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Identity of taxa proposed in *Clythra* (Coleoptera: Chrysomelidae: Cryptocephalinae) by Carl Peter Forsberg (1821)

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Abstract. The taxa of *Clythra* Fabricius, 1798 (nowadays *Clytra* Laicharting, 1781) introduced by Carl Peter Forsberg (1821a) are reviewed. The primary type specimens of all species were examined. *Mastostethus ruficauda* (Forsberg, 1821), comb. nov. is transferred as a valid species to Megalopodidae. The following new synonymies are proposed: *Clytra duodecