘*Clytra / opaca* / TYPE Jacob [w, h] // *Clytra opaca* / typ Jacobs. 98 [h] / G. Jacobson det. [w, p] // [Mubinabad, Kulyaba, Bukhara, Regel, 84] [in Russian, w, p] // TYPE [r, p] // Museum Paris [p] / Clavareau / C. opaca J. [w, h] // PARALECTOTYPE [r, p]’ (MNHN – coll. generale); 1 spec. unsexed, ‘Kuljab / Buchara or. / Regel [w, h] // Kuljab / Buchara or. / Regel 84 [w, h] // *Clytra opaca* / Typ G. Jacobs. [h] / G. Jacobson det. [w, p] // Typus [w, p] // *Clytra / opaca* Jacobs. / L. Medvedev det. [w, h]’ (ZMHB).

*Clytra bucharica*: SYNTYPE: 1 ♀, ‘Boukharie-Est / Ch. Barstchewski / Eté 1891 [w, p] // Type [w, h] // bucharica / Pic [w, h] // TYPE [r, p] // Museum Paris [p] / Pic [w, h]’ (MNHN – coll. generale).

*Clytra bucharica* var. *notatithorax*: SYNTYPES: 1 ♂, ‘Boukharie-Est / Ch. Barstchewski / Eté 1891 [w, p] // Type [w, h] // TYPE [r, p] // v. *notatithorax* / Pic [w, h] // v. *notatithorax* Pic [b, h] // Cl. sp. [w, h] // Museum Paris [p] / Pic [w, h]’ (MNHN – coll. generale); 1 ♂, ‘Boukharie-Est / Ch. Barstchewski / Eté 1891 [w, p] // Type [w, h] // Museum Paris [p] / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. generale).

**Distribution.** Afghanistan, Iran, Tajikistan, Uzbekistan (REGALIN & MEDVEDEV 2010b).

**Comments.** *Clytra bucharica* was already synonymized with *C. jacobsoni* by MEDVEDEV (1962). We confirm both *C. bucharica* (with completely orange pronotum) and *C. bucharica* var. *notatithorax* (with a pair of very small dark spots on pronotum) as synonyms of *C. jacobsoni*.

One syntype of *C. opaca* Jakobson, 1898 deposited in MNHN bears the red label ‘PARALECTOTYPE’, probably added by the late Michel Rapilly or the late Nicole Berti. Because the designation of lectotype of *C. opaca* has never been published, we treat this specimen as a syntype.

### *Clytra (Clytraria) novempunctata* Olivier, 1808

*Clytra novempunctata* Olivier, 1808: 852 (original description).

*Clytra 9-punctata* var. *juncta* Pic, 1920a: 7 (unavailable infrasubspecific name).

*Clytra persica* Pic, 1920a: 7 (original description).

**Type localities.** *Clytra novempunctata*: ‘ile de Naxos’ [Greece]. *Clytra novempunctata* var. *juncta*: ‘Angora; Tokat’ [= Ankara and Tokat, Turkey]. *Clytra persica*: ‘Perse’.

**Type material examined.** *Clytra novempunctata*: not examined.

*Clytra persica*: SYNTYPE: 1 ♂, ‘persica Pic [w, h] // type [w, h] // Perse [w, h] // TYPE [r, p] // MUSEUM PARIS / COLL M. PIC [w, p] // *Clytra* (*Clytrella*) / novempunctata Ol. [h] / M. Rapilly dét. 19 [p] 81 [w, h]’ (MNHN – coll. generale).

**Original material of infrasubspecific entity.** *Clytra novempunctata* var. *juncta*: 1 ♀, ‘Tokat [w, h] // type [w, h] // Museum Paris [p] / Pic [w, h] // TYPE [r, p] // v. *juncta* / Pic [w, h]’ (MNHN – coll. generale); 2 ♀♀, ‘Angora [w, h] // type [w, h] // Museum Paris [p] / Pic [w, h] // TYPE [r, p] // v. *juncta* Pic [grey-blue label, h]’ (MNHN – coll. generale).

**Distribution.** South Europe, Caucasus, Turkey, Near East, Egypt, south of Central Asia (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** One specimen of *Clytra novempunctata* in Olivier’s collection in MNHN bears green round label ‘COLLECTION / OLIVIER / TYPE’ which was added by Olivier’s son (Mantillieri, pers. comm. 2014). Because this specimen was collected in Scio [= Chios Is.] and not in Naxos Is. as published in the original description (OLIVIER 1808), we treat it as a non-type specimen.

*Clytra novempunctata* var. *juncta* was described in a paper containing also a description of a subspecies (Pic 1920a), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The original specimens of *C. novempunctata* var. *juncta*, as well as the syntype of *C. persica*, are conspecific with *C. novempunctata*.

*Clytra novempunctata* is a very variable species forming different populations particularly in the eastern part of its range, which were often described as varieties or even species. Several characters should be commented on: i) the ventral keel on the aedeagus is sharp in western populations while in eastern ones it is often rounded or nearly missing, ii) colouration – black pattern on both pronotum and elytra is often increased towards the eastern part of the range, iii) body shape – usually subtubular, towards the east often distinctly flattened dorsally, iv) body shine – western populations are shiny dorsally while towards the east the specimens are often subopaque or dull, and, v) most of populations throughout the range are glabrous dorsally, however we identified also specimens with very finely but densely pubescent dorsum (Iran: East Azerbaijan, West Azerbaijan provinces, specimens deposited in JBCB).

### *Clytra (Clytraria) valeriana valeriana* Ménétrries, 1832

*Clythra valeriana* Ménétrries, 1832: 237 (original description).

*Clytra valeriana* var. *drurei* Pic, 1920a: 7 (unavailable infrasubspecific name).

*Clytra valeriana* var. *subjuncta* Pic, 1920a: 7 (unavailable infrasubspecific name).

**Type localities.** *Clytra valeriana*: ‘les montagnes de Talyche’ [= Iran/Azerbaijan, Talysh Mts.]. *Clytra valeriana* var. *drurei*: ‘Mossoul’ [= Iraq, Mosul]. *Clytra valeriana* var. *subjuncta*: ‘Anatolie’ [Turkey].

**Type material examined.** *Clytra valeriana*: not examined.

**Original material of infrasubspecific entities.** *Clytra valeriana* var. *drurei*: 1 ♂, ‘Mossoul / (M. Drure) [w, h] // type [w, h] // v. Drurei / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Clytra valeriana* var. *subjuncta*: 1 ♂, ‘Anatolien / Konia / 1899 Korb [w, p] // 237 [w, p] // type [w, h] // v. subjuncta Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘Anatolien / Konia / 1899 Korb [w, p] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Southeast Europe, Caucasus, Turkey, Near East (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** Both varieties were described in a paper containing also a description of a subspecies (Pic 1920a), thus became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The original specimens of both varieties are conspecific with *C. valeriana*.

### *Clytra (Ovoclytra) deficiens* Heyden, 1892

*Clytra nigrocincta* var. *deficiens* Heyden, 1892: 368 (original description).

*Clytra nigrocincta* var. *graeca* Pic, 1915: 5 (original description), **syn. nov.**

*Clytra nigrocincta* var. *cypriaca* Pic, 1918a: 11 (unavailable infrasubspecific name).

*Elytra* [sic!] *nigrocincta* var. *multipunctata* Pic, 1920a: 7 (unavailable infrasubspecific name).

*Clytra nigrocincta* var. *subinterrupta* Pic, 1920a: 7 (unavailable infrasubspecific name).

**Type localities.** *Clytra nigrocincta* var. *deficiens*: ‘Cyprus’. *Clytra nigrocincta* var. *graeca*: ‘Grèce’ [patria falsa ?].

*Clytra nigrocincta* var. *cypriaca*: ‘Chypre’ [= Cyprus]. *Clytra nigrocincta* var. *multipunctata*: not stated [‘Limassol (Chypre)’ based on the locality label]. *Clytra nigrocincta* var. *subinterrupta*: ‘Chypre’ [= Cyprus].

**Type material examined.** *Clytra nigrocincta* var. *deficiens*: LECTOTYPE (designated by BEZDĚK 2013): ♂, ‘Κύπρου [Kypros] / 1876 / L. Schrader [w, p] // Cypern / Krüper [w, h] // DEI Müncheberg / Col - 03111 [pale green label, p] //

LECTOTYPUS, / *Clytra nigrocincta* / var. *deficiens* Heyden, 1892 / des. J. Bezděk 2013 [r, p]' (SDEI). PARALECTOTYPE: 1 ♂, 'Cyprus / Korb [w, h] // 53 [w, h] // DEI Müncheberg / Col - 03111 [pale green label, p] // PARALECTOTYPUS, / *Clytra nigrocincta* / var. *deficiens* Heyden, 1892 / des. J. Bezděk 2013 [r, p]' (SDEI).

*Clytra nigrocincta* var. *graeca*: SYNTYPE: 1 ♀, 'Graec. [w, p] // type [w, h] // var. *graeca* / Pic [w, h] // TYPE [r, p]' (MNHN – coll. Pic).

**Original material of infrasubspecific entities.** *Clytra nigrocincta* var. *cypriaca*: ♀, 'Chypre / Livadia [w, h] // Musuem Paris [p] / coll. Pic [w, h] // v. *cypriaca* / Pic [w, h] // TYPE [p] [r, h] // LECTOTYPUS, / *Clytra nigrocincta* / var. *cypriaca* Pic, 1918 / des. J. Bezděk 2013 [r, p]' (MNHN – coll. Pic).

*Clytra nigrocincta* var. *multipunctata*: 1 ♀, 'Limassol (Chypre) / M. Deflers / 21 mai 83 [w, h] // type [w, h] // v. *multipunctata* / Pic [w, h] // TYPE [r, p]' (MNHN – coll. Pic). Female partly damaged with missing head and pronotum.

*Clytra nigrocincta* var. *subinterrupta*: 1 ♀, 'Limassol (Chypre) / M. Deflers / 21 mai 83 [w, h] // type [w, h] // v. *subinterrupta* / Pic [w, h] // TYPE [r, p]' (MNHN – coll. Pic).

**Distribution.** Endemic to Cyprus (REGALIN & MEDVEDEV 2010b).

**Comments.** *Clytra nigrocincta* var. *deficiens* was elevated to species rank by BEZDĚK (2013). Var. *graeca* was described from 'Grèce' based on a female with compact postmedian band. We do not see any difference between *C. deficiens* from Cyprus and var. *graeca* and we believe that the type material of var. *graeca* was mislabelled as to our knowledge *C. deficiens* is endemic to Cyprus.

Three varieties (*C. nigrocincta* var. *cypriaca*, *C. nigrocincta* var. *multipunctata* and *C. nigrocincta* var. *subinterrupta*) were described in papers containing also description of a subspecies (Pic 1918a, 1920a), thus became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The original specimens of all three varieties are conspecific with *C. deficiens*.

### *Clytra (Ovoclytra) nigrocincta bagdatensis* Pic, 1920

*Clytra nigrocincta* ssp. *bagdatensis* Pic, 1920a: 7 (original description).

**Type locality.** 'Bagdad' [Iraq].

**Type material examined.** SYNTYPES: 1 ♀, 'Bagdad [w, h] // type [w, h] // s. esp. / bagdatensis / Pic [w, h]' (MNHN – coll. Pic); 1 ♀, 'Bagdad / (M J Drure) [w, h] // type [w, h]' (MNHN – coll. Pic). POSSIBLE SYNTYPES: 2 ♂♂ 1 ♀, 'Bagdad [w, h]' (MNHN – coll. Pic); 1 ♂ 4 ♀♀, without any label (MNHN – coll. Pic).

**Distribution.** Iraq (REGALIN & MEDVEDEV 2010b).

**Comments.** All species of the subgenus *Ovoclytra* Medvedev, 1961 (except *C. (O.) deficiens* from Cyprus) badly need a comprehensive revision based on examination of the primary type material. Until that we leave *C. nigrocincta* ssp. *bagdatensis* as a valid subspecies.

In several specimens from Pic's collection we are not sure whether they belong to the type series or not as they have incomplete label data or are without any labels altogether. However, we treat them as possible syntypes.

### *Clytra (Ovoclytra) nigrocincta nigrocincta* Lacordaire, 1848

*Clythra (Clythra) nigrocincta* Lacordaire, 1848: 200 (original description).

*Clytra nigrocincta* var. *semireducta* Pic, 1918: 15 (original description).

**Type localities.** *Clythra nigrocincta*: 'Constantinople; Smyrne; Mèsopotamie' [= Turkey: Istanbul; Turkey: Izmir; Mesopotamia]. *Clytra nigrocincta* var. *semireducta*: 'Syrie'.

**Type material examined.** *Clythra nigrocincta*: not examined. Not traced in MNHN.

*Clytra nigrocincta* var. *semireducta*: SYNTYPE: 1 ♂, ‘Syrie [w, h] // type [w, h] // v. semireducta / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Iran, Syria, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** All species of the subgenus *Ovoelytra* badly need a comprehensive revision based on examination of the primary type material. Until that we leave *C. nigrocincta* var. *semireducta* in synonymy with *C. nigrocincta nigrocincta* as it is catalogued by REGALIN & MEDVEDEV (2010b).

### *Coptocephala aeneopicta* (Fairmaire, 1884)

(Figs 1–2)

*Gynandrophalma aeneopicta* Fairmaire, 1864: 646 (original description).

*Coptocephala aeneopicta* var. *bistrijuncta* Pic, 1905b: 156 (original description).

*Coptocephala aeneopicta* var. *biinterrupta* Pic, 1918d: 23 (original description).

*Coptocephala aeneopicta* var. *biscrensis* Pic, 1918d: 23 (original description).

*Coptocephala aeneopicta* var. *trimaculata* Pic, 1918d: 23 (original description).

**Type localities.** *Gynandrophalma aeneopicta*: ‘Biskra’ [Algeria]. *Coptocephala aeneopicta* var. *bistrijuncta*: ‘Algérie: Les Salines’. *Coptocephala aeneopicta* var. *biinterrupta*: ‘Algérie: Aïn M'lila’. *Coptocephala aeneopicta* var. *biscrensis*: ‘Algérie: Biskra’. *Coptocephala aeneopicta* var. *trimaculata*: ‘Biskra’ [Algeria].

**Type material examined.** *Gynandrophalma aeneopicta*: SYNTYPE: 1 ♀, ‘Gynandroph. / aeneopicta F. / Biskra [w, h]’ (MNHN – coll. Fairmaire).

*Coptocephala aeneopicta* var. *bistrijuncta*: SYNTYPE: 1 ♀, ‘Les Salines [w, h] // type. [w, h] // v. bistrijuncta / Pic [w, h] // aeneopicta var. / bistrijuncta Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Coptocephala aeneopicta* var. *biinterrupta*: SYNTYPES: 2 ♂♂ (on same label), ‘Ain M'lila / ... '95 [partly illegible, w, h] // type [w, h] // v. biinterrupta / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Coptocephala aeneopicta* var. *biscrensis*: SYNTYPES: 1 ♂, ‘Biskra / Desbrochers / 1889 [w, p] // Coptoceph. / sp. ? Biskra [w, h] // type [w, h] // v. biscrensis / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘Biskra [w, h] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Coptocephala aeneopicta* var. *trimaculata*: SYNTYPE: 1 ♂, ‘Biskra [w, h] // type [w, h] // v. trimaculata / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Algeria, Egypt, Morocco, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** *Coptocephala aeneopicta* species group as defined by WARCHAŁOWSKI (1991) is characterised by mandibles sickle-shaped with long and thin left mandible without or with indistinct dorsal tooth on inner margin in males. The group comprises the following taxa: *C. aeneopicta* (Fairmaire, 1884), *C. brevicornis* (Lefèvre, 1872), *C. coptocephalooides* (Lacordaire, 1848) (= *C. jaechi* Warchałowski, 1991), *C. crassipes crassipes* Lefèvre, 1876, *C. crassipes iranica* Medvedev, 1971, *C. crassipes nepalica* Medvedev, 1999, *C. crassipes vavilovi* (Lopatin, 1966), *C. dilatipes* Pic, 1923, *C. furthi* Medvedev, 1992, *C. maidaquensis* Lopatin, 2008, *C. normandi* Pic, 1914, *C. panousei* Kocher, 1959, and *C. rungsi* Pic, 1953.

All four varieties described by PIC (1905b, 1918d) are colour aberrations of *Coptocephala aeneopicta* and are confirmed as its synonyms.

### *Coptocephala arcasi* Baguena, 1960

(Figs 3, 73–77)

*Coptocephala rubicunda* var. *dalmatina* Pic, 1918c: 17 (unavailable infrasubspecific name).

*Coptocephala* (*Coptocephala*) *arcasi* Baguena, 1960: 25 (original description).

**Type localities.** *Coptocephala rubicunda* var. *dalmatina*: ‘Dalmatic’ . *Coptocephala arcasi*: ‘Andalucía’ (suggested as patria falsa by REGALIN & MEDVEDEV 2010a).

**Type material examined.** *Coptocephala arcasi*: HOLOTYPE: 1 ♂, ‘Andalucía [w, h] // Schaufuss / ... [partly illegible, reverse side of previous label, w, h] // Col. del Sr. / Perez Arcas [w, p] // Holotipo [r, p] // COPTOCEPH. ♂ / ARCASI m. [h] / L. Báguna det. [w, p]’ (MNCN).

**Original material of infrasubspecific entity.** *Coptocephala rubicunda* var. *dalmatina*: 1 ♂, ‘type [w, h] // v. dalmatina / Pic [w, h] // Dalmatie [w, h] // Ragusa [w, h] // TYPE [r, p] // Museum París [p] / Coll. Pic [w, h]’ (MNHN – coll. Pic).

**Additional material examined.** **BOSNIA HERZEGOVINA:** Herzegovina, Velez-Planina, 1900, 1 ♂ (NHMB).

**CROATIA:** Dalmatia, 1 ♂ (LMCM); Dalmatia, 1 ♂, Apfelbek leg. (LMCM); Beccagnazzo, vii.1937, 1 ♀, Müller leg. (MSNT – coll. Müller); Bella Vista, Ragusa [= Dubrovnik], 4.vii.1909, 1 ♂ (LMCM); Cerovlje, Carso Trieste, 14.viii.1954, 1 ♂ 1 ♀, Springer leg. (MSNM); Cibaca [= Čibača], Ragusa D., vii.1914, 3 ♂♂ 2 ♀♀, Mussapp leg. (MSNT – coll. Müller); Gravosa D. [= Gruž], vii.1914, 1 ♀, Mussapp leg. (MSNT – coll. Müller); Gravosa [= Gruž], 1 ♂ (RRCM); Hvar Isl., 8.–16.viii.1990, 1 ♂ 1 ♀, N. Pilon leg. (RRCM); Hvar Isl., vii.1979, 1 ♂ (RRCM); Krk Isl., viii.1931, 1 ♂, H. Hopp leg. (NHMB); Dalmatia, Krk Isl., viii.1931, 1 ♂ 1 ♀ (NHMB); Krk Isl., 1 ♂ 1 ♀, Mader leg. (NHMW); Lussin [= Lošinj], Cigale, viii.1923, 1 ♂, Boehm leg. (MSNT – coll. Müller); Is. Lussin [= Lošinj Isl.], 1924, 1 ♀, Boehm leg. (MSNT – coll. Müller); Mali Lošinj, 10.viii.1982, 1 ♂ (DSCC); Split, 1 ♂, Oberberger leg. (LMCM); Spalato [= Split], 4 ♂♂ 1 ♀, Karaman leg. (LMCM); Spalato [= Split], 1914, 1 ♂ (LMCM); Trau [= Trogir], 1 ♂ (MSNT – coll. Müller); Is. Uglijan [= Ugljan Isl.], Lukoran, vii.1917, 1 ♂, Müller leg. (MSNT – coll. Müller); Unije, 1 ♀ (MSNM); Unije, vii.1922, 3 ♂♂ 6 ♀♀, Müller leg. (MSNT – coll. Müller, 1 ♂ MSNV); Zara [= Zadar], 1 ♂ 1 ♀ (MSNM); Zara [= Zadar], 15.vii.1937, 1 ♂, Müller leg. (MSNT – coll. Müller); Zara [= Zadar], 2 ♂♂ (MSNV); Zelenika, viii.1906, 1 ♀ (LMCM); Zlatni rt, Rovinj, 10.–12.vii.1998, 17 ♂♂ 20 ♀♀, R. Regalin leg. (RRCM). **ITALY:** Sistiana, 24.viii.1930, 1 ♂, De Medici leg. (MSNM); Sistiana, 3 ♂♂ 3 ♀♀, De Medici leg. (MSNT – coll. Müller); Duino, 17.viii.1954, 1 ♀, Springer leg. (MSNM); Trieste, vii.1902, 1 ♂ (MSNV); Triest, M. Cal, viii.1925, 2 ♂♂ 1 ♀ (MSNM); Trieste, M. Cal, viii.1925, *Sesleri elatum*, 1 ♂, Carrara leg. (MSNT – coll. Müller); Trieste, M. Cal, 6 ♂♂ 3 ♀♀ (MSNT – coll. Müller); Trieste, M.te Kal, 1 ♂, Müller leg. (MSNT – coll. Müller); Trieste, Monte Spaccato, Gabrošek, 5.viii.1910, 1 ♀ (MSNT – coll. Müller); Trieste, Monte Spaccato, 5.viii.1910, 1 ♂, Ciana leg. (MSNT – coll. Müller); Zaule, Rosandra, ix.1955, 1 ♀, Sauli leg. (MSNM). **MONTENEGRO:** Bocche di Cattaro [= Boka Kotorska], 3 ♂♂ 1 ♀ (NHMB). **SLOVENIA:** Küstl. Orlek, 20.ix.1922, 2 ♀♀, Springer leg. (MSNM).

**Distribution.** Bosnia and Herzegovina, Croatia, Italy, Montenegro, Slovenia (WARCHAŁOWSKI 1991, REGALIN & MEDVEDEV 2010b, present paper).

**Comments.** *Coptocephala arcasi* was described from Spain. Already WARCHAŁOWSKI (1991) doubted its Spanish origin, discussed the possible misidentification as *C. cyanocephala* (Lacordaire, 1848) or *C. fossulata* Lefèvre, 1872 and treated it as a nomen dubium. Recently, REGALIN & MEDVEDEV (2010a), based on the study of holotype of *C. arcasi*, stated it was mislabelled and found that the species frequently occurs in former Yugoslavia and northern Italy. Specific chromatic pattern on elytra suggests that the holotype of *C. arcasi* could originate from Montenegro, as the specimens with the same pattern are known from Kotor Bay.

We also had the opportunity to examine the original specimen of *Coptocephala rubicunda* var. *dalmatina* Pic and based on the examination of its aedeagus we consider it conspecific with *C. arcasi*. However, the variety *dalmatina* is an unavailable infrasubspecific name as it was described in a publication containing also a description of a subspecies (Pic 1918c), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The only name that can be used for the species is *C. arcasi*. Its distribution was indicated only by country acronyms in the Palaearctic catalogue (REGALIN & MEDVEDEV 2010b). Here we present specific data for each country.

*Coptocephala arcasi* shows a considerable chromatic variability of elytral pattern. Northern

population from Italy (Trieste) has increased black spots on elytra. Towards the south the spots are gradually reduced to completely vanished. Similarly, labrum which is usually black with brown margins tends to be reddish-brown or reddish towards the south. Tibiae and tarsi are also more or less reddish-brown in southern populations.

### *Coptocephala crassipes crassipes* Lefèvre, 1876

*Coptocephala crassipes* Lefèvre, 1876: lxxiv (original description).

*Coptocephala crassipes* var. *leprieuri* Pic, 1897e: 198 (original description).

**Type localities.** *Coptocephala crassipes*: ‘Bou-Saada (Algérie)’. *Coptocephala crassipes* var. *leprieuri*: ‘Algérie: la Calle’.

**Type material examined.** *Coptocephala crassipes*: LECTOTYPE (designated by DOGUET & BERGEAL 2007): ♂, ‘Bou Saadah [w, h] // Type [p] ♂ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // TYPE [r, p] // Museum Paris / ex Coll. / R. Oberthur [w, p] // Coptocephala / crassipes / Lefevre [h] / R. Regalin det. 199 [p] 1 [w, h]’ (MNHN – coll. Lefèvre). PARALECTOTYPES: 1 ♀, ‘Bou Saadah [w, h] // Type [p] ♀ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre); 1 ♀, ‘Bou / Saada / 1878 [w, h] // crassipes / n. sp. ! [b, h] // type. [w, h] // C. crassipes / Lef [w, h] // TYPE [r, p]’ (MNHN – coll. Lefèvre).

*Coptocephala crassipes* var. *leprieuri*: SYNTYPES: 1 ♀, ‘Lacalle / juin 82 [w, h] // floralis. [b, h] // type [w, h] // v. Leprieuri / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘La Calle / juill. 82 [w, h] // 854 [w, h] // floralis [b, h]’ (MNHN – coll. Pic).

**Distribution.** Algeria, Egypt, Italy (Sardinia: Sant’Antioco Is.), Morocco, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** The variety *leprieuri* was described based on specimens with pale tibiae (PIC 1897e). Although in the original description both male and female are mentioned, in Pic’s collection in MNHN only two female syntypes were found. The deposition of male syntype(s), if existing, is unknown to us. Although it is somewhat difficult to definitely confirm the species identity based on females only, the synonymy is here supported by examination of several specimens of *C. crassipes* (including male) from Algeria: Bone (NMPC) and Sardinia: Sant’Antioco Is. (MSNG, RRCCM) which also have orange tibiae.

DOGUET & BERGEAL (2007) designated a lectotype for *C. crassipes*, although they did not provide the actual specimens with respective labels. However, the lectotype and paralectotypes can be recognized according to label information given in DOGUET & BERGEAL (2007).

### *Coptocephala destinoi* Fairmaire, 1884

*Coptocephala destinoi* Fairmaire, 1884: 174 (original description).

*Coptocephala fallaciosa* var. *tambei* Pic, 1942b: 7 (original description), **syn. nov.**

*Coptocephala destinoi* var. *latenotata* Pic, 1949a: 4 (original description).

**Type localities.** *Coptocephala destinoi*: ‘Akbès’ [= Turkey near the city of İskenderun]. *Coptocephala fallaciosa* var. *tambei*: ‘Syrie’. *Coptocephala destinoi* var. *latenotata*: ‘Syrie’.

**Type material examined.** *Coptocephala destinoi*: SYNTYPE: 1 ♂, ‘Coptocephala / Destinoi / Fairm / Akbes [w, h] // Museum Paris [p] / Coll. Fairmai- / re [w, h] // TYPE [r, p] // DESSIN [r, h] // DESTINOI Fairm. [w, h]’ (MNHN – coll. generale, box ‘Coptocephala pre-étude Rapilly’).

*Coptocephala fallaciosa* var. *tambei*: SYNTYPES: 1 ♂, ‘Syrie / (També) [w, h] // v. Tambei / mihi [w, h]’ (MNHN – coll. Pic); 3 ♂♂, ‘Syrie / (També) [w, h]’ (MNHN – coll. Pic).

*Coptocephala destinoi* var. *latenotata*: SYNTYPE: 1 ♀, ‘Syrie / (També) [w, h] // v. latenotata / mihi [w, h]’ (MNHN – coll. Pic).

**Distribution.** Caucasus, Cyprus, Greece (Kos, Samos), Iran, Syria, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** *Coptocephala destinoi* was treated as a subspecies of *C. unifasciata* for a long time and recently restored as a valid species (REGALIN & MEDVEDEV 2010a). As in many other *Coptocephala* species, black elytral pattern is variable. The variety *latenotata* Pic, 1949 has both humeral spot and postmedian band extended while var. *tambei* has black pattern reduced, humeral spots are missing and postmedian bands are thin and not connected in the suture. The variety *tambei* was originally described as a variety of *C. fallaciosa* but the morphology of the aedeagus proved its conspecificity with *C. destinoi*.

### *Coptocephala dilatipes* Pic, 1923 stat. restit.

(Figs 4–5, 78–81)

*Coptocephala dilatipes* Pic, 1923: 11 (original description); Pic (1924b): 129 (extended description).

**Type locality.** ‘Egypte: Mariout’.

**Type material examined.** SYNTYPES: 1 ♂, ‘Mariout / (A Petrow) / 23-4-22 [w, h] // sur fleurs / d’ Odontaeum [w, h] // type [w, h] // Coptocephala / dilatipes n sp [w, h]’ (MNHN – coll. Pic); 1 ♂, ‘Ikinghi Mariout / 7.4.1919 [w, h] // Coll. Alfieri / Egypte [w, p] // 1916 [w, h] // F. Monros / Collection / 1959 [w, p] // Coptocephala / dilatipes Pic / 1923 (TYPE) re- / cu de A. Petrow [w, h] // BLNO / 002569 [b, p] // USNM ENT / 00871344 [w, p]’ (USNM).

**Additional material examined.** EGYPT: Mariout, Ikinghi, 2.v.1927, 1 ♂ 1 ♀, A. Alfieri leg. (USNM).

**Redescription.** Body length: ♂♂ 2.8–3.3 mm; ♀ 3.2 mm.

**Male** (Fig. 78). Head black, last palpalomere, labrum and apical third of mandibles brown. Antennomeres I and II orange, III brownish, rest black. Pronotum orange. Scutellum black. Elytra orange, each elytron with four black spots (2, 2), anterior pair not touching anterior margin, humeral spot slightly larger, elongate, spot between humeral calli and scutellum smaller, rounded, posterior pair situated just behind middle, both spots elongate, inner slightly larger than outer one. Meso-, metaventrite, abdomen and legs black, last two tarsomeres brownish.

Head (Fig. 80) enlarged, lustrous, relatively flat. Left mandible longer and better visible than right mandible, simple, without inner concavity, with sharp long apex, in lateral view without tooth or concavity on dorsal margin. Labrum narrow, transverse, covered with several pale setae. Clypeus widely rounded, straight or slightly emarginated in middle, surface of clypeus covered with fine shallow punctures bearing very short, almost invisible pale setae, clypeus separated from head by indistinct subtriangular suture. Eyes small. Frons very wide, 3.65 times as wide as diameter of eye, near eyes with larger punctures bearing longer pale setae, slightly wrinkled. Vertex lustrous, covered with fine small punctures, glabrous. Antennae short, 0.27 times as long as body, antennomere I club-shaped; II small, subglobular, III and IV very short, flattened; antennae serrated from antennomere V; antennomeres V–XI slightly wider than long.

Pronotum strongly transverse, 2.0 times as wide as long, moderately convex, very sparsely covered with irregular punctures, lustrous. Anterior margins straight, lateral margins moderately rounded, posterior margin nearly straight but distinctly thickened in scutellar area. Anterior angles rounded with setigerous pore bearing long seta, posterior angles widely rounded. Lateral and posterior margins bordered, anterior margin indistinctly bordered. Scutellum triangular with sharp apex, lustrous, impunctate, scutellar apex elevated above level of elytra.

Elytra subcylindrical, 1.35 times as long as wide at humeral part, glabrous, lustrous, densely covered with confused punctures. Basal margin bordered, moderately swollen in middle part. Epipleura glabrous, impunctate, wide in humeral area, gradually thinner posteriorly, disappearing in midlength of elytra.

Legs. All tibiae very wide. Protibiae 5.85 times as long as wide, in lateral view of similar width in middle part but slightly flattened basally and apically. Protarsi: protarsomere I long, parallel, 3.15 times as long as broad, slightly shorter than two following tarsomeres combined, protarsomere II parallel, 2.33 as long as broad, protarsomere III very deeply incised, length ratios of protarsomeres I–IV equal to 100–64–45–82. Metatarsi: metatarsomere I short, parallel, 1.70 times as long as broad, 0.66 times shorter than two following tarsomeres combined, length ratios of metatarsomeres I–IV equal to 100–84–67–134. Claws simple.

Male genitalia. Aedeagus widest in preapical part, apex triangularly prolonged. Ventrally with simple median keel and lateral elevations, subapically separated by distinct impression (Fig. 4).

**Female** (Fig. 79). Head not enlarged, left mandible short. Frons narrower, 2.66 times as wide as diameter of eye. Pronotal punctures more distinct than in males. Tibiae less wide, protibiae 5.33 times as long as wide, in lateral view flat in whole length. Protarsi shorter than in males, length ratios of protarsomeres I–IV equal to 100–72–57–128. Spermatheca V-shaped with gradually convergent apex, spermathecal duct very long, filiform (Fig. 5).

**Differential diagnosis.** *Coptocephala dilatipes* belongs to the *C. aeneopicta* species group (see also comments under *C. aeneopicta*) and is characterised by two anterior elytral spots. Within the *C. aeneopicta* species group, similar pattern can be found only in *C. crassipes nepalica* Medvedev, 1999 and rarely also in *C. aeneopicta* but the scutellar spot touches anterior elytral margin (never so in *C. dilatipes*). Other species either have in anterior part of elytra only humeral spot and scutellar spot is absent (*C. brevicornis*; *C. crassipes crassipes*; *C. crassipes iranica*; *C. normandi*; *C. rungsi*) or humeral spot is enlarged covering most of anterior part of elytra (most of *C. aeneopicta*; *C. coptocephaloidea*; *C. crassipes vavilovi*; *C. furthi*; *C. maidaquensis*; *C. panousei*).

Aedeagus of *C. dilatipes* with triangularly prolonged apex cannot be confused with any other species in the *C. aeneopicta* species group (cf. WARCHAŁOWSKI 1991, DOGUET & BERGEAL 2007, LOPATIN 2008). *Coptocephala dilatipes* as well as most species in the group have completely black legs and almost impunctate pronotum, except *C. aeneopicta* and very rarely also *C. crassipes* with reddish tibiae, and *C. furthi* and *C. panousei* with pronotum densely punctate.

**Distribution.** Egypt (PIC 1923, 1924b).

**Comments.** The original description of *C. dilatipes* is very short and uninformative (PIC 1923). One year later, PIC (1924b) published somewhat extended description but because the type specimens were never revised by subsequent specialists, the true identity of *C. dilatipes* was unknown for many decades. WINKLER (1929) listed it as a valid species. WARCHAŁOWSKI (1991) also treated it as valid but indicated possible relation to *C. crassipes*. As a possible synonym of *C. crassipes* it is suggested also in subsequent WARCHAŁOWSKI's (2003, 2010) identification keys. REGALIN & MEDVEDEV (2010b) listed *C. dilatipes* in synonymy of *C. crassipes*, however as a doubtful assignment.

### *Coptocephala fossulata* Lefèvre, 1872

*Coptocephala fossulata* Lefèvre, 1872: 372 (original description).

*Coptocephala fossulata* var. *vitalei* Pic, 1913a: 114 (original description).

**Type localities.** *Coptocephala fossulata*: ‘Sicile’. *Coptocephala fossulata* var. *vitalei*: ‘Palerme, en Sicile’.

**Type material examined.** *Coptocephala fossulata*: SYNTYPES: 1 ♂, ‘Type [p] ♂ [w, h] // Sicile / (Bellier) [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // Museum Paris / ex Coll. / R. Oberthur [w, p] // TYPE [r, p] // Coptocephala / quadrimaculata L. / sensu Rapilly, 1981 / ssp. *fossulata* Lefèvre [h] / R. Regalin det. 199 [p] 1 [w, h]’ (MNHN – coll. Lefèvre); 1 ♀, ‘Sicile / (Bellier) [w, h] // Type [p] ♀ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre).

*Coptocephala fossulata* var. *vitalei*: not examined.

**Distribution.** Central and southern Italy, Sicily (REGALIN & MEDVEDEV 2010b; Regalin, unpublished data).

**Comments.** *Coptocephala fossulata* var. *vitalei* was described from Vitale’s collection. Unfortunately, some parts of his collection were destroyed, and all species of Clytrini are completely missing (HORN et al. 1990, BAVIERA 2004). The synonymy of var. *vitalei* with *C. fossulata* is supported by the dissection of aedeagus of one non-type male from Sicily identified by Pic himself and deposited in his collection in MNHN.

### *Coptocephala massiliensis* Pic, 1914 stat. restit.

(Figs 6, 82–86)

*Chrysomela quadrimaculata* Linnaeus, 1767: 596 (original description, primary homonym, not *Ch. quadrimaculata* Linnaeus, 1758: 376, now in *Phyllobrotica*).

*Coptocephala rubicunda* var. *massiliensis* Pic, 1914b: 11 (original description).

*Coptocephala linnaeana* Petitpierre & Alonso-Zarazaga, 2000: 476 (new substitute name for *Chrysomela quadrimaculata* Linnaeus, 1767), **syn. nov.**

**Type localities.** *Chrysomela quadrimaculata*: ‘Germaniae saxosis’ [sic!; = Germany, ?Saxony]. *Coptocephala rubicunda* var. *massiliensis*: ‘Marseille’.

**Type material examined.** *Chrysomela quadrimaculata*: not examined. The photographs of a lectotype (♀, designated by RAPILLY 1981), labelled: ‘4-maculata [w, h] // 77 [w, p]’ and 1 paralectotype (♀), without any labels, both deposited in The Linnean Society, London, UK, are available at <http://linnean-online.org/view/collection/insects/index.C.html>.

*Coptocephala rubicunda* var. *massiliensis*: SYNTYPE: 1 ♂, ‘Marseille [w, p] // type [w, h] // rubicunda / v. *massiliensis* Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** France, Germany, Italy, Spain (REGALIN & MEDVEDEV 2010b sub *Coptocephala linnaeana*).

**Comments.** The identity of *C. quadrimaculata* was fixed by lectotype designation (RAPILLY 1981). As *Chrysomela quadrimaculata* Linnaeus, 1767 is a primary homonym of *Ch. quadrimaculata* Linnaeus, 1758 (now *Phyllobrotica quadrimaculata*), a new substitute name *C. linnaeana* was proposed by PETITPIERRE & ALONSO-ZARAZAGA (2000). Examination of a syntype of *C. rubicunda* var. *massiliensis* showed that it is conspecific with *Ch. quadrimaculata* Linnaeus, 1767. As var. *massiliensis* is the oldest available name it is elevated here to species rank, and *C. linnaeana* is proposed as its new junior subjective synonym.

### *Coptocephala normandi* Pic, 1914

(Figs 7–8, 87–92)

*Coptocephala normandi* Pic, 1914c: 18 (original description).

**Type locality.** ‘Tunisie: Le Kef’.

**Type material examined.** SYNTYPES: 2 ♀♀ (on the same pin), ‘T. Le Kef / Dr NORMAND [w, p] // type [w, h] // C. normandi / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Additional material examined.** TUNISIA: Tabarka, 16.–22.vi.2012, 4 ♂♂ 4 ♀♀, J. Januš leg. (JBCB); Tabarka, 13.vi.2001, 1 ♂ 1 ♀, J. Schulze leg. (HKCH); Tabarka, 13.vi.2011, 13 ♂♂ 13 ♀♀, M. Egger leg. (HKCH); Tabarka (Umgebung Golfplatz), 4.–16.vi.2011, 2 ♂♂ 2 ♀♀, M. Egger leg. (HKCH); Tabarka (Umgebung Golfhotel), 11.vi.2011, 5 ♂♂ 3 ♀♀, M. Egger leg. (HKCH).

**Redescription.** Body length: ♂♂ 3.6–5.2 mm; ♀♀ 3.8–4.4 mm.

**Male** (Fig. 87). Head black, labrum and apical half of mandibles orange. Antennomeres I–IV orange, V with orange base and black serrate part, rest black. Pronotum orange. Scutellum black. Elytra orange, each elytron with two black spots: humeral and inner posteromedian (see also Variability). Meso-, metaventrite and abdomen black. Legs completely orange, except darkened bases of coxae.

Head (Fig. 89) enlarged, lustrous, flat. Mandibles robust, with distinct inner tooth, outer margin keeled in basal half, mandibles in lateral view with upper margin straight, without concavity or tooth. Labrum narrow, transverse, anterior margin shallowly emarginated, densely covered with pale setae. Clypeus with almost straight anterior margin, surface of clypeus covered with double punctures: denser very fine puncture and scarcer larger punctures, setae are longer around anterior margin of clypeus, disc with short setae, anterior part of head slightly convex, its posterior margin forming slightly elevated indistinct keel in middle of frons. Eyes small. Frons very wide, 3.30 times as wide as diameter of eye. Frons and vertex covered with larger punctures, on sides wrinkled, setae are longer on frons, shorter on vertex. Antennae short, 0.27 times as long as body, antennomere I club-shaped; II subglobular, III very small, IV wider and longer than III; antennae serrated from antennomere V; antennomeres V–X wider than long.

Pronotum strongly transverse, 1.85 times as wide as long, widest behind middle, moderately convex, almost impunctate, some larger irregular punctures cumulated along middle parts of anterior and posterior margin. Anterior margins straight, lateral margins almost straight and convergent in anterior half, moderately rounded in posterior half, posterior margin nearly straight but distinctly thickened in scutellar area. Anterior angles rounded with several very short setae and one setigerous pore bearing long seta, posterior angles widely rounded. Lateral and posterior margins bordered, anterior margin distinctly bordered only laterally. Scutellum triangular with sharp apex, lustrous, lateral and basal sides with very fine punctures bearing very short fine setae, scutellar apex elevated upon level of elytra.

Elytra subcylindrical, 1.55 times as long as wide at humeral part, glabrous, lustrous, densely covered with confused punctures. Basal margin bordered, moderately swollen in middle part. Epipleura glabrous, impunctate, wide in humeral area, gradually thinner posteriorly, disappearing in two thirds of elytral length.

Legs. Protibiae distinctly enlarged, 6.80 times as long as wide. Protarsi: protarsomere I long, subparallel, 3.66 times as long as broad, with inner apical angle forming short acute tip, protarsomere II parallel, 2.33 as long as broad, protarsomere III very deeply incised,

length ratios of protarsomeres I–IV equal to 100–64–45–64. Metatarsi: metatarsomere I short, subparallel, length ratios of metatarsomeres I–IV equal to 100–67–50–100. Claws simple.

Male genitalia. Ventral side with distinct median keel (Fig. 7).

**Female** (Fig. 88). Head not enlarged (Fig. 90). Anterior margin of clypeus orange. Frons narrower than in male, 2.15 times as wide as diameter of eye. Protibiae not enlarged. Protarsi shorter than in males, protarsomeres I and II subtriangular, length ratios of protarsomeres I–IV equal to 100–75–75–150. Spermatheca as in Fig. 8.

**Variability.** Two female syntypes have three black spots on each elytron (larger one on humeral callus and two posteromedian outer smaller than inner – Fig. 91), while all the specimens in the series from Tabarka have reduced black pattern (humeral spot is small, outer posteromedian spot is missing (Figs 87–88)). Scutellum is black or brownish black, one sytype has orange scutellar tip. Two of males have darkened meso- and metafemora, other two males and all females examined have all legs orange.

Differential diagnosis. *Coptocephala normandi* belongs to the *C. aeneopicta* species group. It is closest to *C. crassipes crassipes* and *C. rungsi*. From these species, *C. normandi* can be easily distinguished by legs entirely orange and by different shape of the aedeagus.

With orange legs (including tarsi), *C. normandi* can be confused with two more North African species: *C. sefrensis* Pic, 1897 and *C. perrisi* (Desbrochers des Loges, 1870), both known from Algeria and Morocco. The specimens of *C. sefrensis* have always two round black spots on each elytron (humeral and inner posteromedian), similar as in *C. normandi* but larger (compare Figs 87–91 vs. 103–107). The males of *C. sefrensis* have extremely wide frons, 4.45 times as wide as transverse diameter of eye (3.30 times in *C. normandi*) and head with variable black colour (usually with small black spot along inner margin of an eye, rarely extended and connected on frons, but never with head black as in *C. normandi*). *Coptocephala perrisi* is an extremely variable species, having dorsum from completely orange to elytra with two transverse black bands (Figs 93–102); however, *C. perrisi* is larger species, more than 6 mm (3.6–5.2 mm in *C. normandi*). All three species can be also easily distinguished by the structure of their aedeagi (Figs 7, 9, 11).

**Distribution.** Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** The true identity of *C. normandi* was uncertain for many years. In subsequent catalogues, WINKLER (1930) and NORMAND (1937) listed *C. normandi* as a valid species. WARCHAŁOWSKI (1991, 2003, 2010) listed or keyed it as incertae sedis and also mentioned possible relation to *C. kerimii*. Recently, REGALIN & MEDVEDEV (2010b) listed *C. normandi* as a valid species.

### *Coptocephala panousei* Kocher, 1959

*Coptocephala panousei* Kocher, 1959: 15 (original description).

**Type locality.** ‘Ouine-Mesdour; Bou-Guedjouf; Bou-Tazarht’ [Morocco].

**Type material examined.** SYNTYPES: 1 ♂, ‘Bou Guejouf / Panouse 3.54 [w, h] // C. Panousei [h] / Kocher det. [p] m. [w, h] // [blank small blue rounded label] // PARATYPE [r, h]’ (PJCP); 1 ♀, ‘♀ [w, p] // Ouine Mesdour / Bas Drâ 3.54 [w, h] // [blank small blue rounded label] // ALLOTYPE ♀ [r, h] // COPTOCEPHALA / panousei Kocher / M. Bergeal det 2006 [w, p]’ (PJCP).

**Distribution.** Algeria and Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** *Coptocephala panousei* is confirmed as a valid species.

### *Coptocephala peresi* (Vauloger de Beaupré, 1895)

*Clytra (Coptocephala) peresi* Vauloger de Beaupré, 1895: 194 (original description).

*Coptocephala flavolimbata* Pic, 1905a: 122 (original description).

*Coptocephala perezi* var. *maculicollis* Pic, 1919a: 14 (original description).

**Type localities.** *Clytra peresi*: ‘Tunisia: Kairouan’. *Coptocephala flavolimbata*: ‘Algérie: Biskra’. *Coptocephala perezi* var. *maculicollis*: ‘Egypte’ [from footnote].

**Type material examined.** *Clytra peresi*: not examined.

*Coptocephala flavolimbata*: SYNTYPE: 1 ♀, ‘Algérie / Biskra [w, h] // type. [w, h] // TYPE [r, p] // Muséum Paris / Coll. M. Pic [w, h] // Coptocephala / flavolimbata Pic [w, h] // HOLOTYPE / Coptocephala / flavolimbata / Pic, 1950 [sic!] [r, h] // Coptocephala (s. str.) / peresi Vauloger / (= flavolimbata / Pic) [h] / R. Regalin det. 199 [p] 7 [w, h]’ (MNHN – coll. Pic).

*Coptocephala perezi* var. *maculicollis*: SYNTYPE: 1 ♂, ‘Coll. A. Petroff / Mariut / 18-3-17 [w, h] // Coll. Alfieri / Egypte [w, p] // Coptocephala / Perezi Var. Nov. / maculicollis Pic / TYPE [w, h] // 1917 [w, h]’ (NHMB).

**Distribution.** Algeria, Egypt, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** Pic’s collection in MNHN contains two specimens (♂ and ♀) of the species from ‘Djilma (Tunisie)’ with subsequent red type labels and one male from ‘Les Lacs’ with red label ‘? TYPE’. However, the localities Djilma and Les Lacs do not fit the original description, and in our opinion these specimens are not the true types of this species. Pic (1897c) published the information that *C. peresi* was described based on one male given by M. J. Perez to captain de Vauloger and also mentioned an additional male from Lacs.

Dorsal colouration of *C. peresi* is variable, particularly the pronotum, which is either metallic blue with thin pale margins in dark specimens, or the metallic pattern is reduced to large central spot with two small spots laterally, or reduced to four (var. *maculicollis*) or two (*flavolimbata*) small metallic spots. Elytra are metallic blue with thin orange lateral margin and larger apical orange spot, or orange colour extends also to sutural margin and scutellar area (*flavolimbata*). *Coptocephala flavolimbata* and *C. perezi* var. *maculicollis* are confirmed as synonyms of *C. peresi*.

### *Coptocephala perrisi* (Desbrochers des Loges, 1870) comb. nov.

(Figs 9–10, 93–102)

*Clythra (Titubaea) perrisi* Desbrochers des Loges, 1870a: 79 (original description).

*Coptocephala kerimi* Fairmaire, 1875: 537 (original description), syn. nov.

*Coptocephala bleusei* Pic, 1897a: 84 (original description), syn. nov.

*Coptocephala kerimi* var. *rubriceps* Pic, 1916b: 10 (unavailable infrasubspecific name).

*Coptocephala kerini* [sic!] f. *rubriceps* Roubal, 1948: 34 (original description), syn. nov.

*Coptocephala sextigma* Pic, 1918c: 17 (original description), syn. nov.

*Coptocephala sextigma* var. *impressiceps* Pic, 1918c: 18 (unavailable infrasubspecific name).

*Coptocephala holoxantha* Peyerimhoff, 1949: 294 (original description), syn. nov.

*Coptocephala schrammi* Kocher, 1959: 70 (original description), syn. nov.

**Type localities.** *Clythra perrisi*: ‘E. Maghrnia’ [= Algeria: Maghnia]. *Coptocephala kerimi*: ‘Kéruan’ [= Tunisia, Kairouan]. *Coptocephala bleusei*: ‘Algérie Sud: Aïn Sefra’. *Coptocephala kerimi* var. *rubriceps*: ‘Algérie: Guet es Stel’. *Coptocephala sextigma*: ‘Algérie: Sidi-bel-Abbes’. *Coptocephala sextigma* var. *impressiceps*: ‘Syrie: Alep [patria falsa]’. *Coptocephala holoxantha*: ‘Maroc à Sefrou’. *Coptocephala schrammi*: ‘Région des Goundafa, dans le Grand-Atlas occidental: Aguersioual; Ijoukak’ [Morocco].

**Type material examined.** *Clythra perrisi*: LECTOTYPE (designated here): 1 ♂, ‘E. Maghrnia. [w, h] // Perrisi / Magh. Db. [w, h] // 27 / Db [pink label, p] // type [w, h] // Tituboea / Perrisi Dsb. [w, h] // LECTOTYPUS / Clythra (Titubaea)

*perrisi* / Desbrochers des Loges, 1870 / des. J. Bezděk, 2015 [r, p] (MNHN – coll. Pic).

*Coptocephala kerimii*: HOLOTYPE: 1 ♂, ‘Tunisia [p] / Kairoan / 11.VI [h] / Abdul Kerim 1873 [w, p] // Typus [red letters, w, p] // [small blank grey label] // Kerimii / Fairm. [w, h] // Coptocephala / kerimii / Typus! Fairm. [grey-green label, h] // Coptocephala / Kerimii / n. sp. [w, h] // Museo Civico / di Genova [w, p]’ (MSNG).

*Coptocephala kerimii* var. *rubriceps*: 1 ♀, ‘Guet es Stel / juin 93 [w, h] // type [w, h] // v. rubriceps / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Coptocephala bleusei*: SYNTYPES: 1 ♂, ‘AÏN-SEFRA / Mai-Juin 1896 / L. BLEUSE [w, p] // Coptocephala / Bleusei Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂ 1 ♀, ‘AÏN-SEFRA / Mai-Juin 1896 / L. BLEUSE [w, p] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘AÏN-SEFRA / Mai-Juin 1896 / L. BLEUSE [w, p] // C. pallidipes / Pic n sp [w, p] // Type [red letters, w, p]’ (MNHN – coll. Chobaut); 1 ♂, ‘AÏN-SEFRA / Mai-Juin 1896 / L. BLEUSE [w, p] // Coptocephala / Bleusei / Pic [w, h] // Coptocephala / pallidipes / Pic [reverse of previous label, w, h]’ (MNHN – coll. Chobaut); 3 ♂♂ 1 ♀, ‘AÏN-SEFRA / Mai-June 1896 / L. BLEUSE [w, p]’ (MNHN – coll. Chobaut).

*Coptocephala sextigma*: SYNTYPE: 1 ♀, ‘ALGERIE / Sidi-Bel-Abbès [w, p] // type [w, h] // sextigma Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Coptocephala holoxantha*: HOLOTYPE: 1 ♂, ‘Sefrou 4.8.40 / H. Otin leg. [w, p] // Coptocephala / holoxantha / PEYERIMHOFF / TYPE uniq. [w, h] // Museum Paris [p] / C. holoxantha / Peyer. [w, h] // Museum Paris [p] / Coll. Peyer. [w, h]’ (MNHN – coll. generale, box ‘Coptocephala pre-étude Rapilly’).

*Coptocephala schrammi*: SYNTYPE: 1 ♂, ‘Aguersioual [p] / 4.7.36 [h] / G. Schramm [w, p] // exemplaire / dessiné [w, p] // Schrammi [h] / Kocher det. [p] m. [h] / HOLOTYPE ♂ [w, h]’ (PJCP).

**Original material of infrasubspecific entity.** *Coptocephala sextigma* var. *impressiceps*: 1 ♀, ‘Syrie / Alep [w, h] // type [w, h] // C. sextigma / impressiceps / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Algeria (DESBROCHERS DES LOGES 1870a; PIC 1897a, 1916b, 1918c), Morocco (PEYERIMHOFF 1949, KOCHER 1959), Tunisia (FAIRMAIRE 1875). *Coptocephala sextigma* var. *impressiceps* described from Aleppo in Syria was evidently based on mislabelled specimen(s).

**Comments.** *Coptocephala perrisi* was originally described and until now classified in *Tituboea*. One male syntype was found in PIC’s collection and proved to be a representative of *Coptocephala*. Comparison with type material of some other taxa revealed surprising new synonymies almost all supported by the morphology of the aedeagus. To prevent any future confusion we decided to designate the male syntype of *C. perrisi* as the lectotype. *Coptocephala perrisi* displays great variability in elytral pattern: elytra with two transverse black bands (*C. kerimii* var. *rubriceps*), elytra with bands reduced to large spots with irregular margins (*C. kerimii*, *C. bleusei*), each elytron with two small black spots (*C. perrisi*, *C. sextigma*), dorsum without black pattern (*C. holoxantha*). The head varies from uniformly orange, black spots along interior margins of eyes, to vertex black. Also the aedeagus displays some variability in shape of the apex (apex with triangularly marked tip – Fig. 9, wide or almost rounded). Size of the black pattern seems to increase gradually from west to east. The specimens from western part of the range are without any black pattern or with reduced spots, while eastern populations have increased elytral pattern forming bands.

Two varieties, *Coptocephala kerimi* var. *rubriceps* and *C. sexstigma* var. *impressiceps*, were described in papers containing also description of subspecies (PIC 1916b, 1918c), thus became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The original specimens of both varieties are conspecific with *Coptocephala perrisi*. However, the description of var. *rubriceps* was repeated by ROUBAL (1948) who validated it with new authorship.

*Coptocephala perrisi* is similar to *C. sefrensis* PIC, 1897. Both species share large orange head usually with variable black pattern on vertex but differ in the structure of aedeagus (Figs 9, 11) and the shape of the black spots on elytra. All identified specimens of *C. sefrensis* have

constant two spots on each elytron, one smaller is always on humeral callus, while *C. perrisi* have black elytral pattern very variable (see above), however, anterior spot covers humeral callus only in extremely dark specimens (Fig. 93); usually the anterior spot is somewhat reduced and placed closer to scutellum (Figs 95, 98, 101).

### *Coptocephala plagioccephala* (Fabricius, 1792)

*Cryptocephalus plagioccephala* Fabricius, 1792: 60 (original description).

*Coptocephala melanocephala* var. *externepunctata* Pic, 1895b: 89 (original description).

*Coptocephala melanocephala* var. *tunisea* Pic, 1901a: 80 (original description).

*Coptocephala melanocephala* var. *theryi* Pic, 1918c: 17 (unavailable infrasubspecific name).

*Coptocephala melanocephala* var. *espanoli* Pic, 1933c: 15 (unavailable infrasubspecific name).

**Type localities.** *Cryptocephalus plagioccephala*: ‘Gallia meridionali’ [= southern France]. *Coptocephala melanocephala* var. *externepunctata*: ‘Bône, etc.’ [= Algeria, Annaba]. *Coptocephala melanocephala* var. *tunisea*: ‘Tunisie: Teboursouk et El Fedja’. *Coptocephala melanocephala* var. *theryi*: ‘Algérie: Saint-Charles’. *Coptocephala melanocephala* var. *espanoli*: ‘Maroc: Bab. Tazza’.

**Type material examined.** *Cryptocephalus plagioccephala*: not examined. The photos of 1 ♀ syntype were sent from ZMUC: ‘plagiocep- / halus [w, h] // plagioc / phalus [w, h]’.

*Coptocephala melanocephala* var. *externepunctata*: SYNTYPE: 1 ♂, ‘Bône / juin 86 [w, h] // type [w, h] // melanoceph [b, h] // TYPE [r, p] // v. externepunctata / Pic [w, h] // v. externepunctata Pic [grey label, h] // Museum Paris [p] / Coll. Pic [w, h]’ (MNHN – coll. generale).

*Coptocephala melanocephala* var. *tunisea*: SYNTYPE: 1 ♀ (strongly damaged), ‘type [w, h] // Teboursouk / Normand 5.98 [w, h] // v. tunisea Pic [w, h] // v. tunisea Pic [grey label, h] // type [w, h] // El Fedja / Dr. Normand [w, h] // TYPE [p] détruit [r, h] // Coptocephala plagi- / phala (Fabricius) [h] / M. Rapilly dét. 19 [p] 80 [w, h]’ (MNHN – coll. generale). Based on the original description, part of the specimens should be deposited in Normand’s collection in Institut National Agronomique in Tunis.

**Original material of infrasubspecific entities.** *Coptocephala melanocephala* var. *theryi*: 1 ♀, ‘ST. CHARLES / ALGÉRIE / A. THERY [w, p] // type [w, h] // Copt. v. Kuesteri [w, h] // TYPE [r, p] // v. theryi / Pic [w, h] // v. theryi / Pic [grey label, h]’ (MNHN – coll. generale).

*Coptocephala melanocephala* var. *espanoli*: not examined. The photos of 1 ♀ were sent from MZBS: ‘Bab. Tazza / Marroc / VII-29 [w, h] // Coptocephala / melanocephala / Ol. var (désiré) [w, h] // 76-7431 / MZB [w, p] // v. Espanoli / mihi [w, h] // Coptocephala / bistrinotata (Fab. 1803 / J. Bentanachs [w, p]’ (MZBS).

**Distribution.** Algeria, Italy (Sicily), Morocco, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** All four Pic’s varieties are confirmed as colour aberrations of *C. plagioccephala*. Two varieties (*C. melanocephala* var. *theryi* and *C. melanocephala* var. *espanoli*) were described in papers containing also description of subspecies (Pic 1918c, 1933c), thus became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999).

### *Coptocephala rubicunda rubicunda* (Laicharting, 1781)

*Clytra rubicunda* Laicharting, 1781: 169 (original description).

*Coptocephala tetradyma* var. *subobliterata* Pic, 1901b: 83 (original description).

**Type localities.** *Clytra rubicunda*: ‘Tyrol’ [after the title]. *Coptocephala tetradyma* var. *subobliterata*: ‘Abondance (Haute-Savoie) et Sonnay (Isère)’ [France].

**Type material examined.** *Clytra rubicunda*: not examined.

*Coptocephala tetradyma* var. *subobliterata*: SYNTYPE: 1 ♂, ‘H. Savoie [w, h] // v. subobliterata / Pic [w, h] // Abondance / ... [partly illegible, w, h] // type [w, h] // HOLOTYPE [r, p] // Museum Paris [p] / Coll. Pic [w, h] // Coptocephala tetradyma / subobliterata Pic [h] / M. Rapilly dét. 19 [p] 80 [w, h]’ (MNHN – coll. generale).

**Distribution.** Central and South Europe (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** *Coptocephala tetradyma* var. *subobliterata* was described from two localities: Abondance and Sonnay. We found the male from Abondance in Pic's collection but the deposition of specimen(s) from Sonnay is unknown to us. The aedeagus of the only known syntype of var. *subobliterata* perfectly matches that of *C. rubicunda* thus we confirm the synonymy of both taxa.

### *Coptocephala rungsi* Pic, 1953

*Coptocephala rungsi* Pic, 1953: 62 (original description).

*Coptocephala rungsi* var. *kocheri* Pic, 1953: 62 (original description).

**Type localities.** *Coptocephala rungsi*: 'Imintanout' [Morocco]. *Coptocephala rungsi* var. *kocheri*: 'Imintanout' [Morocco].

**Type material examined.** *Coptocephala rungsi*: LECTOTYPE (designated by DOGUET & BERGEAL 2007): 1 ♀, 'Imintanout / 900 – 5.52 [w, h] // ALLOTYPe [r, h] // ♀ [w, h] // [blank blue rounded label] // C. Rungsi [w, h]' (PJCP). PARALECTOTYPES: 1 ♂, 'Maroc Ifrane / (Rungs) [w, h] // var. / rubicunda [w, h] // C. Rungsi / n sp [w, h] // epistome / presque ... [partly illegible, w, h] // TYPE [r, p]' (MNHN – coll. Pic); 1 ♂ 1 ♀ (on same pine), 'Imintanout Maroc / (Kocher) [w, h] // C. Rungsi / mihi [w, h] // TYPE [r, p]' (MNHN – coll. Pic).

*Coptocephala rungsi* var. *kocheri*: SYNTYPES: 1 ♂, 'V. Kocheri / mihi [w, h] // Imintanout / 900 – 5.52 [w, h] // [blank blue rounded label] // COPTOCEPHALA / rungsi Pic / M. Bergeal det. 2006 [w, p] // Lectotype [sic!, r, p]' (PJCP); 1 ♂, 'Imintanout / Maroc / (Kocher) [w, h] // Var Kocheri / Pic [w, h] // TYPE [r, p]' (MNHN – coll. Pic).

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** DOGUET & BERGEAL (2007) designated the lectotype of *C. rungsi* deposited in Kocher's collection (now in PJCP). Although they published it as a male, in fact the specimen is a female and bears labels exactly fitting the information in DOGUET & BERGEAL (2007) but does not bear any lectotype label. On the other hand, the type specimen of var. *kocheri*, also deposited in PJCP, bears a lectotype label although DOGUET & BERGEAL (2007) did not designate a lectotype for this variety. We think that the authors mistakenly put the lectotype label under the wrong specimen which does not influence validity of the lectotype designation of *C. rungsi* published by DOGUET & BERGEAL (2007) as the published designation clearly refers to the 'allotype' specimen in Kocher's collection.

### *Coptocephala sefrensis* Pic, 1897

(Figs 11, 103–107)

*Coptocephala sefrensis* Pic, 1897: 165 (original description).

*Coptocephala metalliconotata* Pic, 1933b: 11 (original description), **syn. nov.**

*Coptocephala metalliconotata* var. *theryi* Pic, 1936a: 26 (original description), **syn. nov.**

*Coptocephala rotroui* Kocher, 1969: 111 (original description), **syn. nov.**

**Type localities.** *Coptocephala sefrensis*: 'Algérie Sud: Ain Sefra'. *Coptocephala metalliconotata*: 'Algérie: Titen-Yaya'. *Coptocephala metalliconotata* var. *theryi*: 'Maroc: Azrou'. *Coptocephala rotroui*: 'Ksar Aït-Atta, sur le versant sud du Grand-Atlas oriental, au S. E. de Midelt' [Morocco].

**Type material examined.** *Coptocephala sefrensis*: HOLOTYPE: 1 ♂, 'AÏN-SEFRA / Mai-June 1896 / L. BLEUSE [w, p] // sefrensis Pic / type! [w, h] // peutetre von / de Kerimi Frm. ? [w, h] // Coptocephala / sefrensis / Pic / Pic [w, h]' (MNHN – coll. Chobaut).

*Coptocephala metalliconotata*: SYNTYPE: 1 ♀, 'TYPE [red letters, w, p] // Oranie / ? Titen-Yaya [w, p] // Coptocephala / metalliconotata / nov. sp. Pic [w, h] // Coptocephala / metalliconotata / n sp. [w, h]' (MNHN – coll. Rotrou).

*Coptocephala metalliconotata* var. *theryi*: SYNTYPES: 1 ♂, ‘Azrou [h] / Maroc / Coll. THERY [w, p] // metalliconotata / v. Theryi mihi [w, h]’ (MNHN – coll. Pic); 2 ♂♂ 3 ♀♀ ‘Azrou [h] / Maroc / Coll. THERY [w, p]’ (MNHN – coll. Pic); 1 ♂, ‘Azrou [h] / Maroc / Coll. THERY [w, p] // prés / metalliconotata / Pic Ech. 1933, 12 [w, h] // metalliconotata / v. theryi Pic / Ech. 1936, p. 26. [w, h] // TYPE [r, p] // Museum Paris [p] / C. metalliconota / ta theryi Pic [w, h]’ (MNHN – coll. generale, box ‘Coptocephala pre-étude Rapilly’).

*Coptocephala rotroui*: SYNTYPES: 1 ♂, ‘Ksar Aït-Attah / 28.7.32. [w, h] // Coptocephala / metalliconotata / var. Théryi Pic [h] / Kocher det. [p] 61 [h] / in coll. Peyerh. [w, h] // Coptocephala / nov. sp / det Peyh. [w, h] // ♂ [w, p] // Coptoceph. / rotroui m. [h] / Kocher det. [p] 68 [h] / TYPE [red letters, h]’ (PJCP); 1 ♀, ‘Ksar Aït-Attah / 28.7.32. [w, h] // S. E. de Midelt / alt. 1800 [w, h] // ♀ [w, p] // [small blank round blue label]’ (PJCP).

**Distribution.** Algeria and Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** We examined the type specimens of all four taxa. As the specimens differ only in the black pattern on head which varies from small spots on internal margins of eyes to wide irregular black stripe between eyes (Figs 104, 106), we treat all the taxa as colour variations of *C. sefrensis* and we synonymize them. *Coptocephala sefrensis* is similar to *C. perrisi*. For distinguishing characters see comments under *C. perrisi*.

### *Coptocephala scopolina floralis* (Olivier, 1791)

*Clytra floralis* Olivier, 1791: 37 (original description).

*Coptocephala floralis* var. *subasciata* [sic!] Pic, 1897c: 206 (original description).

**Type localities.** *Clytra floralis*: ‘Provence’. *Coptocephala floralis* var. *subasciata*: ‘Espagne’.

**Type material examined.** *Clytra floralis*: not examined.

*Coptocephala floralis* var. *subasciata*: SYNTYPE: 1 ♂, ‘Espagne [w, h] // floralis var [w, h] // type [w, h] // v. subasciata / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Portugal and Spain (REGALIN & MEDVEDEV 2010b).

**Comments.** STAINES & WHITTINGTON (2003) published a list of Olivier’s types of Chrysomelidae deposited in Dufresne’s collection in the Royal Museum of Scotland in Edinburgh including three syntypes of *Clytra floralis*. Richard Lyszkowski from the Royal Museum of Scotland kindly sent us the colour photos of all three specimens, and we identified them as *Macrolenes dentipes* (2 ♀♀) and *Coptocephala* sp. (probably *C. unifasciata* (Scopoli, 1763), 1 ♂). OLIVIER (1791) described *Clytra floralis* in the 6<sup>th</sup> volume of his *Encyclopédie Méthodique* and explicitly mentioned black head and legs and small black humeral spot on elytra, but did not mention the deposition of the specimens. The description is provided with reference to a plate and a picture published later and associated with the 6<sup>th</sup> volume of another Olivier’s publication: *Entomologie ou histoire naturelle des insectes* (OLIVIER 1808). It is necessary to note that OLIVIER (1808) also published another description of *Clytra floralis*, different to that from 1791; however, he explicitly mentioned the reference of description from 1791.

We are sure that the male *Coptocephala* specimen deposited in Edinburgh is not the true syntype of *Clytra floralis* because of bicolorous legs. This male probably refers to the description from 1808. We also have some doubts about the type status of additional two females. Although the colouration of legs agrees with the description, the black spots on elytra have somewhat different shape in comparison with the original description (OLIVIER 1791) and with the picture in OLIVIER (1808). In sum, we treat all three specimens deposited in Edinburgh as non-type material of *Clytra floralis*.

We found one additional specimen of *Clythra floralis* in Olivier's collection in MNHN bearing a green round label 'COLLECTION / OLIVIER / TYPE' added by Olivier's son (Mantilleri, pers. comm. 2014). This specimen (actually a female of *Macrolenes dentipes* (Olivier, 1808)) originates from Spain ('Hispan.'), while *Clytra floralis* was described from Provence in southern France. Thus we also tentatively treat it as a non-type specimen.

Currently we are unable to confirm the identity of *C. scopolina floralis* as we have not found reliable type material. For the purposes of this paper we accept this taxon in its current usage (e.g. WARCHAŁOWSKI 1991, 2003, 2010) and the male syntype of *C. floralis* var. *subfasciata* is treated as its synonym. However, in the future we cannot exclude taxonomical changes based on clarification of the identity of *C. scopolina floralis*.

### *Coptocephala scopolina kuesteri* Kraatz, 1872

*Coptocephala melanocephala* Küster, 1847: 100 (original description, secondary homonym, not *Clytra melanocephala* Olivier, 1808, now in *Coptocephala*).

*Coptocephala kuesteri* Kraatz, 1872: 230 (new substitute name for *Coptocephala melanocephala* Küster, 1847).

*Coptocephala melanocephala* var. *andalusiaca* Pic, 1918c: 17 (unavailable infrasubspecific name).

**Type localities.** *Coptocephala melanocephala*: 'bei Trau in Dalmatien' [= Croatia, Trogir]. *Coptocephala melanocephala* var. *andalusiaca*: 'Andalousie' [patria falsa].

**Type material examined.** *Coptocephala melanocephala*: not examined.

**Original material of infrasubspecific entity.** *Coptocephala melanocephala* var. *andalusiaca*: 1 ♂, 'Andalus [w, h] // type [w, h] // TYPE [r, p] // Muséum Paris / Coll. M. Pic [w, h] // v. *andalusiaca* Pic [b, h] // v. *andalusiaca* / Pic [w, h] // *Coptocephala* / *küsteri* Kraatz [h] / M. Rapilly dét. 19 [p] 80 [w, h]' (MNHN – coll. generale).

**Distribution.** Croatia, Italy, Serbia, Slovenia, Switzerland (REGALIN & MEDVEDEV 2010b).

**Comments.** *Coptocephala melanocephala* var. *andalusiaca* was described in a paper containing also a description of a subspecies (PIC 1918c), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999).

*Coptocephala scopolina kuesteri* is distributed in Italy and former Yugoslavia (e.g. WARCHAŁOWSKI 1991, REGALIN & MEDVEDEV 2010b). We agree with the late Michel Rapilly who dissected the original male specimen of var. *andalusiaca* and identified it as *C. scopolina kuesteri*. As Andalusia (Spain) is placed far from the distribution range of *C. scopolina kuesteri* we think that the original specimen of var. *andalusiaca* was mislabelled.

### *Coptocephala unicolor* (Lucas, 1845)

*Clythra (Cyaniris) unicolor* Lucas, 1845: 125 (original description).

*Coptocephala atra* Pic, 1932: 23 (original description).

*Coptocephala unicolor* var. *aenescens* Pic, 1932: 23 (original description).

**Type localities.** *Clythra unicolor*: 'environs de Constantine et du cercle de la Calle' [Algeria]. *Coptocephala atra*: 'Maroc: Rabat'. *Coptocephala unicolor* var. *aenescens*: 'Philippeville' [= Algeria, Skikda].

**Type material examined.** *Clythra unicolor*: not examined.

*Coptocephala atra*: SYNTYPE: 1 ♂, 'Rabat: Maroc / Le Chilla / 21 Mai 1923 [b, h] // *Coptocephala* / *atra* n sp [w, h]' (MNHN – coll. Pic).

*Coptocephala unicolor* var. *aenescens*: SYNTYPE: 1 ♂, 'Philippeville [w, h] // v. *aenescens* / Pic [w, h]' (MNHN – coll. Pic).

**Distribution.** Algeria, Italy, Malta, Morocco, Portugal, Spain, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** *Coptocephala unicolor* group badly needs comprehensive revision based on examination of the primary type material. Until then we follow the arrangement as published by REGALIN & MEDVEDEV (2010b); thus *C. atra* and *C. unicolor* var. *aenescens* are left as synonyms of *C. unicolor*.

### ***Labidostomis (Chlorostola) guernei lejeunei Fairmaire, 1866***

*Labidostomis lejeunii* Fairmaire, 1866 in FAIRMAIRE & COQUEREL (1866: 70) (original description).

*Labidostomis lejeunei* var. *violaceipennis* Pic, 1932: 23 (original description).

**Type localities.** *Labidostomis lejeunii*: ‘Oran’ [Algeria]. *Labidostomis lejeunei* var. *violaceipennis*: ‘Algérie’.

**Type material examined.** *Labidostomis lejeunii*: not examined.

*Labidostomis lejeunei* var. *violaceipennis*: SYNTYPE: 1 ♀, ‘Algérie / (Vauloger) [w, h] // v. nov. / *violaceipennis* / Pic [w, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. Pic).

**Distribution.** Algeria (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis lejeunei* var. *violaceipennis* is confirmed as a synonym of *L. lejeunei*.

### ***Labidostomis (Chlorostola) rufomarginata (Vauloger de Beaupré, 1895)***

*Clytra (Labidostomis) rufomarginata* Vauloger de Beaupré, 1895: 194 (original description).

*Labidostomis rufomarginata* var. *reymondi* Kocher, 1959: 7 (unavailable infrasubspecific name).

**Type localities.** *Clytra rufomarginata*: ‘Maroc: Tanger’. *Labidostomis rufomarginata* var. *reymondi*: ‘Toufliate (Grand-Atlas); Bin-el-Ouidane’ [Morocco].

**Type material examined.** *Clytra rufomarginata*: SYNTYPES: 1 ♂, ‘limbata ? Lacd. / v. olcesei Pic [w, h] // Tang [= Tanger] [w, h] // type [w, h] // type [w, h] // *Labidostomis / rufomarginata* / Vaulog. / type ♂ [w, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. Pic); 1 ♀, ‘Tanger / coll. Bauduer [w, h] // *Labidostomis / rufomarginata* / Vaulog / type ♀ [w, h] // le type ♂ est / dans la collection / Pic. [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Original material of infrasubspecific entity.** *Labidostomis rufomarginata* var. *reymondi*: 1 ♂, ‘MARRAKECH / Maroc (Kocher) [p] / Toufliat 1400 / 3.47 [w, h] // ♂ [w, p] // *Labidostomis / rufomarginatus* / Vaul [pink label, h] // [blank blue round label] // [blank blue round label] // var. Reymondi [h] / Kocher det. [p] m. [w, h]’ (PJCP); 1 ♀, ‘MARRAKECH / Maroc (Kocher) [p] / Toufliat 1400 / 3.47 [w, h] // ♀ [w, p] // *Labidostomis / rufomarginatus* / ♀ Vaul [pink label, h] // [blank blue round label] // –’ – ♀ [h] / Kocher det. [p] 58 [w, h]’ (PJCP).

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis rufomarginata* var. *reymondi* was described based on specimens with slightly wider orange elytral margins. However, this character is variable through the identified specimens of *L. rufomarginata*. Moreover, the var. *reymondi* was described in a paper containing also descriptions of subspecies (KOCHE 1959), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999).

### ***Labidostomis (Chlorostola) syriaca (Lacordaire, 1848)***

*Clythra (Labidostomis) centromaculata* var. *syriaca* Lacordaire, 1848: 55 (original description).

*Labidostomis centromaculata* var. *lineata* Pic, 1920a: 6 (unavailable infrasubspecific name).

*Labidostomis centromaculata* var. *obliterata* Pic, 1920a: 6 (unavailable infrasubspecific name).

*Labidostomis centromaculata* var. *sutarella* Pic, 1920a: 6 (unavailable infrasubspecific name).

**Type localities.** *Clythra centromaculata* var. *syriaca*: ‘Syrie, Corse’ [lectotype from ‘Corse’]. *Labidostomis centromaculata* var. *lineata*: ‘Corse’. *Labidostomis centromaculata* var. *obliterata*: ‘Corse’. *Labidostomis centromaculata* var. *suturella*: ‘Corse’.

**Type material examined.** *Clythra centromaculata* var. *syriaca*: not examined. Lectotype designated by RAPILLY (1983b) is deposited in Instituto di Zoologia Sistematica, Universita di Torino.

**Original material of infrasubspecific entities.** *Labidostomis centromaculata* var. *lineata*: not examined. Not found in MNHN.

*Labidostomis centromaculata* var. *obliterata*: 1 ♂, ‘type [w, h] // Corse [w, h] // v. oblitterata Pic [w, h] // v. oblitterata Pic [gray label, h] // TYPE [r, p] // Museum Paris [p] / Coll Pic [w, h] // Labidostomis / syriaca oblitterata Pic [h] / M. Rapilly dét. 19 [p] 82 [w, h]’ (MNHN – coll. generale).

*Labidostomis centromaculata* var. *suturella*: 1 ♂, ‘Corsica / D. Nanes [w, h] // type [w, h] // v. suturella Pic [w, h] // v. suturella Pic [gray label, h] // TYPE [r, p] // Museum Paris [p] / Coll Pic [w, h] // Labidostomis / syriaca suturella Pic [h] / M. Rapilly dét. 19 [p] 82 [w, h]’ (MNHN – coll. generale).

**Distribution.** France: Corse (REGALIN & MEDVEDEV 2010b).

**Comments.** All three Pic’s varieties were described in a paper containing also descriptions of subspecies (Pic 1920a), thus they became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999) and are conspecific with *L. syriaca*.

### *Labidostomis (Labidostomis) arcuata* Pic, 1920

*Labidostomis arcuata* Pic, 1920a: 7 (original description).

*Labidostomis arcuata* var. *arisi* Pic, 1920a: 7 (unavailable infrasubspecific name).

**Type localities.** *Labidostomis arcuata*: ‘Turkestan’. *Labidostomis arcuata* var. *arisi*: ‘Auli-Ata’ [= Kazakhstan, Taraz].

**Type material examined.** *Labidostomis arcuata*: SYNTYPES: 1 ♂, ‘Kendyktau [w, p] // J. Sahlb. [w, p] // Jacobs. det. [w, p] // Labidostomis / diversifrons / Lf. [w, h] // type [w, h] // arcuata Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘Kendyktau [w, p] // J. Sahlb. [w, p] // 1567 [w, h] // Jacobs. det. [w, p] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Original material of infrasubspecific entity.** *Labidostomis arcuata* var. *arisi*: 1 ♂, ‘Turkestan / Aulie-Ata / C. ARIS [w, p] // Labidostomis / centrisculpta Rtt. [w, h] // type [w, h] // Arisi Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Kyrgyzstan, Kazakhstan, China: Xinjiang (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis arcuata* var. *arisi* was described in a paper containing also description of subspecies (Pic 1920a), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). We do not see any difference between the type specimens of *L. arcuata* and the original specimens of *L. arcuata* var. *arisi*, thus we consider them conspecific.

### *Labidostomis (Labidostomis) centrisculpta centrisculpta* Pic, 1920

(Figs 108–111)

*Labidostomis centrisculpta* Pic, 1920a: 6 (original description).

*Labidostomis alaiensis* Pic, 1920a: 7 (original description), **syn. nov.**

**Type localities.** *Labidostomis centrisculpta*: ‘Margelan’ [= Uzbekistan, Margilan]. *Labidostomis alaiensis*: ‘Turkestan: Alai’ [= Kyrgyzstan, Alai Mts.].

**Type material examined.** *Labidostomis centrisculpta*: SYNTYPES: 1 ♂, ‘Morgelan / Reitter. [w, p] // L. centrisculpta / ♂, ♀ [w, h] // centrisculpta / (mih) Reitt [w, h]’ (MNHN – coll. Pic); 1 ♂, ‘Morgelan / Reitter. [w, p] // L. centrisculpta [w, h]’ (MNHN – coll. Pic); 1 ♀, ‘Morgelan / Reitter. [w, p]’ (MNHN – coll. Pic).

*Labidostomis alaiensis*: SYNTYPES: 3 ♂♂ (on the same pin), ‘Alai / Turkestan [w, h] // type [w, h] // alaiensis Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘Alai / Turkestan [w, h] // type [w, h]’ (MNHN – coll. Pic).

**Distribution.** China: Xinjiang, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis alaiensis* was, with some doubts, synonymized with *L. stenostoma* Weise, 1900 by LOPATIN (1977). This doubtful synonymy was later adopted by WARCHAŁOWSKI (1985) and also followed by REGALIN & MEDVEDEV (2010b). Comparison of the primary type specimens of *L. alaiensis*, *L. centrisculpta* and *L. stenostoma* (deposited in ZMHB) clearly shows that *L. alaiensis* is conspecific with *L. centrisculpta*, not with *L. stenostoma*.

### *Labidostomis (Labidostomis) diversifrons* Lefèvre, 1872

*Labidostomis diversifrons* Lefèvre, 1872: 90 (original description).

*Labidostomis attenuata* Pic, 1897c: 202 (original description).

**Type localities.** *Labidostomis diversifrons*: ‘Beyrouth; Naplouse [= Lebanon, Bejrut; Israel, Nablus]; Russie méridionale’. *Labidostomis attenuata*: ‘Syrie: Jaffa’ [= Israel, Tel Aviv].

**Type material examined.** *Labidostomis diversifrons*: LECTOTYPE (designated by RAPILLY 1984b): ♂, ‘Type [p] ♂ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // Beyrouth [w, h] // HOLOTYPE [r, p] // Muséum Paris [p] / diversifrons / Coll. Lefèvre [w, h] // Labidostomis / diversifrons Lefèvre [h] / M Rapilly dét. 19 [p] 82 [w, h]’ (MNHN – coll. generale).

*Labidostomis attenuata*: SYNTYPE: ♂, ‘Syria / Jaffa [w, p] // n. sp [w, h] // type [w, h] // Museum Paris / Coll. M. Pic [w, p] // TYPE [r, p] // attenuata / Pic n. sp. [w, h]’ (MNHN – coll. Pic); ♂, ‘Syria / Jaffa [w, p] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Cyprus, Iran, Israel, Jordan, Lebanon, Syria, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis attenuata* is confirmed as a synonym of *L. diversifrons*.

### *Labidostomis (Labidostomis) elegans* Lefèvre, 1876

*Labidostomis elegans* Lefèvre, 1876: lxxii (original description).

*Labidostomis elegans* var. *inhumeralis* Pic, 1920a: 6 (unavailable infrasubspecific name).

**Type localities.** *Labidostomis elegans*: ‘Asterabad (Perse)’ [= Iran, Gorgan]. *Labidostomis elegans* var. *inhumeralis*: ‘Perse’.

**Type material examined.** *Labidostomis elegans*: HOLOTYPE: ♂, ‘Perse sept. / (Staudinger) [w, h] // elegans / E. Lef. / Ann. Fr. 1976. Bull. / No. 74, p. 76 [w, h] // HOLOTYPE [r, p] // Museum Paris [p] / elegans / Lef. [w, h] // *Labidostomis / elegans* Lefèvre [h] / M Rapilly dét. 19 [p] 82 [w, h]’ (MNHN – coll. generale).

**Original material of infrasubspecific entity.** *Labidostomis elegans* var. *inhumeralis*: 1 ♂, ‘type [w, h] // v. *inhumeralis* / Pic [w, h] // v. *inhumeralis* Pic [b, h] // v. Bodemeyer / Persien / Luristan [w, p] // TYPE [r, p] // Comparé au type / par [p] M. RAPILLY / 1981 [w, h] // Museum Paris [p] / Pic [w, h] // *Labidostomis / elegans* Lefèvre [h] / M Rapilly dét. 19 [p] 81 [w, h]’ (MNHN – coll. generale).

**Distribution.** Armenia, Azerbaijan, Iran, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis elegans* var. *inhumeralis* was described in a paper containing also description of subspecies (Pic 1920a), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). Based on the examination of aedeagus of the original specimen, var. *inhumeralis* is conspecific with *L. elegans*. However, the *L. elegans* species group badly needs a comprehensive revision.

### ***Labidostomis (Labidostomis) hebraea* (Lacordaire, 1848)**

*Clythra (Labidostomis) hebraea* Lacordaire, 1848: 55 (original description).

*Labidostomis quadrinotata* var. *bijuncta* Pic, 1912a: 17 (original description).

*Labidostomis quadrinotata* var. *bisbijuncta* Pic, 1912a: 17 (original description).

*Labidostomis quadrinotata* var. *posticejuncta* Pic, 1912a: 17 (original description).

**Type localities.** *Clythra hebraea*: ‘Israël, Mt. Hermon’ (neotype), ‘Palestine’ (original type locality). *Labidostomis quadrinotata* var. *bijuncta*: not stated. *Labidostomis quadrinotata* var. *bisbijuncta*: not stated. *Labidostomis quadrinotata* var. *posticejuncta*: ‘Syrie’.

**Type material examined.** *Clythra hebraea*: NEOTYPE (designated by RAPILLY 1984a): ♂, ‘Trifolium [w, h] // ISRAËL Mt Hermon / 15.v.80 / M. RAPILLY 1450 m. [w, h] // NEOTYPE [r, p] // Labidostomis / hebraea Lacordaire [h] / M. Rapilly dét. 19 [p] 81 [w, h]’ (MNHN – coll. generale).

*Labidostomis quadrinotata* var. *bijuncta*: not examined. Not found in MNHN.

*Labidostomis quadrinotata* var. *bisbijuncta*: not examined. Not found in MNHN.

*Labidostomis quadrinotata* var. *posticejuncta*: SYNTYPE: ♀, ‘Syrie [w, h] // type [w, h] // v. posticejuncta / Pic [w, h] // Museum Paris / Coll. M. Pic [w, p]’ (MNHN – coll. generale).

**Distribution.** Israel, Jordan, Lebanon, Syria, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** The original Lacordaire’s type material of *L. hebraea* was not traced thus a neotype was designated by RAPILLY (1984a). PIC (1912a) described three varieties of *L. quadrinotata* which were transferred under *L. hebraea* by BAGUENA (1960). Of these varieties, we are able to confirm the synonymy only for var. *posticejuncta* based on the examined syntype. The type material of var. *bijuncta* was not traced in MNHN, but in PIC’s collection we found one female with his handwritten label ‘var pres bijuncta PIC’ conspecific with *L. hebraea*. Based on this specimen we think that the synonymy of var. *bijuncta* with *L. hebraea* proposed by BAGUENA (1960) is correct.

In var. *bisbijuncta* we suppose that PIC (1912a) did not have any specimen(s) in hand and the description refers to the female figured on plate I (figure 2) in LEFÈVRE (1872) as it is mentioned at the end of PIC’s description. Unfortunately, no specimen of such colouration was found in the MNHN collections. The female pictured in LEFÈVRE (1872) has very unusual black elytral pattern and we do not know any other specimen with such colouration. On the other hand we cannot exclude that such aberration may occur in *L. hebraea*; thus, we decided to leave the var. *bisbijuncta* in synonymy with *L. hebraea*.

### ***Labidostomis (Labidostomis) hybrida* (Lucas, 1845)**

*Clythra (Labidostomis) hybrida* Lucas, 1845: 121 (original description).

*Labidostomis roberti* Pic, 1919b: 23 (original description).

*Labidostomis hybrida* var. *atlasica* Kocher, 1959: 7 (unavailable infrasubspecific name).

**Type localities.** *Clythra hybrida*: ‘environs d’Oran’ [Algeria]. *Labidostomis roberti*: ‘environs de Rabat’ [Morocco]. *Labidostomis hybrida* var. *atlasica*: ‘Ifrane, Tizi-n-Hassa, Ouest de Missour, Talmest [Morocco]’.

**Type material examined.** *Clythra hybrida*: LECTOTYPE (designated by RAPILLY 1984a): ♂, ‘hybrida / Dej. [w, h] // Labidostomis / sp. ... [partly illegible, w, h] // LECTOTYPE [r, p] // Labidostomis / hybrida Lucas [h] / M. Rapilly dét. 19 [p] 83 [w, h]’ (MNHN – coll. Lucas). PARALECTOTYPE: ♂, ‘Labidostomis / hybrida Lucas [w, h] // Museum Paris [p] / Col. Lucas [w, h] // PARALECTOTYPE [r, p]’ (MNHN – coll. Lucas).

*Labidostomis roberti*: SYNTYPES: 1 ♀, ‘Labidostomis / Roberti mihi [w, h] // type [w, h] // Labidostomis / Roberti Pic [w, h] // TYPE [r, p]’ (MNHN – coll. PIC); 1 ♀, ‘n sp ... / pres hybrida [partly illegible, w, h] // type [w, h] // TYPE [r, p]’ (MNHN – coll. PIC).

**Original material of infrasubspecific entity.** *Labidostomis hybrida* var. *atlasica*: not examined. Not found in PJCP.

**Distribution.** Algeria and Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** For long time *L. hybrida* was treated as a synonym of *L. quadrinotata* (Fabricius, 1787) until RAPILLY (1984a) found that Fabricius' *L. quadrinotata* belongs to *Otiocephala* and restored *L. hybrida* as a valid species. From ZMUK we received a photograph of the type of *Cryptocephalus quadrinotatus* Fabricius, 1787 and we confirm that it really must be classified in *Otiocephala*. Based on examination of the type specimens of *L. hybrida* and *L. roberti* we also confirm the synonymy of both species.

*Labidostomis hybrida* var. *atlasica* was described in a paper containing also description of subspecies (KOCHEM 1959), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). The original specimens of *L. hybrida* var. *atlasica* were not traced in Kocher's collection in PJCP. However, several specimens collected in 1960 and provided with the original Kocher's identification labels are present in the collection. According to these specimens we have no doubts about the identity of var. *atlasica*, which is conspecific with *L. hybrida*.

### ***Labidostomis (Labidostomis) luristanica* Warchałowski, 2004**

(Figs 12, 112–115)

*Labidostomis elegans* var. *luristanica* Pic, 1920a: 6 (unavailable infrasubspecific name).

*Labidostomis luristanica* Warchałowski, 2004: 557 (validation of the name as available).

**Type locality.** *Labidostomis elegans* var. *luristanica*: 'Luristan' [= Iran, Lorestan province].

**Type material examined.** *Labidostomis elegans* var. *luristanica*: SYNTYPE: ♀, 'v. Bodemeyer / Persien / Luristan [w, p] // elegans [w, h] // v. luristanica / Pic [w, h] // v. luristanica Pic [b, h] // type [w, h] // TYPE [r, p] // Museum Paris [p] / Pic [w, h] // Labidostomis / shirazicus Lopatin [h] / M Rapilly dét. 19 [p] 81 [w, h]' (MNHN – coll. generale).

**Distribution.** Iran (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis elegans* var. *luristanica* was described in a paper containing also description of subspecies (PIC 1920a), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). However, it was validated by WARCHAŁOWSKI (2004) who treated it as a valid species and thus established a new name with new authorship in agreement with Article 45.5.1 (ICZN 1999).

*Labidostomis luristanica* is very similar to *L. shirazica* Lopatin, 1979 and *L. kantneri* Warchałowski, 2004. After examination of the type material of all three taxa and additional specimens we are sure that all these taxa represent three distinct species. For the purposes of this paper we present drawings of the spermathecae to demonstrate the differences; however, the whole group is planned to be revised in the near future. Ductus spermathecae of *L. luristanica* is twice longer than in the other two species, proximally nearly straight, distally with coils (Fig. 12), while that of *L. kantneri* is significantly shorter and coiled in whole length (Fig. 13), and ductus spermathecae of *L. shirazica* is also significantly shorter than in *L. luristanica* and straight, not coiled (Fig. 14).

### ***Labidostomis (Labidostomis) lusitanica* (Germar, 1824)**

*Clytra lusitanica* Germar, 1824: 549 (original description).

*Labidostomis bigemina* var. *semideficiens* Pic, 1906a: 19 (original description).

**Type localities.** *Clytra lusitanica*: not given. *Labidostomis bigemina* var. *semideficiens*: 'Valencia (Espagne)'.

**Type material examined.** *Clytra lusitanica*: not examined.

*Labidostomis bigemina* var. *semideficiens*: not examined. Not found in MNHN.

**Distribution.** Algeria, France, Italy (Sardinia), Portugal, Spain, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** The type material of *L. bigemina* var. *semideficiens* was not traced in MNHN and its deposition is unknown to us. In accordance with REGALIN & MEDVEDEV (2010b) we treat this variety as a synonym of *L. lusitanica*.

### *Labidostomis (Labidostomis) mairei* Peyerimhoff, 1922

*Labidostomis mairei* Peyerimhoff, 1922: 62 (original description).

*Labidostomis mairei* var. *subinterruptus* Pic, 1932: 22 (original description).

**Type localities.** *Labidostomis mairei*: ‘Atlantis maroccani’ [= Morocco: Atlas Mts.]. *Labidostomis mairei* var. *subinterruptus*: ‘Maroc: Atlas’.

**Type material examined.** *Labidostomis mairei*: SYNTYPES: ♂, ‘Massif du Tachdirt / 3.200-3.500 m / Gd. Atlas marocain / VIII.1921 – R. Maire [w, h] // Labidostomis / Mairei / Peyerimhoff -types- [w, h] // Museum Paris [p] / Collection / Peyerimhoff [w, h] // LECTOTYPUS / Warchałowski / designavit [r, h]’ (MNHN – coll. Peyerimhoff); 2 ♂♂, ‘Massif du Tachdirt / 3.200-3.500 m / Gd. Atlas marocain / VIII.1921 – R. Maire [w, h] // Labidostomis / Mairei / PEYERIMHOFF [w, h] // PARALECTO- / TYPUS / Warchałowski / designavit [r, h]’ (MNHN – coll. Peyerimhoff).

*Labidostomis mairei* var. *subinterruptus*: SYNTYPE: 1 ♀, ‘Tachdirt & / Djebel Likoumt / Grand-Atlas [w, p] // L. Mairei v / subinterruptus / Pic [w, h]’ (MNHN – coll. Pic).

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** *Labidostomis mairei* was explicitly described from three males (originally probably on the same pin, now separated). All three males bear additional red label ‘Lectotype’ (‘Paralectotype’, respectively) added by Warchałowski. However, in his revision WARCHAŁOWSKI (1985) treated all the specimens as syntypes. Thus the lectotype designation was never published and also in the present paper we treat those specimens as syntypes.

*Labidostomis mairei* var. *subinterruptus* was described by PIC (1932) based on a female with somewhat enlarged metallic pattern that laterally touches the margin. We examined large series of *L. mairei* and without any doubts var. *subinterruptus* is only a colour aberration of *L. mairei*.

### *Labidostomis (Labidostomis) testaceipes* Pic, 1904

*Labidostomis testaceipes* Pic, 1904b: 93 (original description).

*Labidostomis delagrangei* Pic, 1904b: 94 (original description).

**Type localities.** *Labidostomis testaceipes*: ‘Syrie’. *Labidostomis delagrangei*: ‘Haute-Syrie: Mts Amanus’ [= Turkey, Hatay province, Nur Mts.].

**Type material examined.** *Labidostomis testaceipes*: SYNTYPES: 1 ♀, ‘Amanus / Syrie [w, h] // L. testaceipes / Pic [w, h] // type. [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘mts / Amanus [w, h] // type. [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘type [w, h] // TYPE [r, p] // L. testaceipes Pic / (Amanus) [w, h]’ (MNHN – coll. Pic); 1 ♀, ‘Amanus [w, h] // type. [w, h] // L. testaceipes / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Labidostomis delagrangei*: SYNTYPES: 1 ♂, ‘Amanus / Syrie [w, h] // type [w, h] // Delagrangei [w, h] // TYPE [r, p] // Museum Paris [p] / Coll. Pic [w, h]’ (MNHN – coll. Pic); 1 ♂, ‘... Amanus [partly illegible, w, h] // type. [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘Amanus [w, h] // type [w, h] // Labidostomis / Delagrangei Pic [w, h] // Museum Paris / Coll. M. Pic [w, p] // HOLOTYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘type [w, h] // TYPE [r, p] // [illegible, w, h]’ (MNHN – coll. Pic).

**Distribution.** Iraq, Syria, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** Although PIC (1904b) mentioned both, male and female, in the original description of *L. testaceipes*, we found only females in his collection. In our opinion the information about male in the description is a mistake. WARCHAŁOWSKI (1985) synonymized *L. testaceipes* with *L. delagrangei* described in the same PIC's (1904b) paper and treated *L. delagrangei* as a dark form of *L. testaceipes*. The specimens deposited in MNHN suggest different explanation referring to sexual dimorphism. The females were described as *L. testaceipes*, and the males, which are really darker than females, as *L. delagrangei*.

WARCHAŁOWSKI (1985) designated one male of *L. delagrangei* as a lectotype. However, in MNHN there is neither a specimen bearing a lectotype label, nor with Warchałowski's identification label. On the other hand, one of the specimens bears the label 'Holotype'. In our opinion WARCHAŁOWSKI (1985) had this 'Holotype' specimen on loan (as he mentioned exactly only one male examined from MNHN) and published it as a lectotype. Because the lectotype is not clearly labelled and can be confused with other type specimens of *L. delagrangei*, we treat the lectotype designation by WARCHAŁOWSKI (1985) as an invalid act due to a conflict with Article 74.5 of ICZN (1999) and consider all four specimens in MNHN syntypes.

### *Labidostomis (Wellschmiedia) ghilianii* (Lacordaire, 1848)

(Figs 116–117)

*Clythra (Labidostomis) ghilianii* Lacordaire, 1848: 77 (original description).

*Cyaniris atricollis* Pic, 1922: 27 (original description).

**Type localities.** *Clythra ghilianii*: 'Espagne' [= Spain]. *Cyaniris atricollis*: '? Egypte' [patria falsa].

**Type material examined.** *Clythra ghilianii*: Not examined, type specimen in MNHN destroyed.

*Cyaniris atricollis*: SYNTYPE: 1 ♂, '? Egypte [w, h] // type [w, h] // atricollis / Pic [w, h] // TYPE [r, p]' (MNHN – coll. Pic).

**Distribution.** Portugal and Spain (REGALIN & MEDVEDEV 2010b).

**Comments.** The type locality of *C. atricollis* was doubted by PIC (1922) himself. Based on examination of the type specimen, *C. atricollis* was synonymized with the Iberian *Labidostomis ghilianii* by BEZDĚK (2013).

### *Lachnaia (Barathraea) straminipennis* (Lucas, 1845)

(Figs 15–17, 118–125)

*Clythra (Lachnaea) straminipennis* Lucas, 1845: 122 (original description).

*Barathraea octomaculata* Pic, 1895c: 243 (original description), **syn. nov.**

*Lachnea (Barathraea) octopunctata*: PIC (1897c): 204 (incorrect subsequent spelling).

*Lachnea (Barathraea) separata* Pic, 1897c: 204 (original description), **syn. nov.**

**Type localities.** *Clythra straminipennis*: 'environs d'Oran' [Algeria]. *Barathraea octomaculata*: 'Tanger' [Morocco].

*Lachnea separata*: 'Andalousie, ? Sicilie' [patria falsa].

**Type material examined.** *Clythra straminipennis*: SYNTYPES: 1 ♂, '[blank small blue round label] // Museum Paris [p] / collection / Lucas [w, h] // SYNTYPE [r, p] // Lachnea / straminipennis / M... [partly illegible, w, h]' (MNHN – coll. generale); 1 ♂, '[blank small blue round label] // Museum Paris [p] / collection / Lucas [w, h] // SYNTYPE [r, p] // Clythra / straminipennis Lucas [w, h]' (MNHN – coll. generale).

*Barathraea octomaculata*: SYNTYPES: 1 ♂, 'Tanger [w, h] // Tanger / Maroc leg.? [w, h] // 8 maculata / Pic [w, h] // type [w, h] // Museum Paris [p] / collection / Pic [w, h] // LECTOTYPE [r, p] // 1 [w, h] // Lachnaia (Barathraea) / octomaculata Pic, 1895 / Tanger-Maroc, ♂ / LECTOTYPE - 2009 [w, h]' (MNHN – coll. Pic); 1 ♀, 'Tang [w, h]

// Tanger / Maroc leg.? [w, h] // type [w, h] // Museum Paris [p] / collection / Pic [w, h] // 8 maculata Pic [w, h] // PARALECTOTYPE [r, p] // Lachnaia (Barathraea) / octomaculata ♀ / Pic, 1898 [sic!] [h] / J. C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♂, 'Tanger [w, h] // Tanger / Maroc leg.? [w, h] // Barathraea / 8 maculata / Pic [w, h] // PARALECTOTYPE [r, p] // Bonne esp. diff. / de cerealis par / la pubescence du / corps d'après Bedel / qui vidit [w, h] // 2 [w, h] // Lachnaia (Barathraea) / octomaculata ♂ / Pic, 1895 [h] / J. C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♀, '80. [w, h] // Tanger [w, h] // type [w, h] // Barathraea / 8 maculata Pic [w, h]' (MNHN – coll. Pic).

*Lachnea separata*: SYNTYPES: 1 ♂, 'Andalus [w, h] // Andalousie / Espagne leg.? [w, h] // type [w, h] // LECTOTYPE [r, p] // v. separata Pic [b, h] // Museum Paris [p] / collection / Pic [w, h] // separata Pic [w, h] // 1 [w, h] // Lachnaia (Barathraea) / separata Pic, 1897 – ♂ / Andalousie-Espagne / LECTOTYPE - 2009 [w, h]' (MNHN – coll. Pic); 1 ♂, 'Andalus [w, h] // Andalousie / Espagne leg.? [w, h] // separata Pic [w, h] // PARALECTOTYPE [r, p] // ♂ [w, h] // Lachnaia (Barathraea) / separata ♂ / Pic, 1897 [h] / J. C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♂, 'Sicile [w, h] // Sicile / Italie - leg.? [w, h] // type [w, h] // PARALECTOTYPE [r, p] // separata Pic [w, h] // Museum Paris [p] / collection / Pic [w, h] // 3 [w, h] // Lachnaia (Barathraea) / separata ♂ / Pic, 1897 [h] / J. C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♀, 'Andalus [w, h] // Andalousie / Espagne – leg. ? [w, h] // Type [w, h] // PARALECTOTYPE [r, p] // 5 [w, h] // Lachnaia (Barathraea) / separata ♀ / PIC, 1897 [h] / J.C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♀, 'Andalus [w, h] // Andalousie / Espagne – leg. ? [w, h] // Type [w, h] // PARALECTOTYPE [r, p] // 6 [w, h] // Lachnaia (Barathraea) / separata ♀ / PIC, 1897 [h] / J.C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♀, 'Andalus [w, h] // Andalousie / Espagne – leg. ? [w, h] // Type [w, h] // PARALECTOTYPE [r, p] // 4 [w, h] // Lachnaia (Barathraea) / separata ♀ / PIC, 1897 [h] / J.C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic); 1 ♀, 'Andalus [w, h] // Andalousie / Espagne – leg. ? [w, h] // Type [w, h] // PARALECTOTYPE [r, p] // 8 [w, h] // Lachnaia (Barathraea) / separata ♀ / PIC, 1897 [h] / J.C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic).

**Distribution.** Algeria and Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** We studied the aedeagi of the type specimens of all three taxa and consider them similar with slight differences in the width of the apical margin, the depth of the anterolateral incisions, and the width of visible sclerites (Figs 120–125). Although available material is limited we treat *L. straminipennis* as a variable species forming local forms. Similarly as in *Tituboea paykullii* (Lacordaire, 1848) and *Clytra novempunctata*, the elytral surface of *L. straminipennis* can be either glabrous (described as *L. octomaculata*), with indistinct traces of setae, or glabrous (described as *L. separata*), or densely pubescent (described as *L. straminipennis*). Also the shape of clypeal excavation and of clypeal processes are variable throughout the populations (Figs 15–17).

*Lachnaia straminipennis* was described based on specimens with densely pubescent pronotum and elytra. The aedeagus has narrow apical margins, shallow anterolateral incisions and visible sclerites with long and narrow apical processes (see Figs 124–125, correctly pictured also by COBOS (1956)). The clypeal excavation is regularly concave, apical processes moderately long and wide (Fig. 15). The population with pubescent elytra seems to be restricted to northwestern Algeria and the adjacent part of Morocco.

The population described as *L. octomaculata* is characterized by the aedeagus with wider apical margins, deep and almost rectangular anterolateral incisions, wider and shorter sclerite processes (Figs 120–121), glabrous elytra, clypeal excavation regularly concave and clypeal processes short and wide (Fig. 16). This population covers most of Morocco.

The specimens described as *L. separata* have somewhat intermediate shape of the aedeagus and its sclerites between *L. straminipennis* and *L. octomaculata* (Figs 122–123), clypeal excavation with subtriangularly formed base and clypeal processes narrow but longer (Fig.

17). Elytra are glabrous in two syntypes and with indistinct traces of setae in the third syntype. The distribution of this population is unknown. PIC (1897c) described *Lachnea separata* from 'Andalousie, ? Sicilie'. We treat both localities as patriae falsae as this species occurs neither in Spain nor in Sicily. REGALIN & MEDVEDEV (2010b) mistakenly published it from Tunisia based on GRASSO (1963). Based on the accompanying picture of aedeagus, the distributional data of *L. separata* in GRASSO (1963) without any doubts refer to *L. padillai* Tomov, 1982.

The type specimens of both *Barathraea octomaculata* and *Lachnea separata* bear the labels 'lectotype' or 'paralectotype' added by J.-C. Bourdonné, but the lectotype designations have never been published. Thus we treat all the type specimens as syntypes.

### *Lachnaia (Lachnaia) paradoxa* (Olivier, 1808)

*Clytra paradoxa* Olivier, 1808: 844 (original description).

*Lachnaea paradoxa* var. *bistigmata* Pic, 1912c: 90 (original description).

*Lachnaea paradoxa* var. *kabyliana* Pic, 1912c: 90 (original description).

*Lachnaea paradoxa* var. *jurturensis* Pic, 1913b: 129 (original description).

**Type localities.** *Clytra paradoxa*: 'côte de Barbarie' [= North African coast from Morocco to Libya]. *Lachnaea paradoxa* var. *bistigmata*: 'Constantine' [Algeria]. *Lachnaea paradoxa* var. *kabyliana*: 'Kabylie, à Azazga' [Algeria]. *Lachnaea paradoxa* var. *jurturensis*: 'Djurjura: Aïtzer' [Algeria].

**Type material examined.** *Clytra paradoxa*: not examined.

*Lachnaea paradoxa* var. *bistigmata*: SYNTYPE: 1 ♂, 'Constant [b, p] // Constantine / Algérie leg.? [w, h] // Type [w, h] // paradoxa var. / bistigmata Pic / type [w, h] // TYPE [r, p] // Lachnaia (s. str.) / paradoxa ♂ / (Olivier, 1808) [h] / J. C. Bourdonné dét. [p] 2009 [w, h]' (MNHN – coll. Pic).

*Lachnaea paradoxa* var. *kabyliana*: SYNTYPE: 1 ♀, 'Azazga [w, h] // paradoxa var. / kabyliana Pic / type [w, h] (MNHN – coll. Pic).

*Lachnaea paradoxa* var. *jurturensis*: SYNTYPES: 1 ♀, 'Aïtzer' / ... 74 [partly illegible, w, h] // vicina [w, h] // v. jurturensis / type Pic [w, h] (MNHN – coll. Pic); 1 ♀, 'Aïtzer' / 1874 [w, h] // vicina [w, h] (MNHN – coll. Pic).

**Distribution.** Algeria, Egypt, France, Italy (Sicily), Libya, Portugal, Spain, Morocco, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** All three varieties described by PIC (1912c, 1913b) are confirmed as colour aberrations and synonyms of *Lachnaia paradoxa*.

### *Lachnaia (Lachnaia) peyerimhoffi* Kocher, 1953

*Lachnaea lucidicollis* var. *peyerimhoffi* Kocher, 1953: 86 (original description).

**Type locality.** 'tout le Grand et le Moyen-Atlas' [Morocco].

**Type material examined.** SYNTYPES: 1 ♂, 'TAQUELFT / G<sup>d</sup> Atlas (Kocher) [p] / 1100 m. 6. 48 [w, h] // [small blue rounded blank label] // cylindrica ? [w, h] // non! voir / p<sup>t</sup>. huméral [w, h] // [illegible, w, h] // var. / Peyerimhoffi [h] / Kocher det. [p] nov. [w, h]' (PJCP); 1 ♀, 'Taquelft / G<sup>d</sup> Atlas Mar. / 1100 m. / (Kocher) [w, h] // Peyerimhoffi [h] / Kocher det. [p] m. [w, h]" (MNHN – coll. Peyerimhoff).

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** *Lachnaea lucidicollis* var. *peyerimhoffi* was described in a publication containing also descriptions of subspecies (KOCHER 1953), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). However, it was validated with the original authorship in accordance with Article 45.6.4.1 of ICZN (1999) because CODINA PADILLA (1958) adopted *L. peyerimhoffi* as a species name.

The type locality was mentioned only superficially as ‘tout le Grand et le Moyen-Atlas’ [= whole High and Middle Atlas Mts.], however the specimens in PJCP and MNHN bear the labels with exact localities. Due to this ambiguity we tentatively treat only two specimens which bear original Kocher’s identification label as true syntypes.

### *Lachnaia (Lachnaia) pubescens* (Dufour, 1820)

*Clytra pubescens* Dufour, 1820: 307 (original description).

*Lachnaea pubescens* var. *subfasciata* Pic, 1897e: 197 (original description).

**Type localities.** *Clytra pubescens*: ‘in Hispaniae Galliaeque’ [= Spain: Galicia]. *Lachnaea pubescens* var. *subfasciata*: ‘France méridionale: Marseille’.

**Type material examined.** *Clytra pubescens*: not examined.

*Lachnaea pubescens* var. *subfasciata*: SYNTYPE: 1 ♀, ‘Marseille [w, p] // type [w, h] // v. *subfasciata* Pic [w, h] // Muséum Paris / Coll. M. Pic [w, p] // TYPE [r, p]’ (MNHN – coll. generale).

**Distribution.** France, Portugal, Spain (REGALIN & MEDVEDEV 2010b).

**Comments.** *Lachnaea pubescens* var. *subfasciata* is confirmed as a synonym of *L. pubescens*.

### *Lachnaia (Lachnaia) puncticollis* Chevrolat, 1840

*Lachnaia (Clythra) puncticollis* Chevrolat, 1840: 17 (original description).

*Lachnaea puncticollis* var. *uniustigmata* Pic, 1898: 74 (original description).

*Lachnaea curtipennis* Pic, 1936b: 214 (original description).

**Type localities.** *Lachnaia puncticollis*: ‘en Galice, dans la vallée de Lunade’ [= in . *Lachnaea puncticollis* var. *uniustigmata*: ‘Tunisie: Tebersouk’. *Lachnaea curtipennis*: ‘Maroc’.

**Type material examined.** *Lachnaia puncticollis*: not examined.

*Lachnaea puncticollis* var. *uniustigmata*: SYNTYPE: 1 ♂, ‘Teboursouk / 5-98 (Normand) [w, h] // Tabursuq (= Teboursouk) / 29 km S.E. de Béja / Tunisie – leg. Normand [w, h] // type [w, h] // v. *uniustigmata* / Pic [w, h] // TYPE [r, p] // *Lachnaea* (s. str.) / *puncticollis* ♂ / CHEVROLAT, 1840 [h] / J. C. Bourdonné dét. [p] 2009 [w, h]’ (MNHN – coll. Pic).

*Lachnaea curtipennis*: SYNTYPE: 1 ♀, ‘Kebbab / Le Bret [w, p] // ex Thery [w, h] // *Lachnaea / curtipennis* / n sp. [w, h]’ (MNHN – coll. Pic).

**Distribution.** Algeria, France, Libya, Morocco, Portugal, Spain, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** Both taxa described by PIC (1898, 1936b) are confirmed as synonyms of *L. puncticollis*.

### *Macrolenes dentipes* (Olivier, 1808)

*Clytra dentipes* Olivier, 1808: 857 (original description).

*Macrolenes ruficollis* var. *latemaculatus* Pic, 1897b: 165 (original description).

*Macrolenes dentipes* var. *binotaticollis* Pic, 1916a: 6 (original description).

**Type localities.** *Clytra dentipes*: ‘midi de l’Europe, sur la côte de Barbarie, dans les îles de l’Archipel’. *Macrolenes ruficollis* var. *latemaculatus*: ‘Tebessa’ [Algeria]. *Macrolenes dentipes* var. *binotaticollis*: ‘France Méridionale’.

**Type material examined.** *Clytra dentipes*: not examined.

*Macrolenes ruficollis* var. *latemaculatus*: SYNTYPES: 1 ♂, ‘Tebessa / ... [partly illegible, w, h] // type [w, h] // Muséum Paris / Coll. M. Pic [w, p] // TYPE [r, p] // v. *latemaculatus* Pic [b, h]’ (MNHN – coll. generale); 1 ♀, ‘type [w, h] // Muséum Paris / Coll. M. Pic [w, p] // TYPE [r, p] // v. *latemaculatus* / Pic [w, h]’ (MNHN – coll. generale).

*Macrolenes dentipes* var. *binotaticollis*: SYNTYPE: 1 ♂, ‘Ollioules [w, h] // type [w, h] // Muséum Paris / Coll. M. Pic [w, p] // TYPE [r, p] // v. binotaticollis Pic [b, h] // v. binotaticollis / Pic [w, h]’ (MNHN – coll. Pic).

**Distribution.** Mediterranean species (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** Both varieties described by PIC (1897b, 1916a) are confirmed as colour aberrations and synonyms of *M. dentipes*.

### *Otiocephala opaca* (Rosenhauer, 1856)

*Clythra opaca* Rosenhauer, 1856: 308 (original description).

*Otiocephala opaca* var. *rufolimbata* PIC, 1897d: 135 (original description).

*Cyaniris* (*Otiocephala*) *opaca* var. *carnerii* PIC, 1920b: 21 (original description).

*Otiocephala opaca* var. *latecyanescens* PIC, 1946: 3 (original description).

**Type localities.** *Clythra opaca*: ‘Algeciras’ [Spain]. *Otiocephala opaca* var. *rufolimbata*: ‘Mecheria’ [Algeria]. *Cyaniris opaca* var. *carnerii*: ‘Egypte: Mariout’. *Otiocephala opaca* var. *latecyanescens*: ‘Maroc’ [‘Maghraoua’ based on the locality label].

**Type material examined.** *Clythra opaca*: SYNTYPES: 1 ♀, ‘opaca Rsh. / Algeciras [w, h] // Thiere / Andalusiens / Rosenhauer [w, p] // TYPE [r, p]’ (MNHN – coll. Lefèvre); 1 ♂, ‘Thiere / Andalusiens / Rosenhauer [w, p] // TYPE [r, p]’ (MNHN – coll. Lefèvre).

*Otiocephala opaca* var. *rufolimbata*: HOLOTYPE: 1 ♀, ‘MECHERIA / Mai 1896 / Dr. A. Chobaut [w, p] // Otiocephala / rufolimbata / Chob. [w, h] // Otiocephala / Warioni / v. rufolimbata / Chob. [w, h]’ (MNHN – coll. Chobaut).

*Cyaniris opaca* var. *carnerii*: SYNTYPE: 1 ♂, ‘12 [w, h] // Mariout / 21/3/1920 [w, h] // type [w, h] // v. Carnerii / PIC [w, h]’ (MNHN – coll. PIC). The photos of additional two syntypes from GMNH were provided by the curator Maria Dimaki: 1 ♂, ‘♂ [w, p] // Mariout / 21 III 1920 [w, h]’ (GMNH); 1 ♀, ‘♀ [w, p] // Mariout / 21 III 1920 [w, h]’ (GMNH).

*Otiocephala opaca* var. *latecyanescens*: SYNTYPE: 1 ♀, ‘Maghraoua / 2000 m ... [partly illegible, w, h] // Otiocephala / sp? / d. Peyh. [w, h] // [illegible, w, h] // O. opaca v. / latecyanescens / mihi [w, h] // TYPE [r, h] // Ot. opaca v. / latecyanescens PIC [h] / Dét. P. Rotrou – Taza [w, p]’ (MNHN – coll. Rotrou).

**Distribution.** Algeria, Egypt, Morocco, Spain (REGALIN & MEDVEDEV 2010b).

**Comments.** The genus *Otiocephala* badly needs a modern and comprehensive revision. We are almost sure that all three varieties described by PIC (1897d, 1920b, 1946) are not conspecific with *O. opaca* but provisionally we leave them in its synonymy in accordance with the Palaearctic catalogue (REGALIN & MEDVEDEV 2010b) till the comprehensive revision of the genus is done.

PIC (1920b) stated ‘coll. PIC et Carneri’ as the deposition of the type specimens of *Cyaniris opaca* var. *carnerii*. In his collection in MNHN we found one male syntype. Additional two syntypes (male and female) are deposited in the collection of A. Carneri which is now part of the collection of P. G. Moazzo in GMNH. One of us (RR) visited this museum in 2002 and studied both specimens. Curator Maria Dimaki also sent us simple photos including the labels. Although both specimens lack the original PIC’s identification label, they were collected in Mariout on the same date, ‘21.iii.1920’, as the syntype in MNHN. As the deposition in Carneri’s collection was explicitly stated in the original description we treat both specimens as syntypes of *Cyaniris opaca* var. *carnerii*.

### *Otiocephala rotroui* (PIC, 1934)

*Cyaniris* (*Otiocephala*) *rotroui* PIC, 1934: 26 (original description).

**Type locality.** ‘Maroc: Bel Farah’.

**Type material examined.** SYNTYPES: 1 ♂, ‘Bel Farah / 9/4/32 [w, h] // Nov. Sp [r, h] // ♀ in coll / Rotrou [w, h] // Oticephala / Rotroui n sp [w, h]’ (MNHN – coll. Pic); 1 ♂, ‘Bel Farah / 9/4/32 [w, h] // Oticephala / Rotroui n sp [w, h] // TYPE [pink label, h]’ (MNHN – coll. Rotrou); 2 ♂♂ 1 ♀, ‘Bel Farah / 9/4/32 [w, h] // TYPE [pink label, h]’ (MNHN – coll. Rotrou); 1 ♂, ‘Bel Farah / 9/4/32 [w, h] // Maroc / central [w, h] // Cyaniris / rotroui Pic / Ech. 1934, 26 / CoType ♂ [w, h]’ (MNHN – coll. Peyerimhoff); 1 ♂, ‘Bel Farah / 9/4/32 [w, h] // Cyaniris / rotroui Pic / Echange 1934, 24 / Co-Type ♀ [sic!, w, h]’ (MNHN – coll. Peyerimhoff).

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** We confirm *O. rotroui* as a valid species.

### *Otiothraea rotroui* (Kocher, 1961) comb. nov.

(Figs 18, 126–127)

*Chilotoma rotroui* Kocher, 1961: 238 (original description).

**Type locality.** Morocco: ‘Moyen-Atlas septentrional au S. de Taza (entre Bechyne et Meghraoua)’.

**Type material examined.** HOLOTYPE: ♂, ‘Entre Bechyne / et Meghraoua / 10.6.48 [w, h] // Chilotoma / Rotroui m. [h] / Kocher det. [p] 60 [h] / HOLOTYPE ♂ [red letters, w, h] // HOLOTYPE [r, p]’ (PJCP). PARATYPE: ♀, ‘Entre Bechyne / et Meghraoua / 10.6.48 [w, h] // MUSEUM PARIS / 1971 / Coll. P. ROTROU [w, p] // ALLOTYPE [r, p] // Chilotoma / Rotroui m. [h] / Kocher det. [p] 60 [h] / ALLOTYPE ♀ [red letters, w, h]’ (MNHN – coll. Rotrou).

**Additional material examined.** MOROCCO: Entre Bechyne et Meghraoua, 10.vi.1948, 2 ♂♂, P. Rotrou leg. (MNHN – coll. Peyerimhoff).

**Distribution.** Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** In habitus, *O. rotroui* is very similar to *O. riffensis* Romantsov, 2011 (cf. Figs 126–129). Both species differ in the colouration of pronotum (*O. riffensis* has black anterior and posterior margins, *O. rotroui* has black anterior and posterior margins connected with two thin longitudinal stripes) and in the shape of clypeal incision (quadrangular in *O. riffensis*, subtriangular in *O. rotroui*, cf. Figs 127, 129).

Two specimens of *O. rotroui* found in Peyerimhoff’s collection evidently originate from the same series as the two type specimens. Nevertheless, KOCHER (1961) explicitly described this species from ‘un couple’, thus, both males from Peyerimhoff’s collection do not belong to the type material.

### *Smaragdina affinis manicata* (Lacordaire, 1848)

*Clythra* (*Gynandrophthalma*) *affinis* var. *manicata* Lacordaire, 1848: 304 (original description).

*Gynandrophthalma* *manicata* Lefèvre, 1872: 341 (original description), **syn. nov.**

*Chilotoma reyi* var. *lucidipes* Pic, 1897c: 206 (original description), **syn. nov.**

**Type localities.** *Clythra manicata*: ‘Espagne’. *Gynandrophthalma manicata*: ‘Espagne: Galice; Castille’ [Spain: Galicia, Castile]. *Chilotoma reyi* var. *lucidipes*: ‘Portugal’.

**Type material examined.** *Clythra manicata*: Not examined.

*Gynandrophthalma manicata*: SYNTYPES: 1 ♀ (on the same pin), ‘Galice [w, h] // Type [w, p] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // TYPE [r, p] // manicata / Lefèv. [box label, w, h]’ (MNHN – coll. Lefèvre).

*Chilotoma reyi* var. *lucidipes*: SYNTYPES: 1 ♂ 1 ♀ (on the same pin), ‘Gynandroph. / thoracica / Portugal [w, h] // type [w, h] // v. lucidipes / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Portugal and Spain (REGALIN & MEDVEDEV 2010b).

**Comments.** In many cases LACORDAIRE (1848) when describing varieties gave them a one-letter name (e.g. Var. A) and simultaneously mentioned its full name either with the complete

reference or mentioned it in the text. Such names are currently accepted as validly described as the name is accompanied with the description (e.g. BEZDĚK & KANTNER 2010, REGALIN & MEDVEDEV 2010a).

The variety *manicata* Lacordaire, 1848 was first mentioned in the text under the variety A of *Clythra (Gynandrophthalma) affinis* and was based on one female from Reiche's collection (Espagne, Ghilliani leg.). LEFÈVRE (1872) did not accept Lacordaire's description and provided his own. Although in the text he was using only species names without 'sp. n.' or 'm.', in index (p. 394) the name is listed as '*manicata* Lef' what, in our opinion, clearly indicates Lefèvre's intention to describe it as new to science. Also, it is necessary to note that LEFÈVRE (1872) described *G. manicata* from different specimens than LACORDAIRE (1848). In sum, *G. manicata* Lefèvre, 1872 is an available name and has to be treated as a junior subjective synonym and a primary homonym of *Clythra (Gynandrophthalma) affinis* var. *manicata* Lacordaire, 1848.

*Chilotoma reyi* var. *lucidipes* was treated as a simple synonym of *Smaragdina reyi* (Brisout de Barneville, 1866) (e.g. REGALIN & MEDVEDEV 2010b). However, examination of two syntypes of var. *lucidipes* proved that this variety has to be synonymized with *Smaragdina affinis manicata* (Lacordaire, 1848).

### *Smaragdina flavigollis* (Charpentier, 1825)

(Figs 130–132)

*Clythra flavigollis* Charpentier, 1825: 236 (original description).

*Gynandrophthalma amasina* Pic, 1897e: 197 (original description).

**Type localities.** *Clythra flavigollis*: 'Austriae alpibus'. *Gynandrophthalma amasina*: 'Turquie d'Asie: Amasic'.

**Type material examined.** *Clythra flavigollis*: not examined.

*Gynandrophthalma amasina*: SYNTYPES: 1 ♀, 'type [w, h] // Amasie [w, h] // Museum Paris [p] / Coll. Pic [w, h] // TYPE [r, p] // amasina / Pic [w, h]' (MNHN – coll. Pic); 1 ♂, 'Gynandrophthalma flavigollis / Amas [w, h] // type [w, h] // Museum Paris [p] / Collection / Pic [w, h] // TYPE [r, p]' (MNHN – coll. Pic).

**Distribution.** Most European countries and Turkey (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** Although *S. amasina* was catalogued as a valid species by REGALIN & MEDVEDEV (2010b), it was already synonymized with *S. flavigollis* by KASAP (1987). We also had the possibility to examine the syntype of *Gynandrophthalma flavigollis* var. *picticollis* Weise, 1889 deposited in ZMHB. As both *S. amasina* and *S. flavigollis* var. *picticollis* were described from Amasya and have the same colouration of pronotum (with black spot in the middle of posterior margin) it is evident that both taxa refer to the same population. KASAP (1987) mentioned that colouration of pronotum and coxae are variable characters in Turkish *S. flavigollis*. On the other hand, all European *S. flavigollis* that we examined have pronotum completely orange. As a result we tentatively respect the synonymy of *S. amasina* and *S. flavigollis* var. *picticollis* with *S. flavigollis* made by KASAP (1987). However, the specimens of *S. flavigollis* from various regions should be revised as we cannot exclude the possibility that they could also represent an eastern subspecies or even species. If the population from Amasya is separated from *S. flavigollis* in the future, the name *S. picticollis* will have to be used with *S. amasina* as its synonym.

### *Smaragdina graeca* (Kraatz, 1872)

*Gynandrophthalma graeca* Kraatz, 1872: 217 (original description).

*Gynandrophthalma graeca* Lefèvre, 1872: 346 (original description, primary homonym).

*Gynandrophthalma brucki* Pic, 1897a: 85 (new substitute name for *Gynandrophthalma graeca* Lefèvre, 1872).

**Type localities.** *Gynandrophthalma graeca* Kraatz: ‘Griechenland’. *Gynandrophthalma graeca* Lefèvre: ‘Grèce: au mont Parnès’ [= Greece, Parnitha Mt.].

**Type material examined.** *Gynandrophthalma graeca* Kraatz: Not examined.

*Gynandrophthalma graeca* Lefèvre: SYNTYPE: 1 ♀, ‘Grèce / Mt. Parnès [w, h] // Type [p] ♀ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // Muséum Paris / Coll. Oberthur / ex. Lefèvre [w, h] // TYPE [r, p] // SINTYPUS / R. Regalin / vid. 2006 [r, h]’ (MNHN – coll. Lefèvre).

**Additional material examined.** *Gynandrophthalma brucki*: 1 ♀, ‘Apfelbeck / Jannina / Dr. Christos [w, p] // Muséum Paris / Coll. M. Pic [w, p] // TYPE [r, p] // Brucki Pic [w, h]’ and 2 ♀♀ (on the same pin), ‘Muséum Paris / Coll. M. Pic [w, p] // TYPE [r, p] // Brucki Pic / graeca Lef. [w, h]’.

**Distribution.** Bulgaria, Greece, Macedonia, Serbia (REGALIN & MEDVEDEV 2010b), Turkey (ÖZDIKME 2011).

**Comments.** *Smaragdina graeca* has distinct sexual dimorphism: males have pronotum red with wide median black stripe while females have pronotum uniformly red. By coincidence, it was described twice in one year under the same name. Priority is given to *Gynandrophthalma graeca* Kraatz, 1872 (published in November 1872 as written on the content pages of the respective volume) over *Gynandrophthalma graeca* Lefèvre, 1872 (published on 31<sup>st</sup> December 1872, based on LEFÈVRE (1885)). KRAATZ (1872) described the taxon based on a male. Although he had also a female at disposal he associated it with male with some doubts. On the contrary, LEFÈVRE (1872) described the taxon from females only. The above mentioned sexual dimorphism probably led PIC (1897a) to treat both taxa as separate species and to propose a new substitute name *Gynandrophthalma brucki* for Lefèvre’s species.

PIC’s collection in MNHN contains also three females labelled as type specimens of *Gynandrophthalma brucki* (see additional material examined). We treat these specimens as invalid types, because *Gynandrophthalma brucki* was without any doubts proposed as a new substitute name for Lefèvre’s *G. graeca* and thus both names are objective synonyms and have the same name bearing type, in agreement with Article 72.7 (ICZN 1999).

### *Smaragdina pallescens* (Pic, 1895)

*Gynandrophthalma pallescens* Pic, 1895a: 81 (original description).

**Type locality.** ‘Laghouat’ after lectotype designation; originally, ‘Laghouat et Tébessa’ [Algeria].

**Type material examined.** LECTOTYPE (designated by RAPILLY 1983a): ♂, ‘Laghouat [w, h] // G. pallescens Pic / n sp. [w, h] // TYPE [r, p] // LECTOTYPE [r, p] // Museum Paris / Coll. M. Pic [w, p] // Smaragdina / pallescens (Pic) [h] / M Rapilly dét. 19 [p] 83 [w, h]’ (MNHN – coll. generale). PARALECTOTYPES: 1 ♂, ‘type [w, h] // Laghouat [w, h] // pres immaculata / Lac du Sénégal [w, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p] // PARALECTO-TYPE [r, p]’ (MNHN – coll. generale); 1 ♀, ‘type [w, h] // Tebessa [w, h] // ♀ [w, h] // pres G. brevicornis Lef. / esp. rem par la coloration [w, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p] // PARALECTOTYPE [r, p]’ (MNHN – coll. generale).

**Distribution.** Algeria, Israel, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** We confirm *S. pallescens* as valid species.

### *Smaragdina persica* (Pic, 1911)

(Figs 133–136)

*Gynandrophthalma persica* Pic, 1911: 107 (original description).

*Smaragdina mirabilis* Romantsov, 2012: 64 (original description), **syn. nov.**

**Type localities.** *Gynandrophthalma persica*: ‘Perse: Luristan’ [= Iran, Lorestan province]. *Smaragdina mirabilis*: ‘S Iran, Kohkiloye-va-Boyerhamad Province, Yasuj area, 10 SE Sepidar’.

**Type material examined.** *Gynandrophthalma persica*: SYNTYPE: ♀, ‘v. Bodemeyer / Persien / Luristan [w, p] // type [w, h] // TYPE [r, p] // Persica / Pic [w, h] // Museum Paris / Coll. M. Pic [w, p] // Smaragdina / persica (Pic) [h] / M Rapilly dét. 19 [p] 83 [w, h]’ (MNHN – coll. generale).

*Smaragdina mirabilis*: Not examined. Photos of the holotype and the paratype (Figs 135–136) were sent to us by Pavel Romantsov.

**Additional material examined.** IRAN: FARS PROVINCE: Dash-e Arzhan env., 29°34'02"N 51°56'44"E, 2100–2300 m, 29.iv.2010, 1 ♂, A. Weigel leg. (FFCJ). KOHGİRÜYE-O-BÜYER-AHMAD PROVINCE: Sisakht, Dena Mt., Kuh-Gol vall., 30°84'N, 51°53'E, 2498 m, 27.v.2009, 1 ♂ 1 ♀, J. Voříšek leg. (JBCB). LORESTAN PROVINCE: 5–10 km SW of Dorud, 1400 m, 9.–10.v.2002, 3 ♂♂ 1 ♀, G. Sama leg. (RRCM).

**Distribution.** Iran (REGALIN & MEDVEDEV 2010b). The record from Turkey (MEDVEDEV 1975) probably refers to some other species (see Comments).

**Comments.** Examination of the type specimen (Figs 133–134) of *Gynandrophthalma persica* in Pic’s collection without any doubts shows that this species was misidentified in all recent publications and keys (e.g. ERBER & MEDVEDEV 1999, MEDVEDEV & KATBEH-BADER 2002, LOPATIN 2002, WARCHAŁOWSKI 2010, ROMANTSOV 2012). Moreover, *Smaragdina mirabilis* (Figs 135–136) is proposed as a new synonym of *S. persica* as there is no difference between the type specimens of both taxa. The identity of the taxon misidentified as *S. persica* in the above mentioned publications is unclear and requires further study.

### *Smaragdina scutellaris* (Lefèvre, 1872)

(Figs 137–144)

*Gynandrophthalma scutellaris* Lefèvre, 1872: 335 (original description).

*Gynandrophthalma scutellaris* var. *latemaculata* Pic, 1897c: 205 (original description).

*Smaragdina (Calyptrorrhina) furthi* Erber & Medvedev, 1999: 3 (original description), **syn. nov.**

*Smaragdina jordanica* Medvedev & Katbeh-Bader, 2002: 255 (original description), **syn. nov.**

**Type localities.** *Gynandrophthalma scutellaris*: ‘Syrie, Palestine, Jérusalem’ [lectotype from ‘Syrie’]. *Gynandrophthalma scutellaris* var. *latemaculata*: ‘Liban, Akbès’ [= Turkey, near İskenderun]. *Smaragdina furthi*: ‘Israel, 20 km NE Qiryat, Shemonah Hermon Cableway’. *Smaragdina jordanica*: ‘Jordan, Al Jubayhah’.

**Type material examined.** *Gynandrophthalma scutellaris*: LECTOTYPE (designated by RAPILLY 1983a): ♂, ‘Syrie [w, h] // Type [w, p] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // Muséum Paris [p] / Coll. Lefèvre / scutellaris [w, h] // LECTOTYPE [r, p] // Smaragdina / scutellaris (Lefèvre) [h] / M. Rapilly dét. 19 [p] 83 [w, h]’ (MNHN – coll. generale). PARALECTOTYPE: ♂, ‘Syrie [w, h] // Type [w, p] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // Muséum Paris [p] / Coll. Lefèvre / scutellaris [w, h] // PARALECTOTYPE [r, p]’ (MNHN – coll. generale).

*Gynandrophthalma scutellaris* var. *latemaculata*: SYNTYPES: 1 ♂ 1 ♀, ‘Ab. d. / Perrin / Liban [w, h] // scutellaris / type. [b, h] // type [w, h] // TYPE [r, p] // Museum Paris [w, p]’ (MNHN – coll. generale); 1 ♀, ‘Akbès [w, h] // type [w, h] // v. latemaculata / Pic [w, h] // TYPE [r, p] // Museum Paris [w, p]’ (MNHN – coll. generale).

*Smaragdina furthi*: HOLOTYPE: ♂, ‘ISRAEL 33°18'35"46' / 16.V.96 20km NE Qiryat / Shemonah Hermon / Cableway / Leg.: HAUSER ISR-her [w, p] // HOLOTYPE [p] / Smaragdina / furthi sp. n. [h] / L. Medvedev det. 19 [p] 98 [r, h]’ (SMNS).

*Smaragdina jordanica*: HOLOTYPE: ♂, ‘Al Jubayhah, Jordan / April 2000 / On leaves of fruit trees / Coll. A. Katbeh [w, p] // Holotypus / Smaragdina / jordanica / L. Medv. & K-B [r, p]’ (NHMB). PARATYPES: 2 ♂♂ 1 ♀, ‘Al Jubayhah,

Jordan / April 2000 / On leaves of fruit trees / Coll. A. Katbeh [w, p] // Paratype / *Smaragdina jordanica* / L. Medv. & K-B [r, p] // Dono L. Medvedev / XI. 2002 [w, p]' (1 ♂ in MSNG, 1 ♂ 1 ♀ in RRCM).

**Distribution.** Iran, Israel, Iraq, Jordan, Lebanon, Syria, Turkey (REGALIN & MEDVEDEV 2010b).

**Comments.** The punctuation of pronotum in *S. scutellaris* is variable. Often the specimens with very fine and sparse pronotal punctures and thus shinier pronotum, as well as specimens with denser and larger punctures can be found within one population. The metallic blue pattern on elytra is also very variable. While the type specimens of *Gynandrophthalma scutellaris* have wedge-shaped elytral pattern (Fig. 137), *G. scutellaris* var. *latemaculata* has the pattern largely extending behind the midlength of the elytra (Fig. 139) similarly to the holotype *S. furthi* which has also an additional humeral spot and larger punctuation on pronotum (Fig. 143). The only character separating *S. jordanica* (Fig. 141) from *S. scutellaris* given in the original description (MEDVEDEV & KATBEH-BADER 2002) is the first protarsomere in male being as long as the next two tarsomeres combined, while shorter in *S. scutellaris*. Comparison of the type specimens of both, *S. jordanica* and *S. scutellaris*, showed no difference in the length of the first protarsomere. Based on the above mentioned facts, *Gynandrophthalma scutellaris* var. *latemaculata*, *S. furthi*, and *S. jordanica* represent just different colour forms of one species and are synonymized here with *S. scutellaris*.

### *Smaragdina thoracica thoracica* (Fischer von Waldheim, 1842)

*Coptocephala thoracica* Fischer von Waldheim, 1842: 20 (original description).

*Coptocephala thoracica* var. *bijuncta* Pic, 1906b: 42 (original description).

*Cyaniris (Gynandrophthalma) thoracica* var. *latejuncta* Pic, 1914c: 18 (original description).

*Cyaniris thoracica* var. *subjuncta* Pic, 1914d: 139 (original description).

**Type localities.** *Coptocephala thoracica*: ‘Songoria Rossica’ [= Russian Dzhungaria]. *Coptocephala thoracica* var. *bijuncta*: ‘Turkestan’. *Cyaniris thoracica* var. *latejuncta*: ‘Dshungarie; Borochoro’ [= China, Xinjiang, Boro-choro Mts.]. *Cyaniris thoracica* var. *subjuncta*: ‘monts Alexandre’ [= Kyrgyzstan, Kyrgyz ridge].

**Type material examined.** *Coptocephala thoracica*: Not examined.

*Coptocephala thoracica* var. *bijuncta*: SYNTYPE: 1 ♂, ‘Alai [w, h] // type. [w, h] // v. *bijuncta* Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Cyaniris thoracica* var. *latejuncta*: SYNTYPE: 1 ♀, ‘DSUNGARIA / Borochoro-Gb. / Coll. Hauser 6.05. [w, p] // *Coptocephala / thoracica* var [w, h] // v. *latejuncta* / Pic type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Cyaniris thoracica* var. *subjuncta*: SYNTYPE: 1 ♂, ‘Alexand / Gebirg / Koltze [w, h] // *Gynandrophthalma* / II notata Wse. / (Heyden) [w, h] // Var pres / hilaris [w, h] // type [w, h] // v. *subjuncta* / mihi [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** China (Xinjiang), Kazakhstan, Kyrgyzstan, Tajikistan (REGALIN & MEDVEDEV 2010b).

**Comments.** All three varieties described by PIC (1906b, 1914c,d) are confirmed as colour aberrations and synonyms of *S. thoracica thoracica*.

### *Smaragdina vaulogeri* (Pic, 1894)

*Gynandrophthalma vaulogeri* Pic, 1895b: cclxxxv (original description).

**Type locality.** ‘Syria: Akbès’ [= Turkey, near İskenderun].

**Type material examined.** LECTOTYPE (designated by RAPILLY 1983a): ♂, ‘SYRIE / AMANUS / C.D. 1891 [w, p] // type [w, h] // djebellina [w, h] // TYPE [r, p] // Museum Paris / Coll. M. Pic [w, p] // Vaulogeri Pic / type verus [w, h]

// Vaulogeri Pic / type verus! / (subtus nigro-coerulea) [w, h] // LECTOTYPE [r, p] // Smaragdina / vaulogeri (Pic) [h] / M. Rapilly dét. 19 [p] 83 [w, h]' (MNHN – coll. generale). PARALECTOTYPES: 1 ♀, 'type [w, h] // Vaulogeri / ♀ [w, h] // Gynandrophthalma / Vaulogeri Pic / differé de judaica / Lef. [w, h] // Museum Paris / Coll. M. Pic [w, p] // PARALECTOTYPE [r, p]' (MNHN – coll. generale); 1 ♂, 'type [w, h] // SYRIE / AMANUS / C.D. 1891 [w, p] // G. Vaulogeri Pic [w, h] // PARALECTOTYPE [r, p] // Muséum Paris / Coll. M. Pic [w, p] // Smaragdina / vaulogeri (Pic) / det. A. Warchałowski [w, p]' (MNHN – coll. generale).

**Distribution.** Turkey, Syria (REGALIN & MEDVEDEV 2010b), Iran (GHAHARI & HAWKESWOOD 2011).

**Comments.** Confirmed here as a valid species. The year of publication of *G. vaulogeri* is sometimes listed as 1895 (e.g. REGALIN & MEDVEDEV 2010b) while other authors used year 1894 (RAPILLY 1983a; WARCHAŁOWSKI 2003, 2010). As found by EVENHUIS (2002), the bi-monthly version of the *Bulletin de la Société Entomologique de France* with the description of *G. vaulogeri* was issued on 31<sup>st</sup> December 1894, while the quarterly version on 30<sup>th</sup> May 1895. Hence, the year of publication is here fixed to 1894.

### *Smaragdina xanthaspis* (Germar, 1824)

*Clytra xanthaspis* Germar, 1824: 547 (original description).

*Cyaniris bicoloripes* Pic, 1922: 27 (original description), **syn. nov.**

**Type localities.** *Clytra xanthaspis*: 'Germania'. *Cyaniris bicoloripes*: 'Angora' [= Turkey, Ankara].

**Type material examined.** *Clytra xanthaspis*: Not examined.

*Cyaniris bicoloripes*: SYNTYPES: ♀, 'Angora [w, h] // type [w, h] // bicoloripes / n sp [w, h] // TYPE [r, p]' (MNHN – coll. Pic); ♂, 'Angora [w, h] // type [w, h]' (MNHN – coll. Pic).

**Distribution.** Europe, Turkey, Caucasus, Near East (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** *Cyaniris bicoloripes* was listed as a suspected synonym of *S. xanthaspis* in the Palaearctic catalogue (REGALIN & MEDVEDEV 2010b). After examination of two syntypes of *C. bicoloripes* we can confirm that both species are conspecific and thus *C. bicoloripes* is synonymized here with *S. xanthaspis*.

### *Tituboea arabica* (Olivier, 1808)

(Figs 19–21, 145–154)

*Clytra arabica* Olivier, 1808: 860 (original description).

*Titubaea mokattamensis* Pic, 1912b: 73 (original description), **syn. nov.**

*Titubaea subabbreviata* Pic, 1912b: 73 (original description), **syn. nov.**

*Titubaea subabbreviata* var. *notaticeps* Pic, 1912b: 73 (original description), **syn. nov.**

*Titubaea subabbreviata* var. *robustior* Pic, 1912b: 73 (original description), **syn. nov.**

*Titubaea subabbreviata* var. *bisbinotata* Pic, 1912c: 90 (original description), **syn. nov.**

**Type localities.** *Clytra arabica*: 'petit désert de l'Arabie, près de l'Euphrate'. *Tituboea mokattamensis*: 'Mokattam, près Le Caire' [Egypt]. *Titubaea subabbreviata*: 'Region des Pyramides' [Egypt]. *Tituboea subabbreviata* var. *notaticeps*: 'Region des Pyramides' [Egypt]. *Tituboea subabbreviata* var. *robustior*: 'Egypte'. *Tituboea subabbreviata* var. *bisbinotata*: 'Egypte'.

**Type material examined.** *Clytra arabica*: SYNTYPE: unsexed (damaged), 'E. Coll: / Chev' / [w, p] // Type [round label with red collar, w, p] // 167 [b, p] // Titubaea / arabica ♂ / Ol. type [w, h] // Arabie bo... [partly illegible, w, h] // 67-56 [w, p]' (BMNH).

*Tituboea mokattamensis*: SYNTYPES: ♀, ‘Mokattam / ... [partly illegible, w, h] // arabica [b, h] // Titubaea [w, h] // 26 [w, h] // arabica / ex Vauloger [w, h] // arabica ? [w, h] // Type [w, h] // communiqué / coll. Pic [b, h] // TYPE [r, p] // MUSÉUM PARIS / 1958 / COLL. M. PIC [w, p] // Antipa / Titubaea / mokattamensis Pic [w, h]’ (MNHN – coll. Pic); ♀, ‘Mokattam / ... [partly illegible, w, h] // arabica [b, h] // mokattamensis / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Tituboea subabbreviata*: SYNTYPES: ♂, ‘Egypte / Pyram. [w, h] // Type [w, h] // TYPE [r, p] // MUSÉUM PARIS / 1958 / COLL. M. PIC [w, p] // subabbreviata / Pic [w, h]’ (MNHN – coll. Pic); ♂, ‘communiqué / coll. Pic [b, h] // Tituboea / subabbreviata / Pic [w, h] // Egypte / Pyram. [w, h] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); ♂, ‘Titubaea / arabica Ol. [w, h] // TYPE [r, p] // Type [w, h] // Aegyptus / Reitter. [w, p]’ (MNHN – coll. Pic).

*Tituboea subabbreviata* var. *notaticeps*: SYNTYPE: ♂, ‘Egypte / Pyram. [w, h] // Type. [w, h] // v. notaticeps / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Tituboea subabbreviata* var. *robustior*: HOLOTYPE: ♂, ‘W. HoH / 1908 [b, h] // 436 [w, h] // T. arabica Ol. / (ex. Tenante) [w, h] // type [w, h] // subabbreviata / v. robustior Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Tituboea subabbreviata* var. *bisbinotata*: SYNTYPE: ♂, ‘Coll. H [r, h] // EGYPTE [w, p] // Titubaea / arabica / rare [w, h] // Mokattam / juin [w, h] // Type [w, h] // subabbreviata / v. bisbinotata / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Additional material examined.** **EGYPT:** Helwan, 25.v.1995, 1 ♂, A. El-Torky leg. (JBCB). **IRAN:** Khorasan, 14 km S of Gonabad, 1350 m, 26.v.2008, 4 ♂♂, Mühlé leg. (JBCB); Fars prov., Abadeh, vi-vii.1916, 4 ♂♂, P. Paschen leg. (BMNH). **JORDAN:** Wadi Ghuba, 9.v.1995, 1 ♂, P. Pucholt leg. (JBCB). **SAUDI ARABIA:** Sihal Matarin, 24.vi.1931, 1 ♂, Philby leg. (BMNH). **SYRIA:** Rasafah (Raqqa), 35°38'N 38°46'E, 310 m, 16.vi.1998, 2 ♂♂ 1 ♀, J. Šobotník leg. (JBCB); Homs prov., 30 km N of Palmyra, 28.v.2010, 1 ♂, A. Kotán, E. Miszei, T. Németh & Rahmé N. leg. (HNHM); Homs prov., Palmyra env., 6.vi.2000, 1 ♀, K. Deneš leg. (FKCC). **TURKEY:** Nemrut Dagi Mts., Karadut, 8.vii.1996, 1 ♀, J. Hájek leg. (JBCB); Nemrut Dagi Mts., Karadut, 9.–12.vii.1996, 2 ♂♂, F. Kantner leg. (FKCC).

**Distribution.** Egypt (incl. Sinai), Iran, Iraq, Israel, Jordan, Saudi Arabia, Yemen (REGALIN & MEDVEDEV 2010b), Turkey (ÖZDIKMEN & OKUTANER 2007). New record for Syria.

**Comments.** Comparison of the available type specimens showed no important morphological differences, thus, *T. mokattamensis*, *T. subabbreviata*, *T. subabbreviata* var. *notaticeps* and *T. subabbreviata* var. *bisbinotata* are synonymized here with *T. arabica*.

In colouration, *T. arabica* is one of very variable *Tituboea* species (see Figs 145–154). Head is orange, often with black stripe between eyes or with frons and vertex black, pronotum orange, rarely with two posterolateral irregular black spots, each elytron usually with four black spots (as two pairs), anterior pair often smaller or rarely absent, posterior pair often enlarged and connected. Legs are completely orange, rarely procoxae are black or partly black. Underside is rarely completely orange, usually bicolourous with lateral parts of metaventrite and abdominal ventrites black, less often metaventrite black and abdomen black except for apical part.

ALFIERI (1976) mentioned the deposition of the type material of var. *bisbinotata* in the G. Frey collection (now in NHMB). According to Bohrer (pers. comm. 2014) no type specimen of var. *bisbinotata* was found in the Frey collection.

### *Tituboea atriceps* Pic, 1924, stat. nov.

(Figs 22–25, 155–164)

*Titubaea minor* var. *atriceps* Pic, 1924a: 22 (original description).

*Antipa* (*Titubaea*) *minor* var. *decemmaculata* Pic, 1937: 13 (original description), **syn. nov.**

*Antipa israelita* Medvedev, 1992: 54 (original description), **syn. nov.**

**Type localities.** *Tituboea minor* var. *atriceps*: ‘Egypte’. *Antipa minor* var. *decemmaculata*: ‘Egypte: Hammam’. *Antipa israelita*: ‘Israel, Kurnub’.

**Type material examined.** *Tituboea minor* var. *atriceps*: not examined.

*Antipa minor* var. *decemmaculata*: HOLOTYPE: 1 ♀, ‘EGYPTE [p] Hammam / Mer 14.6.1936 [h] / A. RABI-NOVITCH [w, p] // Coll. Alfieri / Egypte [w, p] // Décrit dans / l’Echange, No 470, / 1937, p. 13 [w, h] // Antipa / (*Tituboea*) / minor var. / *decemmaculata* Pic / (1937) TYPE [w, h] // 1905 [w, h] // F. Monros / collection / 1959 [w, p]’ (USNM).

*Antipa israelita*: POSSIBLE PARATYPE (see comments below): 1 ♂, ‘ISR- Wadi Ramon / 6 km O Mizpe Ramon / 11.4.90 Warncke [w, p] // PARATYPE [r, p] // Antipa / israelita m. [h] / L. N. Medvedev 19 [p] 92 [w, h] // coll. / Kippenberg [w, p]’ (HKCH). The photo of holotype (Figs 163–164) deposited in Medvedev’s collection in Moscow was kindly provided by Pavel Romantsov. HOLOTYPE: 1 ♂, ‘ISRAEL [p] / Kurnub / 25.III. [h] 197 [p] 5 [h] / M. KAPLAN [w, p] // [blank red label] // *Coptocephala* / sp. [w, h] // HOLOTYPE [p] / Antipa / israelita m. [h] / L. Medvedev 199 [p] 1 [w, h]’.

**Invalid type material examined.** *Tituboea minor* var. *atriceps*: 1 ♀, ‘Wadi Um Assad / 18.3.1935 [w, h] // Coll. Alfieri / Egypte [w, p] // TYPE [r, h] // Anastase Alfieri / Collection / 1965 [white label with red horizontal stripe, p] // Antipa / (*Tituboea*) / minor / *atriceps* Pic [w, h]’ (USNM).

**Additional material examined.** EGYPT: Hammam, 14.vi.1936, 1 ♂ 2 ♀♀, A. Rabinovitch leg. (USNM). IRAQ: W Iraq, Western Desert, Wádi al Hazimi, 21.iii.1979, 1 ♂, J. Macek leg. (RRCM); same data, 25.iii.1979, 1 ♀ (RRCM). ISRAEL: Arava Valley, Nahal Omer, 21.iii.1995, 1 ♀, G. Sama leg. (RRCM); Ein Gedi, 25.iii.1960, 1 ♂, L. Kugler leg. (TAU); Ha Makhtesh Ha Qatan, Nahal Hazeva, 0–80 m, 26.iii.2015, 4 ♂♂ 1 ♀, L. Friedman leg. (TAU); Hazeva, 23.iii.1997, 1 ♂ 1 ♀, R. Hoffman leg. (TAU); Hazeva, 1.iii.1994, 1 ♂, Shapira leg. (TAU); Horbat Mamshit, 1.iv.2014, 1 ♂ 1 ♀, A. Freidberg leg. (TAU); Kurnub, 25.iii.1975, 1 ♂, M. Kaplan leg. (TAU); Mishor Yamin, 25.iv.1997, 1 ♀, R. Hoffman leg. (TAU); Nahal Shahaq, 22.iii.1998, 1 ♂, E. Ashkenazi leg. (TAU); Nahal Gidron, 5 km W of Arava, 12.iii.1998, 1 ♀, E. Ashkenazi leg. (TAU); Oron, rt. 206, 21.iv.2005, 2 ♂♂, L. Friedman leg. (TAU); 6 km S of Zomet Rotem, 410 m, 1.iv.2014, on *Calligonum comosum*, 1 ♂, L. Friedman leg. (TAU).

**Redescription.** Body length: ♂ 4.3–7.2 mm; ♀♀ 3.8–5.9 mm.

**Male** (Fig. 161). Head black with orange labrum and mandibles, anterior margin of clypeus brownish, antennae with four basal antennomeres orange, black from antennomere V. Pronotum yellow with brown transverse band with irregular anterior margin situated along posterior pronotal margin. Scutellum black. Elytra yellow with 4 small black spots (1, 2, 1), apical one slightly larger than others. Ventral side black. Legs orange, coxae brown, tarsi black, last tarsomere brownish apically.

Head and mandibles moderately enlarged (Fig. 162). Mandibles robust, left mandible longer, hook-like. Labrum transverse, anterior margin concave, lateral margins convergent and rounded, surface anterolaterally with several long pale setae. Clypeus nearly impunctate, sparsely covered with long pale setae. Eyes small. Frons very wide, 4.00 times as wide as diameter of eye, in middle slightly depressed. Frons and vertex punctate and covered with very dense pale setae. Antennae short, 0.35 times as long as body, antennomere I club-shaped, II and III small, subglobular, IV small elongate triangular, antennae serrated from antennomere V, antennomeres V–X wider than long.

Pronotum strongly transverse, 1.75 times as wide as long, widest in basal third, moderately convex, lustrous, very densely covered with large punctures, glabrous. Anterior margin slightly convex, lateral margins moderately rounded and slightly convergent anteriorly, posterior margin nearly straight but moderately bisinuate in scutellar area. Anterior angles nearly rectangular with tip rounded, posterior angles very widely rounded with indicated tip. Both anterior and posterior angles with several pale setae on pronotal margin near the tip. Lateral and posterior margins bordered, anterior margin bordered only in lateral parts. Posterior angles not elevated above elytral base. Surface along posterior margin with distinct

long depression, in middle almost touching posterior margin, laterally oblique in angle ca 20° to posterior margin. Scutellum triangular with rounded tip, covered with microsculpture and short setae, scutellar apex elevated above elytral level.

Elytra subcylindrical, 0.62 times as long as body, 1.25 times as long as wide in humeral part, glabrous, lustrous, densely covered with small confused punctures. Basal margin with complete thin border, in middle distinctly elevated forming narrow keel. Epipleura impunctate, with several setae along anterior angle, wide in humeral area, short, disappearing in 1/4 of elytral length. Lateral margin of elytra widely shallowly concave in lateral view.

Legs. Protarsi and protibiae prolonged. Protarsi (Fig. 25) very slender, protarsomere I subparallel, 4.00 times as long as broad, protarsomere II parallel, 2.65 times as long as broad, length ratios of protarsomeres I–IV equal to 100-67-42-58. Metatarsi short and slender, length ratios of metatarsomeres I–IV equal to 100-60-60-100. Claws simple.

Male genitalia. Aedeagus short and robust, with triangular apex, with one long and wide dorsal sclerite, aedeagus in lateral view S-shaped (Figs 22–23).

**Female** (Figs 155, 158). Head and mandibles not enlarged (Figs 156, 159). Frons about 4.10 times as wide as diameter of eye. Depression along posterior margin of pronotum not so distinct as in male. Protibiae not enlarged, protarsi short, length ratios of protarsomeres I–IV equal to 100-60-60-100. Spermatheca: cornu V-shaped, basally slender, apically slightly wider, spermathecal duct short, thin, moderately bent (Fig. 24).

**Variability.** One female from Egypt has black labrum, anterior margin of clypeus and also mandibles are dark brown to black. All studied specimens from Israel have completely black head. Almost all females have brown band on pronotum separated into three spots: two large lateral with irregular anterior margins and one small transverse in the middle. The black pattern on elytra is variable: one female from Egypt has only three black spots (1, 2), one male and one female from Egypt four black spots (1, 2, 1), an additional male from Egypt and all specimens from Israel also four spots but (2, 2) and two females from Egypt five spots (2, 2, 1). Females have tarsi dark brown (not black) with tarsomeres I and IV somewhat paler.

**Differential diagnosis.** *Tituboea atriceps* is similar to *T. chobauti*. The punctuation of pronotum is larger and sparser in *T. atriceps* while smaller and denser in *T. chobauti*. Moreover, *T. chobauti* is on average a larger species (about 6–7 mm) and black spots on elytra are larger, contrary to smaller *T. atriceps* (3.8–7.2 mm) with smaller elytral spots. Both species differ also in the structure of aedeagus (Figs 22–23, 26).

**Distribution.** Egypt (REGALIN & MEDVEDEV 2010b, present paper), Israel (MEDVEDEV 1992, present paper). New species for Iraq.

**Comments.** Both Pic's varieties were originally associated with *T. minor* Fairmaire, 1894 described from one male from 'Ouargla, bordj Dzelfana' in Algeria (FAIRMAIRE 1894). Based on the original description of *T. minor* it is impossible to confirm if *T. minor* and both varieties described by Pic are conspecific or not. The arrangement of black spots on elytra (1, 2, 1) as published by FAIRMAIRE (1894) is different to both varieties. The deposition of the holotype of *T. minor* is unknown to us, it was not found in MNHN and other European institutions visited by the authors in the past 10 years. We decided to treat *T. minor* as a nomen dubium. A subsequent record of *T. minor* from Libya (GRIDELLI 1930) is also uncertain as it can refer to any other *Tituboea* species. The voucher specimen is probably still deposited in Libya and is inaccessible now.

*Tituboea minor* var. *atriceps* was described from Egypt from material collected by Alfieri (Pic 1924a). One female specimen originated from Alfieri's collection and labelled as a type of *T. minor* var. *atriceps* is deposited in USNM (see section 'invalid type material examined'). Undoubtedly, this specimen, collected eleven years after the publication of the original description, is not the primary type. The red label 'TYPE' was added by Alfieri but in many cases was used also for specimens collected in the type locality or for specimens only compared with the original description (cf. note of K. V. Krombein in introduction to ALFIERI 1976: vii). Also the colouration of elytra in the specimen examined does not match exactly the original description. Pic (1924a) explicitly mentioned four black spots obliquely on each elytron (2, 2). Female from USNM has reduced postscutellar spot (1, 2). The deposition of the true type material of *T. minor* var. *atriceps* is unknown to us. On the other hand, based on the examined female we have no doubts about the identity of this taxon. As var. *atriceps* is the oldest available name we raise it to species rank with *Antipa minor* var. *decemmaculata* Pic, 1937 and *A. israelita* Medvedev, 1992 as its new junior subjective synonyms.

The male specimen of *A. israelita* labelled as a paratype was found in HKCH. This specimen was not included in the original description. However, as it was collected in 1990, two years before the description of *A. israelita*, we cannot exclude the possibility that it is a valid paratype based on Article 72.4.1.1 of the Code (ICZN 1999) and thus we treat it as a possible paratype. Nevertheless, it perfectly corresponds with the photos of holotype (Fig. 163) kindly sent to us by Pavel Romatsov.

### *Tituboea biguttata* (Olivier, 1791)

(Figs 68–70)

*Clytra biguttata* Olivier, 1791: 34 (original description).

*Antipa biguttata* var. *vagenotata* Pic, 1939: 18 (original description).

*Antipa bicoloripes* Pic, 1942a: 78 (original description) [published on 31<sup>st</sup> May 1942 according to Ballerio, pers. comm. 2015], **syn. nov.**

*Antipa bicoloripes* Pic, 1942b: 10 (duplicate description, junior primary homonym and objective synonym) [published on 18<sup>th</sup> Aug 1942 according to the title page of the publication], **syn. nov.**

*Antipa tredecimpunctata* var. *flavipennis* Pic, 1950: 16 (original description).

*Antipa biguttata* var. *legionis* Kocher, 1959: 12 (unavailable infrasubspecific name).

**Type localities.** *Clytra biguttata*: 'Espagne'. *Antipa biguttata* var. *vagenotata*: 'Tunis'. *Antipa bicoloripes*: 'Adrar des Iforas' [northeastern Mali]. *Antipa tredecimpunctata* var. *flavipennis*: 'Maroc: Grand-Atlas'. *Antipa biguttata* var. *legionis*: 'Ziz, près de Rich; près de Bou-Arfa' [= Morocco, Ziz river, near Er-Rich; near Bouarfa].

**Type material examined.** *Clytra biguttata*: not examined.

*Antipa biguttata* var. *vagenotata*: not examined. Not found in MNHN.

*Antipa bicoloripes*: SYNTYPES: 1 ♂, 'Adrar des Iforas / Od Tin Biden / (s. sahelo-sahar.) / 6-8 aout 1941 / Volkonsky [w, h] // Antipa (1) [w, h] // désiré [w, h] // Antipa / bicoloripes / n sp [w, h] // TYPE [r, p]' (MNHN – coll. Pic); 1 ♀, 'Kidal / Adrar des Iforas / aout 1941 / Volkonsky [w, h] // TYPE [r, p]' (MNHN – coll. Pic); 1 ♂, 'Kidal / Adrar des Iforas / aout 1941 / Volkonsky [w, h] // Antipa / bicoloripes Pic / c.types [w, h] // décrit in / l'Echange No 489 / 1942, p. 10 [w, h]' (MNHN – coll. Peyerimhoff); 1 ♀, 'Adrar des Iforas / Od Tin Biden / (s. sahelo-sahar.) / 6-8 aout 1941 / Volkonsky [w, h]' (MNHN – coll. Peyerimhoff); 1 ♀, 'Kidal / Adrar des Iforas / aout 1941 / Volkonsky [w, h]' (MNHN – coll. Peyerimhoff).

*Antipa tredecimpunctata* var. *flavipennis*: not examined.

**Original material of infrasubspecific entity.** *Antipa biguttata* var. *legionis*: 1 ♂, 'Rich (Ziz) [h] / SUD MAROC [p] / (Rouleau) 5.53 [w, h] // [small blank round blue label] // var. *legionis* / m. [h] / Kocher det. [w, p] // HOLOTYPE [r, p]' (PJCP); 1 ♀, 'foud ouet [h] / Bou-Arfa / Mar. Ortal [w, p] // Maroc [p] 30-5-54 [h] / A. REYMOND [w, p] // ♀ [w, p] // [small blank round blue label] // PARATYPE [r, p]' (PJCP).

**Distribution.** Mediterranean species (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** *Tituboea biguttata* is one of the most common and widespread Mediterranean clytrines with extensive variability of dorsal pattern. This species evidently forms many local populations which can slightly differ also in the shape of the aedeagus and male protarsi.

The type material of *T. biguttata* was not traced in MNHN and its deposition is unknown. However, there is no doubt about the identity of the species based on the description (OLIVIER 1791) and colour picture in OLIVIER (1808).

The type material of var. *vagenotata* was not found in MNHN and the deposition is unknown to us. We left this taxon in synonymy with *T. biguttata*.

According to KOCHER (1959: 9, note 2), *A. tredecimpunctata* var. *flavipennis* was described based on one female (holotype) deposited in Institut scientifique chérifien in Rabat. In PJCJ only non-type specimen mentioned by KOCHER (1959: 12) was found. However, there is no doubt about its synonymy with *Tituboea biguttata*.

*Antipa biguttata* var. *legionis* was described in a publication containing also descriptions of subspecies (KOCHE 1959), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). Two original specimens are deposited in PJCP and bear ‘holotype’ and ‘paratype’ labels, but these were added later by Jolivet (Jolivet, pers. comm. 2014). This variety is conspecific with *T. biguttata*.

The type series of *A. bicoloripes* is split into two parts: two syntypes are placed in Pic’s collection and additional three syntypes are in Peyerimhoff’s collection. The colouration of the specimens, particularly on pronotum, resembles that of *T. tredecimpunctata*, however examination of aedeagus confirmed that *A. bicoloripes* is conspecific with *T. biguttata*. Protarsi I in the male syntypes of *A. bicoloripes* are slightly shorter than in typical *T. biguttata*, however we think that such difference can occur in local marginal population of this widely distributed species. *Antipa bicoloripes* was described twice based on the same type specimens (PIC 1942a,b), thus, both names are objective synonyms and are also proposed as new synonyms of *T. biguttata*.

### *Tituboea chobauti* (Pic, 1896)

(Figs 26–27, 165–168)

*Gynandrophthalma chobauti* Pic, 1896c: 142 (original description).

*Titubaea chobauti* var. *semijuncta* Pic, 1918c: 18 (unavailable infrasubspecific name).

**Type localities.** *Gynandrophthalma chobauti*: ‘Algérie Sud: Aïn Sefra’. *Tituboea chobauti* var. *semijuncta*: ‘Algérie Sud: Ain Sefra’.

**Type material examined.** *Gynandrophthalma chobauti*: SYNTYPES: 1 ♀, ‘Sefra [w, h] // type [w, h] // TYPE [r, p] // Muséum Paris / 1958 / Col. M. Pic [w, p] // G. Chobauti Pic [w, h]’ (MNHN – coll. Pic); 1 ♂, ‘AÏN-SEFRA / Mai 1896 / Dr. A. CHOBAUT [w, p] // Type [red letters, w, p] // Titubaea / Chobauti / Pic / sub *Gynandrophthalma* [w, h]’ (MNHN – coll. Chobaut).

**Original material of infrasubspecific entity.** *Tituboea chobauti* var. *semijuncta*: 1 ♂, ‘A. Sefra / mai 96 [w, h] // Tit. minor ? / Frm var. [w, h] // type. [w, h] // Titubaea [w, h] // v. semijuncta / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Additional material examined.** ALGERIA: Biskra, 9.iv.1894, 1 ♂, without name of collector (BMNH); Figuig, Dj. Grouz, 13.iv.1952, 1 ♂, W. Neugebauer leg. (SMNS). MOROCCO: Aouloug, 25.–26.iv.1996, 1 ♀, R. Šigut leg. (FKCC).

**Distribution.** Algeria, Egypt, Jordan, Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** *Tituboea chobauti* var. *semijuncta* was described in a publication containing also descriptions of subspecies (PIC 1918c), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). *Tituboea chobauti* var. *semijuncta* is conspecific with *T. chobauti*.

*Tituboea elegans* Weise, 1898 described from Tanger (Morocco) may be conspecific with *T. chobauti*. However, we avoid proposing the new synonymy without the study of the relevant type specimens. Their deposition is presently unknown to us as they were not found in ZMHB or Naturhistoriska Riksmuseet, Stockholm that house the main parts of Weise's collection.

### *Tituboea cingulata* (Lefèvre, 1883)

(Figs 28–29, 169–172)

*Camptolenes cingulata* Lefèvre, 1883: 150 (original description).

*Antina* [sic!] (*Titubaea*) *arabica* var. *donceeli* PIC, 1929a: 14 (original description), **syn. nov.**

**Type localities.** *Camptolenes cingulata*: ‘Arabie (env. d’Aden) [= Yemen, Aden env.]. *Antipa arabica* var. *donceeli*: ‘Arabie’.

**Type material examined.** *Camptolenes cingulata*: SYNTYPES: 1 ♂, ‘Aden [w, h] // Type [p] ♂ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p] // Muséum Paris [p] / Collection / Lefèvre [w, h] // Lectotypus [p] / *Camptolenes / cingulata* Lef. [r, h] // *Antipa* 196 [p] 9 [h] / *cingulata* Lef. [h] / L. Medvedev det. [w, p]’ (MNHN – coll. Lefèvre); 1 ♀, ‘Aden [w, h] // Type [p] ♀ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre); 1 ♂ 1 ♀, ‘Aden [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre).

*Antipa arabica* var. *donceeli*: SYNTYPE: ♂, ‘Arabie [w, h] // Type [w, h] // v. Donceeli / PIC [w, h] // TYPE [r, p]’ (MNHN – coll. PIC).

**Distribution.** Saudi Arabia, Yemen (REGALIN & MEDVEDEV 2010b), Djibouti (FAIRMAIRE 1886). The record from Djibouti is uncertain and needs verification.

**Comments.** The publication year of *Camptolenes cingulata* is sometimes listed as 1884 (e.g. REGALIN & MEDVEDEV 2010b). As found by EVENHUIS (2002), the bi-monthly version of the *Bulletin de la Société Entomologique de France* with the description of *C. cingulata* was issued on 20<sup>th</sup> September, 1883, while the quarterly version on 31<sup>st</sup> January, 1884. Therefore the year of publishing is here corrected to 1883.

One male syntype of *C. cingulata* bears Medvedev's label ‘Lectotypus’ (Fig. 172). According to our knowledge, Medvedev never published the lectotype designation of *C. cingulata*, thus all four type specimens are still treated as syntypes.

The syntype of *Antipa arabica* var. *donceeli* deposited in MNHN is without any doubts conspecific with *T. cingulata*, thus var. *donceeli* is proposed as its new junior subjective synonym.

### *Tituboea fasciata* Lefèvre, 1872

(Figs 35–37, 173, 179, 183)

*Tituboea paykulli* var. *fasciata* Lefèvre, 1872: 129 (original description).

*Tituboea fasciata* var. *obliterata* PIC, 1897b: 164 (original description).

*Titubaea fasciata* var. *binotaticollis* PIC, 1914a: 1 (original description).

*Titubaea fasciata* var. *semiconjuncta* PIC, 1914a: 1 (original description).

*Antipa fasciata* var. *infasciata* KOCHER, 1952: 117 (original description).

**Type localities.** *Tituboea paykullii* var. *fasciata*: ‘Algérie’. *Tituboea fasciata* var. *obliterata*: ‘Ghardaïa; Aïn Sefra; Le Kreider’ [Algeria]. *Tituboea fasciata* var. *binotaticollis*: ‘Algérie sud’. *Tituboea fasciata* var. *semiconjuncta*:

‘Algérie sud’. *Antipa fasciata* var. *infasciata*: ‘Beni Abbés’ [Algeria].

**Type material examined.** *Tituboea paykullii* var. *fasciata*: SYNTYPE: 1 ♂, ‘Algérie [w, p] // Var<sup>4</sup>. / fasciata / Ed. Lef. [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre).

*Tituboea fasciata* var. *obliterata*: SYNTYPES: 1 ♂, ‘A. Sefra [w, h] // type [w, h] // v. oblitterata / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘Kheider [w, h] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘GHARDAÏA / Mai 1997 / Dr. A. CHOBAUT [w, p] // Tit. fasciata / v. oblitterata / Pic / type [w, h]’ (MNHN – coll. Chobaut); 1 ♂, ‘GHARDAÏA / Mai 1997 / Dr. A. CHOBAUT [w, p] // v. oblitterata / Pic / ♂ ♀ types! [w, h]’ (MNHN – coll. Chobaut); 4 ♂♂ 1 ♀, ‘GHARDAÏA / Mai 1997 / Dr. A. CHOBAUT [w, p]’ (MNHN – coll. Chobaut).

*Tituboea fasciata* var. *binotaticollis*: SYNTYPE: 1 ♀, ‘Algérie / sud. [w, h] // type [w, h] // v. binotaticollis / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Tituboea fasciata* var. *semiconjuncta*: SYNTYPE: 1 ♀, ‘Algérie / sud. [w, h] // type [w, h] // v. semiconjuncta / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Antipa fasciata* var. *infasciata*: SYNTYPES: 1 ♂ 3 ♀♀, ‘Oued Saoura [h] / BENI-ABBÈS / Sahara oranaïs / (Reymond) [p] 6.47 [w, h] // [small blank blue round label] // var. / infasciata / Kocher [box label, w, h]’ (PJCP); 2 ♂♂, ‘BENI-ABBÈS / Sahara oranaïs / (Reymond) [p] 6/47 [w, h] // [small blank blue round label]’ (PJCP); 2 ♂♂ (on the same pin), ‘Oued Saoura [h] / BENI-ABBÈS / Sahara oranaïs / (Reymond) [p] 6.47 [w, h] // A. fasciata / infasciata [h] / Kocher det. [p] m. [w, h] // seule differe / ... [partly illegible, w, h]’ (MNHN – coll. Pic).

**Additional material examined. MOROCCO:** 20 km N of Zagora, 13.vi.2000, 1 ♂ H. Mühle leg. (HKCH); 40 km NW of Zagora, Tinezouline (Zinzouline), 4.vi.2007, 1 ♂ 1 ♀, F. Houška leg. (JBCB); Anti Atlas Mts., Ouarzazate, 2.vi.2007, 1 ♂, F. Houška leg. (JBCB); Anti Atlas mts., Agdz, 3.vi.2007, 1 ♂, M. Šárovec leg. (FKCC); Anti Atlas mts., Tanouline, 7.vi.2007, 1 ♀, M. Šárovec leg. (FKCC).

**Distribution.** Algeria and Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** All four varieties are just simple colour aberrations of *T. fasciata* and we confirm them as its synonyms. Moreover, *Antipa fasciata* var. *infasciata* Kocher, 1952 is a junior secondary homonym of *Tituboea nigriventris* var. *infasciata* Pic, 1912.

*Tituboea fasciata* is similar to *T. paykullii*, *T. laticollis* (Olivier, 1808) and *T. femoralis* Medvedev, 1962 (cf. Figs 173–178). All species are variable in colouration, however *T. fasciata* has usually orange legs and mandibles which are often black in *T. paykullii* or always black in *T. laticollis* and *T. femoralis*. Morphological characters are constant: i) the left mandible in male of *T. fasciata* is sharp but simple without or with very short hook-like termination (with hook-like process in *T. laticollis* and *T. paykullii*, cf. Figs 179–186); ii) the anterior margin of male profemora near the base is without or with very shallow emargination (with deep round emargination in *T. paykullii*, *T. laticollis* and *T. femoralis*); iii) the propleura glabrous (densely pubescent anteriorly and sparsely or bare posteriorly in *T. paykullii*, *T. laticollis* and *T. femoralis*); iv) the aedeagus is in lateral view almost straight, ventrally with shallow wide impression reaching basal opening (apical half of aedeagus distinctly S-shaped in lateral view in *T. paykullii*, apical half straight in lateral view in *T. laticollis* and *T. femoralis*; in all three species ventrally with shallow oval impression medially and two elongate impressions anterolaterally, cf. Figs 30, 32, 35, 38).

### *Tituboea fasciaticeps* (Pic, 1929) nomen dubium

*Antipa (Titubaea) fasciaticeps* Pic, 1929b: 95 (original description).

**Type locality.** ‘Agedabia’ [= Libya, Ajdabiya].

**Type material examined.** Not examined.

**Distribution.** Libya (Pic 1929b, GRIDELLI 1930).

**Comments.** The deposition of the type specimen(s) is unknown to us. The species was described based on at least one male collected by C. Krüger (R. Ufficio Agrario per la Cirenaica, Benghasi). The type specimens of some other species described by Pic from the same collection are deposited in MSNG but not those of *T. fasciaticeps* (Poggi, pers. comm. 2014). It is possible that the types are in Ufficio Agrario Benghasi as it is mentioned by GRIDELLI (1930) who also published extended redescription of this species.

Based on the original description (Pic 1929b) and the redescription by GRIDELLI (1930), it is impossible to figure out the true identity of this species. Moreover, the high chromatic and morphological variability of some North African *Tituboea* species does not allow us to ascertain even its possible affinities or possible synonymy. For these reasons we decided to treat *T. fasciaticeps* as a nomen dubium.

### *Tituboea illigeri* (Lacordaire, 1848)

*Clythra (Tituboea) illigeri* Lacordaire, 1848: 142 (original description).

*Titubaea illigeri* var. *lepraeuri* Pic, 1895b: 89 (original description).

*Antipa (Titubaea) illigeri* var. *semiundulata* Pic, 1939: 18 (original description).

**Type localities.** *Clythra illigeri*: ‘environns d’Alger’. *Tituboea illigeri* var. *lepraeuri*: ‘Algérie: Bône, Nemours, etc.’. *Antipa illigeri* var. *semiundulata*: ‘Algérie’.

**Type material examined.** *Clythra illigeri*: HOLOTYPE: ♂, ‘Illigeri / Lac. / Barbarie Type [w, h] // Ex-Musaeo / Mnischek [w, p] // TYPE [r, p]’ (MNHN – coll. Lefèvre).

*Tituboea illigeri* var. *lepraeuri*: SYNTYPES: 1 ♂, ‘Nemours / ... [partly illegible, w, h] // Illigeri [b, h] // type [w, h] // v. Leprieuri / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘Bone / mai 86 [w, h] // Illigeri / var. [b, h] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘Bone / mai 84 [w, h] // Illigeri / var. [b, h] // type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Antipa illigeri* var. *semiundulata*: SYNTYPE: 1 ♂, ‘Algérie / Sibastien [w, h] // Labidostomis ? / (Clythra) / Leprieuri ? [w, h] // v. semiundulata / mihi [w, h]’ (MNHN – coll. Pic).

**Distribution.** Algeria, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** Both varieties are colour aberrations of *T. illigeri* and here confirmed as its synonyms.

### *Tituboea lacordairei* (Pic, 1929) stat. nov.

(Figs 40–42, 187–197)

*Antina* [sic!] (*Titubaea*) *arabica* var. *lacordairei* Pic, 1929a: 14 (original description).

**Type locality.** ‘Sinaï, etc.’ [sic!].

**Type material examined.** *Antipa arabica* var. *lacordairei*: SYNTYPE: 1 ♂, ‘Gebel Um Lehas / SINAI, 6.4.24 / plaine sablonneuse / et grand vert [w, h] // Coll. Alfieri / Egypte [w, p] // Titubaea / (Antipa) / arabica var. / lacordairei Pic / (det. Pic) [horizontally] / TYPE [vertically, w, h] // 1895 [w, h] // F. Monros / Collection / 1959 [w, p]’ (USNM).

**Additional material examined.** EGYPT: SOUTH SINAI: Wadi Isla, Karm Alah, 680 m, at light, 10.–12.iv.1940, 1 ♂, A. Alfieri leg. (USNM); Wadi Isla, Bir Tarfa, 1430 m, at light, 13.–14.iv.1940, 1 ♀, A. Alfieri leg. (USNM); Bir Isla, 390 m, at light, 6.–9.iv.1940, 1 ♀, A. Alfieri leg. (USNM). ISRAEL: JUDEA: Ein Gedi, Dead Sea, 19.v.2005, 1 ♀, L. Kantnerová leg. (FKCC); Ein Gedi, 1 ♂, Bytinski-Salz leg. (TAU). JERUSALEM: Nahal Qidron, 7.vi.1996, 1 ♂ 1 ♀, A. Freidberg leg. (TAU). SOUTHERN DISTRICT: Arugot valley, 26.x.1969, D. Furth leg. (TAU); Nahal Hashitta, vi.1999, 1 ♀, I. Yarom & V. Kravchenko leg. (TAU). ISRAEL/SYRIA: GOLAN HEIGHTS: Mt. Hermon, 1500 m, 22.iv.1973, 1 ♂, D. Furth leg. (TAU). JORDAN: AQABA: Wadi Rum, 11.v.1995, 1 ♂ 1 ♀, P. Pucholt leg. (JBCB). TAIFIL: 20

km W of At Tafila, 30°52.906'N 35°26.015'E, -280 m, 1.vi.2007, 5 ♂♂, F. & L. Kantner leg. (FKCC), same data, 7 ♂♂ 2 ♀♀, J. Bezděk leg. (JBCB). **OMAN: Dhofar:** Ain Garziz dint., 17°06'29"N 54°04'35"E, 16.iii.2004, 2 ♂♂ 3 ♀♀, M. Dellacasa leg. (CIUC); Al Mughsayl dint., 16°54'10"N 53°45'54"E, 50 m, 12.iii.2004, 1 ♂, M. Dellacasa leg. (CIUC); Darbat pool, 17°05'N 54°26'E, 14.iii.2004, 1 ♂ 5 ♀♀, M. Dellacasa leg. (CIUC); Jabal Samhan, Hyoor dint., 17°07'19"N 54°42'44"E, 1320 m, 10.iii.2004, 1 ♂, M. Dellacasa leg. (CIUC); Khor Rori dint., 17°02'N 54°26'E, 10 m, 7.iii.2004, 1 ♂, M. Dellacasa leg. (CIUC); 7 km of Tawi Atayr, 17°03'46"N 54°36'15"E, 9.iii.2004, 600 m, 1 ♀, M. Dellacasa leg. (CIUC); Wadi Darbat, 17°04'27"N 54°25'53"E, 2.iii.2004, 1 ♂, M. Dellacasa leg. (CIUC); Wadi Darbat, 17°05'45"N 54°26'59"E, 3.iii.2004, 200 m, 1 m 1 ♀, M. Dellacasa leg. (CIUC). **YEMEN: SANA'a:** Haraz Mts., 80 km SE of Sana'a, Manacha env., 15°03'50"N 43°44'32"E, 2600–2800 m, 11.vi.2009, 3 ♂♂, L. Purchart leg. (JBCB).

**Redescription.** Body length: ♂♂ 5.7–8.0 mm; ♀♀ 6.0–7.2 mm.

**Male** (syntype, Fig. 196). Body almost completely brownish-orange, each elytron with 4 black spots (2, 2), scutellum darkened in middle part (or only laterally), apices of mandibles brown, antennae with darkened apices of last four antennomeres, mesoventrite laterally with ill-defined darkened areas.

Head. Mandibles slightly enlarged, inner margin with small tooth, outer side below upper margin with small obtuse tooth. Labrum with anterior margin shallowly incised, lateral margins rounded and convergent anteriorly, disc covered with several long pale setae. Clypeus with anterior margin subtriangularly emarginated, lustrous, impunctate, laterally with pale setae. Eyes large. Frons and vertex subopaque, covered with large punctures and short pale setae. Frons narrow, 1.50 times as wide as diameter of eye, in middle with shallow impression. Antennae short, 0.22 times as long as body, antennomere I club-shaped; II subglobular, III as long as II but subtubular, IV triangular; V–X serrated.

Pronotum transverse, 1.72–1.90 times as wide as long, convex, covered with irregular mixture of fine and larger punctures, lustrous, posterior margins distinctly elevated above elytra level. Anterior margin straight, lateral margins moderately rounded, widest in middle, posterior margin bisinuate. All margins thinly bordered. Anterior angles widely rounded, posterior angles nearly rectangular with rounded apex, all angles with setigerous pore bearing long pale seta, posterior pore placed on lateral margin near posterior angle. Scutellum triangular with transversely cut apex, medially lustrous, impunctate, laterally with small puncture and short setae, scutellar apex not or only slightly elevated above level of elytra.

Elytra subcylindrical, 0.55 times as long as body, 1.50 times as long as wide in humeral part, glabrous, lustrous, densely covered with small confused punctures. Basal margin with complete thin border. Epipleura glabrous, impunctate, wide in humeral area, short, disappearing in 1/4 of elytral length.

Legs. All tibiae narrow. Protarsi (Fig. 42) very long and thin, protarsomere I long, parallel, five times as long as broad, slightly shorter than two following tarsomeres combined, protarsomere II parallel, three times as long as broad, length ratios of protarsomeres I–IV equal to 100-60-50-45. Length ratios of metatarsomeres I–IV equal to 100-64-45-91. Claws simple.

Male genitalia. Aedeagus with triangular apical third, margin at anterolateral angles with small shallow impressions. Ventrally with three small shallow impressions (Fig. 40).

**Female** (Fig. 195). Head of same development as in males, only mandibles are smaller. Frons 1.75–1.90 times as wide as diameter of eye. Pronotum 1.80–2.00 times as wide as long, widest in basal third and more convergent anteriorly. Protarsi shorter than in males, length ratios of protarsomeres I–IV equal to 100-67-56-122. Length ratios of metatarsomeres I–IV

equal to 8–5–4–10. Spermatheca U-shaped with distinctly wider apical part, proximal duct long and thin (Fig. 41).

**Variability.** *Tituboea lacordairei* is widely distributed through the Arabian Peninsula and forms many local populations which vary in the colouration, intensity of pronotal punctuation and particularly in the size of male eyes, while the shape of aedeagus, mandibles and male protarsi are almost the same. Width/length ratio of pronotum in males varies from 1.70–2.00. Elytra of males are 1.45–1.55 times as long as wide in humeral part. Below are given the differences found among the populations:

Specimens from Sinai and Jordan (Wadi Rum) (Figs 187, 195, 196): body completely orange except for four spots on elytra; pronotum with dense double punctuation, glabrous or posteriorly and laterally with traces of very short setae; males with large eyes (ratio frons width/diameter of eye 1.50–1.66) (Fig. 188).

Specimens from Jordan (At Tafila) (Fig. 189): body completely orange except for four spots on elytra; pronotum glabrous, punctuation finer but well visible; males with small eyes (ratio frons width / diameter of eye 2.50–3.22) (Fig. 190).

Specimens from Oman (Fig. 191): body completely orange except for four spots on elytra; pronotum covered with short fine setae, punctuation finer but well visible; males with moderate size of eyes (ratio frons width / diameter of eye 2.10–2.57) (Fig. 192).

Specimens from Yemen (Fig. 193): head either completely orange with black spot on inner margin of eye or with black band between eyes, pronotum orange or with posterolateral black spots, elytra with four black spot, scutellar spot sometimes indistinct, posterior pair of spots sometimes enlarged, connecting and forming band, meso- and metaventrite black, abdomen orange or black with posterior half of last ventrite and whole pygidium orange; pronotum glabrous, punctuation very fine, almost invisible in some specimens; males with small eyes (ratio frons width / diameter of eye 2.85–3.15) (Fig. 194).

Specimens from Israel: body orange, 4 spots on elytra black, meso-, metaventrite and abdomen (except for most part of last ventrite) darkened.

**Differential diagnosis.** *Tituboea lacordairei* is similar to *T. pindai* Bezděk, 2011 from the United Arab Emirates and to *T. ogloblini* (Medvedev, 1962) from Yemen in having long thin protarsi in males. Because the size of eyes in *T. lacordairei* is variable, all three species can be separated with certainty only based on the shape of aedeagus (Figs 40, 43, cf. with BEZDĚK & BATELKA 2011). Additionally, males of *T. pindai* have somewhat longer protarsi than *T. lacordairei*. *Tituboea ogloblini* has aedeagus very similar to *T. lacordairei* except for two bulges on ventral side near the apex (Fig. 43) which are missing in *T. lacordairei* (Fig. 40).

**Distribution.** Egypt (Sinai), Israel, Oman, Saudi Arabia, Yemen (present paper).

**Comments.** The drawing of the aedeagus of *T. ogloblini* published in the original description (MEDVEDEV 1962) is very simplified but two ventral bulges situated near the apex are explicitly mentioned in the text. Although we did not examine the holotype of *T. ogloblini* which was not found in ZIN (Moseyko, pers. comm. 2014) and Medvedev's collection (Medvedev, pers. comm. 2014), we examined one male from the same material as the holotype (Filippov's expedition), which has the aedeagus with two ventral bulges. The aedeagi of *T. lacordairei* and *T. ogloblini* are very similar and differ only in absence (*T. lacordairei*) or presence (*T. ogloblini*) of ventral bulges. As we did not examine any transitional forms between both types we treat them as distinct species.

***Tituboea laticollis* (Olivier, 1808)**

(Figs 32–34, 175, 181, 185)

*Clytra laticollis* Olivier, 1808: 846 (original description).*Titubaea laticollis* var. *subjuncta* Pic, 1903: 114 (original description).

**Type localities.** *Clytra laticollis*: ‘côte de Barbarie’ [= North African coast from Morocco to Libya]. *Tituboea laticollis* var. *subjuncta*: ‘Tunisie: Gafsa’.

**Type material examined.** *Clytra laticollis*: not examined.

*Tituboea laticollis* var. *subjuncta*: SYNTYPE: 1 ♂, ‘Gafsa [w, h] // Type [w, h] // v. subjuncta Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘Gafsa / (Bome) [w, h] // Type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Additional material examined.** **TUNISIA:** Gafsa env., 27.vi.1976, 2 ♂♂ 1 ♀, Mager & Mühle leg. (HKCH); 8 km SE of Gafsa-oued, 29.–30.v.1993, 1 ♂, J. Batelka leg. (FKCC); Monastir, 14.–20.vi.2009, 1 ♂ 1 ♀, K. Orszulik leg. (JBCB).

**Distribution.** Algeria, Egypt, Morocco, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** The type material of *T. laticollis* was not examined and its deposition is unknown to us. However, var. *subjuncta* is conspecific with *T. laticollis* in its widely accepted concept (e.g. LACORDAIRE 1848; REGALIN & MEDVEDEV 2010b; WARCHAŁOWSKI 2003, 2010).

***Tituboea lefevrei* (Pic, 1894) comb. nov.**

(Figs 46–50, 198–207)

*Melitonomia lefevrei* Pic, 1894a: 221 (original description).*Antina* [sic!] (*Titubaea*) *arabica* var. *palaestina* Pic, 1929a: 14 (original description), **syn. nov.***Antipa* (*Titubaea*) *chikatunovi* Lopatin, 1995: 100 (original description), **syn. nov.**

**Type locality.** *Melitonomia lefevrei*: ‘Bou-Sâada (Algérie)’. *Antipa arabica* var. *palaestina*: ‘Jaffa’ [= Israel, Tel Aviv]. *Antipa chikatunovi*: ‘Израиль, Нахариах’ [= Israel, Nahariya].

**Type material examined.** *Melitonomia lefevrei*: HOLOTYPE: ♀, ‘Bou / Saada / 1873 [w, h] // ♀ / Melitonomia ? [w, h] // type [w, h] // Lefevrei Pic / n sp. [w, h] // Le Nat. No. 182 / (... 94) p. 221 [partly illegible, w, h] // Tituboea / Lefevrei Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Antipa arabica* var. *palaestina*: SYNTYPES: 1 ♂, ‘Jaffa / Palestine / 21st June ’24 / G. F. Hucklesby [w, h] // ♀ Palestine / in Br. Museum [w, h] // v. nov. / *palaestina* [w, h] // *Titubaea* / *arabica* Ol. / var [w, h]’ (MNHN – coll. Pic); 1 ♀, ‘Type [round label with red collar, w, p] // sent by / G. E. Bodkin [w, h] // Jaffa / Palestine / 21st June ’24 / G. F. Hucklesby [w, h] // Pres. by / Imp. Bur. Ent. / Brit. Mus. / 1929-570. [w, p] // *Antipa* ou / *Tituboea* / *arabica* v. n. [w, h] // v. *palaestina* [w, h] // [illegible, w, h]’ (BMNH).

*Antipa chikatunovi*: Not examined personally. The photos of two paratypes deposited in currently unavailable Lopatin’s collection in Minsk (Belarus) were provided by Oxana Nesterova. PARATYPES: 1 ♂, ‘Palestine, / Beer-sheba, 21.VI. / Bytinski-Salz, 1944 [w, h] // Paratypus [r, p] // *Antipa* / *chikatunovi* sp. n. [h] / det. I. Lopatin, 19 [p] 93 [w, h] // *Tituboea* / *chikatunovi* m. [h] / det. I. Lopatin, 200 [p] 9 [w, h]’; 1 ♀, ‘Израиль, Beer- / шеба, 31.IV.944 / Бытински-Залыц [= Israel, Beer-sheba, 31.VI.1944, Bytinski-Salz leg.] [w, h] // Paratypus [r, p] // *Antipa* / *chikatunovi* sp. n. [h] / det. I. Lopatin, 19 [p] 93 [w, h]’.

**Additional material examined.** **ALGERIA:** El Ateuf, 19.v.1897, 5 ♂♂ 3 ♀♀, without name of collector (MNHN). **ISRAEL:** Beersheba, 21.vi.19[44 ?], 1 ♂, Bytinski-Salz leg. (RRCM); Negev, Sharandal, 20.vi.1950, 1 ♂, J. Wahrman leg. (TAU). **JORDAN:** Wadi Ghuba, 9.v.1995, 1 ♀, P. Pucholt leg. (JBCB). **MOROCCO:** Figuig, 26.v.1994, 1 ♂, Bourada leg. (HKCH). **TUNISIA:** Gafsa env., 27.vi.1976, 1 ♂ 1 ♀, Mager & Mühle leg. (HKCH).

**Redescription.** Body length: ♂♂ 4.8–6.8 mm; ♀♀ 5.5–6.6 mm (holotype 5.5 mm).

**Male** (Fig. 198). Almost complete body orange. Apices of mandibles black, scutellum dark brown to black with orange apex, each elytron with four black spots (2, 2), mesoventrite darkened to black.

Head and mandibles only slightly enlarged (Fig. 199). Head lustrous, flat. Mandibles short and robust. Labrum transverse, anterior margin concave, lateral margins convergent and rounded, along anterior margin with several pale setae. Clypeus impunctate, anterior margin shallowly concave. Eyes small. Frons wide, 2.55 times as wide as diameter of eye, covered with small punctures, in middle with small round depression. Vertex covered with fine punctures (smaller than on frons). Frons and vertex densely covered with short pale setae. Antennae short, 0.25 times as long as body, antennomere I club-shaped; II and III small, subglobular; antennae serrated from antennomere IV; antennomeres V–X wider than long.

Pronotum strongly transverse, 2.10–2.20 times as wide as long, widest in basal quarter, moderately convex, lustrous, covered with fine punctures, along posterior margin and near posterior angles with larger and denser punctures, pronotal surface covered with dense short pale setae (usually partially abraded). Anterior margin shallowly concave, lateral margins convergent anteriorly and moderately rounded, posterior margin nearly straight but bisinuate in scutellar area. Anterior angles nearly rectangular with tip rounded, posterior angles very widely rounded. Lateral and posterior margins bordered, anterior margin bordered only in lateral parts. Posterior angles distinctly elevated above elytral base. Scutellum triangular with rounded tip, lustrous, in middle impunctate and glabrous, laterally with fine punctures and short setae, scutellar apex elevated upon elytral level.

Elytra subcylindrical, 0.65 times as long as body, 1.30 times as long as wide in humeral part, glabrous, lustrous, densely covered with small confused punctures. Basal margin with complete thin border. Epipleura glabrous, impunctate, wide in humeral area, short, disappearing in 1/3 of elytral length. Lateral margin of elytra widely concave in lateral view.

Legs. Protarsi and protibiae enlarged. Protarsi (Fig. 50): protarsomere I long, elongate subtriangular, 2.35 times as long as broad, protarsomeres II and III narrowed in basal quarter, rest parallel, length ratios of protarsomeres I–IV equal to 100-71-71-71. Metatarsi short and narrow, metatarsomere I 0.80 times shorter than two following tarsomeres combined, length ratios of metatarsomeres I–IV equal to 100-63-63-75. Claws simple.

Male genitalia. Aedeagus with subtriangular apex (Figs 46–47).

**Female** (Fig. 200). Head and mandibles not enlarged (Fig. 201). Frons wider, 2.95 times as wide as diameter of eye. Protibiae not enlarged, protarsi much shorter and narrower than in males, length ratios of protarsomeres I–IV equal to 100-71-71-100. Spermatheca: cornu widely C-shaped, of the same width, spermathecal duct relatively wide, with several coils, with very peculiar club-shaped appendix with nearly sphaerical termination (Figs 48–49).

**Variability.** The populations from the Near East are often darker with head partly black, pronotum with two posterolateral black spots and posterior elytral spots extended, connected and forming transverse band (Figs 204–206). Often elytra are slightly paler than pronotum. Meso- and metaventrites can be darkened to black. Abdomen is orange in almost all specimens, only one male from Tunisia has abdomen dark brown with orange last ventrite. The spermatheca is pictured for the female from Jordan (Fig. 49) and another female from Algeria (Fig. 48). Both differ in the shape of connection of spherical appendix, but we consider such differences to be infraspecific variability within a large area.

**Differential diagnosis.** *Tituboea lefevrei* is characterised by combination of the following characters: protarsomere I relatively short in males (Fig. 50), only slightly enlarged head and

mandibles in male, pronotum covered with fine setae, structure of aedeagus (Figs 46–47), and very peculiar shape of spermatheca (Figs 48–49).

*Tituboea lefevrei* has habitus similar to *T. arabica* and *T. saadensis* but both species have aedeagus distinctly S-shaped in lateral view (almost straight in *T. lefevrei*), pronotum glabrous and spermatheca without spherical appendix.

**Distribution.** Algeria (PIC 1894a, present paper), Israel (PIC 1929a, LOPATIN 1995, present paper), Tunis (REGALIN & MEDVEDEV 2010b, present paper). New species for Morocco and Jordan (present paper).

**Comments.** Number of the available specimens of *Melitonoma lefevrei* was not stated in the original description (PIC 1894a). Three years later, PIC (1897c) specified that this species was described based on one female which is therefore considered holotype by monotypy.

The generic position of *T. lefevrei* was uncertain for many decades. PIC (1894a) described it in the genus *Melitonoma* Chevrolat, 1836. Later, PIC (1897c) transferred it to *Tituboea* and, finally, NORMAND (1949) classified it in *Coptocephala*. Most recently, REGALIN & MEDVEDEV (2010b) followed Normand's opinion and listed it again in *Coptocephala* but as a doubtful assignment. Also the species identity of *T. lefevrei* was an object of disputation for a long time being treated as a valid species (e.g. PIC 1913c, 1931; NORMAND 1949), synonym of *T. perrisi* (e.g. CLAVAREAU 1913, WINKLER 1929) or as a valid species but misidentified as *Tituboea perrisi* (see WARCHAŁOWSKI 2003, 2010). Here we confirm *T. lefevrei* as a valid species different from *T. perrisi* (transferred here to *Coptocephala*).

Based on all available specimens we treat *T. lefevrei* as a species with wide distribution along the east and south shore of the Mediterranean Sea from Israel to Morocco. The population from the Near East was first described by PIC (1929a) as *Antipa arabica* var. *palaestina* and due to the inadequate description usually listed as a simple synonym of *T. arabica*. Both male and female syntypes of var. *palaestina* were examined and it is synonymized here with *T. lefevrei*. Recently, LOPATIN (1995) described it once more as *T. chikatunovi*. Its type material is currently unavailable being in possession of Lopatin's relatives in Minsk (Belarus), however Oxana Nesterova was so kind and sent us photos of the type specimens. Based on these photos and examination of an additional male specimen collected on the same occasion as the paratypes, we consider *T. chikatunovi* conspecific with *T. lefevrei* and propose their synonymy.

### *Tituboea macropus* (Illiger, 1800)

*Clytra macropus* Illiger, 1800: 128 (original description).

*Titubaea ciliciensis* Pic, 1904a: 57 (original description).

*Titubaea macropus* var. *armeniaca* Pic, 1918c: 18 (unavailable infrasubspecific name).

**Type localities.** *Clytra macropus*: ‘Friaul’ [= Northeastern Italia/Slovenia, Friuli region]. *Titubaea ciliciensis*: ‘Taurus cilicium’ [= Turkey, Taurus Mts.]. *Tituboea macropus* var. *armeniaca*: ‘Armenie’.

**Type material examined.** *Clytra macropus*: not examined.

*Tituboea ciliciensis*: SYNTYPES: 1 ♂, ‘Taurus [w, h] // type [w, h] // TYPE [r, p] // Titubaea / ciliciensis Pic [w, h]’ (MNHN – coll. Pic); 1 ♀, ‘Taurus [w, h] // type [w, h] // Tit. ciliciensis / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Original material of infrasubspecific entity.** *Tituboea macropus* var. *armeniaca*: ♂, ‘Russ. Armen: / Kulp. / 1901. Korb. [w, p] // type [w, h] // v. armeniaca / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Central and Southeastern Europe, Turkey, Caucasus, Near East, Central Asia (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** *Tituboea macropus* var. *armeniaca* was described in a publication containing also descriptions of subspecies (PIC 1918c), thus it became infrasubspecific according to Article 45.6.4 of the Code (ICZN 1999). Both *Tituboea ciliciensis* and *T. macropus* var. *armeniaca* are conspecific with *T. macropus*.

### *Tituboea mecheriensis* PIC, 1895, stat. nov.

(Figs 51–53, 208–213)

*Titubaea octopunctata* var. *mecheriensis* PIC, 1895: 13 (original description).

*Tituboea octopunctata* var. *hypomelaena* BEDEL, 1921: 61 (original description), **syn. nov.**

*Titubaea tredecimpunctata* var. *kocheri* PIC, 1949b: 16 (original description), **syn. nov.**

*Macrolenes janczyki* COBOS, 1956: 169 (original description), **syn. nov.**

*Antipa urikkana* TOMOV, 1983: 64 (original description), **syn. nov.**

**Type localities.** *Tituboea octopunctata* var. *mecheriensis*: ‘Mecheria’ [Algeria]. *Tituboea octopunctata* var. *hypomelaena*: ‘Moyen Atlas: Bekrit’ [Morocco]. *Tituboea tredecimpunctata* var. *kocheri*: ‘Maroc: Ain-Kahla’. *Macrolenes janczyki*: ‘Marruecos, Alto Atlas’. *Antipa urikkana*: ‘Marokko, Urika’.

**Type material examined.** *Tituboea octopunctata* var. *mecheriensis*: SYNTYPES: 1 ♂, ‘Type [w, h] // v. mecheriensis / Pic n. v. [w, h] // TYPE [r, p]’ (MNHN – coll. PIC); 1 ♂ 1 ♀, ‘Type [w, h] // TYPE [r, p]’ (MNHN – coll. PIC).

*Tituboea octopunctata* var. *hypomelaena*: not examined. Not found in MNHN.

*Tituboea tredecimpunctata* var. *kocheri*: SYNTYPES: 1 ♂, ‘Ain Kahla / 2000 m (Kocher) [w, h] // 13 punctata / v. Kocheri / mihi [w, h]’ (MNHN – coll. PIC); 1 ♂, ‘Ain Kahla / 2000 – 7.48 [w, h] // 13punctata / v. Kocheri PIC [w, h] // TYPE [r, h] // [blank blue round label]’ (PJCP).

*Macrolenes janczyki*: HOLOTYPE: ♂, ‘Fés Taghat / 25.V.30 [w, h] // Marokko / R. Ebner 1930 [w, p] // HOLOTIPO [r, p] // Macrolenes / janczyki / Holotipo / m. nov. sp. [h] / A. Cobos det. 1.956 [w, p]’ (NHMW).

*Antipa urikkana*: HOLOTYPE: ♂, ‘Marokko / Urika / Quedenfeldt S. [blue-gray label, p] // Coll. Fiori [w, p] // Antipa / urikkana sp. n. / V. Tomov det. 1981 [w, h] // Holotypus [r, p]’ (ZMHB). PARATYPES: 1 ♀, ‘Marokko / Urika / Quedenfeldt S. [blue-gray label, p] // Coll. Fiori [w, p] // Antipa / urikkana sp. n. / V. Tomov det. 1981 [w, h] // Allotypus [r, p]’ (ZMHB); 1 ♀, ‘Marokko / Urika / Quedenfeldt S. [blue-gray label, p] // Coll. Fiori [w, p] // Antipa / urikkana sp. n. / V. Tomov det. 1981 [w, h] // Paratypus [r, p]’ (ZMHB); 1 ♀, ‘Marokko / Morbeya / Quedenfeldt S. [blue-gray label, p] // Coll. Fiori [w, p] // Antipa / urikkana sp. n. / V. Tomov det. 1981 [w, h] // Paratypus [r, p]’ (ZMHB).

**Additional material examined.** ALGERIA: Timgad, v.1926, 1 ♂ (NMPC). TUNISIA: Tunis, v.1930, 1 ♂, J. Obenberger leg. (NMPC); Kairouan, 28.v.1930, 1 ♂, J. Obenberger leg. (NMPC).

**Distribution.** Algeria (PIC 1895, present paper) and Morocco (COBOS 1956, TOMOV, 1983). New species for Tunisia (present paper).

**Comments.** BEZDĚK (2013) synonymized *Antipa urikkana* with *Tituboea janczyki*. Now, having examined additional type material in MNHN we found three more taxa to be synonymized with the species reported as *T. janczyki*. *Tituboea octopunctata* var. *mecheriensis* is elevated to species rank as the oldest available name for this taxon and *T. octopunctata* var. *hypomelaena*, *T. tredecimpunctata* var. *kocheri*, *Macrolenes janczyki*, and *Antipa urikkana* are proposed as its new synonyms.

While the males of *T. mecheriensis* and *T. octopunctata* can be easily distinguished by the shape of aedeagus and protarsi (Figs 51, 53–54, 56), the females are habitually very similar. Identification of both species can be supported by the colouration of the basal antennomeres. In *T. octopunctata* these are always pale orange, while in *T. mecheriensis* they are dark orange, usually antennomere I is darkened, sometimes all basal antennomeres black.

We were unable to locate the type material of *T. octopunctata* var. *hypomelaena* in MNHN but it is synonymized with *T. mecheriensis* based on the original description. BEDEL (1921)

used only one character for the description of var. *hypomelaena* – completely black antennae. This character is typical just for *T. mecheriensis*.

### *Tituboea nigriventris* Lefèvre, 1872

*Tituboea nigriventris* Lefèvre, 1872: 136 (original description).

*Titubaea nigriventris* var. *infasciata* Pic, 1912b: 73 (original description).

**Type localities.** *Tituboea nigriventris*: ‘Russie: Chodshent’ [= Tajikistan: Khujand]. *Tituboea nigriventris* var. *infasciata*: ‘Asie: Sir Darja’ [= Syr Darya river, Uzbekistan/Kazakhstan].

**Type material examined.** *Tituboea nigriventris*: SYNTYPES: 1 ♂, ‘Chod- shent [w, p] // Type [p] ♂ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre); 1 ♀, ‘Chod- shent [w, p] // Type [p] ♀ [w, h] // Ex-Musaeo / LEFÈVRE / 1894 [w, p]’ (MNHN – coll. Lefèvre).

*Tituboea nigriventris* var. *infasciata*: SYNTYPE: 1 ♀, ‘Syr Darja / (Staudinger) [w, h] // Tituboea / rugulosa [w, h] // non rugulosa / (ex descript.) [w, h] // Type [w, h] // nigriventris / var. infasciata / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Afghanistan, Iran, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan (REGALIN & MEDVEDEV 2010b).

**Comments.** *Tituboea nigriventris* var. *infasciata* is confirmed as a synonym of *T. nigriventris*.

### *Tituboea octopunctata* (Fabricius, 1787)

(Figs 54–56)

*Cryptocephalus octopunctatus* Fabricius, 1787: 79 (original description).

*Tituboea octopunctata* var. *unipunctata* Pic, 1897b: 165 (original description).

*Titubaea octopunctata* var. *siciliensis* Pic, 1912b: 74 (original description).

**Type localities.** *Cryptocephalus octopunctatus*: ‘Barbaria’ [= North African coast from Morocco to Libya]. *Tituboea octopunctata* var. *unipunctata*: ‘Palestro’ [= Algeria: Lakhdaria]. *Tituboea octopunctata* var. *siciliensis*: ‘Sicile’.

**Type material examined.** *Cryptocephalus octopunctatus*: not examined. The photos of dissected ♂ syntype were sent from ZMUC: ‘C: 8 punctata / e Barbar: Vahl / e Tanger: Schout ... [partly illegible, w, h] // TYPE [r, p] // zmuc / 00031183 [w, p] // ANTIPA [p] / 8-punctata F. [h] / ERBER [p] vid. [h] 19 [p] 97 [w, h]’.

*Tituboea octopunctata* var. *unipunctata*: SYNTYPE: ♂, ‘Palestro / II mai 97 [w, h] // type. [w, h] // v. unipunctata [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Tituboea octopunctata* var. *siciliensis*: SYNTYPES: 1 ♀, ‘Sicile [w, h] // Type [w, h] // v. siciliensis / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♂, ‘Sicile [w, h] // Type [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

**Distribution.** Algeria, Morocco, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** Male syntypes of both varieties described by Pic (1897, 1912b) have visible apex of the aedeagus with characteristic apical sinuation. From ZMUC we received a photo of a dissected ♂ syntype of *Cryptocephalus octopunctatus* and we confirm both Pic’s varieties as its colour aberrations and synonyms.

*Tituboea octopunctata* var. *siciliensis* was described from Sicily, however, its occurrence in Sicily needs to be verified as no additional material of *T. octopunctata* from Sicily is known.

### *Tituboea paykullii* (Lacordaire, 1848)

(Figs 38–39, 176–178, 182, 186)

*Clythra (Tituboea) paykullii* Lacordaire, 1848: 161 (original description).

*Antipa (Titubaea) testaceipes* Pic, 1939: 18 (original description), **syn. nov.**

*Antipa hirsutula* Kocher, 1959: 70 (original description), **syn. nov.**

**Type localities.** *Clythra paykullii*: ‘Algérie occidentale, Maroc’. *Antipa testaceipes*: ‘Maroc: Ouezzan’. *Antipa hirsutula*: ‘Ijoukak, Sous’ [Morocco].

**Type material examined.** *Clythra paykullii*: not examined. Deposition of the type material is unknown to us.

*Antipa testaceipes*: SYNTYPES: 1 ♂, ‘Ouezzan / 22 Aout 28 / Thery [w, p] // Antipa / testaceipes / n sp [w, h] // punctuation / elytrale plus [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘Ouezzan / 22 Aout 28 / Thery [w, p] // TYPE [r, p]’ (MNHN – coll. Pic).

*Antipa hirsutula*: SYNTYPES: 1 ♂, ‘Ijoukak [p] / 12.7.36 [h] / G. Schramm [w, p] // [blank small rounded blue label] // exemplaire / dessiné [w, p] // A. Paykulli / s. sp. hirsutula / m [h] / Kocher det. [p] / HOLOTYPE ♂ [w, h]’; 1 ♀, ‘Zone à Arganières / Maroc: Sous [w, h] // A. Balafré / 15.VI.56 [w, h] // [blank small rounded blue label]’ (PJCP).

**Additional material examined. MOROCCO:** ‘Marokko’, without additional data, 5 ♂♂ (FKCC); Aouluz, S of High Atlas, 150 km E of Agadir, 10.vi.2000, 1 ♂, Mühlé leg. (HKCH); Argana, 31.v.1994, 1 ♂, Farbiak leg. (FKCC); Asni, 1 ♂, R. Gregor leg. (NMPC).

**Distribution.** Algeria, Morocco (REGALIN & MEDVEDEV 2010b).

**Comments.** Because the deposition of the type specimens of *T. paykullii* is unknown to us, the concept of the species is based on consistently identified material in various collections.

*Antipa testaceipes* was described based on pale specimens with reduced black elytral pattern and is synonymized here with *T. paykullii*.

*Antipa hirsutula* was based on specimens with dorsum densely covered with short setae. All other important characters such as the shape of mandibles, aedeagus and emargination of male profemora are the same as in *T. paykullii*. All pubescent specimens originate from a relatively small area between Agadir and Marrakesh in Morocco. We consider them a local population of *T. paykullii* and treat them as conspecific.

For characters distinguishing *T. paykullii* and *T. fasciata* see Comments under *T. fasciata*.

#### *Tituboea saadensis* (Pic, 1894)

(Figs 57–60, 214–222)

*Melitonoma saadensis* Pic, 1894a: 221 (original description).

*Melitonoma saadensis* var. *sefrensis* Pic, 1897: 82 (original description).

*Coptocephala volatica* Normand, 1949: 92 (original description), **syn. nov.**

*Coptocephala adrarensis* Pic, 1942a: 78 (original description), **syn. nov.**

*Antipa reymondi* Kocher, 1956: 127 (original description), **syn. nov.**

**Type localities.** *Melitonoma saadensis*: ‘Bou-Saada’ [Algeria]. *Melitonoma saadensis* var. *sefrensis*: ‘Aïn-Sefra’ [Algeria]. *Coptocephala volatica*: ‘Gafsa’ [Tunisia]. *Coptocephala adrarensis*: ‘Adrar des Iforas (Sahara central)’ [northeastern Mali]. *Antipa reymondi*: ‘Oum-Jerane, dans le pré-Sahara marocain, au N.-E. du coude du Drâ’ [Morocco].

**Type material examined.** *Melitonoma saadensis*: SYNTYPES: 1 ♀, ‘Bou / Saada / 1873 [w, h] // Macrolenes / ♀ nov. sp.! [b, h] // [illegible, w, h] // Biskra in / coll. Chobaut [w, h] // type [w, h] // Le Nat. No. 182 / (... 94) p. 221 [partly illegible, w, h] // saadensis [w, h] // TYPE [r, p]’ (MNHN – coll. Pic); 1 ♀, ‘Bou / Saada / 1873 [w, h] // Serait ce la ♀ d'une / nouvelle espèce de / Macrolenes? [w, h] // type [w, h] // saadensis / n sp Pic / descrip. incompl. [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).

*Melitonoma saadensis* var. *sefrensis*: HOLOTYPE: ♂, ‘AÏN-SEFRA / Mai-June 1896 / L. BLEUSE [w, p] // saadensis / v. sefrensis / Pic [w, h] // Type [red letters, w, p] // Melitonoma / saadensis / v. sefrensis / Chob. [w, h]’ (MNHN – coll. Chobaut).

*Coptocephala volatica*: not examined. Described based on holotype (♂), probably deposited in Institut National Agronomique in Tunis.

*Coptocephala adrarensis*: SYNTYPES: ♂, ‘Coptocephala / adrarensis / n sp [w, h] // Kidal / Adrar des Iforas / aout 1941 / Volkonsky [w, h] // TYPE [r, p] // Museum Paris [p] / C. adrarensis / C. Peyer. [w, h]’; ♀, ‘Adrar des Iforas /

Od Tin Biden / (s. sahelo-sahar.) / 6-8 aout 1941 / Volkonsky [w, h] // Museum Paris [p] / C. adrarensis / C. Peyer. [w, h]'; ♀, 'Adrar / des Iforas / Volkonsky [w, h] // Museum Paris [p] / C. adrarensis / C. Peyer. [w, h] // TYPE [r, p]' (all specimens in MNHN – coll. generale, box 'Coptocephala pre-étude Rapilly').

*Antipa reymondi*: HOLOTYPE: ♂, 'Oum Jerane [h] / SUD MAROCAIN / Reymond coll. [p] 4. 52 [w, h] // TYPE [r, h] // [blank blue round label] // Antipa / Reymondi m. [h] / Kocher det. [w, p]' (PJCP). PARATYPES: 2 ♂♂, 'Oum Jerane / Gora Mimoun [h] / SAHARA MAR. / (Reymond) [p] 4. 52 [w, h] // [blank blue round label] // PARATYPE [r, p]' (PJCP). POSSIBLE PARATYPE: ♂, 'Oum Jerane [h] / SUD MAROCAIN / Reymond coll. [p] 4. 52 [w, h] // 19 [w, h] // Antipa / Reymondi / Kocher [w, h] // COLLEZIONE / M. DACCORDI [b, p]' (MDCV).

**Additional material examined.** ALGERIA: Ghardaia (Mzab), without additional data, 2 ♀♀ (MNHN). TUNISIA: Bau Abdalah env., 40 km SE of Gafsa, Jebel Hachichina, 2.vi.1994, 1 ♂, F. Kantner leg. (FKCC); Bled Thalah, pays des gommiers, without additional data, 1 ♂ (MNHN); N Jebel Cherchicha, 10 km E Haffouz (W Kairouan), 9.–10. vi.1994, 1 ♂, S. Bečvář leg. (RRCM).

**Redescription.** Body length: ♂♂ 3.9–5.5 mm; ♀♀ 4.2–6.2 mm.

**Male** (Fig. 217). Head orange with apices of mandibles black, antennae with darkened antennomeres V–XI, pronotum orange, scutellum dark with orange apex, elytra orange usually with 4 small black spots (2, 2), underside orange, metasternum darkened. Legs orange, claws infuscate.

Head and mandibles only slightly enlarged (Figs 218, 221). Mandibles small, left mandible slightly longer, sharp. Labrum transverse, anterior margin concave, lateral margins convergent and rounded, surface with row of pale setae along anterior margin. Head covered with dense short setae and small fine punctures, only clypeus nearly impunctate and glabrous. Clypeus widely shallowly concave. Eyes small. Frons very wide, 3.50 times as wide as diameter of eye, interocular space shallowly depressed. Antennae short, 0.25 times as long as body, antennomere I club-shaped, II and III very small, IV small, triangular, antennae serrated from antennomere V, antennomeres V–X wider than long.

Pronotum strongly transverse, 1.75–1.80 times as wide as long, widest in basal third, moderately convex, lustrous, covered with very fine punctures (sometimes almost indistinct), glabrous. Anterior margin slightly concave, lateral margins moderately rounded, posterior margin nearly straight but moderately bisinuate in scutellar area. Anterior angles nearly rectangular with tip rounded, posterior angles obtusangulate with tip rounded. All angles with setigerous pore bearing long pale seta. Lateral and posterior margins bordered, anterior margin bordered only in lateral parts. Posterior angles elevated above elytral base. Scutellum triangular with rounded tip, glabrous, smooth, but with large punctures along lateral margins, scutellar apex elevated above elytral level.

Elytra subcylindrical, 0.67–0.72 times as long as body, 1.35–1.45 times as long as wide in humeral part, glabrous, lustrous, densely covered with small confused punctures. Basal margin with complete thin border, in middle distinctly elevated forming narrow keel. Epipleura impunctate, glabrous, very wide in anterior quarter, suddenly narrowed and disappearing in 1/4 of elytral length. Lateral margin of elytra widely concave in lateral view.

Legs. Protibiae prolonged. Protarsi (Fig. 60): protarsomere I elongate triangular, 2.20 times as long as broad, protarsomere II elongate triangular, 1.60 times as long as broad, length ratios of protarsomeres I–IV equal to 100–80–70–90. Metatarsi short and slender, length ratios of metatarsomeres I–IV equal to 100–67–67–133. Claws simple.

Male genitalia. Aedeagus with triangular apex, in lateral view S-shaped (Figs 57–58).

**Female** (Fig. 2014). Head and mandibles not enlarged (Fig. 215). Frons 2.90–3.15 times as wide as diameter of eye. Protibiae not enlarged, protarsi short, length ratios of protarso-meres I–IV equal to 100–60–60–120. Spermatheca: cornu C-shaped, apically slightly wider, spermathecal duct slightly longer than cornu (Fig. 59).

**Variability.** Head orange or with ill defined transverse dark stripe between eyes (Figs 215, 218, 221). Antennae usually with darkened antennomeres V–XI, rarely almost completely orange with only apical antennomeres slightly infuscate. Elytra usually with four black spots, rarely humeral or scutellar spots missing (Figs 214, 217, 220), posterior pair of spots may be connected. Underside either completely orange, orange with ill-defined darkened lateral sides or metasternum completely darkened.

The populations in Morocco and Mali are on average larger and the aedeagus is more curved in lateral view (Fig. 58) than in those from Algeria and Tunisia.

**Distribution.** Algeria (PIC 1894a, 1897, present paper), Tunisia (NORMAND 1949, present paper), Morocco (KOCHER 1956), Mali (PIC 1942a).

**Comments.** Type specimens of *Melitonoma saadensis*, *M. saadensis* var. *sefrensis*, *Coptocephala adrarensis* and *Antipa reymondi* were examined and are treated as conspecific. The holotype of *Coptocephala volatica* is probably deposited in the Institut National Agronomique in Tunis and is currently inaccessible. The description of *C. volatica* is accompanied with a photo of habitus and a drawing of the aedeagus (NORMAND 1949) – both well fit other known specimens. In sum, all the above mentioned taxa are synonymized with *Tituboea saadensis*.

The specimen found in MDCV has a questionable type status. Evidently, it originates from the same series as the original Kocher's type material as the locality label is identical to the holotype. However, we are not sure if Kocher had this specimen in hands when describing *Antipa reymondi*.

### *Tituboea sexmaculata* (Fabricius, 1781)

*Cryptocephalus sexmaculatus* Fabricius, 1781: 138 (original description).

*Tituboea sexmaculata* var. *akbesiana* PIC, 1897a: 82 (original description).

*Titubaea sexmaculata* var. *humeralifer* PIC, 1900: 91 (original description).

**Type localities.** *Cryptocephalus sexmaculata*: ‘Italia’. *Tituboea sexmaculata* var. *akbesiana*: ‘Haute-Syrie: Akbès’ [= Turkey, near the city of İskenderun]. *Tituboea sexmaculata* var. *humeralifer*: ‘France méridionale’.

**Type material examined.** *Cryptocephalus sexmaculata*: not examined. The photos of 1 ♀ syntype were sent from ZMUC: ‘6 macu / latus [w, h] // ANTIPA [p] / sexamaculata F. [h] / ERBER [p] vid. [h] 19 [p] 97 [w, h]’.

*Tituboea sexmaculata* var. *akbesiana*: SYNTYPES: 1 ♀, ‘SYRIE / AMANUS / C.D. 1891 [w, p] // macropus [w, h] // type [w, h] // TYPE [r, p] // sexmaculata / v. akbesiana / PIC / pres fulvipes [w, h]’ (MNHN – coll. PIC); 1 ♀, ‘Tituboea / macropus / Akbès 94 [w, h] // type [w, h] // T. sexmaculata / v. nouvelle pres / rufipes Lef. [w, h] // TYPE [r, p]’ (MNHN – coll. PIC).

*Tituboea sexmaculata* var. *humeralifer*: SYNTYPE: 1 ♀, ‘F<sup>e</sup>. M<sup>le</sup>. [w, h] // 6 maculata [w, h] // Type [w, h] // Muséum Paris / Coll. M. PIC [w, p] // TYPE [r, p] // v. humeralifer PIC [w, h]’ (MNHN – coll. generale).

**Distribution.** Mediterranean species, eastwards to Iran (for details see REGALIN & MEDVEDEV 2010b).

**Comments.** Both varieties described by PIC (1897a, 1900) are confirmed as synonyms of *T. sexmaculata*.

***Tituboea testaceiventris* Pic, 1913**

(Figs 63–65, 223–225)

*Titubaea testaceiventris* Pic, 1913d: 186 (original description).**Type locality.** ‘Syrie: Alep’.**Type material examined.** SYNTYPE: 1 ♂, ‘Alep / (Syrie) [w, h] // désiré plusi ... [w, h] // Titubaea / ... [partly illegible, w, h] // type [w, h] // testaceiventris / Pic [w, h] // TYPE [r, p]’ (MNHN – coll. Pic).**Additional material examined.** IRAQ: Abu Ghraib area, vii.1993, 1 ♂, Smatana leg. (FKCC).**Redescription.** Body length: ♂♂ 4.4–4.5 mm (syntype 4.5 mm).

**Male** (Fig. 223). Body orange, apices of mandibles black, antennomeres VI–VIII with darkened apices, IX–XI completely darkened, elytra orange with 4 black spots (2, 2), anterior pair of spots smaller, posterior pair larger and narrowly connected, meso- and metaventrites darkened, claws black.

Head and mandibles not enlarged (Fig. 224). Mandibles small, left mandible longer, sharp. Labrum with anterior margin emarginated, lateral margins slightly convergent, anterior angles widely rounded, surface with group of 5–6 setae on each side anterolaterally, additional short setae placed on anterior margin laterally to central emargination. Head covered with dense short setae and small fine punctures, only clypeus nearly impunctate and glabrous. Clypeus widely concave. Eyes small. Frons very wide, 2.81 times as wide as diameter of eye, interocular space shallowly impressed in middle. Antennae short, 0.27 times as long as body, antennomere I club-shaped, II and III very small, IV small, triangular, antennae serrated from antennomere V, antennomeres V–X wider than long.

Pronotum glabrous, lustrous, strongly transverse, 1.81 times as wide as long, widest in basal quarter, moderately convex, sparsely covered with fine punctures and very sparsely with larger punctures. Anterior margin straight, lateral margins moderately rounded, convergent anteriorly, posterior margin nearly straight but moderately bisinuate in scutellar area. Anterior angles nearly rectangular with tip rounded, posterior angles widely rounded. All angles with setigerous pore bearing long pale seta. Lateral and posterior margins bordered, anterior margin bordered only in lateral parts, in middle border almost invisible. Posterior angles not elevated above elytral base. Scutellum triangular with rounded tip, glabrous, microsculptured, scutellar apex elevated above elytral level.

Elytra subcylindrical, 0.66 times as long as body, 1.43 times as long as wide in humeral part, glabrous, lustrous, densely covered with small confused punctures. Basal margin with complete thin border forming narrow elevated keel. Epipleura impunctate, glabrous, wide in anterior quarter, suddenly narrowed and disappearing in 1/4 of elytral length. Lateral margin of elytra widely concave in lateral view.

Legs. Protibiae moderately prolonged. Protarsomere I elongate triangular, twice as long as broad, protarsomere II triangular, 1.33 times as long as broad, length ratios of protarsomeres I–IV equal to 100–57–57–100 (Fig. 64). Metatarsi short and slender, length ratios of metatarsomeres I–IV equal to 100–75–75–150. Claws simple.

Male genitalia. Aedeagus robust, apex subtriangular with widely rounded tip. In lateral view, apex hook-like (Figs 63, 65).

**Female.** Unknown.

**Variability.** Male from Iraq has scutellum basally dark and gradually paler apically, meso- and metaventrites black, abdomen with ventrites I–III black laterally and procoxae darkened anteriorly.

**Distribution.** Syria (Pic 1913d). Newly recorded from Iraq.

**Comments.** *Tituboea ornaticollis* Medvedev, 1957 from Iran may represent a synonym of *T. testaceiventris* according to the drawing of aedeagus in the original description (MEDVEDEV 1957). However, we avoid proposing this synonymy without examination of the holotype which was not available for the present study.

In habitus, *T. testaceiventris* is also similar to *T. carmelica* Lopatin & Chikatunov, 2001 from Israel (paratype examined, TAU, see Figs 61–62, 226–228) and *T. saudica* Medvedev, 2012 from Saudi Arabia, but it can be distinguished by the shape of aedeagus: *T. testaceiventris* has apex hook-like in lateral view and separated from the rest of aedeagus by a sharp keel in dorsal view, while *T. carmelica* and *T. saudica* have apex directed up and without a keel in dorsal view. It is also evident that the structure of aedeagus of *T. testaceiventris* is close to other Iranian *Tituboea* species, particularly to *T. pusilla* Lopatin, 2001 and *T. zarudnyi* Lopatin, 2001. Unfortunately, LOPATIN (2001) created his identification key mainly based on colour characters which are extremely variable. Also, his drawings seem to be inaccurate. Thus, comprehensive comparison of the Iranian *Tituboea* is left for future studies.

The aedeagus of the syntype of *T. testaceiventris* is weakly sclerotized and particularly in lateral view unnaturally flattened (Fig. 63). The correct drawings of aedeagus are based on the specimen from Iraq (Fig. 65).

### *Tituboea tredecimpunctata* (Desbrochers des Loges, 1870)

(Figs 66–67, 229–235)

*Clythra* (*Tituboea*) *tredecimpunctata* Desbrochers des Loges, 1870b: 128 (original description).

*Titubaea peyerimhoffi* Pic, 1902: 48 (original description), **syn. nov.**

**Type localities.** *Clythra tredecimpunctata*: ‘Algérie’. *Tituboea peyerimhoffi*: ‘Arabie: Mâ’an’ [= Jordan, Ma’an].

**Type material examined.** *Clythra tredecimpunctata*: not examined. Not found in MNHN.

*Tituboea peyerimhoffi*: SYNTYPE: 1 ♀, ‘Tituboea / Peyerimhoff Pic [black letters] / Mâ’an / II.3.1902 [red letters, w, h] // Peyerimhoffi / Pic [w, h] // var. de Titubaea / 13 punctata Dsbr [w, h] // TYPE [r, p]’ (MNHN – coll. Peyerimhoff).

**Additional material examined. ALGERIA:** ‘Algeria’, without additional data, 1 ♂ (MNHN – coll. Demaison); Biskra env., without date of collecting, 2 ♀♀, De Vaulogier leg. (MNHN – coll. Demaison, MNHN – coll. Pic); Mehalis, v.1896, 1 ♂ (MNHN – coll. Pic); M’raier [= El Meghaier], 21.iv.1893, 1 ♀ (MNHN – coll. Pic). **ISRAEL:** Dead Sea, Ein Bokek, 26.iii.1997, 1 ♀, H. Sparmberg leg. (FFCJ); Hazeva, 23.iii.1997, 1 ♂, R. Hoffman leg. (TAU); Negev, Tal S of Sede Boger, 300 m, 13.ii.1987, 1 ♂, Schawaller & Schmalfuss leg. (SMNS); Negev, Nahal Zin, Akrabim, 28.iii.1997, 1 ♀, H. Sparmberg leg. (FFCJ); Palestina, Jericho, 22.iii.1936, 1 ♂, G. Frey leg. (RRCM). **JORDAN:** Wadi Mujib, 2.–10.iv.1989, 1 ♂, C. Bayer leg. (HKCH); Jarmuk river, near Umm Qays, 14.iv.2000, 1 ♂, G. Zappi leg. (RRCM); Wadi el Hasa, 29.iii.2005, 1 ♀ (RRCM). **EGYPT:** Wadi Abu Gufan, 25.iii.1918, 1 ♂, A. Alfieri leg. (MNHN – coll. Pic). **MOROCCO:** ‘Maroc’, without additional data, 1 ♂ (MNHN – coll. Demaison). **TUNISIA:** S of Kebili, Blidette vill., 33°35'N 08°50'E, 25.–27.iii.2006, 4 ♂♂ 5 ♀♀, J. Batelka & J. Straka leg. (NMPC); Ksar Ghilane, Douz, 14.iii.1997, 1 ♂, J. Schmidl leg. (HKCH); S of Kebili, Blidette vill., 25.iii.2006, 1 ♂, J. Batelka leg. (FKCC); Douz, 16.–17.iv.1996, 1 ♂ 1 ♀, J. Batelka & H. Podrouzková leg. (FKCC); 15 km N of Kebili, 17.iii.1986, 2 ♂♂, Zool. Mus. Copenhagen Exp. (RRCM); 10 km N of Kasserine, Oued el Hatab, 19.iv.1993, 1 ♂, R. Regalin leg. (RRCM); Sousse, near Hergla, 1.v.1993, 1 ♀, R. Regalin leg. (RRCM); Hadej, 43 km S of Gabes, 15.iv.1996, 1 ♀, J. Batelka & H. Podrouzková leg. (RRCM); Fernana dint., 450 m, 20.v.2009, R. Regalin leg. (RRCM).

**Distribution.** Algeria, Egypt, Israel, Jordan, Morocco, Sinai, Tunisia (REGALIN & MEDVEDEV 2010b).

**Comments.** The type material of *T. tredecimpunctata* was not located in MNHN. Therefore, we follow the identification according to the specimens in the collections of Desbrocher's contemporaries, e.g. Lefèvre, Pic, and Demaison, which exactly fit the original description. The female syntype of *T. peyerimhoffi* does not differ from the specimens of *T. tredecimpunctata*, thus we synonymize it here with the latter.

*Tituboea tredecimpunctata* is very similar to *T. biguttata*. While the colouration of *T. biguttata* is extremely variable (e.g. CODINA PADILLA 1960), all identified specimens of *T. tredecimpunctata* are almost constant in colour (Figs 229, 231, 233) but they can be confused with some aberrations of *T. biguttata*. Both species can be separated by the structure of the aedeagus which is distinctly angulated in lateral view in *T. tredecimpunctata* while in *T. biguttata* the ventral margin is almost straight. Because the spermatheca of *T. biguttata* seems to be very variable among populations, it has only a limited application (cf. Figs 66, 68). Auxiliary character can be also the shape of antennomere IV; its triangular process is usually longer in *T. tredecimpunctata* and less developed in *T. biguttata*, however, some males of *T. biguttata* cannot be distinguished based on this character.

## West Palaearctic Clytrini described by Maurice Pic with their current status

Original combination	Current status
<i>Antipa (Titubaea) arabica</i> var. <i>donceeli</i> Pic, 1929	<b>syn. nov.</b> of <i>Tituboea cingulata</i> (Lefèvre, 1883)
<i>Antipa (Titubaea) arabica</i> var. <i>lacordairei</i> Pic, 1929	<b>valid species</b> <i>Tituboea lacordairei</i> (Pic, 1929)
<i>Antipa (Titubaea) arabica</i> var. <i>palaestina</i> Pic, 1929	<b>syn. nov.</b> of <i>Tituboea lefevrei</i> (Pic, 1894)
<i>Antipa (Titubaea) fasciaticeps</i> Pic, 1929	nomen dubium
<i>Antipa (Titubaea) illigeri</i> var. <i>semiundulata</i> Pic, 1939	syn. of <i>Tituboea illigeri</i> (Lacordaire, 1848)
<i>Antipa (Titubaea) minor</i> var. <i>decemmaculata</i> Pic, 1937	<b>syn. nov.</b> of <i>Tituboea atriceps</i> Pic, 1924
<i>Antipa (Titubaea) testaceipes</i> Pic, 1939	<b>syn. nov.</b> of <i>Tituboea paykullii</i> (Lacordaire, 1848)
<i>Antipa biguttata</i> var. <i>vagenotata</i> Pic, 1939	syn. of <i>Tituboea biguttata</i> (Olivier, 1791)
<i>Antipa bicoloripes</i> Pic, 1942	<b>syn. nov.</b> of <i>Tituboea biguttata</i> (Olivier, 1791)
<i>Antipa tredecimpunctata</i> var. <i>flavipennis</i> Pic, 1950	syn. of <i>Tituboea biguttata</i> (Olivier, 1791)
<i>Barathraea octomaculata</i> Pic, 1895	<b>syn. nov.</b> of <i>Lachnaia straminipennis</i> (Lucas, 1845)
<i>Chilotoma reyi</i> var. <i>lucidipes</i> Pic, 1897	<b>syn. nov.</b> of <i>Smaragdina affinis manicata</i> (Lacordaire, 1848)
<i>Clythra atraphaxidis</i> var. <i>delagrangei</i> Pic, 1896	syn. of <i>Clytra atraphaxidis atraphaxidis</i> (Pallas, 1773)
<i>Clytra atraphaxidis</i> var. <i>milliati</i> Pic, 1942	syn. of <i>Clytra atraphaxidis atraphaxidis</i> (Pallas, 1773)
<i>Clytra atraphaxidis</i> var. <i>nigromaculata</i> Pic, 1897	<b>syn. nov.</b> of <i>Clytra atraphaxidis atraphaxidis</i> (Pallas, 1773)
<i>Clytra atraphaxidis</i> var. <i>quinquemaculata</i> Pic, 1920	unavailable infrasubspecific entity
<i>Clytra bicoloriceps</i> Pic, 1933	<b>syn. nov.</b> of <i>Clytra duodecimmaculata</i> (Fabricius, 1775)
<i>Clytra bucharica</i> Pic, 1915	syn. of <i>Clytra jacobsoni</i> Semenov, 1903
<i>Clytra bucharica</i> var. <i>notatithorax</i> Pic, 1915	syn. of <i>Clytra jacobsoni</i> Semenov, 1903
<i>Clytra nigrocincta</i> ssp. <i>bagdatensis</i> Pic, 1920	<i>Clytra nigrocincta</i> ssp. <i>bagdatensis</i> Pic, 1920
<i>Clytra nigrocincta</i> var. <i>cypriaca</i> Pic, 1918	unavailable infrasubspecific entity
<i>Clytra nigrocincta</i> var. <i>graeca</i> Pic, 1915	<b>syn. nov.</b> of <i>Clytra deficiens</i> Heyden, 1892
<i>Clytra nigrocincta</i> var. <i>multipunctata</i> Pic, 1920	unavailable infrasubspecific entity
<i>Clytra nigrocincta</i> var. <i>semireducta</i> Pic, 1918	syn. of <i>Clytra nigrocincta nigrocincta</i> Lacordaire, 1848
<i>Clytra nigrocincta</i> var. <i>subinterrupta</i> Pic, 1920	unavailable infrasubspecific entity
<i>Clytra novempunctata</i> var. <i>juncta</i> Pic, 1920	unavailable infrasubspecific entity
<i>Clytra persica</i> Pic, 1920	syn. of <i>Clytra novempunctata</i> Olivier, 1808
<i>Clytra valeriana</i> var. <i>drurei</i> Pic, 1920	unavailable infrasubspecific entity
<i>Clytra valeriana</i> var. <i>subjuncta</i> Pic, 1920	unavailable infrasubspecific entity
<i>Coptocephala adrarensis</i> Pic, 1942	<b>syn. nov.</b> of <i>Tituboea saadensis</i> (Pic, 1894)
<i>Coptocephala aeneopicta</i> var. <i>biinterrupta</i> Pic, 1918	syn. of <i>Coptocephala aeneopicta</i> (Fairmaire, 1864)
<i>Coptocephala aeneopicta</i> var. <i>biscrensis</i> Pic, 1918	syn. of <i>Coptocephala aeneopicta</i> (Fairmaire, 1864)
<i>Coptocephala aeneopicta</i> var. <i>bistrijuncta</i> Pic, 1905	syn. of <i>Coptocephala aeneopicta</i> (Fairmaire, 1864)
<i>Coptocephala aeneopicta</i> var. <i>trimaculata</i> Pic, 1918	syn. of <i>Coptocephala aeneopicta</i> (Fairmaire, 1864)
<i>Coptocephala atra</i> Pic, 1932	syn. of <i>Coptocephala unicolor</i> (Lucas, 1845)
<i>Coptocephala bleusei</i> Pic, 1897	<b>syn. nov.</b> of <i>Coptocephala perrisi</i> (Desbrochers des Loges, 1870)
<i>Coptocephala crassipes</i> var. <i>lepturieri</i> Pic, 1897	syn. of <i>Coptocephala crassipes crassipes</i> Lefèvre, 1876
<i>Coptocephala destinoi</i> var. <i>latenotata</i> Pic, 1949	syn. of <i>Coptocephala destinoi</i> Fairmaire, 1884
<i>Coptocephala dilatipes</i> Pic, 1923	<b>valid species</b> <i>Coptocephala dilatipes</i> Pic, 1923
<i>Coptocephala fallaciosa</i> var. <i>tambei</i> Pic, 1942	<b>syn. nov.</b> of <i>Coptocephala destinoi</i> Fairmaire, 1884
<i>Coptocephala flavolimbata</i> Pic, 1905	syn. of <i>Coptocephala peresi</i> (Vauloger de Beaupré, 1895)
<i>Coptocephala floralis</i> var. <i>subfasciata</i> Pic, 1897	syn. of <i>Coptocephala scopolina floralis</i> (Olivier, 1791)

(continued on the next page)

Original combination	Current status
<i>Coptocephala fossulata</i> var. <i>vitalei</i> Pic, 1913	syn. of <i>Coptocephala fossulata</i> Lefèvre, 1872
<i>Coptocephala kerimi</i> var. <i>rubericeps</i> Pic, 1916	unavailable infrasubspecific entity
<i>Coptocephala melanocephala</i> var. <i>andalusiaca</i> Pic, 1918	unavailable infrasubspecific entity
<i>Coptocephala melanocephala</i> var. <i>espanoli</i> Pic, 1933	unavailable infrasubspecific entity
<i>Coptocephala melanocephala</i> var. <i>externepunctata</i> Pic, 1895	syn. of <i>Coptocephala plagioccephala</i> (Fabricius, 1792)
<i>Coptocephala melanocephala</i> var. <i>theryi</i> Pic, 1918	unavailable infrasubspecific entity
<i>Coptocephala melanocephala</i> var. <i>tunisea</i> Pic, 1901	syn. of <i>Coptocephala plagioccephala</i> (Fabricius, 1792)
<i>Coptocephala metalliconotata</i> Pic, 1933	<b>syn. nov.</b> of <i>Coptocephala sefrensis</i> Pic, 1897
<i>Coptocephala metalliconotata</i> var. <i>theryi</i> Pic, 1936	<b>syn. nov.</b> of <i>Coptocephala sefrensis</i> Pic, 1897
<i>Coptocephala normandi</i> Pic, 1914	<i>Coptocephala normandi</i> Pic, 1914
<i>Coptocephala perezi</i> var. <i>maculicollis</i> Pic, 1919	syn. of <i>Coptocephala peresi</i> (Vauloger de Beaupré, 1895)
<i>Coptocephala rubicunda</i> var. <i>dalmatina</i> Pic, 1918	unavailable infrasubspecific entity
<i>Coptocephala rubicunda</i> var. <i>massiliensis</i> Pic, 1914	<b>valid species</b> <i>Coptocephala massiliensis</i> Pic, 1914
<i>Coptocephala rungsi</i> Pic, 1953	<i>Coptocephala rungsi</i> Pic, 1953
<i>Coptocephala rungsi</i> var. <i>kocheri</i> Pic, 1953	syn. of <i>Coptocephala rungsi</i> Pic, 1953
<i>Coptocephala sefrensis</i> Pic, 1897	<i>Coptocephala sefrensis</i> Pic, 1897
<i>Coptocephala sext stigma</i> Pic, 1918	<b>syn. nov.</b> of <i>Coptocephala perrisi</i> (Desbrochers des Loges, 1870)
<i>Coptocephala sext stigma</i> var. <i>impressiceps</i> Pic, 1918	unavailable infrasubspecific entity
<i>Coptocephala tetradyma</i> var. <i>suboblitata</i> Pic, 1901	syn. of <i>Coptocephala rubicunda rubicunda</i> (Laicharting, 1781)
<i>Coptocephala thoracica</i> var. <i>bijuncta</i> Pic, 1906	syn. of <i>Smaragdina thoracica thoracica</i> (Fischer von Waldheim, 1842)
<i>Coptocephala unicolor</i> var. <i>aenescens</i> Pic, 1932	syn. of <i>Coptocephala unicolor</i> (Lucas, 1845)
<i>Cyaniris</i> ( <i>Cyaniris</i> ) <i>maroccana</i> Pic, 1936	<i>Chilotomina maroccana</i> (Pic, 1936), <b>comb. nov.</b>
<i>Cyaniris</i> ( <i>Gynandrophthalma</i> ) <i>thoracica</i> var. <i>latejuncta</i> Pic, 1914	syn. of <i>Smaragdina thoracica thoracica</i> (Fischer von Waldheim, 1842)
<i>Cyaniris</i> ( <i>Otiocephala</i> ) <i>opaca</i> var. <i>carnerii</i> Pic, 1920	syn. of <i>Otiocephala opaca</i> (Rosenhauer, 1856)
<i>Cyaniris</i> ( <i>Otiocephala</i> ) <i>rotroui</i> Pic, 1934	<i>Otiocephala rotroui</i> (Pic, 1934)
<i>Cyaniris atricollis</i> Pic, 1922	syn. of <i>Labidostomis</i> ( <i>Wellschmiedia</i> ) <i>ghilianii</i> (Lacordaire, 1848)
<i>Cyaniris bicoloripes</i> Pic, 1922	<b>syn. nov.</b> of <i>Smaragdina xanthaspis</i> (Germar, 1824)
<i>Cyaniris thoracica</i> var. <i>subjuncta</i> Pic, 1914	syn. of <i>Smaragdina thoracica thoracica</i> (Fischer von Waldheim, 1842)
<i>Gynandrophthalma amasina</i> Pic, 1897	syn. of <i>Smaragdina flavicollis</i> (Charpentier, 1825)
<i>Gynandrophthalma chobauti</i> Pic, 1896	<i>Tituboea chobauti</i> (Pic, 1896)
<i>Gynandrophthalma pallescens</i> Pic, 1895	<i>Smaragdina pallescens</i> (Pic, 1895)
<i>Gynandrophthalma persica</i> Pic, 1911	<i>Smaragdina persica</i> (Pic, 1911)
<i>Gynandrophthalma scutellaris</i> var. <i>latemaculata</i> Pic, 1897	syn. of <i>Smaragdina scutellaris</i> (Lefèvre, 1872)
<i>Gynandrophthalma vauilogeri</i> Pic, 1894	<i>Smaragdina vauilogeri</i> (Pic, 1894)
<i>Labidostomis alaiensis</i> Pic, 1920	<b>syn. nov.</b> of <i>Labidostomis centrisculpta</i> Pic, 1920
<i>Labidostomis arcuata</i> Pic, 1920	<i>Labidostomis arcuata</i> Pic, 1920
<i>Labidostomis arcuata</i> var. <i>arisi</i> Pic, 1920	unavailable infrasubspecific entity
<i>Labidostomis attenuata</i> Pic, 1897	syn. of <i>Labidostomis diversifrons</i> Lefèvre, 1872
<i>Labidostomis bigemina</i> var. <i>semideficiens</i> Pic, 1906	syn. of <i>Labidostomis lusitanica</i> (Germar, 1824)
<i>Labidostomis centrisculpta</i> Pic, 1920	<i>Labidostomis centrisculpta</i> Pic, 1920

(continued on the next page)

Original combination	Current status
<i>Labidostomis centromaculata</i> var. <i>lineata</i> Pic, 1920	unavailable infrasubspecific entity
<i>Labidostomis centromaculata</i> var. <i>obliterata</i> Pic, 1920	unavailable infrasubspecific entity
<i>Labidostomis centromaculata</i> var. <i>suturella</i> Pic, 1920	unavailable infrasubspecific entity
<i>Labidostomis delagrangei</i> Pic, 1904	syn. of <i>Labidostomis testaceipes</i> Pic, 1904
<i>Labidostomis elegans</i> var. <i>inhumeralis</i> Pic, 1920	unavailable infrasubspecific entity
<i>Labidostomis elegans</i> var. <i>luristanica</i> Pic, 1920	<i>Labidostomis luristanica</i> Warchałowski, 2004
<i>Labidostomis lejeunei</i> var. <i>violaceipennis</i> Pic, 1932	syn. of <i>Labidostomis guerinii lejeunei</i> Fairmaire, 1866
<i>Labidostomis mairei</i> var. <i>subinterruptus</i> Pic, 1932	syn. of <i>Labidostomis mairei</i> Peyerimhoff, 1922
<i>Labidostomis quadrinotata</i> var. <i>bijuncta</i> Pic, 1912	syn. of <i>Labidostomis hebraea</i> (Lacordaire, 1848)
<i>Labidostomis quadrinotata</i> var. <i>bisbijuncta</i> Pic, 1912	syn. of <i>Labidostomis hebraea</i> (Lacordaire, 1848)
<i>Labidostomis quadrinotata</i> var. <i>posticejuncta</i> Pic, 1912	syn. of <i>Labidostomis hebraea</i> (Lacordaire, 1848)
<i>Labidostomis roberti</i> Pic, 1919	syn. of <i>Labidostomis hybrida</i> (Lucas, 1845)
<i>Labidostomis testaceipes</i> Pic, 1904	<i>Labidostomis testaceipes</i> Pic, 1904
<i>Lachnaea curtipennis</i> Pic, 1936	syn. of <i>Lachnaia punccticollis</i> Chevrolat, 1840
<i>Lachnaea paradoxa</i> var. <i>bistigmata</i> Pic, 1912	syn. of <i>Lachnaia paradoxa</i> (Olivier, 1808)
<i>Lachnaea paradoxa</i> var. <i>jurjurense</i> Pic, 1913	syn. of <i>Lachnaia paradoxa</i> (Olivier, 1808)
<i>Lachnaea paradoxa</i> var. <i>kabyliana</i> Pic, 1912	syn. of <i>Lachnaia paradoxa</i> (Olivier, 1808)
<i>Lachnaea pubescens</i> var. <i>subfasciata</i> Pic, 1897	syn. of <i>Lachnaia pubescens</i> (Dufour, 1820)
<i>Lachnaea punccticollis</i> var. <i>uniustigmata</i> Pic, 1898	syn. of <i>Lachnaia punccticollis</i> Chevrolat, 1840
<i>Lachnea (Barathraea) separata</i> Pic, 1897	<b>syn. nov.</b> of <i>Lachnaia straminipennis</i> (Lucas, 1845)
<i>Macrolenes dentipes</i> var. <i>binotaticollis</i> Pic, 1916	syn. of <i>Macrolenes dentipes</i> (Olivier, 1808)
<i>Macrolenes ruficollis</i> var. <i>latemaculatus</i> Pic, 1897	syn. of <i>Macrolenes dentipes</i> (Olivier, 1808)
<i>Melitonoma lefevrei</i> Pic, 1894	<i>Tituboea lefevrei</i> (Pic, 1894), <b>comb. nov.</b>
<i>Melitonoma saadensis</i> Pic, 1894	<i>Tituboea saadensis</i> (Pic, 1894)
<i>Melitonoma saadensis</i> var. <i>sefrensis</i> Pic, 1897	syn. of <i>Tituboea saadensis</i> (Pic, 1894)
<i>Oticephala opaca</i> var. <i>latecyanescens</i> Pic, 1946	syn. of <i>Oticephala opaca</i> (Rosenhauer, 1856)
<i>Oticephala opaca</i> var. <i>rufolimbata</i> Pic, 1897	syn. of <i>Oticephala opaca</i> (Rosenhauer, 1856)
<i>Titubaea ciliicensis</i> Pic, 1904	syn. of <i>Tituboea macropus</i> (Illiger, 1800)
<i>Titubaea fasciata</i> var. <i>binotaticollis</i> Pic, 1914	syn. of <i>Tituboea fasciata</i> Lefèvre, 1872
<i>Titubaea fasciata</i> var. <i>semiconjuncta</i> Pic, 1914	syn. of <i>Tituboea fasciata</i> Lefèvre, 1872
<i>Titubaea chobauti</i> var. <i>semijuncta</i> Pic, 1918	unavailable infrasubspecific entity
<i>Titubaea illigeri</i> var. <i>lepraeuri</i> Pic, 1895	syn. of <i>Tituboea illigeri</i> (Lacordaire, 1848)
<i>Titubaea laticollis</i> var. <i>subjuncta</i> Pic, 1903	syn. of <i>Tituboea laticollis</i> (Olivier, 1808)
<i>Titubaea macropus</i> var. <i>armeniaca</i> Pic, 1918	unavailable infrasubspecific entity
<i>Titubaea minor</i> var. <i>atriceps</i> Pic, 1924	<b>valid species</b> <i>Tituboea atriceps</i> Pic, 1924
<i>Titubaea mokattamensis</i> Pic, 1912	<b>syn. nov.</b> of <i>Tituboea arabica</i> (Olivier, 1808)
<i>Titubaea nigriventris</i> var. <i>infasciata</i> Pic, 1912	syn. of <i>Tituboea nigriventris</i> Lefèvre, 1872
<i>Titubaea octopunctata</i> var. <i>mecheriensis</i> Pic, 1895	<b>valid species</b> <i>Tituboea mecheriensis</i> Pic, 1895
<i>Titubaea octopunctata</i> var. <i>siciliensis</i> Pic, 1912	<b>syn. nov.</b> of <i>Tituboea octopunctata</i> (Fabricius, 1787)
<i>Titubaea peyerimhoffi</i> Pic, 1902	<b>syn. nov.</b> of <i>Tituboea tredecimpunctata</i> (Desbrochers des Loges, 1870)
<i>Titubaea sexmaculata</i> var. <i>akbesiana</i> Pic, 1897	syn. of <i>Tituboea sexmaculata</i> (Fabricius, 1781)
<i>Titubaea sexmaculata</i> var. <i>humeralifer</i> Pic, 1900	syn. of <i>Tituboea sexmaculata</i> (Fabricius, 1781)
<i>Titubaea subabbreviata</i> Pic, 1912	<b>syn. nov.</b> of <i>Tituboea arabica</i> (Olivier, 1808)
<i>Titubaea subabbreviata</i> var. <i>bisbinotata</i> Pic, 1912	<b>syn. nov.</b> of <i>Tituboea arabica</i> (Olivier, 1808)
<i>Titubaea subabbreviata</i> var. <i>notaticeps</i> Pic, 1912	<b>syn. nov.</b> of <i>Tituboea arabica</i> (Olivier, 1808)
<i>Titubaea subabbreviata</i> var. <i>robustior</i> Pic, 1912	<b>syn. nov.</b> of <i>Tituboea arabica</i> (Olivier, 1808)
<i>Titubaea testaceiventris</i> Pic, 1913	<i>Tituboea testaceiventris</i> Pic, 1913
<i>Titubaea tredecimpunctata</i> var. <i>kocheri</i> Pic, 1949	<b>syn. nov.</b> of <i>Tituboea mecheriensis</i> Pic, 1895
<i>Tituboea fasciata</i> var. <i>obliterata</i> Pic, 1897	syn. of <i>Tituboea fasciata</i> Lefèvre, 1872
<i>Tituboea octopunctata</i> var. <i>unipunctata</i> Pic, 1897	syn. of <i>Tituboea octopunctata</i> (Fabricius, 1787)

## Clytrini described by Louis Kocher with their current status

Original combination	Current status
<i>Antipa biguttata</i> var. <i>legionis</i> Kocher, 1959	unavailable infrasubspecific entity
<i>Antipa fasciata</i> var. <i>infasciata</i> Kocher, 1952	syn. of <i>Tituboea fasciata</i> Lefèvre, 1872
<i>Antipa hirsutula</i> Kocher, 1959	<b>syn. nov.</b> of <i>Tituboea paykulii</i> (Lacordaire, 1848)
<i>Antipa reymondi</i> Kocher, 1956	<b>syn. nov.</b> of <i>Tituboea saadensis</i> (Pic, 1894)
<i>Chilotoma rotroui</i> Kocher, 1961	<i>Otiothraea rotroui</i> (Kocher, 1961), <b>comb. nov.</b>
<i>Coptocephala parousei</i> Kocher, 1959	<i>Coptocephala parousei</i> Kocher, 1959
<i>Coptocephala rotroui</i> Kocher, 1969	<b>syn. nov.</b> of <i>Coptocephala sefrensis</i> Pic, 1897
<i>Coptocephala schrammi</i> Kocher, 1959	<b>syn. nov.</b> of <i>Coptocephala perrisi</i> (Desbrochers des Loges, 1870)
<i>Labidostomis hybrida</i> var. <i>atlasica</i> Kocher, 1959	unavailable infrasubspecific entity
<i>Labidostomis rufomarginata</i> var. <i>reymondi</i> Kocher, 1959	unavailable infrasubspecific entity
<i>Lachnaea lucidicollis</i> var. <i>peyerimhoffi</i> Kocher, 1953	<i>Lachnaia peyerimhoffi</i> Kocher, 1953

## Clytrini types in Kocher's collection described by other authors

### *Labidostomis ballsi* Antoine, 1937

*Labidostomis ballsi* Antoine, 1937: 244 (original description).

**Type material in PJCP.** SYNTYPES: ♂, ‘Dj. Rhat. 3200 [h] / Maroc (Antoine) [p] / 12.VII.36 [w, h] // Type [r, h] // Labidostomis / Ballsi m. [h] / Antoine det. [w, p] // [small blue round label, blank]’; ♀, ‘Dj. Rhat. 3200<sup>m</sup> [h] / Maroc (Antoine) [p] / 12.VII.36 [w, h] // CoType [r, h] // Labidostomis / Ballsi m. [h] / Antoine det. [w, p] // [small blue round label, blank]’.

**Current status.** *Labidostomis (Chlorostola) ballsi* Antoine, 1937.

**Comments.** Described from three specimens, two of them found in PJCP. Although they are labelled as type and cotype, this information was not published in the original description thus both specimens are treated as syntypes. The deposition of the third syntype is unknown to us.

### *Gynandrophthalma (Otioccephala) antoinei* Cobos, 1957

*Gynandrophthalma (Otioccephala) antoinei* Cobos, 1957: 178 (original description).

**Type material in PJCP.** SYNTYPES: ♂, ‘Ifrane IV.41 [h] / Maroc (Antoine) [w, p] // [small blue round label, blank] // HOLOTIPO [r, p] // Otioccephala / sp. / Peyer det. [w, h] // Otioccephala / antoinei / m. nov. sp. / Holotipo [h] / A. Cobos det. 1.955 [w, p]’; ♀, ‘Ifrane IV.41 [h] / Maroc (Antoine) [w, p] // [small blue round label, blank] // ALOTIPO [r, p] // Otioccephala / antoinei / m. nov. sp. / Alotipo [h] / A. Cobos det. 1.955 [w, p]’.

**Current status.** *Otioccephala antoinei* (Cobos, 1957).

**Comments.** COBOS (1957) described *Otioccephala antoinei* from unspecified number of specimens of both sexes collected by Antoine. Because holotype and allotype are not mentioned in the original description we treat both specimens as syntypes.

### *Gynandrophthalma (Oticephala) atlantica Cobos, 1957*

*Gynandrophthalma (Oticephala) atlantica Cobos, 1957: 179* (original description).

**Type material in PJCP.** SYNTYPES: ♂, ‘Oualous [h] / TAQUELFT / G<sup>d</sup> Atlas (Kocher) [p] / 1300 – 5.48 [w, h] // HOLOTIPO [r, p] // [small blue round label, blank] // Oticephala / atlantica / nov. sp. [h] / A. Cobos det. 1955 [w, p]’; ♀, ‘Tazanit [h] / G<sup>d</sup> Atlas (Kocher [p] / 1600 – 4.48 [w, h] // ALOTIPO [r, p] // [small blue round label, blank] // opaca var. / ... / Warioni Lef. [partly illegible, w, h] // Oticephala / atlantica / m. nov. sp. / Alotipo [h] / A. Cobos det. 1.956 [w, p]’; 1 unsexed specimen (badly damaged), ‘TAQUELFT / G<sup>d</sup> Atlas (Kocher) [p] / 1100<sup>m</sup> 5.48 [w, h] // [small blue round label, blank] // PARATIPO [r, p] // Oticephala / atlantica / m. nov. sp. / Paratipo [h] / A. Cobos det. 1.956 [w, p]’.

**Current status.** *Oticephala atlantica* (Cobos, 1957).

**Comments.** Described from unspecified number of specimens of both sexes and the Institut scientifique chérifien in Rabat was indicated as depository. Because holotype, allotype and paratype are not mentioned in the original description we treat the specimens as syntypes.

### *Gynandrophthalma (Oticephala) grossepunctata Cobos, 1957*

*Gynandrophthalma (Oticephala) grossepunctata Cobos, 1957: 187* (original description).

**Type material in PJCP.** SYNTYPES: ♂, ‘Oujda [w, h] // HOLOTIPO [r, p] // [small blue round label, blank] // var. / Warioni Lef [h] / Kocher det. [p] 51 [w, h] // Oticephala / grossepunctata / m. nov. sp. / Holotipo [h] / A. Cobos det. 1.956 [w, p]’; ♂, ‘Oujda [w, h] // PARATIPO [r, p] // [small blue round label, blank] // Oticephala / grossepunctata / m. nov. sp. / Paratipo [h] / A. Cobos det. 1.956 [w, p]’.

**Current status.** *Oticephala grossepunctata* (Cobos, 1957).

**Comments.** Described from unspecified number of males and their deposition was not mentioned. Because holotype and paratype are not mentioned in the original description we treat both males as syntypes. The syntype(s) from Sidi Ali mentioned in the original description were not found in PJCP, their deposition is unknown to us.

### *Gynandrophthalma (Oticephala) kocheri Cobos, 1957*

*Gynandrophthalma (Oticephala) kocheri Cobos, 1957: 180* (original description).

**Type material in PJCP.** HOLOTYPE: ♂, ‘AZGOUR [p] Adassil [h] / (Gd. Atlas Occ.) / Maroc (Kocher) [p] / 1600–2000 4.51 [w, h] // [small blue round label, blank] // HOLOTIPO [r, p] // Oticephala / kocheri / m. nov. sp. [h] / A. Cobos det. 1955 [w, p]’.

**Current status.** *Oticephala kocheri* (Cobos, 1957).

**Comments.** Explicitly described based on one male deposited in the Institut scientifique chérifien in Rabat. The holotype is however deposited in PJCP.

### *Gynandrophthalma (Oticephala) maroccana Cobos, 1957*

*Gynandrophthalma (Oticephala) maroccana Cobos, 1957: 181* (original description).

**Type material in PJCP.** SYNTYPES: ♂, ‘Christian [p] 3.53 [h] / (Maroc) (Rouleau) [w, p] // [small blue round label, blank] // HOLOTIPO [r, p] // Oticephala / maroccana / Holotipo nov. sp. [h] / A. Cobos det. 1.956 [w, p]’; ♀, ‘Air Regada / M. At. c. III 47 [h] / Maroc (Antoine) [w, p] // [small blue round label, blank] // ALOTIPO [r, p] // Oticephala / maroccana / m. nov. sp. / Alotipo [h] / A. Cobos det. 1.956 [w, p]’.

**Current status.** *Oticephala maroccana* (Cobos, 1957).

**Comments.** Described from unspecified number of specimens of both sexes and the Institut scientifique chérifien in Rabat was indicated as depository. Because holotype and allotype are not mentioned in the original description we treat the specimens as syntypes.

### ***Gynandrophthalma (Otioccephala) proxima* Cobos, 1957**

*Gynandrophthalma (Otioccephala) proxima* Cobos, 1957: 174 (original description).

**Type material in PJCP.** HOLOTYPE: ♂, ‘gara de Berguent [h] / Maroc (Antoine) [p] / 900. XII.40 [w, h] // [small blue round label, blank] // HOLOTIPO [r, p] // Otioccephala / proxima / nov. sp. / Holotipo [h] / A. Cobos det. 1.956 [w, p]’.

**Current status.** *Otioccephala proxima proxima* (Cobos, 1957).

**Comments.** Explicitly described based on one male from Antoine’s collection. The holotype is however deposited in PJCP.

### ***Gynandrophthalma (Otioccephala) proxima obsoletesculpta* Cobos, 1957**

*Gynandrophthalma (Otioccephala) proxima* ssp. *obsoletesculpta* Cobos, 1957: 174 (original description).

**Type material in PJCP.** SYNTYPES: ♂, ‘Guercif. I.39 [h] / Maroc (Antoine) [w, p] // [small blue round label, blank] // HOLOTIPO [r, p] // Otioccephala / proxima ssp. / *obsoletesculpta* / Holotipo nov. [h] / A. Cobos det. 1.956 [w, p]’; ♀, ‘Guercif. I.39 [h] / Maroc (Antoine) [w, p] // [small blue round label, blank] // ALLOTYPE [red letters, w, h]’.

**Current status.** *Otioccephala proxima obsoletesculpta* (Cobos, 1957).

**Comments.** Described from unspecified number of specimens from Antoine’s collection. Because holotype and allotype are not mentioned in the original description we treat both males as syntypes.

## **Acknowledgements**

We would like to thank all curators listed in Material and methods for giving us the opportunity to study the type specimens in their custody. Pierre Jolivet (Paris, France) kindly allowed the first author to examine the Clytrini type material described by Louis Kocher, included in his collection. Sree Gayathree Selvanthan and Alexey Solodovnikov (ZMUC) took photos of several Fabrician’s type specimens. Berta Caballero López (MZBS) kindly sent us photos of *Coptocephala melanocephala* var. *espanoli*. Maria Dimaki (GMNH) sent us photos of *Cyaniris opaca* var. *carnerii*. Oxana Nesterova (Minsk, Belarus) provided us with photos of *Tituboea chikatunovi* from Lopatin’s collection, currently unavailable and in possession of Lopatin’s relatives. We also express our thanks to Alberto Ballerio (Brescia, Italy), a member of the International Commission on Zoological Nomenclature, for his kind help with the interpretations of some articles of the ICZN.

This research received support from the Synthesys Project FR-TAF-3479 ‘Taxonomical status of varieties described by Maurice Pic in Palaearctic Clytrini (Coleoptera: Chrysomelidae)’ financed by the European Community-Research Infrastructure Action under the Seventh Framework Programme.

## References

- ALFIERI A. 1976: The Coleoptera of Egypt. *Mémoires de la Société Entomologique d'Egypte* **5**: i–xvi + 1–362.
- ANTOINE M. 1937: Notes d'entomologie marocaine. XXIV. Deuxième contribution à la faune du Djebel Rhat. *Bulletin de la Société des Sciences Naturelles du Maroc* **16** (1936): 239–245.
- BAGUENA L. 1960: Notas críticas y descriptivas sobre algunos Clytrini (Col. Chrysomelidae). *Graellsia* **18**: 15–28.
- BAILLY-CHOUMARA H. 1973: Louis Kocher (1894–1972). Secrétaire général honoraire de la Société des sciences naturelles et physiques du Maroc. Son oeuvre entomologique marocaine. *Bulletin de la Société des Sciences Naturelles et Physiques du Maroc* **53**: 3–10.
- BAVIERA C. 2004: La collezione di coleotteri di Francesco Vitale. *Il Naturalista Siciliano (Serie Quarta)* **28**: 925–981.
- BEDEL L. 1921: Coléoptères nouveaux du Maroc. Récoltes du Dr. M. Bedel dans le Moyen Atlas, 1916–1917. *Bulletin de la Société Entomologique de France* **1921**: 59–61.
- BEZDĚK J. 2013: Taxonomical changes in West Palaearctic Clytrini (Coleoptera: Chrysomelidae, Cryptocephalinae). *Entomologische Zeitschrift* (Stuttgart) **123**: 247–250.
- BEZDĚK J. & BATELKA J. 2011: Order Coleoptera, family Chrysomelidae. Additions and description of a new species. Pp. 250–273. In: HARTEN A. VAN (ed.): *Arthropod fauna of the UAE. Volume 4*. Multiply Marketing Consultancy Services, Abu Dhabi, 816 pp.
- BEZDĚK J. & KANTNER F. 2010: Revision of the genus Paraclytra (Coleoptera: Chrysomelidae: Cryptocephalinae: Clytrini), with description of *P. cervenkai* sp. nov. from Sultanate of Oman. *Zootaxa* **2353**: 1–33.
- CHARPENTIER T. DE 1825: *Horae entomologicae, adjectis tabulis novem coloratis*. A. Gosohorsky, Wratislaviae, xvi + 255 pp., 9 pls.
- CHEVROLAT L. A. A. 1840: Descriptions de quelques coléoptères de la Galice et du Portugal provenant d'envois de M. Deyrolles fils. *Revue Zoologique par la Société Cuvierienne* **3**: 8–18.
- CLAVAREAU H. 1913: Chrysomelidae: 5. Megascelinae, 6. Megalopodinae, 7. Clytrinae, 8. Cryptocephalinae, 9. Chlamydinae, 10. Lamprosominae. In: SCHENKLING S. (eds): *Coleopterorum Catalogus. Pars 53*. W. Junk, Berlin, 278 pp.
- COBOS A. 1956: Estudios sobre Clytritae (Col. Chrysomelidae) del norte de África. *Tamuda* **4**: 169–182.
- COBOS A. 1957: Las Gynandrophthalma Lac. del subgénero Otiocepha Lef. (Coleoptera, Chrysomelidae). *Archivos del Instituto de Aclimatación* (Almería) **6**: 163–190.
- CODINA PADILLA F. 1958: Las Lachnaea Redt. Ibero-Marroquies (Col. Chrysomelidae). *Graellsia* **16**: 33–44.
- CODINA PADILLA F. 1960: Apuntes sobre Chrysomelidae Ibero-Marroquies. *Graellsia* **18**: 37–50.
- DESBROCHERS DES LOGES J. 1870a: Description de coléoptères nouveaux algériens et remarques diverses. *Bulletin de l'Académie d'Hippone* **9**: 68–82.
- DESBROCHERS DES LOGES J. 1870b: Descriptions de coléoptères nouveaux d'Europe et confins. *L'Abeille* **7** (1869–1870): 10–135.
- DOGUET S. & BERGEAL M. 2007: Contribution à l'étude des Chrysomelidae du Maroc et d'Espagne, avec description d'une espèce nouvelle de Longitarsus (Coleoptera). *Nouvelle Revue d'Entomologie (Nouvelle Série)* **23** (2006): 99–113.
- DUFOUR L. 1820: Description de dix espèces nouvelles ou peu connues d'insectes recueillis en Espagne. *Annales Générales des Sciences Physiques* (Bruxelles) **6**: 307–317.
- ERBER D. & MEDVEDEV L. N. 1999: Zur Taxonomie der Gattung Smaragdina Chevrolat (Coleoptera: Chrysomelidae: Clytrinae), mit Beschreibungen neuer Taxa aus Asien. *Stuttgarter Beiträge zur Naturkunde (A Biologie)* **601**: 1–10.
- EVENHUIS N. E. 2002: Publication and dating of the two "Bulletins" of the Société Entomologique de France (1873–1894). *Zootaxa* **70**: 1–32.
- FABRICIUS J. C. 1775: *Systema Entomologiae sistens insectorum classes, ordines, genera, species, adjectis synonymis, locis, descriptionibus, observationibus*. Korte, Flensburgi et Lipsiae, xxxii + 832 pp.
- FABRICIUS J. C. 1781: *Species insectorum exhibentes eorum differentias specificas, synonyma auctorum, loca natalia, metamorphosin adiectis observationibus, descriptionibus. Tom I.* Carol Ernest Bohnii, Hamburgi et Kilonii, vii + 552 pp.
- FABRICIUS J. C. 1787: *Mantissa Insectorum sistens eorum species nuper detectas adiectis characteribus genericis, differentiis specificis, emendationibus, observationibus*. Christ. Gottl. Proft, Hafniae, xx + 348 pp.

- FABRICIUS J. C. 1792: *Entomologia systematica emendata et aucta. Secundum classes, ordines, genera, species adjectis synonymis, locis, descriptionibus, observationibus. Tom I. Pars II.* Christ. Gottl. Proft, Hafniae, 538 pp.
- FAIRMAIRE L. 1864: Coléoptères d'Algérie, rapports par M. Ogier de Baulny. *Annales de la Société Entomologique de France, Série 4* 3: 637–648.
- FAIRMAIRE L. 1875: Coléoptères de la Tunisie récoltés par Mr. Abdul Kerim. *Annali del Museo Civico di Storia Naturale di Genova* 7: 475–540.
- FAIRMAIRE L. 1884: Liste des coléoptères recueillis par M. l'abbé David à Akbès (Asie-Mineure) et descriptions des espèces nouvelles. *Annales de la Société Entomologique de France, Série 6* 4: 165–180.
- FAIRMAIRE L. 1886: Note sur les Coléoptères recueillis par M. Laligant à Obock. *Annales de la Société Entomologique de France, Série 6* 5 (1885): 435–462.
- FAIRMAIRE L. 1894: Descriptions de Coléoptères d'Algérie. *Annales de la Société Entomologique de Belgique* 38: 310–313.
- FAIRMAIRE L. & COQUEREL C. 1860: Essai sur les coléoptères de Barbarie 4. *Annales de la Société Entomologique de France, Série 4* 6: 17–74.
- FISCHER VON WALDHEIM G. 1842: *Catalogus Coleopterorum in Siberia orientali a Cel. Gregorio Silide Karelino collectorum.* Moscou, 21 pp.
- GERMAR E. F. 1824: *Insectorum species novae aut minus cognitae, descriptionibus illustratae. Volumen primum. Coleoptera.* J. C. Hendelii et Filii, Halae, xxiv + 624 pp., 2 pls.
- GHAHARI H. & HAWKESWOOD T. J. 2011: A study on the Chrysomelidae (Coleoptera) from Kurdistan province and adjacent areas, western Iran. *Calodema* 195: 1–6.
- GRASSO D. 1963: Osservazioni sulle Lachnaea, subg. Barathraea, interessanti la fauna italiana (Coleoptera Chrysomelidae). *Bollettino della Società Entomologica Italiana* 93: 74–76.
- GRESSITT J. L. & KIMOTO S. 1961: The Chrysomelidae (Coleopt.) of China and Korea. Part 1. *Pacific Insects Monograph 1A*: 1–299.
- GRIDELLI E. 1930: Risultati zoologici della missione inviata dalla R. Società Geografica Italiana per l'esplorazione dell'oasi di Giarabub (1926–1927). Coleotteri. *Annali del Museo Civico di Storia Naturale di Genova* 54: 1–485.
- HEYDEN L. VON 1892: Bemerkenswerthe Chrysomeliden-Varietäten. *Deutsche Entomologische Zeitschrift* 1891: 368.
- HORN W., KAHLE I., FRIESE G. & GAEDIKE R. 1990: *Collectiones entomologicae. Ein Kompendium über den Verbleib entomologischer Sammlungen der Welt bis 1960. Teil II: L bis Z.* Akademie der Landwirtschaftswissenschaften der Deutschen Demokratischen Republik, Berlin, 223–541 pp.
- ICZN 1999: *International code of zoological nomenclature.* Fourth Edition. International Trust for Zoological Nomenclature, London, 306 pp.
- ILLIGER J. C. W. 1800: Vierzig neue Insekten aus der Hellwigschen Sammlung in Braunschweig. *Archiv für Zoologie und Zootomie* 1: 103–150.
- JAKOBSON G. G. 1898: Chrysomelidae palaearectici novi vel parum cogniti. II. *Annuaire du Musée Zoologique de l'Académie Impériale des Sciences de St.-Pétersbourg* 3: 191–202.
- KASAP H. 1987: A list of some Clytrinae (Col.: Chrysomelidae) from Turkey. Part II. Clytra, Smaragdina, Cheilotoma. *Türkische Entomologische Dergisi* 11: 85–95.
- KIMOTO S. & GRESSITT J. L. 1981: Chrysomelidae (Coleoptera) of Thailand, Cambodia, Laos and Vietnam. II. Clytrinae, Cryptocephalinae, Chlamisinae, Lamprosomatinae and Chrysomelinae. *Pacific Insects* 23: 286–391.
- KOCHER L. 1952: Antipa Paykulli Lac et fasciata Lef (Col. Chrysom.). *Compte Rendu des Séances Mensuelles de la Société de Sciences Naturelles et Physique du Maroc* 18: 117–118.
- KOCHER L. 1953: Localisations nouvelles ou intéressantes de coléoptères marocains. *Travaux de l'Institut Scientifique Chérifien, Série Zoologie* 7: 6–142.
- KOCHER L. 1956: Description d'une nouvelle Clytrinae du Pré-Sahara marocaine (Col. Chrysom.). *Compte Rendu des Séances Mensuelles de la Société de Sciences Naturelles et Physique du Maroc* 22: 127–128.
- KOCHER L. 1959: Contribution à l'étude des chrysomélides du Maroc. *Mémoires de la Société des Sciences Naturelles et Physiques du Maroc (Nouvelle Série), Zoologie* 5 (1958): 1–82.
- KOCHER L. 1961: Nouvelles espèces de Coléoptères du Maroc. *Bulletin de la Société des Sciences Naturelles et Physiques du Maroc* 40 (1960): 233–241.
- KOCHER L. 1969: Description de nouveaux coléoptères du Maroc. *Bulletin de la Société des Sciences Naturelles et Physiques du Maroc* 48 (1968): 107–113.

- KRAATZ G. 1872: Bemerkungen über europäische Clytriden. *Berliner Entomologische Zeitschrift* **16**: 193–232.
- KÜSTER H. C. 1847: *Die Käfer Europas. Nach der Natur beschrieben. Mit Beiträgen mehrerer Entomologen*. 9. Heft. Bauer & Raspe, Nürnberg, [2] + 100 sheets, 3 pl.
- LACORDAIRE J. T. 1848: Monographie des coléoptères subpentamères de la famille des phytophages. Tome second. *Mémoires de la Société Royale des Sciences de Liège* **5**: i–vi + 1–890.
- LAICHARTING J. N. VON 1781: *Verzeichniß und Beschreibung der Tyrolier-Insekten. I. Theil. Käferartige Insecten. 1. Band*. Johann Caspar Füssly, Zürich, xii + 248 pp.
- LEFÈVRE E. 1872: Monographie des clytrides d'Europe et du bassin de la Méditerranée. *Annales de la Société Entomologique de France, Série 5* **2**: 49–168, 313–396.
- LEFÈVRE E. 1876: [new taxa]. *Bulletin de la Société Entomologique de France* **1876**: lxxii–lxxiv.
- LEFÈVRE E. 1883: [new taxa]. *Bulletin de la Société Entomologique de France* **1883**: 149–150 [bi-monthly version issued on 20.ix.1883].
- LEFÈVRE E. 1885: *Annales de la Société entomologique de France. Tables générales, de 1861 à 1880 inclusivement*. Société entomologique de France, Paris, 291 pp.
- LINNAEUS C. 1758: *Systema naturae per regna tria naturae secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis. Tomus I. Editio decima, reformata*. Laurentii Salvii, Holmiae, 823 pp.
- LINNAEUS C. 1767: *Systema naturae, per regna tria naturae, secundum classes, ordines, genera. Species cum characteribus, differentiis, synonymis, locis. Editio duodecima. Tomus I., Pars II*. Laurentii Salvii, Holmiae, 2 + 533–1327 + [37] pp.
- LÖBL I. & SMETANA A. (eds.) 2010: *Catalogue of Palaearctic Coleoptera. Volume 6. Chrysomeloidea*. Apollo Books, Stenstrup, 924 pp.
- LÖBL I. & SMETANA A. (eds.) 2011: *Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea I*. Apollo Books, Stenstrup, 373 pp.
- LOPATIN I. K. 1977: *Zhuki-listoedy (Chrysomelidae) Sredney Azii i Kazakhstana. [Leaf-beetles (Chrysomelidae) of Middle Asia and Kazakhstan]*. Nauka, Leningrad, 268 pp (in Russian).
- LOPATIN I. K. 1995: Novye i maloizvestnye zhuki-listoedy (Coleoptera, Chrysomelidae) iz yuzhnogo i vostochnogo Azii. (New and little known leaf-beetles (Coleoptera, Chrysomelidae) from South and East Asia). *Entomologicheskoe Obozrenie* **74**: 97–104 (in Russian, English abstract).
- LOPATIN I. K. 2001: Review of Iranian species of the genus *Tituboea* Lacordaire, 1848 (Coleoptera: Chrysomelidae). *Genus* **12**: 35–43.
- LOPATIN I. K. 2002: Übersicht der Ost-Mediterranen Calyptorrhina-Arten mit zweifarbigem flügeldecken (Coleoptera, Chrysomelidae, Clytrinae). *Vestnik Zoologii* **36**: 87–89.
- LOPATIN I. K. 2008: Order Coleoptera, family Chrysomelidae. Pp. 312–324. In: HARTEN A. VAN (ed.): *Arthropod fauna of the United Arab Emirates. Volume 1*. Multiply Marketing Consultancy Services, Abu Dhabi, 754 pp.
- LUCAS P. H. 1845: Note sur quelques nouvelles espèces d'insectes qui habitent les possessions françaises du nord de l'Afrique. *Revue Zoologique, par la Société Cuvierienne* **8**: 120–127.
- MEDVEDEV L. N. 1975: Chrysomelidae Collected by Dr. W. Wittmer in Turkey and Iran. *Mitteilungen der Entomologischen Gesellschaft Basel* **25**: 12–19.
- MEDVEDEV L. N. 1992: The Clytrinae (Coleoptera Chrysomelidae) of Israel. *Russian Entomological Journal* **1**: 51–55.
- MEDVEDEV L. N. & KATBEH-BADER A. 2002: New species of Smaragdina Chevrolat, 1837 from Jordan (Chrysomelidae, Clytrinae). *Entomologica Basiliensis* **24**: 255–258.
- MÉNÉTRIÉS E. 1832: *Catalogus raisonné des objets de zoologie recueillis dans un voyage au Caucase et jusqu'aux frontières actuelles de la Perse*. Académie Impériale des Sciences, St. Pétersbourg, xxxiii + 271 pp.
- NORMAND H. 1949: Contribution au catalogue des coléoptères de la Tunisie. Troisième supplément (fascicule 4). *Bulletin de la Société de Science Naturelles de Tunisie* **2**: 79–104, pl. VII.
- OLIVIER A. G. 1791: *Encyclopédie métodique, ou par ordre de matières; par une société de gens de lettres, de savans et d'artistes; précédée d'un vocabulaire universel, servant de table pour tout l'ouvrage, ornée des portraits de Mm. Diderot et d'Alembert, premiers éditeurs de l'Encyclopédie. Histoire Naturelle. Insectes. Tome sixième. Pars I. Panckoucke*, Paris, 704 pp.
- OLIVIER A. G. 1808: *Entomologie, ou histoire naturelle des insectes, avec leurs caractères génériques et spécifiques, leur description, leur synonymie et leur figure enluminée. Coléoptères. Tome sixième*. Baudonin, Paris, [4] + 613–1104, 46 pls.

- ÖZDIKmen H. 2011: A comprehensive contribution for leaf beetles of Turkey with a zoogeographical evaluation for all Turkish fauna (Coleoptera: Chrysomelidae). *Munis Entomology & Zoology* **6**: 540–638.
- ÖZDIKmen H. & OKUTANER A. Y. 2007: Two interesting and unknown species for Turkish Clytrinae (Chrysomelidae) with zoogeographical remarks. *Munis Entomology & Zoology* **2**: 445–449.
- PALLAS P. S. 1773: *Reise durch verschiedene Provinzen des Russischen Reiches. Zweyter Theil, Zweytes Buch vom Jahr 1771*. Kaiserliche Akademie der Wissenschaften, St. Petersburg, 371–744 pp.
- PEYERIMHOFF P. DE 1922: Nouveaux coléoptères du Nord Africain. Quarantième note: récoltes de M. le Dr. R. Maire vers le sommet du Tachdirt (Grand Atlas marocain). *Bulletin de la Société Entomologique de France* **1922**: 60–68.
- PEYERIMHOFF P. DE 1949: Études et descriptions de coléoptères marocains. II. *Bulletin de la Société des Sciences Naturelles de Maroc* **25–27** (1945–1947): 248–303.
- PETITPIERRE E. & ALONSO-ZARAZAGA M. A. 2000: Apéndice 1. Nomenclatura: lista de sinónimos y combinaciones. Pp. 461–505. In: PETITPIERRE E.: *Coleoptera. Chrysomelidae I. Fauna Ibérica*, vol. 13. Museo Nacional de Ciencias Naturales, CSIS, Madrid, 521 pp.
- PIC M. 1894a: Description d'un coléoptère nouveau. *Le Naturaliste* **16**: 221.
- PIC M. 1894b: [Diagnoses de plusieurs coléoptères rapportés de Syrie par M. C. Delagrange]. *Bulletin de la Société Entomologique de France* **1894**: cclxxxiv–cxxxxv. [bi-monthly version issued 31.xii.1894].
- PIC M. 1895a: Descriptions de coléoptères d'Algérie. *L'Échange, Revue Linnéenne* **11**: 78–82.
- PIC M. 1895b: A propos des variétés. *L'Échange, Revue Linnéenne* **11**: 87–89.
- PIC M. 1895c: Description de coléoptères. *Le Naturaliste* **17**: 243.
- PIC M. 1895d: Excursion entomologique dans la Province d'Oran (Algérie). *Revue Scientifique du Bourbonnais et du Centre de la France* **8**: 10–13.
- PIC M. 1896a: Remarques synonymiques et descriptives sur le genre *Cercomorphus*, sur divers phytophages, sur des Anthicidés, etc. (Col.). *Bulletin de la Société Entomologique de France* **1896**: 29–31.
- PIC M. 1896b: Descriptions et notes diverses. *L'Échange, Revue Linnéenne* **12**: 61–62.
- PIC M. 1896c: Descriptions de coléoptères d'Algérie et de Syrie. *Miscellanea Entomologica* **4**: 140–142.
- PIC M. 1897a: Etudes sur les coléoptères phytophages (Clytridae). *Bulletin de la Société Zoologique de France* **22**: 82–88.
- PIC M. 1897b: Complément à mes études sur les coléoptères phytophages (Clytridae). *Bulletin de la Société Zoologique de France* **22**: 164–165.
- PIC M. 1897c: Complément à mes études sur les coléoptères phytophages (Clytridae) (1). *Bulletin de la Société Zoologique de France* **22**: 202–206.
- PIC M. 1897d: Note sur Oticephala opaca Rosh. et ses variétés (Col.). *Bulletin de la Société Entomologique de France* **1897**: 135.
- PIC M. 1897e: Descriptions de coléoptères. *Bulletin de la Société d'Histoire Naturelle d'Autun* **10**: 194–198.
- PIC M. 1898: Notes descriptives sur plusieurs coléoptères et sur un Ichneumon (Hyménoptère). *Miscellanea Entomologica* **6**: 73–75.
- PIC M. 1900: Diagnoses de coléoptères du globe. *L'Échange, Revue Linnéenne* **16**: 89–91.
- PIC M. 1901a: Espèces et variété nouvelles de coléoptères paléarctiques. *L'Échange, Revue Linnéenne* **17**: 79–80.
- PIC M. 1901b: Notes diverses et diagnoses. *L'Échange, Revue Linnéenne* **17**: 81–83.
- PIC M. 1902: Descriptions et notes diverses (3e article). *L'Échange, Revue Linnéenne* **18**: 47–49 [sic!; = 57–59, erroneously numbered as 47–49, volume erroneously numbered as 17].
- PIC M. 1903: Descriptions et habitats de divers coléoptères du Nord de l'Afrique. *L'Échange, Revue Linnéenne* **19**: 113–115.
- PIC M. 1904a: Diagnoses de divers coléoptères d'Europe et Turquie d'Asie. *L'Échange, Revue Linnéenne* **20**: 57–58.
- PIC M. 1904b: Diagnoses ou descriptions abrégées de coléoptères paléarctiques. *L'Échange, Revue Linnéenne* **20**: 89–94.
- PIC M. 1905a: Descriptions abrégées et notes diverses. *L'Échange, Revue Linnéenne* **21**: 121–122.
- PIC M. 1905b: Nouveaux coléoptères d'Algérie & d'Asie occidentale. *L'Échange, Revue Linnéenne* **21**: 153–156.
- PIC M. 1906a: Coléptères européens, algériens et asiatiques nouveaux. *L'Échange, Revue Linnéenne* **22**: 17–20.
- PIC M. 1906b: Habitats et descriptions de divers coléoptères paléarctiques. *L'Échange, Revue Linnéenne* **22**: 41–42.
- PIC M. 1911: Descriptions ou diagnoses et notes diverses (Suite). *L'Échange, Revue Linnéenne* **27**: 105–107.
- PIC M. 1912a: Descriptions ou diagnoses et notes diverses (Suite). *L'Échange, Revue Linnéenne* **28**: 17.
- PIC M. 1912b: Descriptions ou diagnoses et notes diverses (Suite). *L'Échange, Revue Linnéenne* **28**: 73–74.

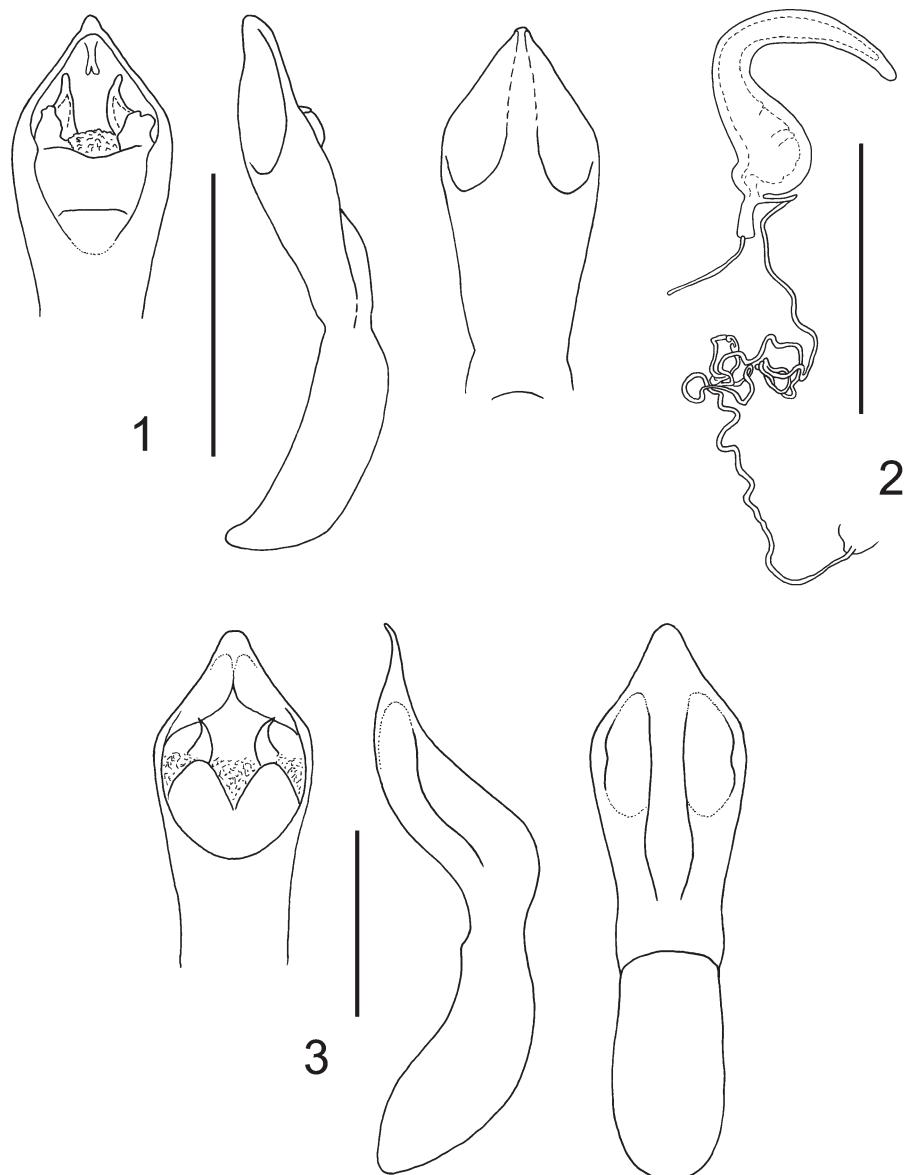
- PIC M. 1912c: Nouveaux coléoptères paléarctiques. *L'Échange, Revue Linnéenne* **28**: 89–90.
- PIC M. 1913a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **29**: 113–114.
- PIC M. 1913b: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **29**: 129–130.
- PIC M. 1913c: [note]. *L'Échange, Revue Linnéenne* **29**: 180.
- PIC M. 1913d: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **29**: 185–187.
- PIC M. 1914a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **30**: 1–2.
- PIC M. 1914b: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **30**: 10–13.
- PIC M. 1914c: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **30**: 17–18.
- PIC M. 1914d: Note sur *Cyaniris thoracica* Fish. et ses variétés (Col. Phytophaga). *Bulletin de la Société Entomologique de France* **1914**: 139.
- PIC M. 1915: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **31**: 5–6.
- PIC M. 1916a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **32**: 5–7.
- PIC M. 1916b: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **32**: 9–11.
- PIC M. 1918a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **34**: 9–11.
- PIC M. 1918b: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **34**: 13–15.
- PIC M. 1918c: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **34**: 17–19.
- PIC M. 1918d: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **34**: 21–24.
- PIC M. 1919a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **35**: 13–14.
- PIC M. 1919b: Notes diverses, description et diagnoses (Suite). *L'Échange, Revue Linnéenne* **35**: 21–23.
- PIC M. 1920a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **36**: 5–8.
- PIC M. 1920b: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **36**: 21–22.
- PIC M. 1922: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **38**: 25–28.
- PIC M. 1923: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **39**: 9–11.
- PIC M. 1924a: Notes diverses, descriptions et diagnoses (Suite). *L'Échange, Revue Linnéenne* **39**: 21–23.
- PIC M. 1924b: Habitats et notes concernant divers coléoptères intéressants d'Egypte. *Bulletin de la Société Royale Entomologique d'Egypte* **1923**: 125–130.
- PIC M. 1929a: Notes diverses, nouveautés. *L'Échange, Revue Linnéenne* **45**: 13–14.
- PIC M. 1929b: Coléoptères nouveaux de la Cyrénaique. *Bollettino della Società Entomologica Italiana* **61**: 94–96.
- PIC M. 1931: Coléoptères nouveaux du Maroc. *Bulletin de la Société Entomologique de France* **1931**: 60–61.
- PIC M. 1932: Notes diverses nouveautés (Suite). *L'Échange, Revue Linnéenne* **48**: 21–23.
- PIC M. 1933a: Nouveautés diverses. *Mélanges Exotico-Entomologiques* **61**: 3–36.
- PIC M. 1933b: Notes diverses, nouveautés (Suite). *L'Échange, Revue Linnéenne* **49**: 9–11.
- PIC M. 1933c: Notes diverses, nouveautés (Suite). *L'Échange, Revue Linnéenne* **49**: 13–15.
- PIC M. 1934: Notes diverses, nouveautés (Suite). *L'Échange, Revue Linnéenne* **50**: 25–27.
- PIC M. 1936a: Notes diverses, nouveautés. *L'Échange, Revue Linnéenne* **52**: 25–27.
- PIC M. 1936b: Descriptions de coléoptères. *Bulletin de la Société Entomologique de France* **41**: 213–216.
- PIC M. 1937: Notes diverses, nouveautés. *L'Échange, Revue Linnéenne* **53**: 13–15.
- PIC M. 1939: Notes diverses, nouveautés (Suite). *L'Échange, Revue Linnéenne* **55**: 17–19.
- PIC M. 1942a: Coléoptères nouveaux de l'Adrar des Iforas. *Bulletin de la Société Entomologique de France* **1942**: 77–79.
- PIC M. 1942b: Coléptères du globe (Suite). *L'Échange, Revue Linnéenne* **58**: 5–8.
- PIC M. 1946: Coléoptères du globe (Suite). *L'Échange, Revue Linnéenne* **62**: 1–4.
- PIC M. 1949a: Coléptères du globe (Suite). *L'Échange, Revue Linnéenne* **65**: 1–4.
- PIC M. 1949b: Coléptères du globe (Suite). *L'Échange, Revue Linnéenne* **65**: 13–16.
- PIC M. 1950: Nouveautés diverses, mutation. *Diversités Entomologique* **6**: 15–16.
- PIC M. 1953: Coléoptères nouveaux de la région marocaine. *Comptes Rendus des Séances Mensuelles de la Société des Sciences Naturelles du Maroc* **19**: 61–63.
- POLLOCK D. A. 2005: Nomenclatural changes in eurypine Mycteridae (Coleoptera), with special reference to taxa described by Maurice Pic. *Coleopterists Bulletin* **59**: 250–255.
- RAPILLY M. 1981: Révision des espèces françaises du genre *Coptocephala* (Col. Chrysomelidae). *L'Entomologiste* **37**: 53–78.

- RAPILLY M. 1983a: Contribution a la connaissance des espèces israéliennes du genre Smaragdina Chevr. (Coleoptera, Chrysomelidae, Clytrinae). *Annales de la Société Entomologique de France, Nouvelle Série* **19**: 317–326.
- RAPILLY M. 1983b: Réhabilitation de Labidostomis syriaca (Col. Chrysomelidae). *Cahiers des Naturalistes, Nouvelle Série* **38**: 93–96.
- RAPILLY M. 1984a: Note sur un Clytrinae du Proche-Orient: Labidostomis hebraea (Coleoptera: Chrysomelidae). *Revue Française d'Entomologie, Nouvelle Série* **6**: 133–136.
- RAPILLY M. 1984b: Révision des Labidostomis d'Iran (Col., Chrysomelidae, Clytrinae). *Annales de la Société Entomologique de France, Nouvelle Série* **20**: 215–230.
- REGALIN R. & MEDVEDEV L. N. 2010a: New acts and comments. Chrysomelidae: Cryptocephalinae: Clytrini. Pp. 76–79. In: LÖBL I. & SMETANA A. (eds.) 2010: *Catalogue of Palaearctic Coleoptera. Volume 6. Chrysomeloidea*. Apollo Books, Stenstrup, 924 pp.
- REGALIN R. & MEDVEDEV L. N. 2010b: Cryptocephalinae: Clytrini. Pp. 564–580. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 6. Chrysomeloidea*. Apollo Books, Stenstrup, 924 pp.
- ROMANTSOV P. V. 2011: A new species of the genus Otiothraea Warchałowski, 1990 (Coleoptera: Chrysomelidae: Cryptocephalinae: Clytrini) from Morocco. *Caucasian Entomological Bulletin* **7**: 145–146, pl. 7.
- ROMANTSOV P. V. 2012: To the knowledge of Palaearctic Cryptocephalinae (Coleoptera: Chrysomelidae) with description of two new species and with some taxonomical remarks. *Caucasian Entomological Bulletin* **8**: 63–69.
- ROSENHAUER W. G. 1856: *Die Thiere Andalusiens nach dem Resultate einer Reise zusammengestellt, nebst den Beschreibungen von 249 neuen oder bis jetzt noch unbeschriebenen Gattungen und Arten*. Blaesing, Erlangen, viii + 429 pp., 3 pls.
- ROUBAL J. 1948: Systematická, zoogeografická, bibliografická studie o červených druzích rodu Coptocephala Dejean (Chrysomelidae). (De chrysomelidarum genere Coptocephala Dejean adnotaciones systematicae, zoogeographicae, necnon bibliographicæ). *Entomologické Listy* **11**: 33–34.
- SEMEONOV A. 1903: Analecta coleopterologica. *Revue Russe d'Entomologie* **3**: 169–173.
- STAINES C. L. & WHITTINGTON A. E. 2003: Chrysomelidae (Coleoptera) types in the Royal Museum of Scotland Collection. *Zootaxa* **192**: 1–8.
- VAULOGER DE BEAUPRÉ M. 1895: Description de deux Clytra nouveaux du Nord de l'Afrique. *L'Abeille* **28** (1892–1896): 194–195.
- VILLIERS A. 1958. Maurice Pic †. *Entomologische Blätter* **54**: 3–4.
- WARCHAŁOWSKI A. 1985: Revision der Gattung Labidostomis Germar, 1824 (Coleoptera, Chrysomelidae, Clytrinae). *Polskie Pismo Entomologiczne* **55**: 621–765.
- WARCHAŁOWSKI A. 1991: Über die rot und schwarz gefleckten Arten der Untergattung Coptocephala s. str. (Coleoptera: Chrysomelidae: Clytrinae). *Genus* **2**: 229–279.
- WARCHAŁOWSKI A. 2000: A short review of the genus Chilotomina Reitter, 1912 (Coleoptera: Chrysomelidae: Clytrinae). *Genus* **11**: 573–583.
- WARCHAŁOWSKI A. 2003: *Chrysomelidae. The leaf-beetles of Europe and the Mediterranean area*. Natura Optima Dux Foundation, Warszawa, 600 pp.
- WARCHAŁOWSKI A. 2004: Labidostomis kantneri sp. nov. from Iran (Coleoptera: Chrysomelidae: Clytrinae). *Annales Zoologici (Warszawa)* **54**: 557–559.
- WARCHAŁOWSKI A. 2010: *The Palaearctic Chrysomelidae. Identification keys. Volume 1*. Natura Optima Dux Foundation, 629 pp.
- WINKLER A. 1929: *Catalogus Coleopterorum regionis palaearcticae. Pars 10*. A. Winkler, Wien, pp. 1137–1264.

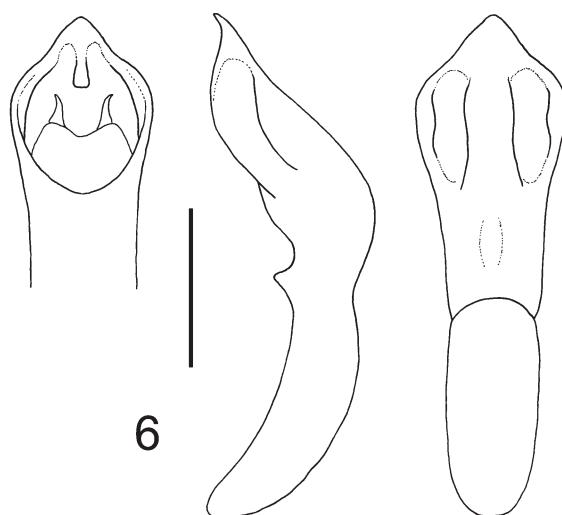
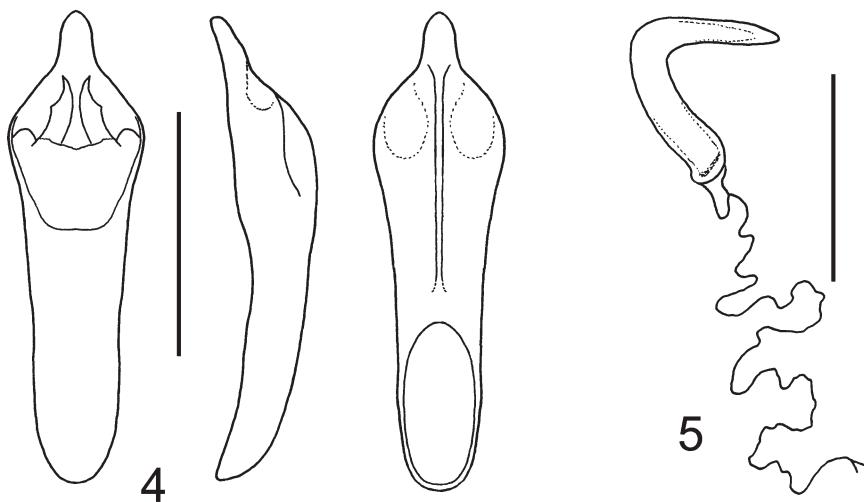


## **Plates**

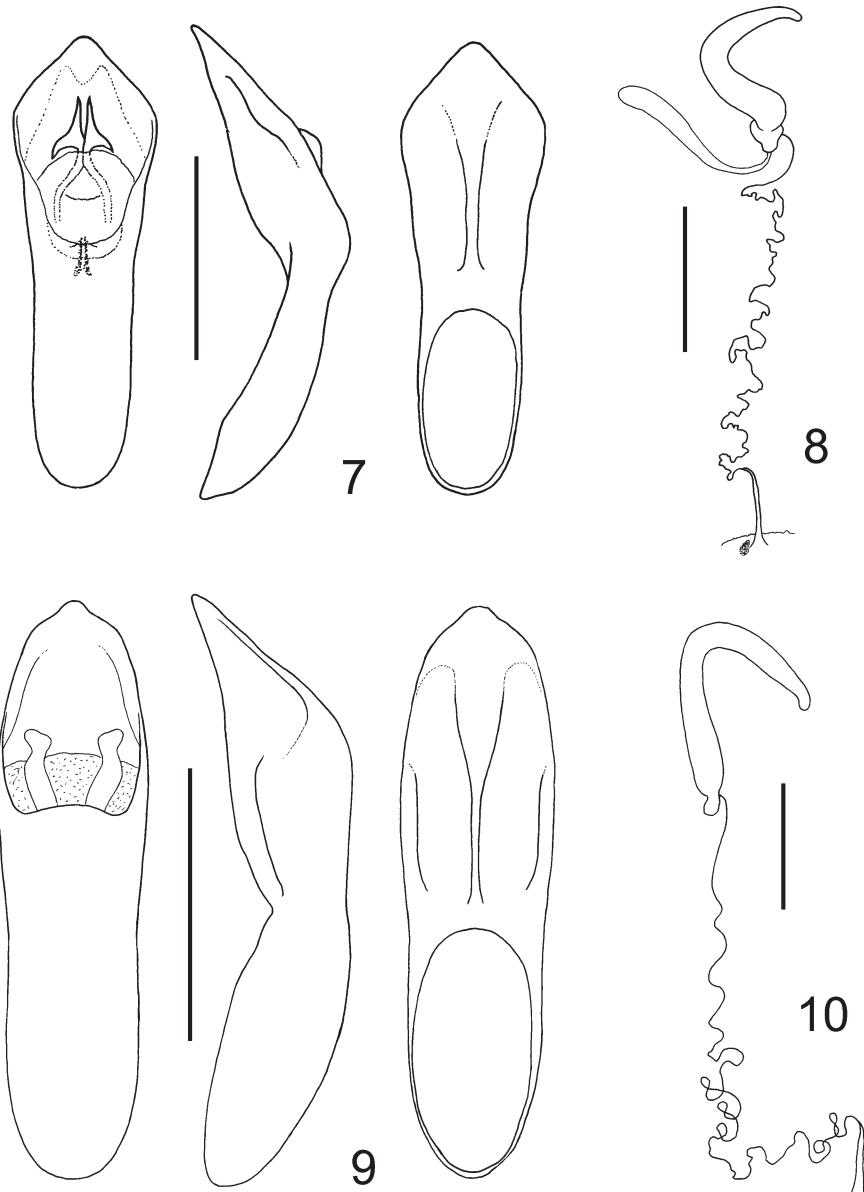




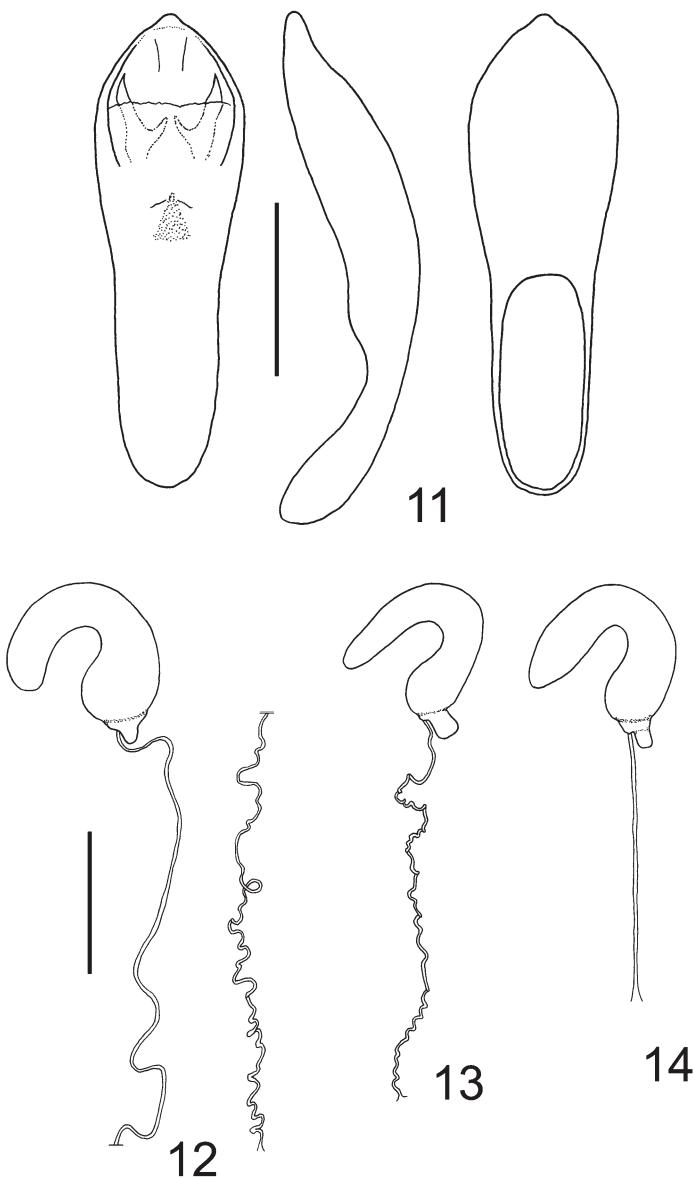
Figs 1–3. 1–2 – *Coptocephala aeneopicta* (Fairmaire, 1864): 1 – aedeagus (dorsal, lateral and ventral views); 2 – spermatheca. 3 – aedeagus of *Coptocephala arcasi* Báguna, 1960 (dorsal, lateral and ventral views). Scale bars: 0.5 mm for Figs 1 and 3, 0.25 mm for Fig. 2.



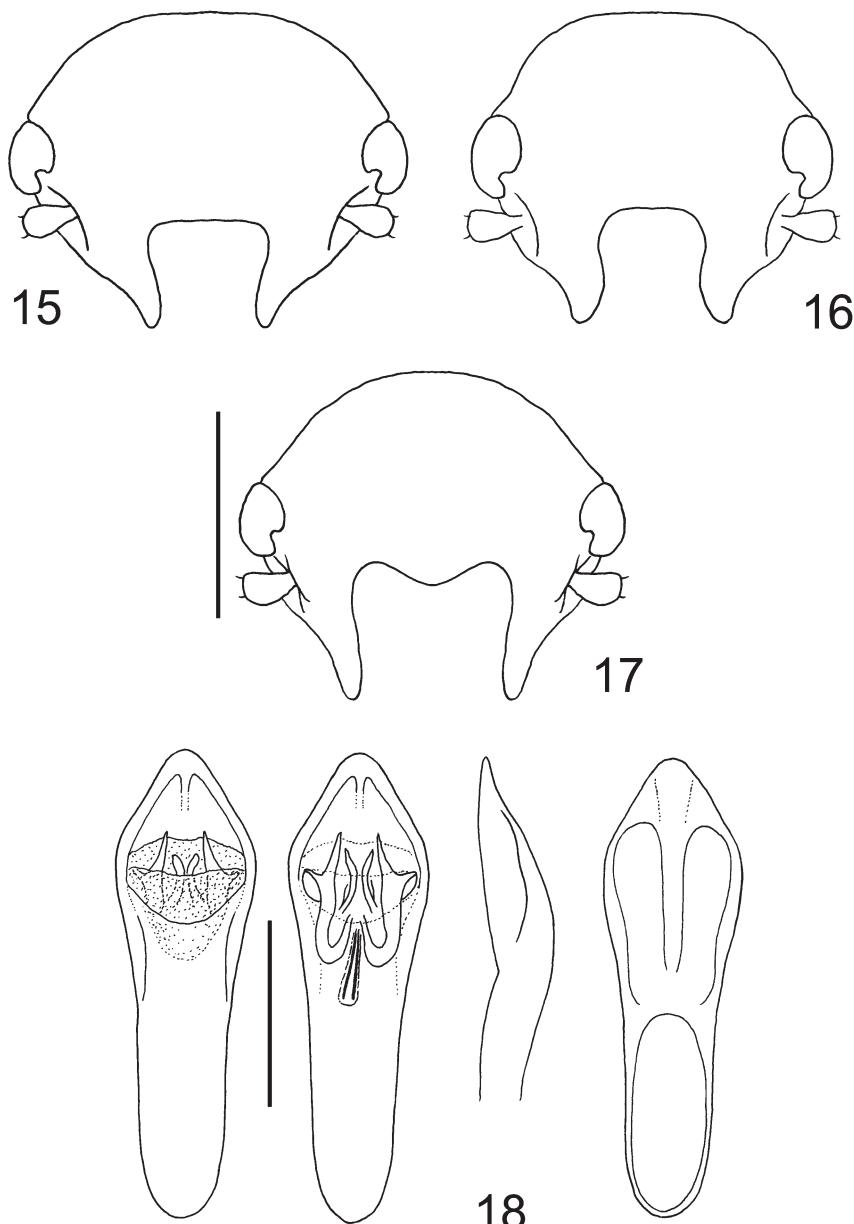
Figs 4–6. 4–5 – *Coptocephala dilatipes* Pic, 1923: 4 – aedeagus (dorsal, lateral and ventral views); 5 – spermatheca. 6 – aedeagus of *Coptocephala massiliensis* Pic, 1914 (dorsal, lateral and ventral views). Scale bars: 0.5 mm for Figs 4 and 6, 0.25 mm for Fig. 5.



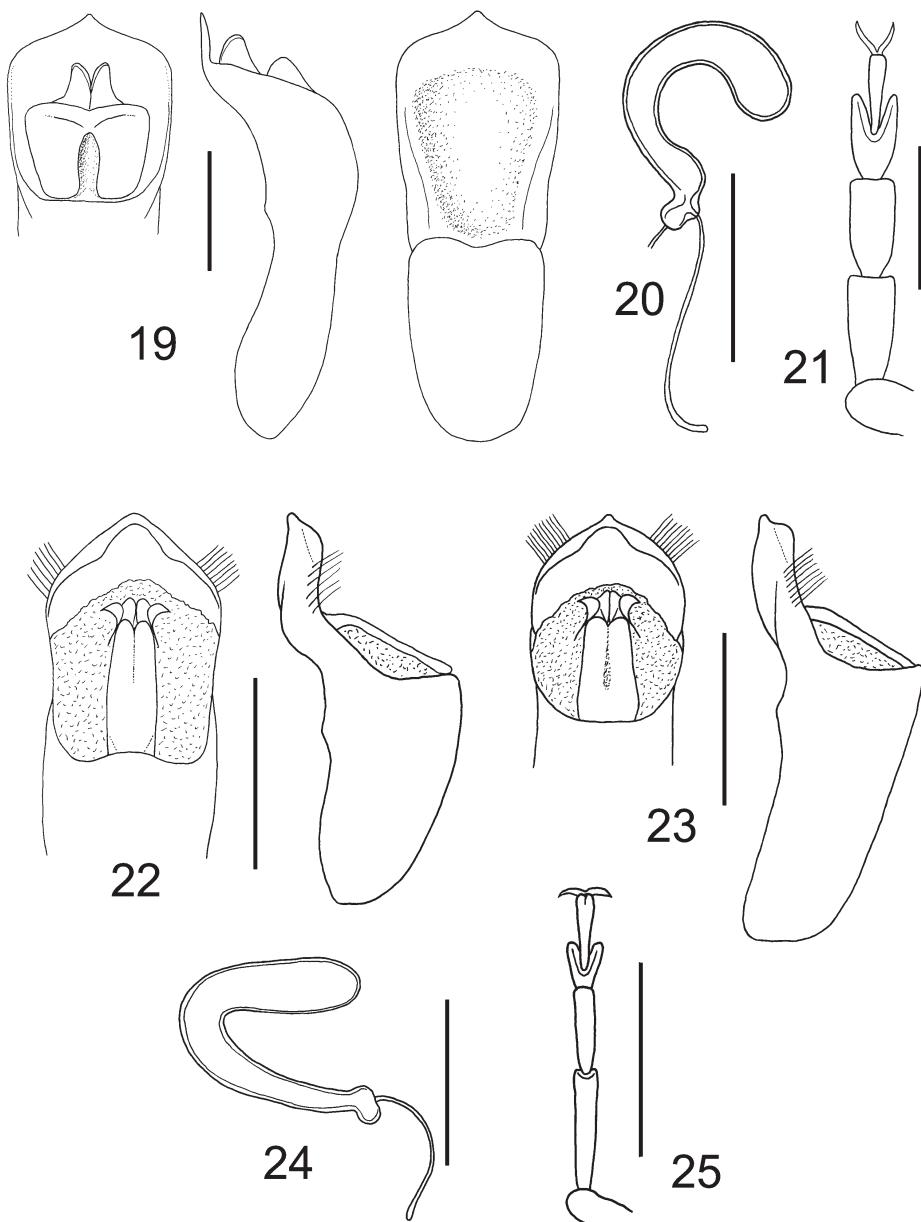
Figs 7–10. 7–8 – *Coptocephala normandi* Pic, 1914: 7 – aedeagus (dorsal, lateral and ventral views); 8 – spermatheca. 9–10 – *Coptocephala perrisi* (Desbrochers des Loges, 1870): 9 – aedeagus (dorsal, lateral and ventral views); 10 – spermatheca. Scale bars: 1 mm for Fig. 9, 0.5 mm for Fig. 7, 0.25 mm for Figs 8 and 10.



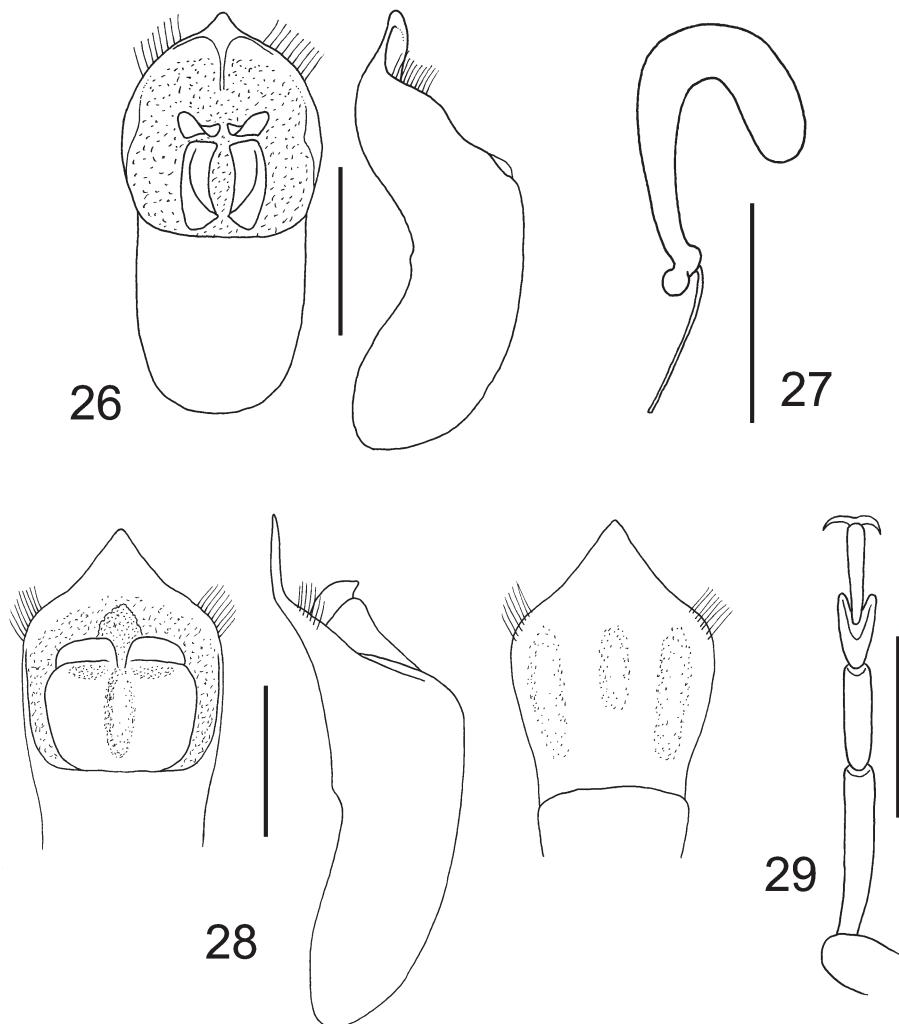
Figs 11–14. 11 – *Coptocephala sefrensis* Pic, 1897: aedeagus (dorsal, lateral and ventral views). 12–14 – spermatheca and ductus spermathecae: 12 – *Labidostomis luristanica* Warchałowski, 2004; 13 – *L. kantneri* Warchałowski, 2004; 14 – *L. shirazica* Lopatin, 1979. Scale bars: 0.5 mm.



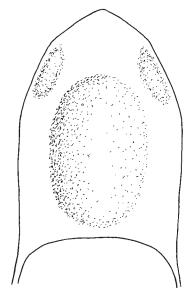
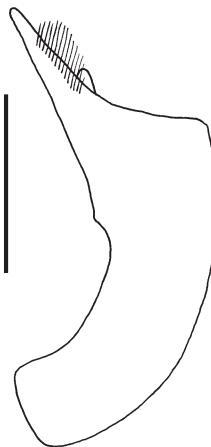
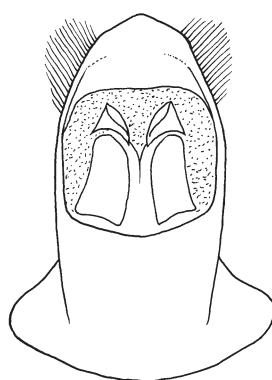
Figs 15–18. 15–17 – Variability of outline of male head in *Lachnaia (Barathraea) straminipennis* (Lucas, 1845): 15 – *straminipennis* type; 16 – *octomaculata* type; 17 – *separata* type. 18 – aedeagus of *Otiothraea rotroui* (Kocher, 1961) (dorsal, dorsal with internal sclerites, lateral and ventral views). Scale bars: 2 mm for Figs 15–17, 0.5 mm for Fig. 18.



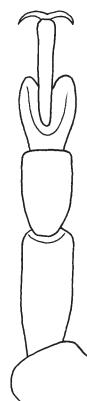
Figs 19–25. 19–21 – *Tituboea arabica* (Olivier, 1808): 19 – aedeagus (dorsal, lateral and ventral views); 20 – spermatheca; 21 – right male protarsus. 22–25 – *Tituboea atriceps* Pic, 1924: 22 – aedeagus (dorsal and lateral views, from Egypt); 23 – aedeagus (dorsal and lateral views, from Israel); 24 – spermatheca; 25 – right male protarsus. Scale bars: 1 mm for Figs 21 and 25; 0.5 mm for Figs 19, 20, 22 and 23, 0.25 mm for Fig. 24.



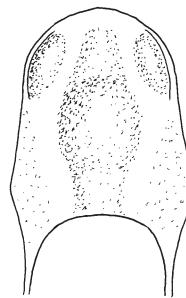
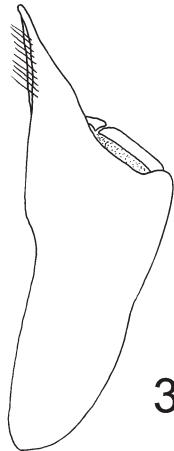
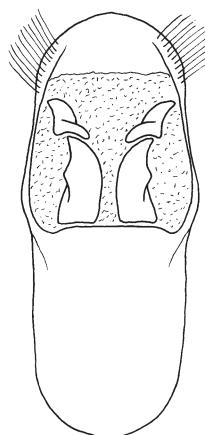
Figs 26–29. 26–27 – *Tituboea chobauti* (Pic, 1896): 26 – aedeagus (dorsal and lateral views); 27 – spermatheca. 28–29 – *Tituboea cingulata* (Lefèvre, 1884): 28 – aedeagus (dorsal, lateral and ventral views); 29 – right male protarsus. Scale bars: 1 mm for Fig. 29; 0.5 mm for Figs 26–28.



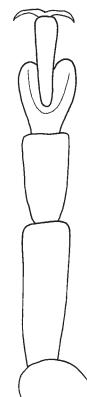
30



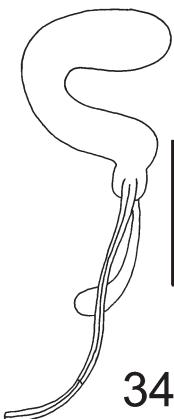
31



32

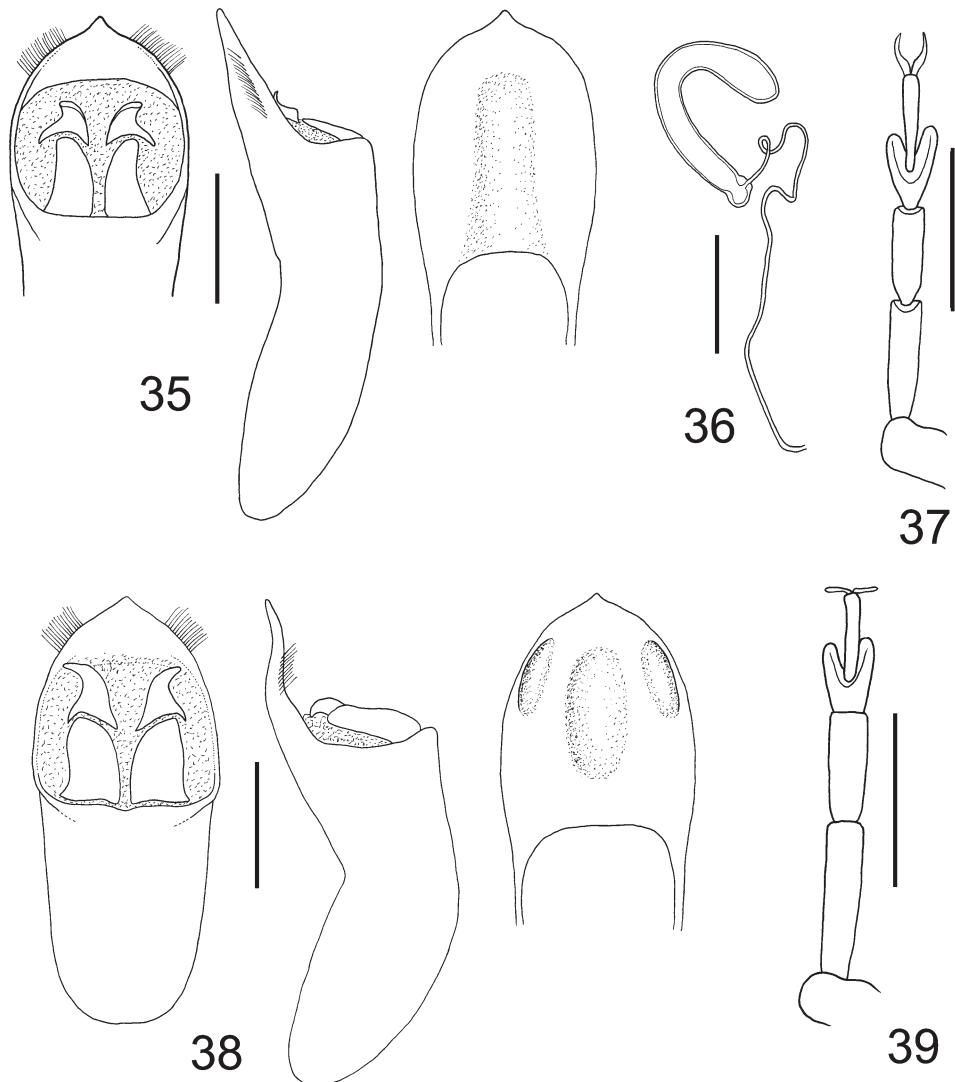


33

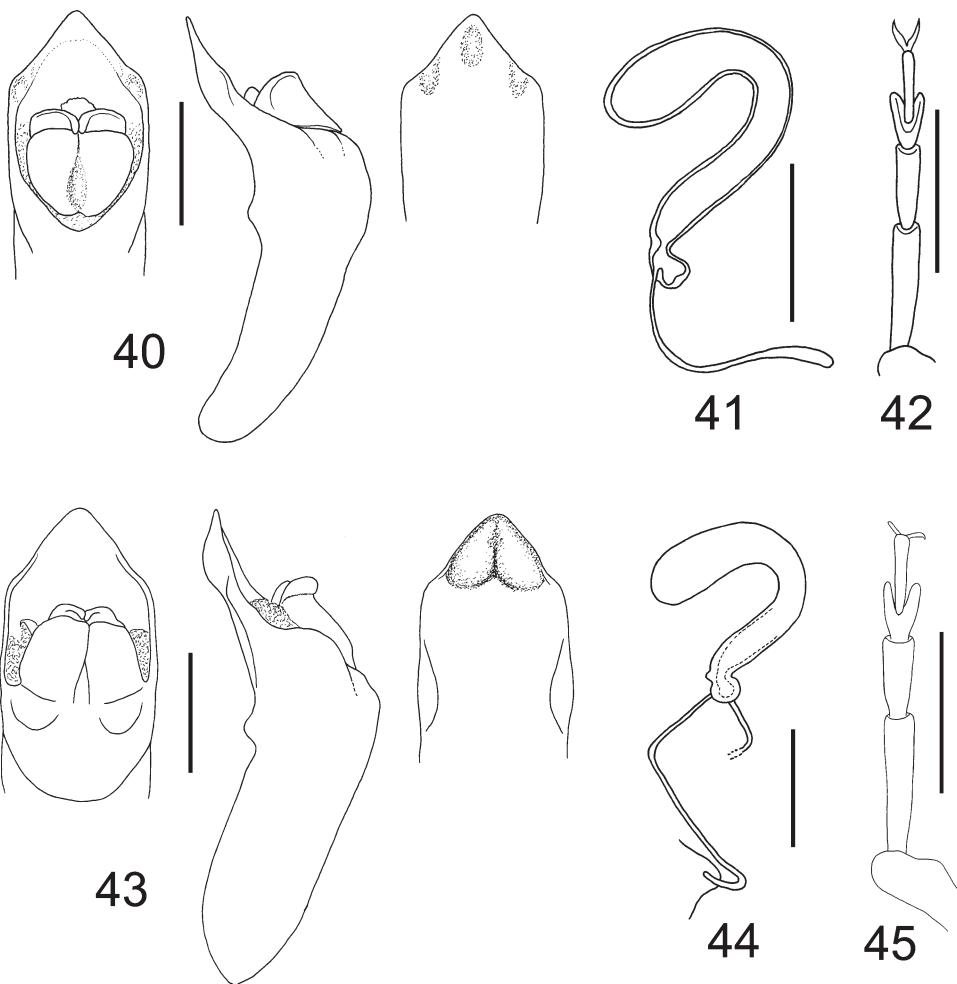


34

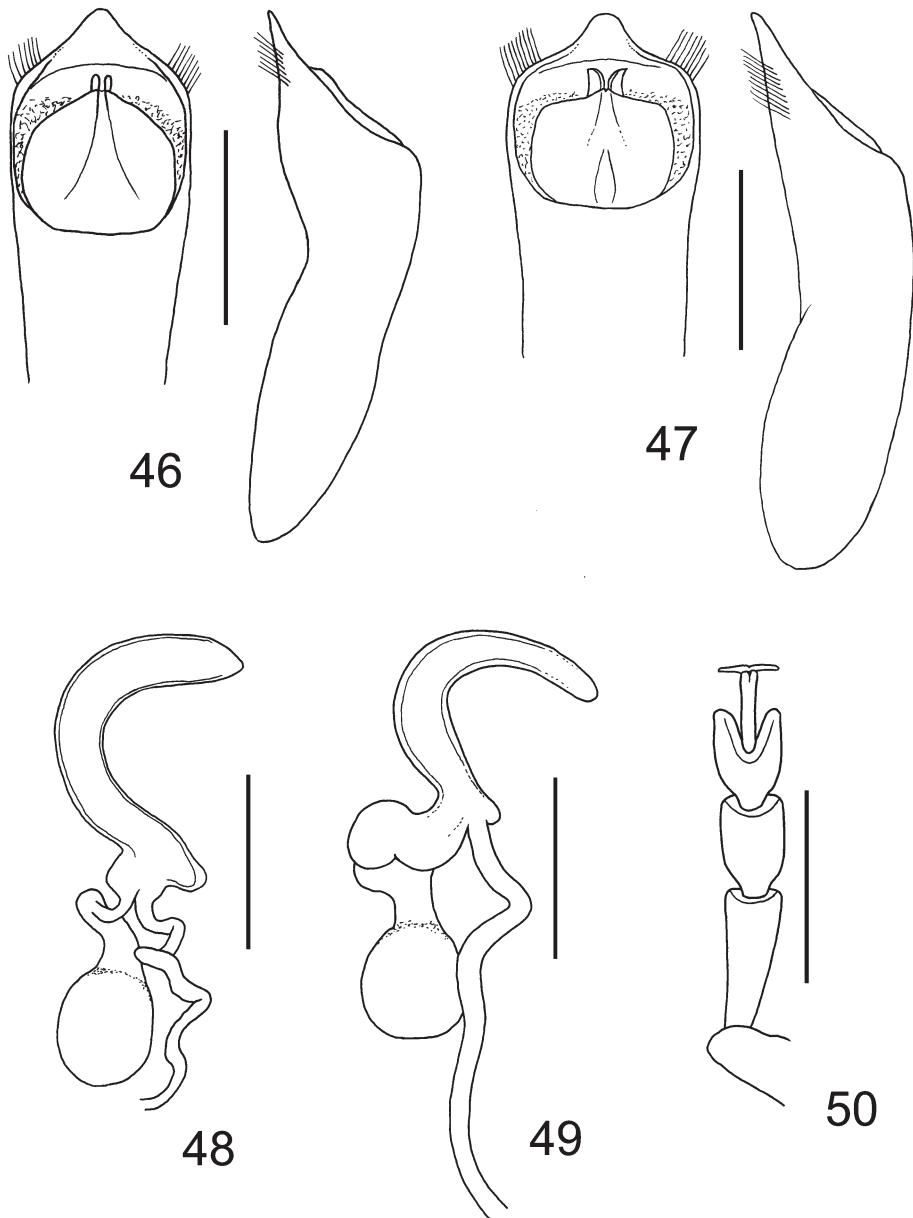
Figs 30–34. 30–31 – *Tituboea femoralis* Medvedev, 1962: 30 – aedeagus (dorsal, lateral and ventral views); 31 – right male protarsus. 32–34 – *Tituboea laticollis* (Olivier, 1808): 32 – aedeagus (dorsal, lateral and ventral views); 33 – right male protarsus; 34 – spermatheca. Scale bars: 1 mm for Figs 31–33; 0.5 mm for Figs 30 and 34.



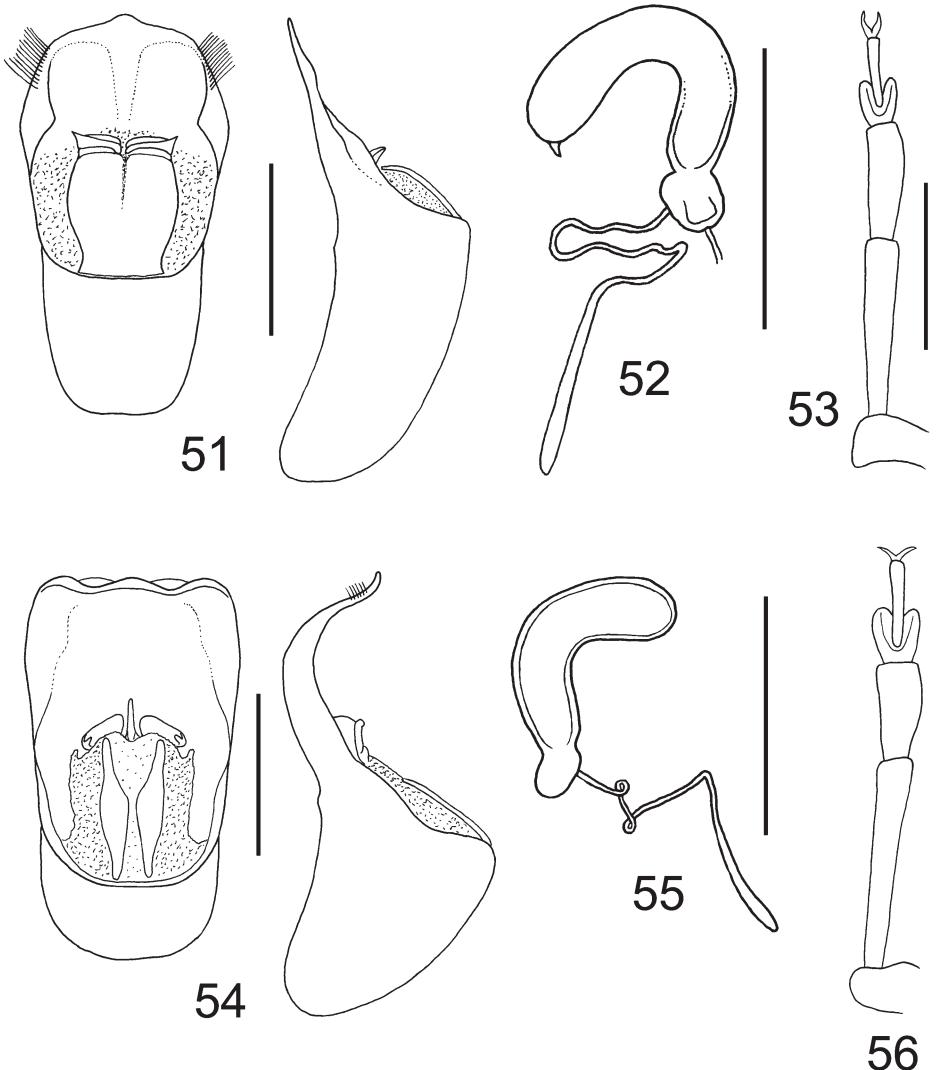
Figs 35–39. 35–37 – *Tituboea fasciata* Lefèvre, 1872: 35 – aedeagus (dorsal, lateral and ventral views); 36 – spermatheca; 37 – right male protarsus. 38–39 – *Tituboea paykullii* (Lacordaire, 1848): 38 – aedeagus (dorsal, lateral and ventral views); 39 – right male protarsus. Scale bars: 1 mm for Figs 37 and 39; 0.5 mm for Figs 35, 36 and 38.



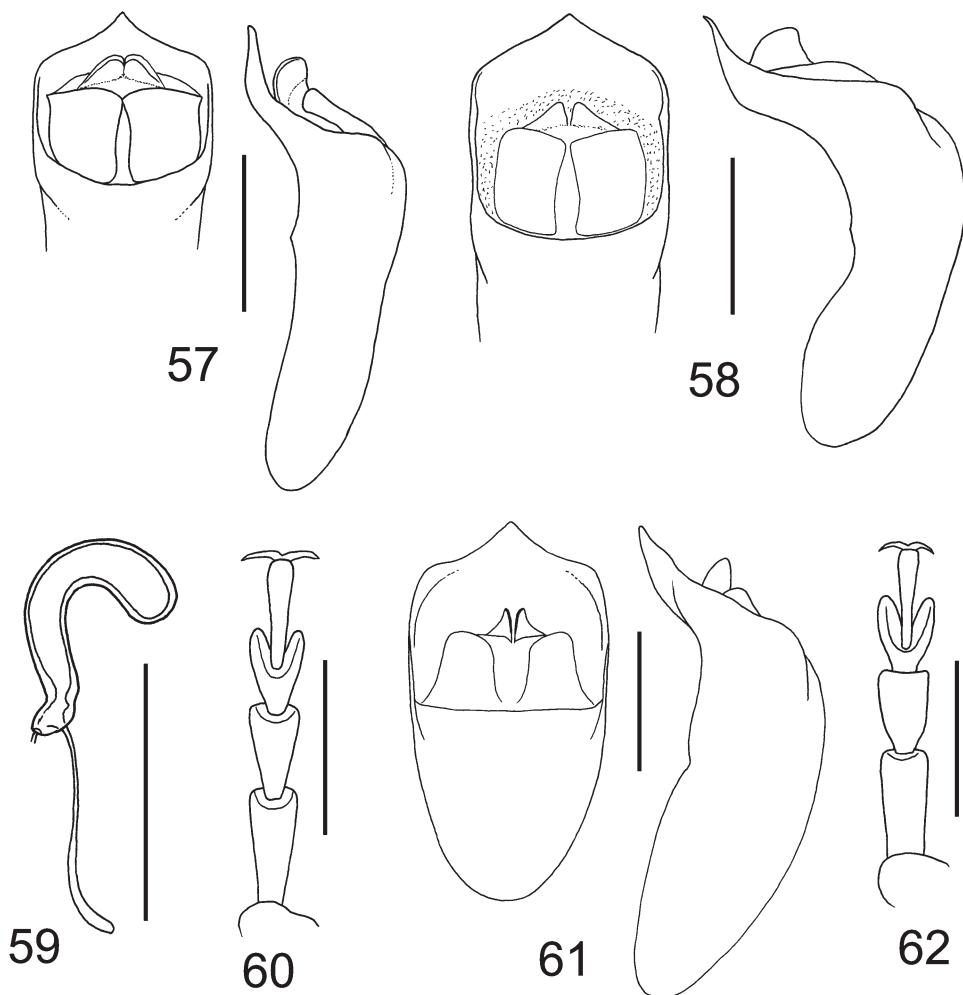
Figs 40–45, 40–42 – *Tituboea lacordairei* (Pic, 1929): 40 – aedeagus (dorsal, lateral and ventral views); 41 – spermatheca; 42 – right male protarsus. 43–45 – *Tituboea ogloblini* (Medvedev, 1962): 43 – aedeagus (dorsal, lateral and ventral views); 44 – spermatheca; 45 – right male protarsus. Scale bars: 1 mm for Figs 42 and 45; 0.5 mm for Figs 40 and 43, 0.25 mm for Figs 41 and 44.



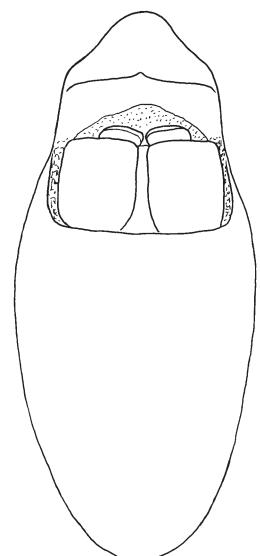
Figs 46–50. *Tituboea lefevrei* (Pic, 1894): 46 – aedeagus (dorsal and lateral views, from Algeria); 47 – aedeagus (dorsal and lateral views, from Israel); 48 – spermatheca (from Algeria), 49 – spermatheca (from Jordan); 50 – right male protarsus. Scale bars: 1 mm for Fig. 50, 0.5 mm for Figs 46–47, 0.25 mm for Figs 48–49.



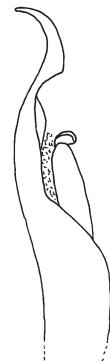
Figs 51–56. 51–53 – *Tituboea mecheriensis* Pic, 1895: 51 – aedeagus (dorsal and lateral views); 52 – spermatheca; 53 – right male protarsus. 54–56 – *Tituboea octopunctata* (Fabricius, 1787): 54 – aedeagus (dorsal and lateral views); 55 – spermatheca; 56 – right male protarsus. Scale bars: 1 mm for Figs 53, 54 and 56; 0.5 mm for Figs 51, 52 and 55.



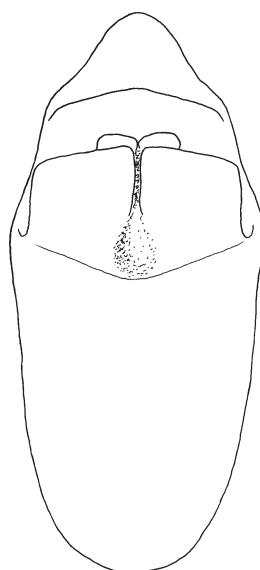
Figs 57–62. 57–60 – *Tituboea saadensis* (Pic, 1894): 57 – aedeagus (dorsal and lateral views, from Algeria); 58 – aedeagus (dorsal and lateral views, from Mali); 59 – spermatheca; 60 – right male protarsus. 61–62 – *Tituboea carmelica* (Lopatin & Chikatunov, 2001): 61 – aedeagus (dorsal and lateral views); 62 – right male protarsus. Scale bar: 0.5 mm.



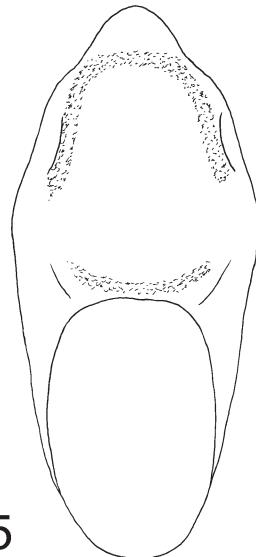
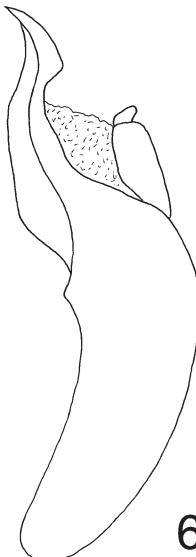
63



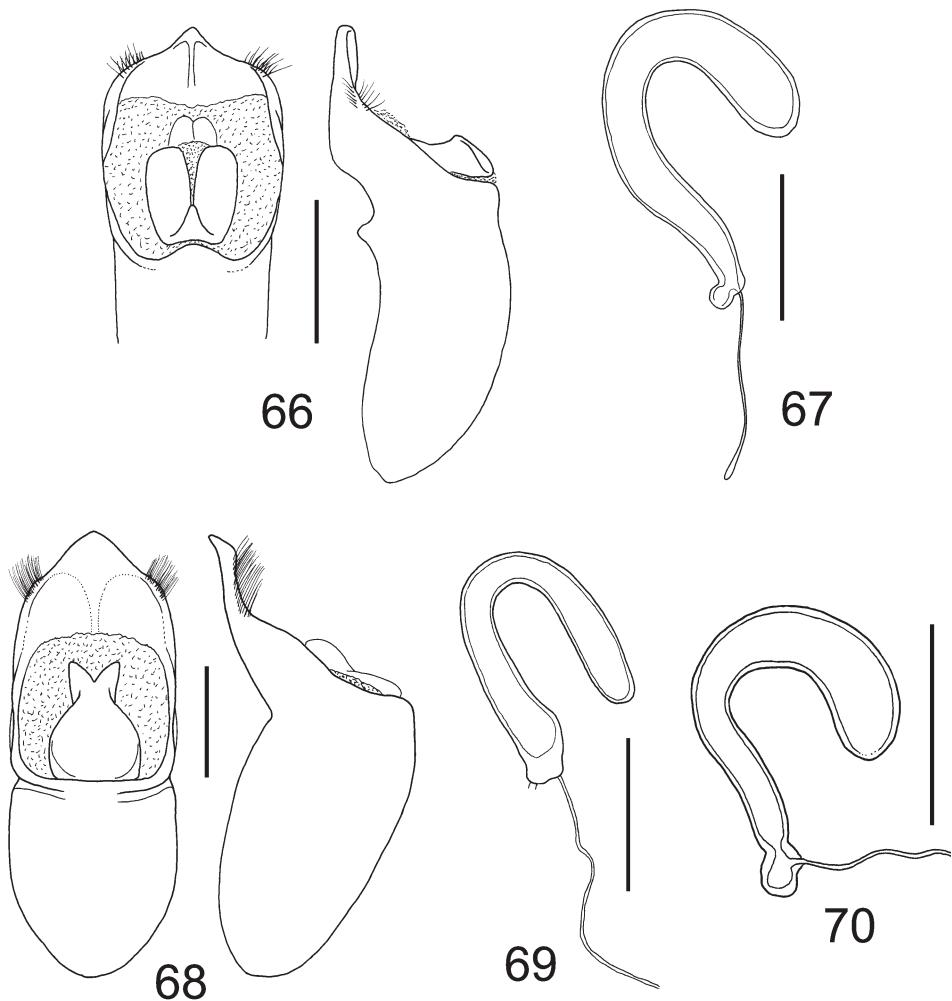
64



65



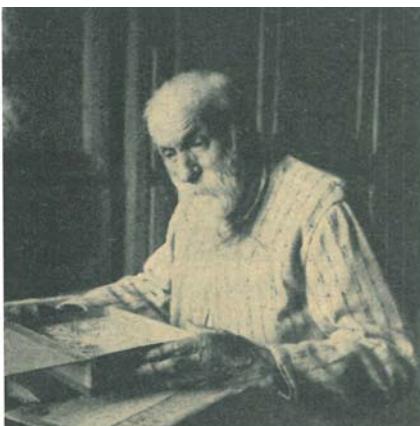
Figs 63–65. *Tituboea testaceiventris* Pic, 1913: 63 – aedeagus of syntype (dorsal and lateral views); 64 – right male protarsus; 65 – aedeagus of male from Iraq (dorsal, lateral and ventral views). Scale bar: 0.5 mm.



Figs 66–70. 66–67 – *Tituboea tredecimpunctata* (Desbrochers des Loges, 1870): 66 – aedeagus (dorsal and lateral views); 67 – spermatheca. 68–70 – *Tituboea biguttata* (Olivier, 1791): 68 – aedeagus (dorsal and lateral views); 69 – spermatheca (from Greece); 70 – spermatheca (from Spain). Scale bars: 0.5 mm for Figs 66 and 68–70; 0.25 mm for Fig. 67.



71



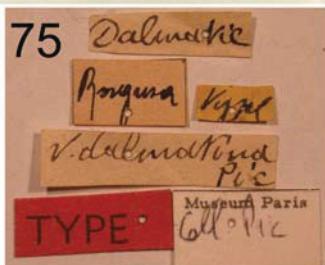
72



73



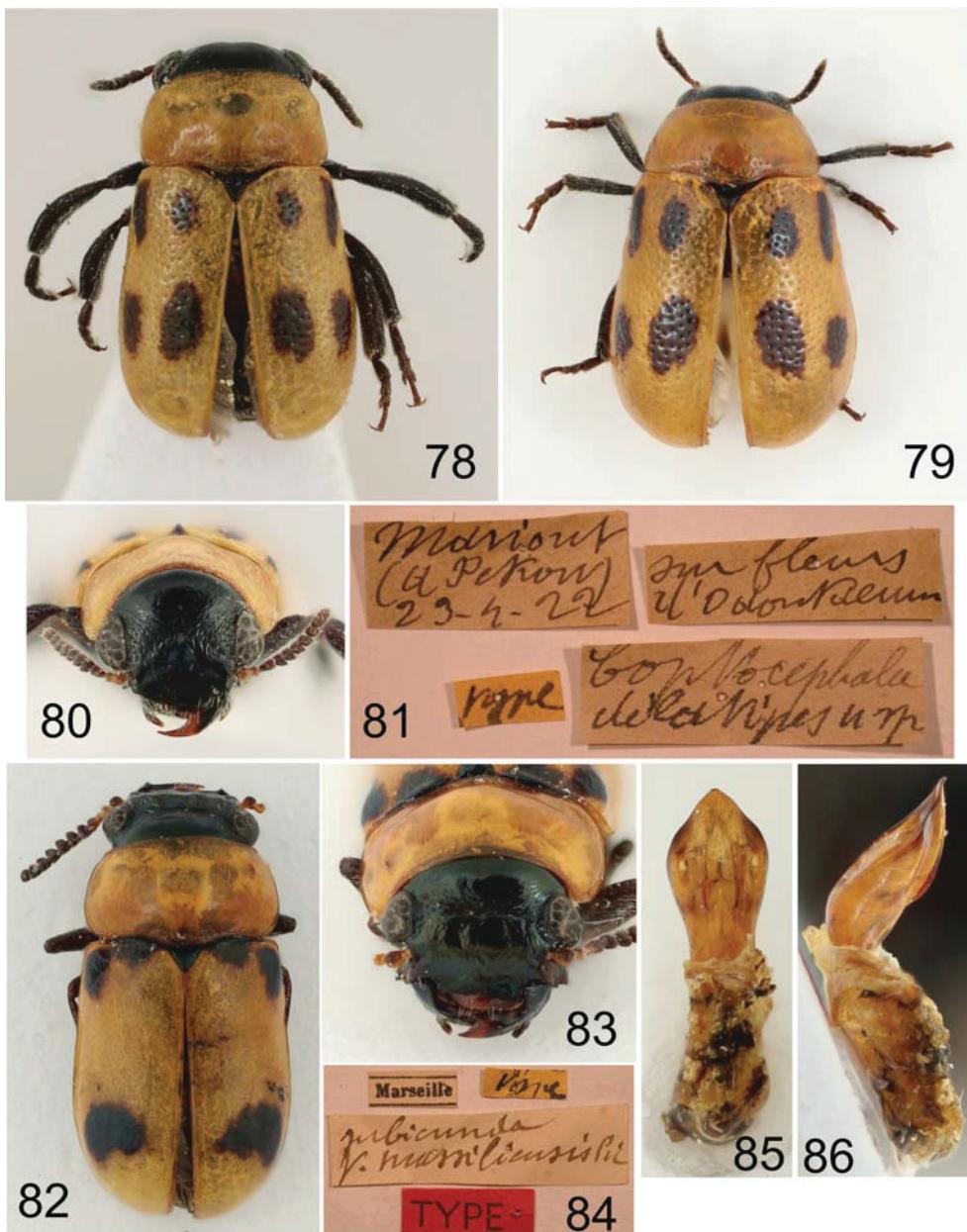
74



76

77

Figs 71–77. 71 – Maurice Pic in 1895 in Algeria (downloaded from <http://www.zin.ru>); 72 – Maurice Pic in final stage of his life (from VILLIERS 1958). 73–77 – *Coptocephala arcasi* Baguena, 1960 (original specimen of *Coptocephala rubicunda* var. *dalmatina* Pic, 1918, male, 5.4 mm): 73 – habitus; 74 – head; 75 – labels; 76 – aedeagus in ventral view; 77 – aedeagus in lateral view.

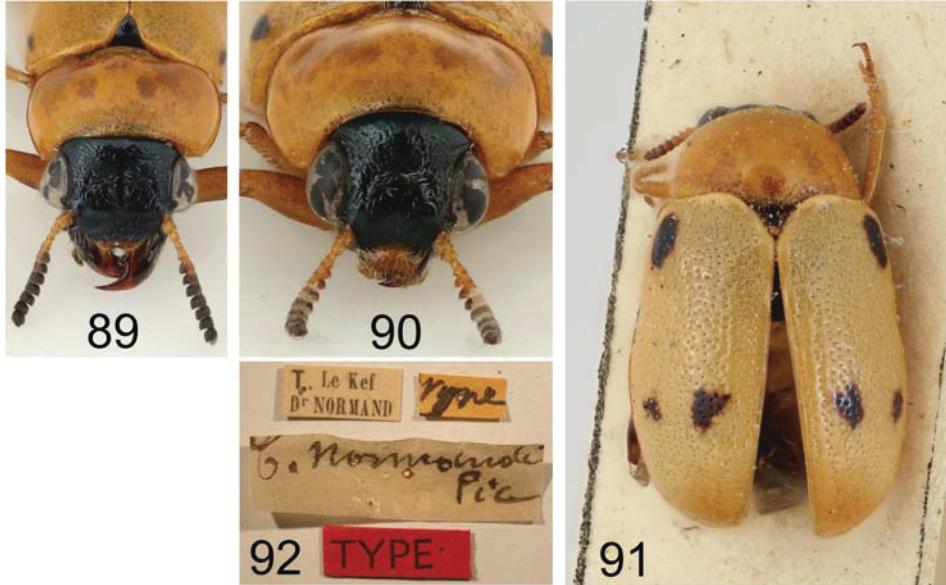


Figs 78–86. 78–81 – *Coptocephala dilatipes* Pic, 1923: 78 – habitus of male (syntype, 3.2 mm); 79 – habitus of female (3.2 mm); 80 – head of male (syntype); 81 – labels of syntype; 82–86 – *Coptocephala massiliensis* Pic, 1914 (syntype, male, 5.0 mm): 82 – habitus; 83 – head; 84 – labels; 85 – aedeagus in ventral view; 86 – aedeagus in lateral view.



87

88



89

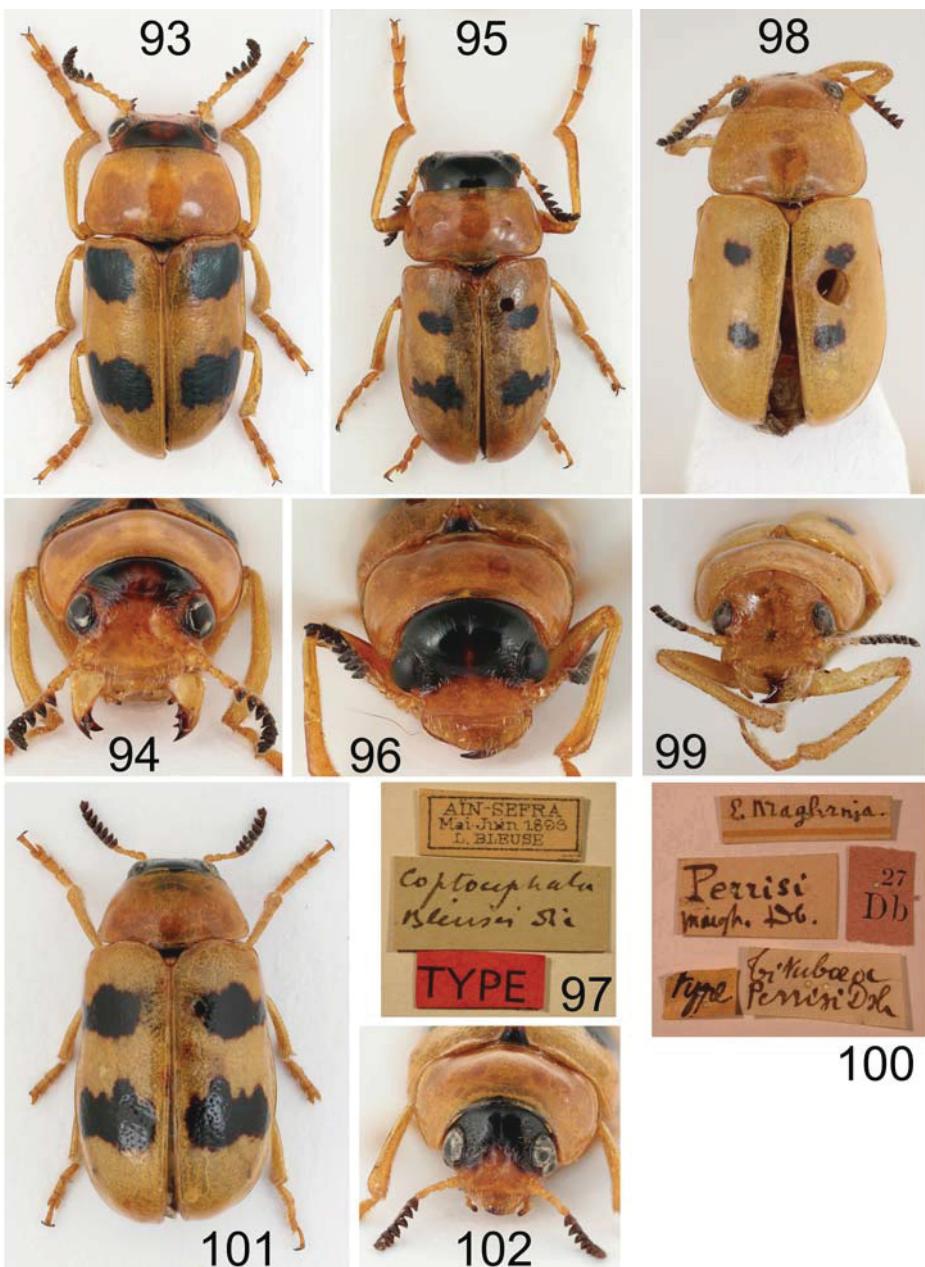
90

T. Le Kef  
Dr NORMAND  
Normandie  
Pic

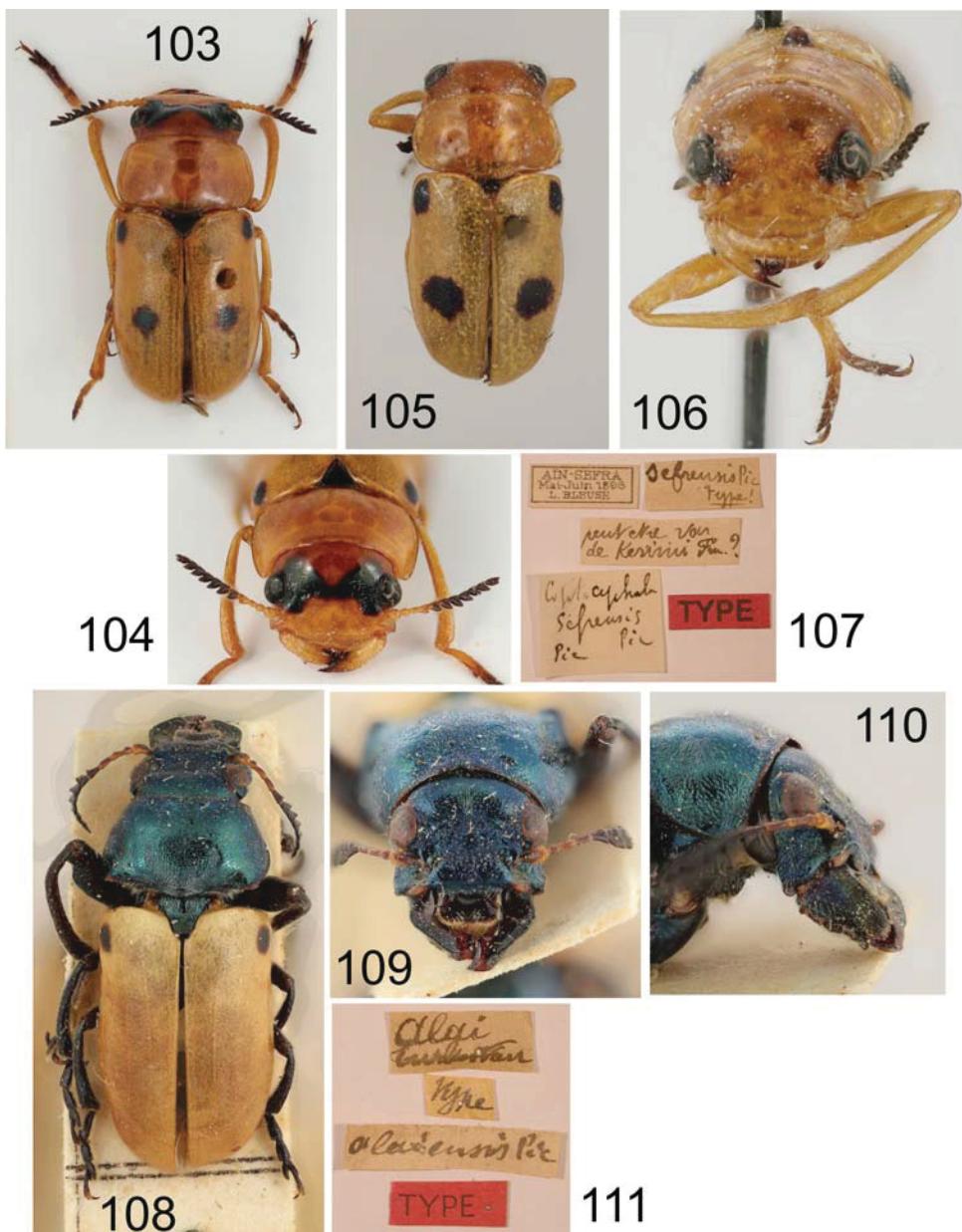
92 TYPE

91

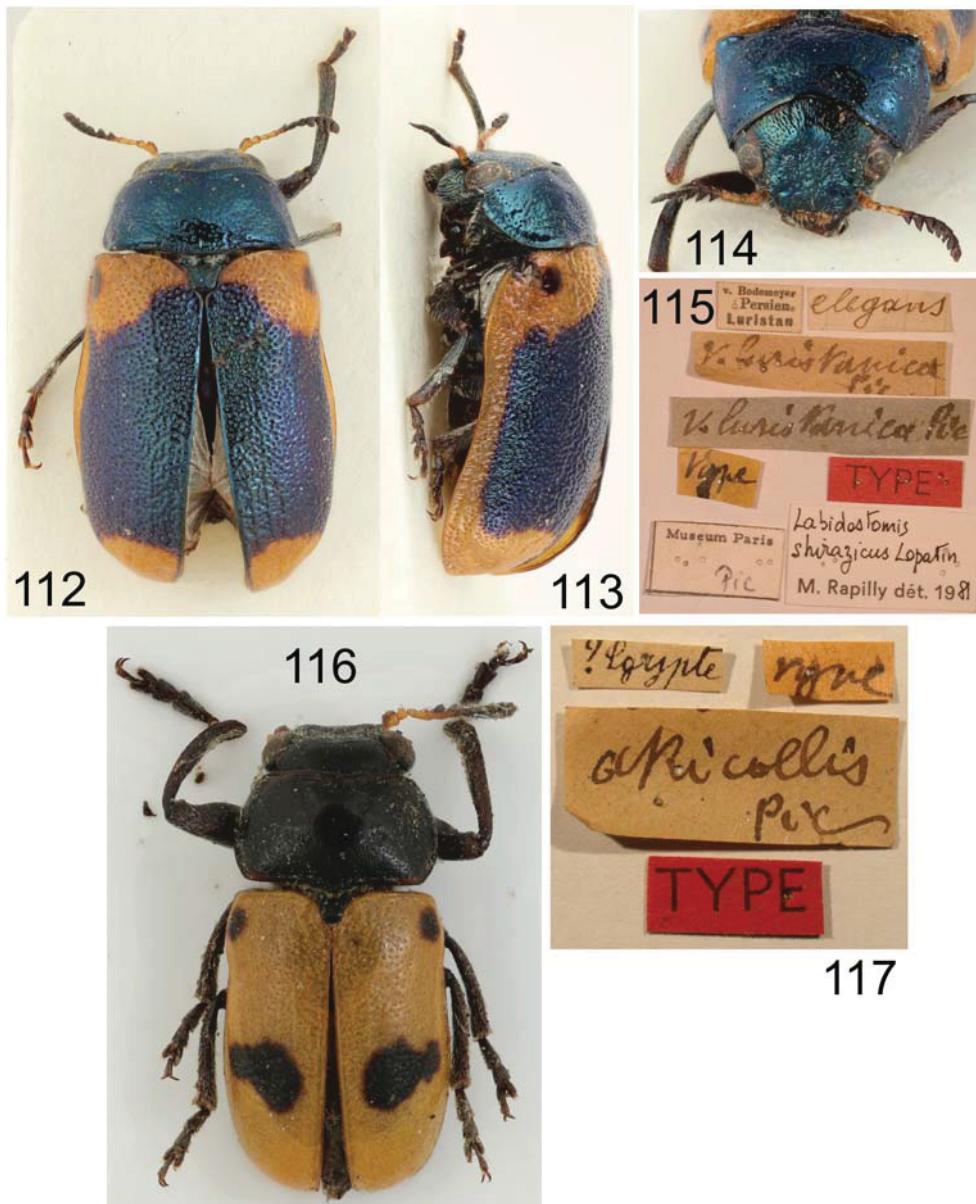
Figs 87–92. *Coptocephala normandi* Pic, 1914: 87 – habitus of male (5.2 mm); 88 – habitus of female (4.4 mm); 89 – head of male; 90 – head of female; 91 – habitus of syntype (female, 4.2 mm); 92 – labels of syntype.



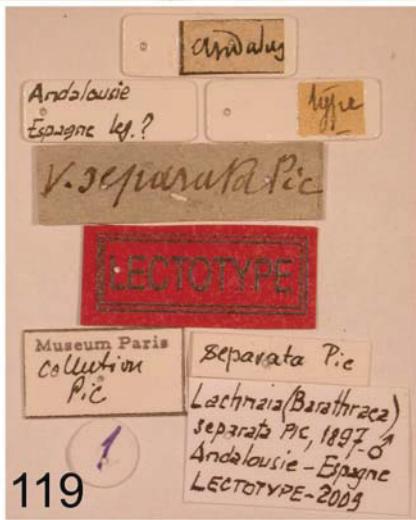
Figs 93–102. *Coptocephala perrisi* (Desbrochers des Loges, 1870): 93 – habitus of male (6.7 mm); 94 – head of male; 95 – habitus of male (syntype of *C. bleusei* Pic, 1897, 7.1 mm); 96 – head of male (syntype of *C. bleusei*); 97 – labels of syntype of *C. bleusei*; 98 – habitus of male (lectotype of *C. perrisi*, 6.0 mm); 99 – head of male (lectotype of *C. perrisi*); 100 – labels of lectotype of *C. perrisi*; 101 – habitus of female (syntype of *C. bleusei*, 6.4 mm); 102 – head of female (syntype of *C. bleusei*).



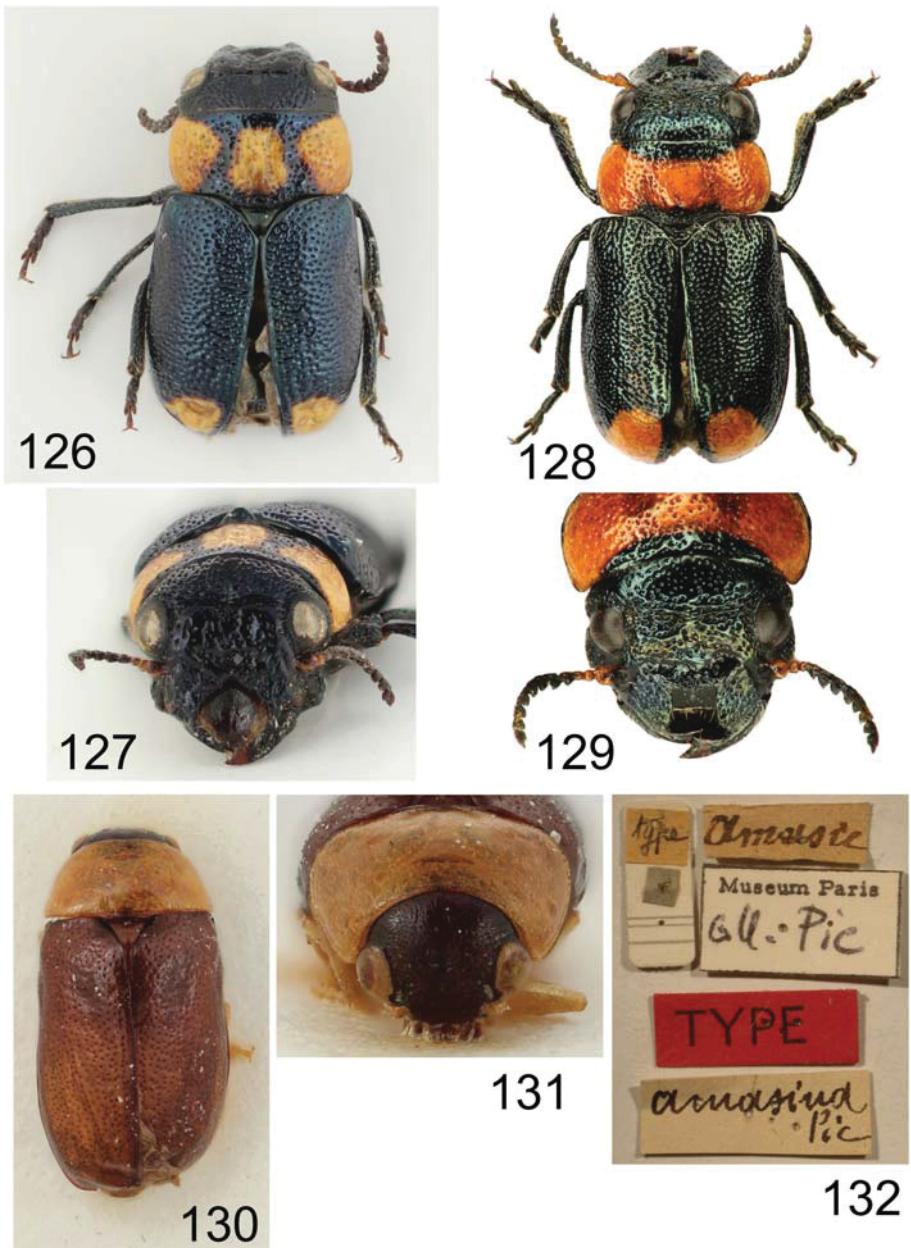
Figs 103–111. 103–107 – *Coptocephala sefrensis* Pic, 1897: 103 – habitus of male (6.4 mm); 104 – head of male; 105 – habitus of male (holotype, 5.4 mm); 106 – head of male (holotype); 107 – labels of holotype. 108–111 – *Labidostomis centrisculpta* Pic, 1920 (syntype of *L. alaiensis* Pic, 1920, male, 9.9 mm): 108 – habitus; 109 – head; 110 – head in lateral view; 111 – labels.



Figs 112–117. 112–115 – *Labidostomis luristanica* Warchałowski, 2004 (original specimen of *L. elegans* var. *luristanica* Pic, 1920, female, 5.6 mm): 112 – habitus; 113 – habitus in lateral view; 114 – head; 115 – labels. 116–117 – *Labidostomis ghiliani* (Lacordaire, 1848) (syntype of *Cyaniris atricollis* Pic, 1922, male, 4.8 mm): 116 – habitus; 117 – labels.



Figs 118–125. 118–119 – *Lachnaia straminipennis* (Lucas, 1845) (syntype of *L. separata* Pic, 1897) (male, 9.2 mm): 118 – habitus; 119 – labels. 120–125 – Variability of aedeagus of *Lachnaia straminipennis* (left dorsal view, right lateral view): 120–121 – *octomaculata* form; 122–123 – *separata* form; 124–125 – *straminipennis* form.



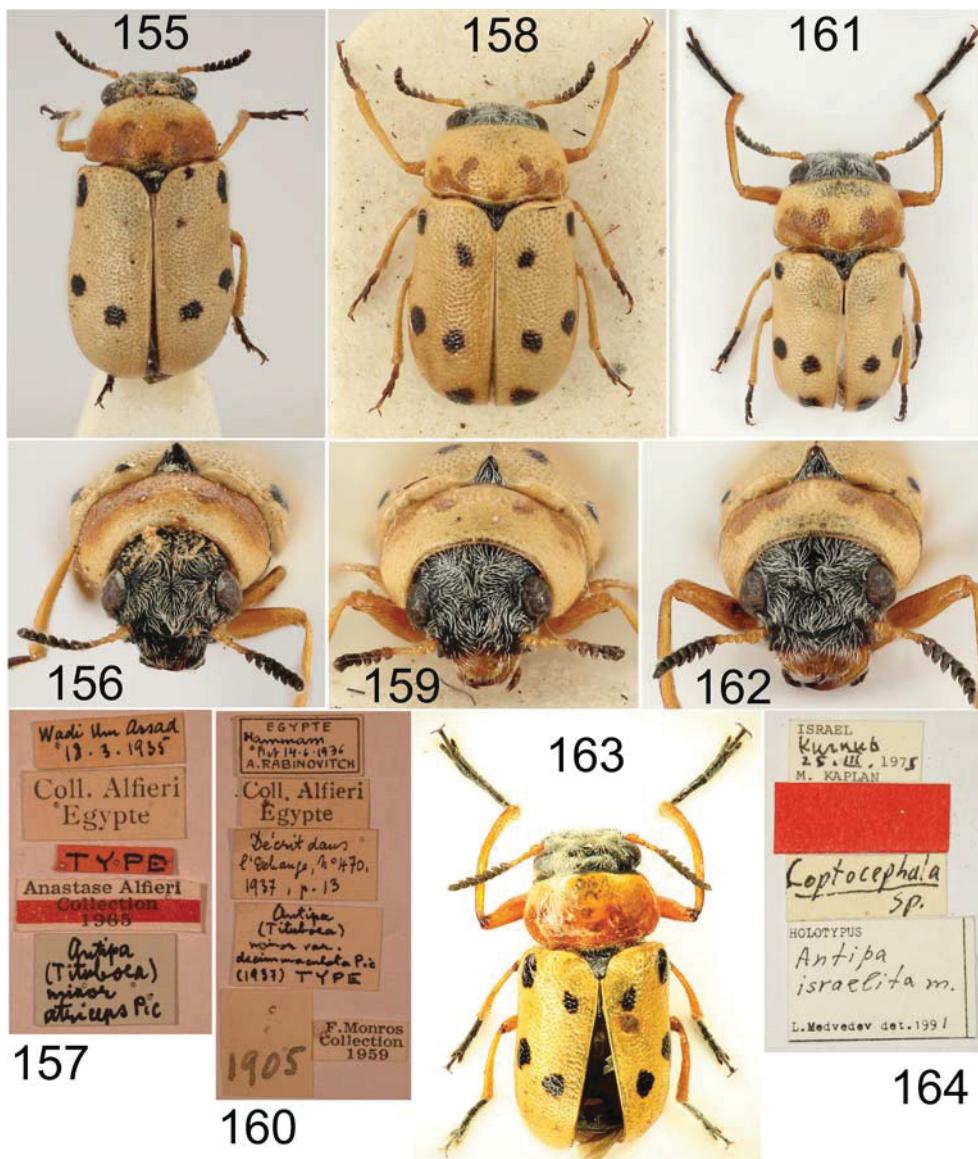
Figs 126–132. 126–127 – *Otiothraea rotroui* (Kocher, 1961) (male, 4.0 mm): 126 – habitus; 127 – head. 128–129 – *Otiothraea rafflesii* Romantsov, 2011 (holotype, male, Romantsov orig.): 128 – habitus; 129 – head. 130–132 – *Smaragdina flavidollis* (Charpentier, 1825) (syntype of *Gynandrophthalma amasina* Pic, 1897, female, 4.5 mm): 130 – habitus; 131 – head; 132 – labels.



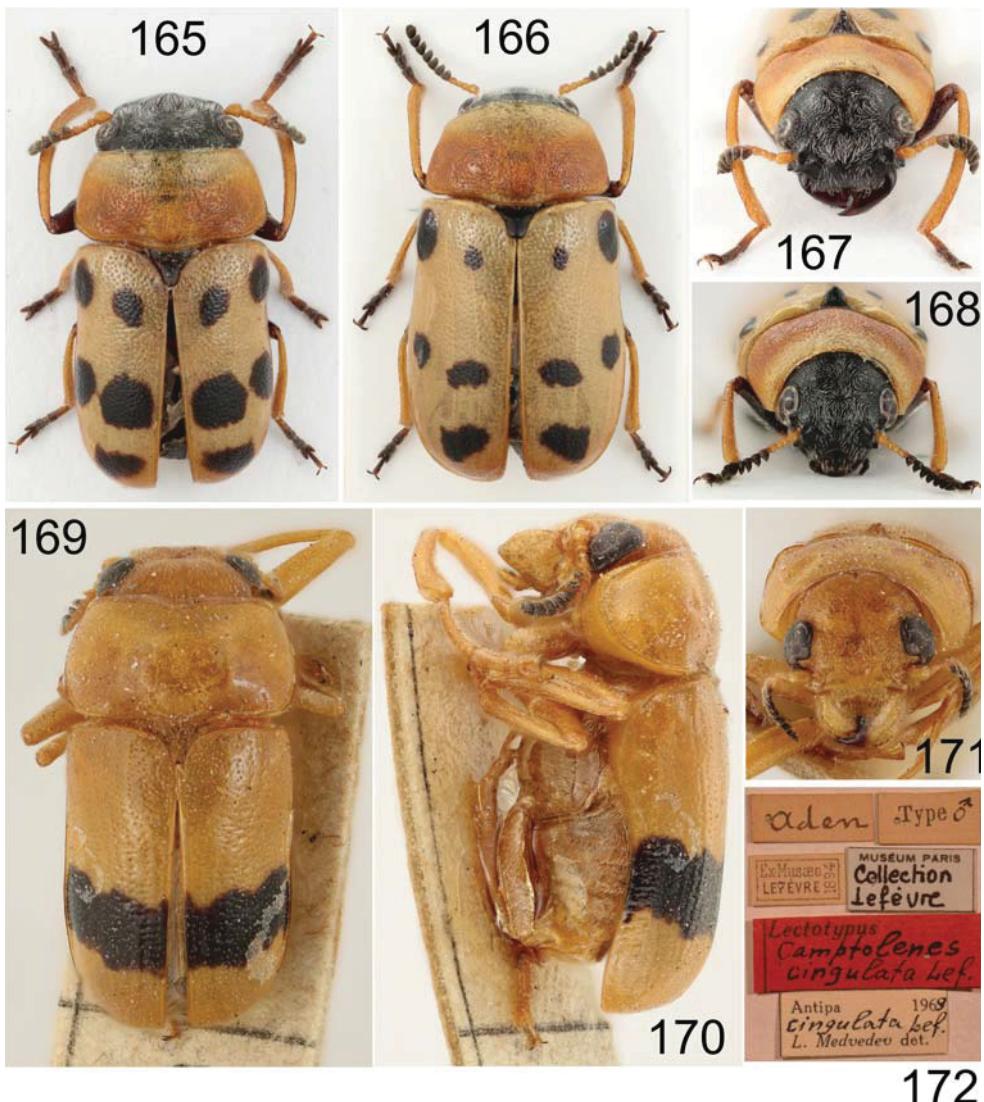
Figs 133–144. 133–136 – *Smaragdina persica* (Pic, 1911): 133 – syntype (female, 3.6 mm); 134 – labels; 135 – holotype of *S. mirabilis* Romantsov, 2012 (male, Romantsov orig.); 136 – paratype of *S. mirabilis* (female, Romantsov orig.). 137–144 – *Smaragdina scutellaris* (Lefèvre, 1872) (type specimens and labels): 137–138 – paralectotype of *Gynandrophthalma scutellaris* Lefèvre, 1872 (male, 5.1 mm); 139–140 – syntype of *G. scutellaris* var. *latemaculata* Pic, 1897 (male, 4.4 mm); 141–142 – holotype of *S. jordanica* Erber & Medvedev, 1999 (male, 4.6 mm); 143–144 – holotype of *S. furthi* Medvedev & Katbeh-Bader, 2002 (male, 5.3 mm).



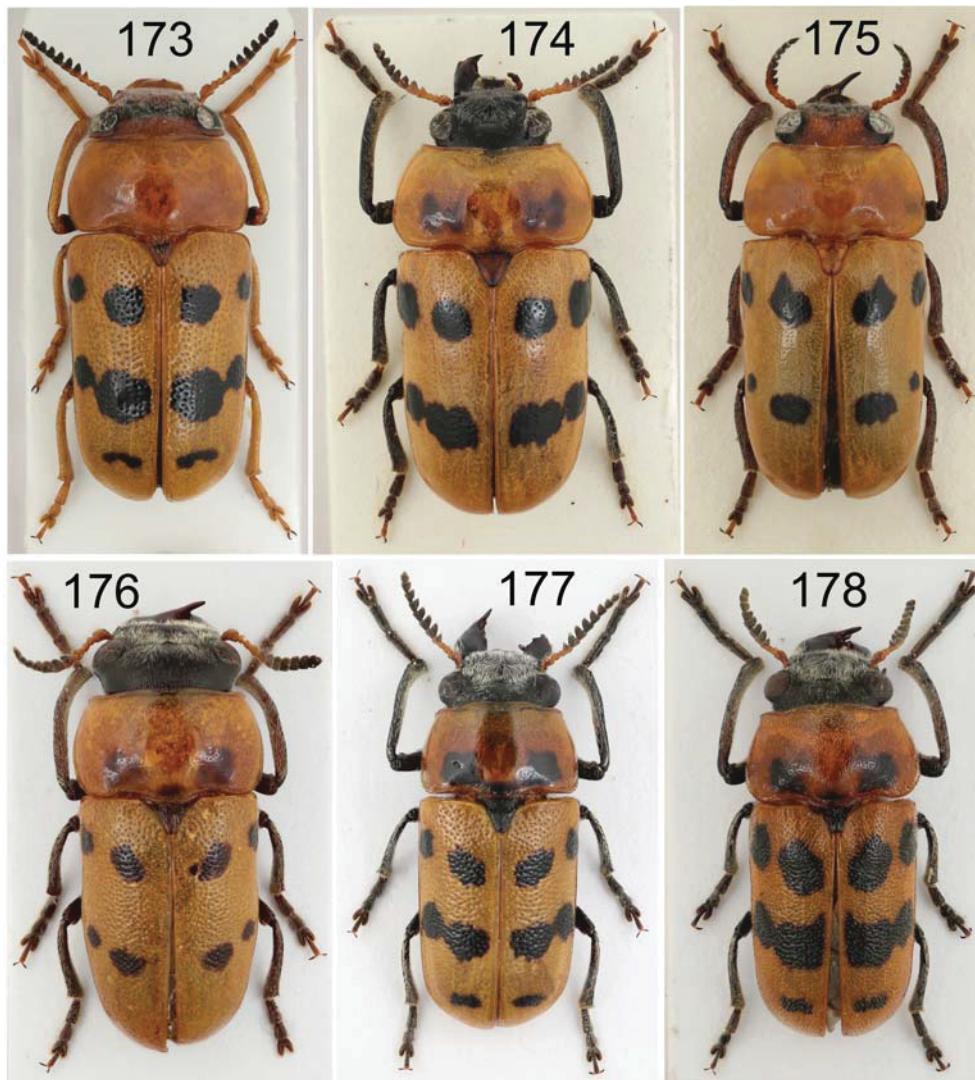
Figs 145–154. *Tituboea arabica* (Olivier, 1808). 145–146 – syntype of *Clytra arabica* Olivier, 1808 (unsexed): 145 – habitus; 146 – labels. 147–148 – syntype of *T. mokattamensis* Pic, 1912 (female, 6.0 mm): 147 – habitus; 148 – labels. 149–150 – syntype of *T. subabbreviata* Pic, 1912 (male, 6.5 mm); 149 – habitus; 150 – labels. 151 – male (Iran, 8.2 mm); 152 – male (Syria, 8.0 mm); 153 – head of male (Iran); 154 – head of male (Syria).



Figs 155–164. *Tituboea atriceps* Pic, 1924. 155–157 – Invalid type of *T. minor* var. *atriceps* (female, 5.2 mm): 155 – habitus; 156 – head; 157 – labels. 158–160 – Holotype of *T. minor* var. *decemmaculata* Pic, 1937 (female, 3.9 mm): 158 – habitus; 159 – head; 160 – labels. 161 – male (4.4 mm); 162 – head of male. 163–164 – Holotype of *Antipa israelita* Medvedev, 1992 (male, Romantsov orig.): 163 – habitus; 164 – labels.



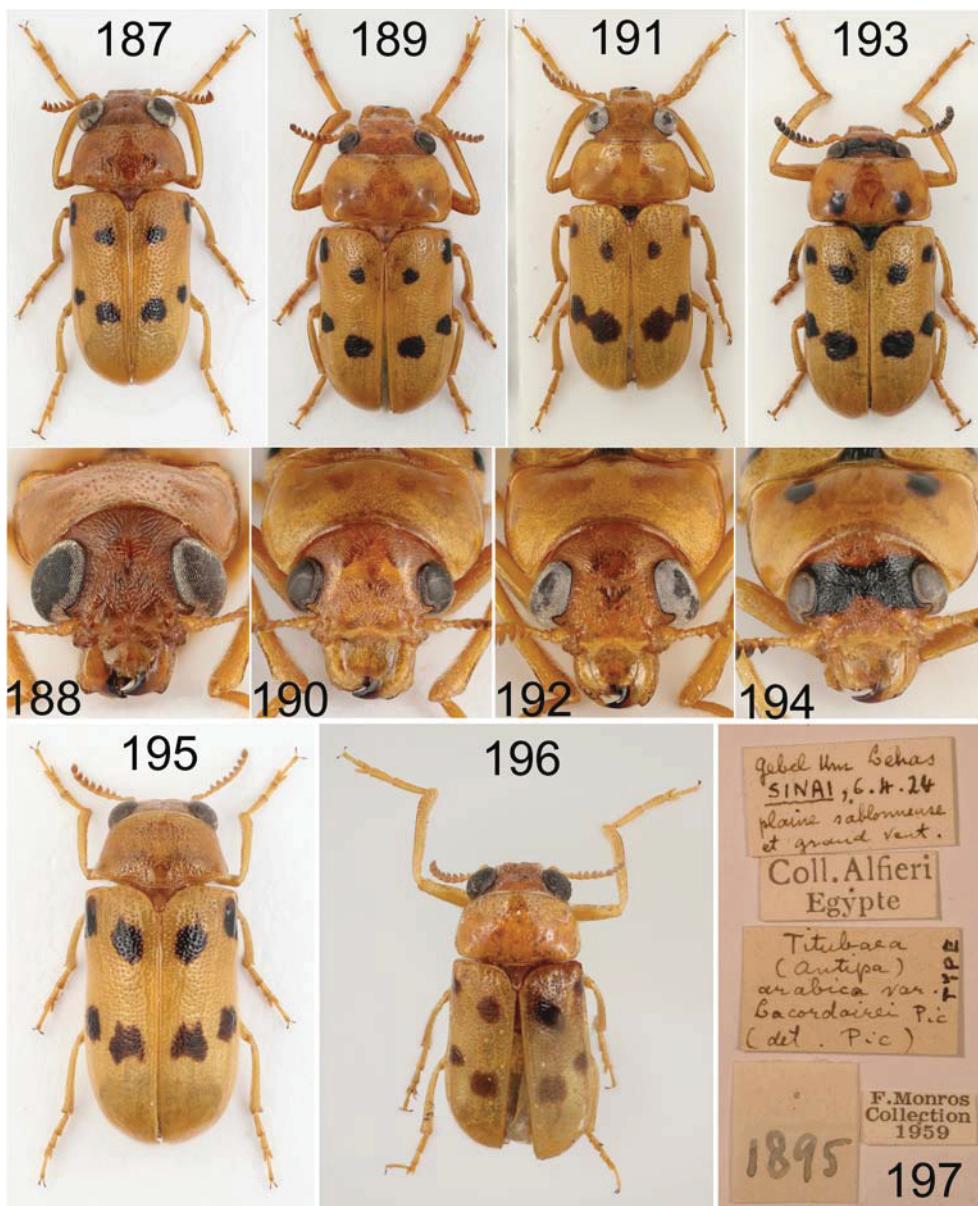
Figs 165–172. 165–168 – *Tituboea chobauti* (Pic, 1896): 165 – habitus of male (Algeria, 6.1 mm); 166 – habitus of female (Morocco, 5.8 mm); 167 – head of male; 168 – head of female. 169–172 – *Tituboea cingulata* (Lefèvre, 1883) (syntype, male, 6.7 mm): 169 – habitus; 170 – habitus in lateral view; 171 – head; 172 – labels.



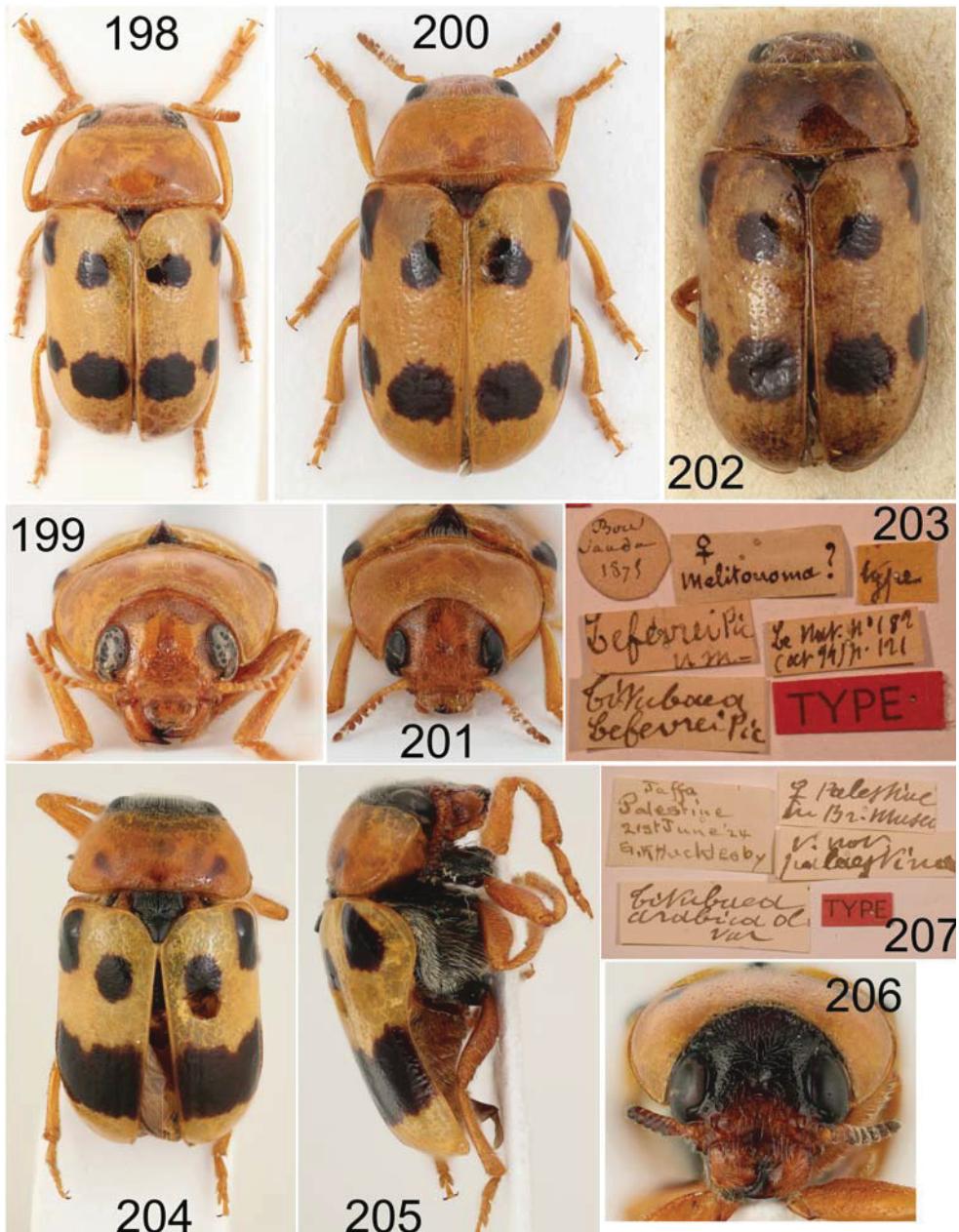
Figs 173–178. *Tituboea paykullii* species group, habitus: 173 – *Tituboea fasciata* Lefèvre, 1872 (male, 9.5 mm); 174 – *T. femoralis* Medvedev, 1962 (male, 11.5 mm); 175 – *T. laticollis* (Olivier, 1808) (male, 11.9 mm); 176–178 – males of *T. paykullii* (Lacordaire, 1848) from Morocco, illustrating the color variability (lengths: 176 – 9.5 mm, 177 – 7.8 mm, 178 – 8.8 mm).



Figs 179–186. *Tituboea paykullii* species group, head of males. 179–182 – frontal view: 179 – *Tituboea fasciata* Lefèvre, 1872; 180 – *T. femoralis* Medvedev, 1962; 181 – *T. laticollis* (Olivier, 1808); 182 – *T. paykullii* (Lacordaire, 1848). 183–186 – lateral view: 183 – *Tituboea fasciata*; 184 – *T. femoralis*; 185 – *T. laticollis*; 186 – *T. paykullii*.



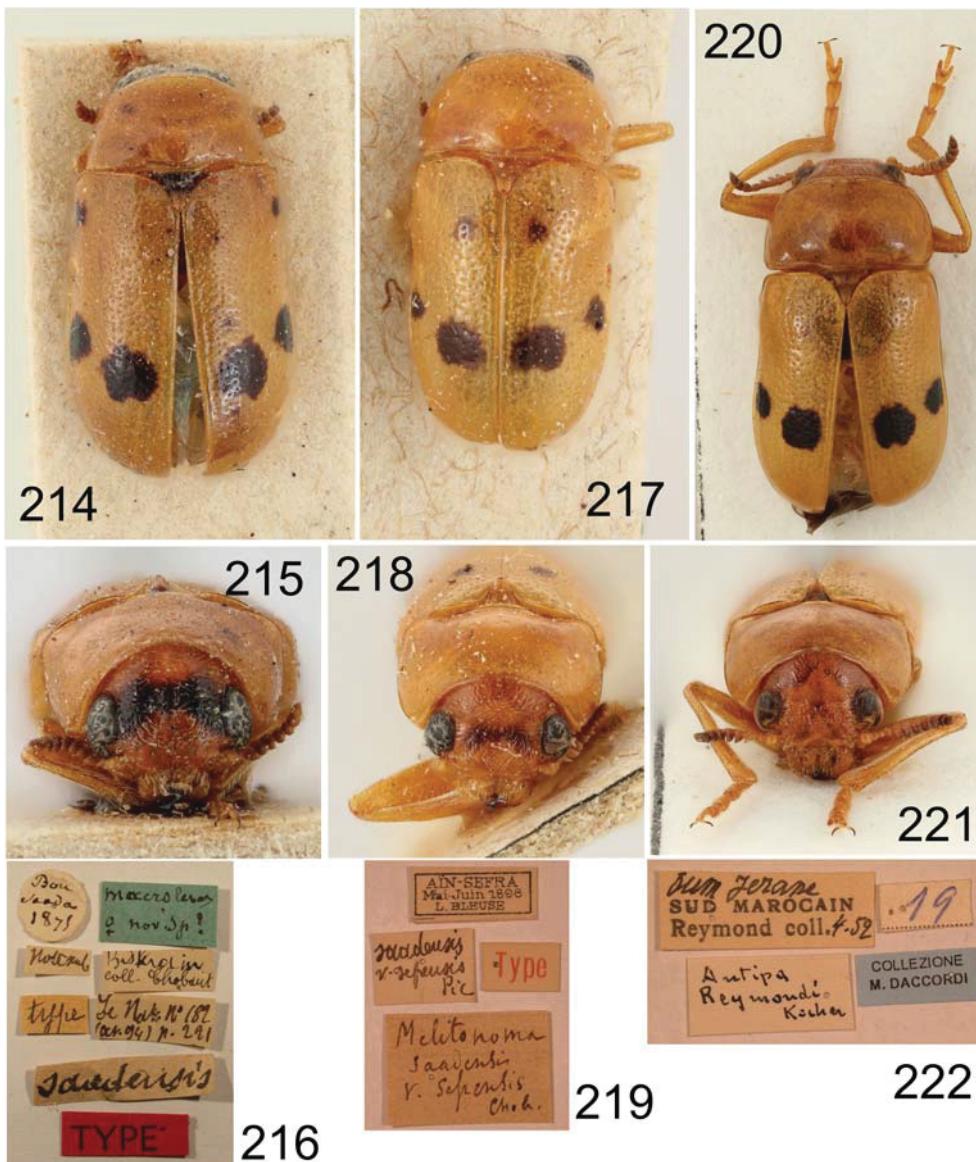
Figs 187–197. *Titubaea lacordairei* (Pic, 1929): 187 – male (Jordan: Wadi Rum, 6.9 mm); 188 – its head; 189 – male (Jordan: At Tafila, 8.0 mm); 190 – its head; 191 – male (Oman, 6.7 mm); 192 – its head; 193 – male (Yemen, 5.8 mm); 194 – its head; 195 – female (Jordan: Wadi Rum, 6.4 mm); 196–197 – Syntype of *Antipa arabica* var. *lacordairei* (male, 5.8 mm): 196 – habitus; 197 – labels.



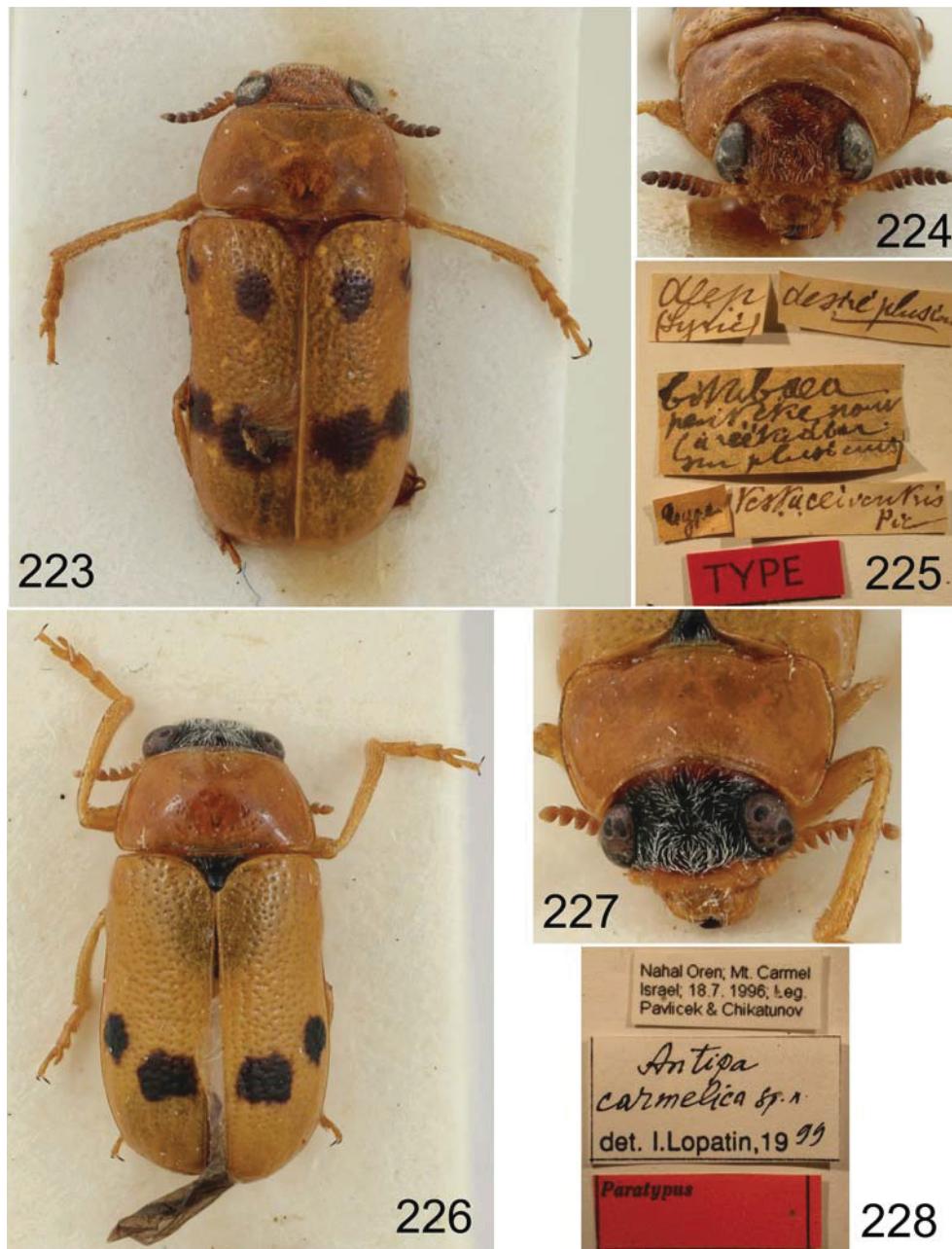
Figs 198–207. *Tituboea lefevrei* (Pic, 1894): 198 – male (Algeria, 6.6 mm); 199 – head of male; 200 – female (Algeria, 6.5 mm); 201 – head of female; 202 – holotype of *Melitonoma lefevrei* (female, 5.5 mm); 203 – labels. 204–207 – syntype of *Antipa arabica* var. *palaestina* Pic, 1929, male, 6.2 mm: 204 – habitus; 205 – habitus in lateral view; 206 – head; 207 – labels.



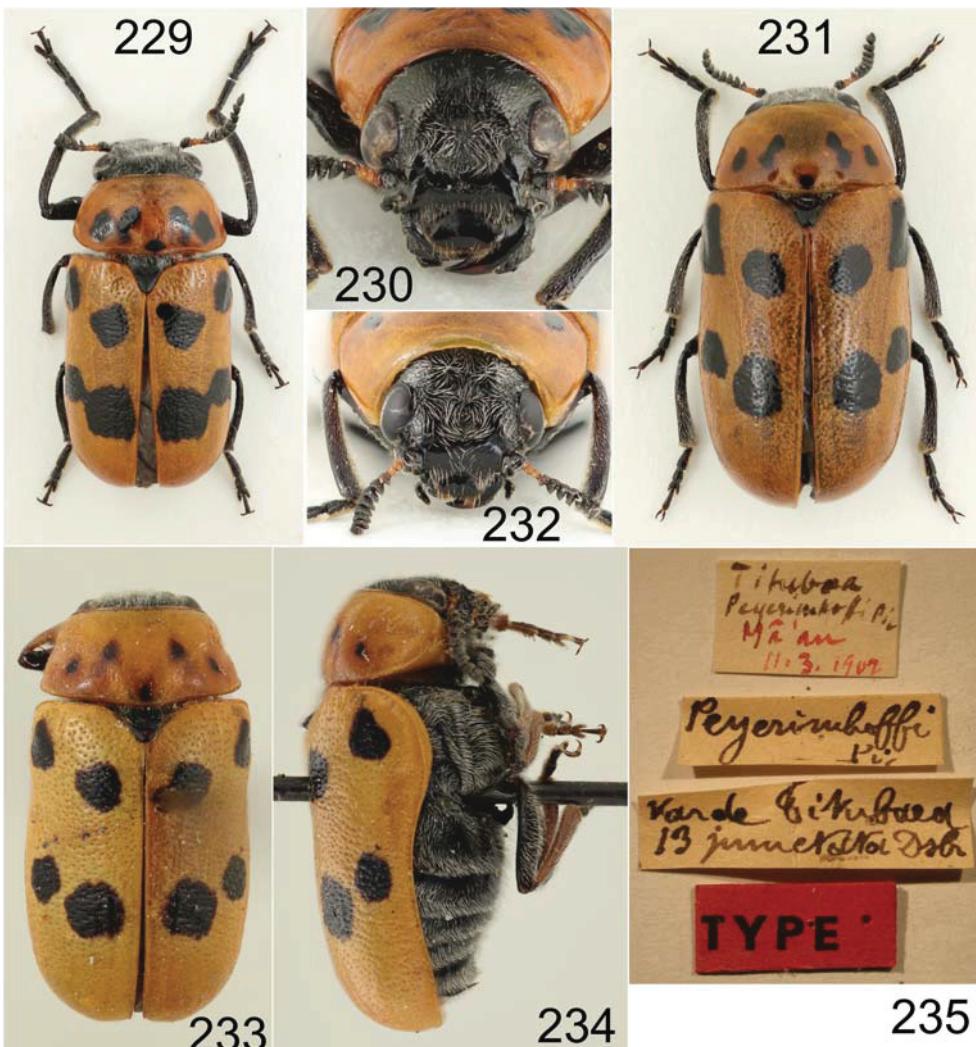
Figs 208–213. *Tituboea mecheriensis* Pic, 1895: 208 – male (7.1 mm); 209 – head of male; 210 – female (5.9 mm); 211 – head of female. 212–213 – Syntype of *Tituboea octopunctata* var. *mecheriensis* Pic, 1895 (male, 7.1 mm); 212 – habitus; 213 – labels.



Figs 214–222. *Tituboea saadensis* (Pic, 1894). 214–216 – Syntype of *Melitonoma saadensis* (female, 4.7 mm): 214 – habitus; 215 – head; 216 – labels. 217–219 – Holotype of *Melitonoma saadensis* var. *sefrensis* Pic, 1897 (male, 4.2 mm): 217 – habitus; 218 – head; 219 – labels. 220–222 – Possible paratype of *Antipa reymondi* Kocher, 1956 (male, 5.5 mm): 220 – habitus; 221 – head; 222 – labels.



Figs 223–228. 223–225 – *Tituboea testaceiventris* Pic, 1913 (syntype, male, 4.5 mm). 223 – habitus; 224 – head; 225 – labels. 226–228 – *T. carmelica* Lopatin & Chikatunov, 2001 (paratype, male, 4.6 mm): 226 – habitus; 227 – head; 228 – labels.



Figs 229–235. *Tituboea tredecimpunctata* (Desbrochers des Loges, 1870): 229 – habitus of male (Israel, 8.4 mm); 230 – head of male; 231 – habitus of female (Tunisia, 8.1 mm); 232 – head of female. 233–235 – syntype of *T. peyerimhoffi* Pic, 1902 (female, 6.6 mm): 233 – habitus; 234 – habitus in lateral view; 235 – labels.



## Abbreviated instructions for authors

Full version of the instructions available at <http://www.aemnp.eu>

Journal *Acta Entomologica Musei Nationalis Pragae* (AEMNP) publishes entomological papers focused on (i) insect taxonomy, (ii) nomenclature, (iii) morphology of adult and immature stages and/or their biology with possible applications in taxonomy and phylogeny, (iv) phylogeny at least partly based on morphological characters, (v) catalogues applicable for further taxonomy and biodiversity studies, and (vi) general papers on methodology of insect taxonomy. Manuscripts are reviewed by two peer reviewers and evaluated by the editorial board. Papers not conforming to the journal style may be returned without a review. Manuscripts submitted to AEMNP must contain unpublished work and cannot be simultaneously submitted elsewhere.

AEMNP will consider manuscripts of any length but the editorial board may decide to publish long contributions in a supplementary issue. No page charges are required for shorter papers with no more than two color plates. Costs of papers with high number of color plates and long papers published as supplements are subject to the editor's decision. Each author will receive 50 reprints and a PDF file for private use. Peer reviewers will receive the final PDF file of any manuscript reviewed by them.

AEMNP only accepts manuscripts in clear and concise English; papers requiring extensive linguistic corrections will be returned to the authors. Subject to the editor's approval, papers may contain a translation of the summary or identification keys into other languages. Authors must follow the latest edition of the International Code of Zoological Nomenclature and its important recommendations, especially Recommendation 16C on the deposition of the holotypes in institutional collections.

**Text** (in .doc standard text file or .rtf format, 12 pt font size) should be double spaced and left justified; do not divide words and avoid unusual fonts. Manuscript should be structured as follows: title, abstract, keywords, main text, acknowledgements, references, and figure legends. The main text should be divided into introduction, material and methods, results and discussion; some of them can be omitted where appropriate (e.g. in short notes). Page headings are supplied by the editors and approved by the authors in proofs.

**Tables** can be submitted in text format (MS Word files in .rtf and .doc formats) or in spreadsheets (MS Excel .xls format). Formatting should be kept simple; final layout assembled by the journal office will be approved by the authors in proofs.

**Illustrations** are accepted as original artwork or in TIFF format with at least 600 dpi resolution at print size for black-and-white illustrations and 300 dpi at print size for photographs.

The editors reserve the right to make minor editorial changes in line with the instructions for authors without the approval of authors.

Manuscripts should be submitted electronically to the journal office by e-mail or on a CD-ROM. Author(s) will receive one set of proofs. Requested original artwork and storage media will be returned together with the reprints.

All correspondence should be sent to the AEMNP journal office, Department of Entomology, National Museum, Cirkusová 1740, CZ-193 00 Praha 9 – Horní Počernice, Czech Republic or e-mailed to [aemnp.editors@gmail.com](mailto:aemnp.editors@gmail.com).

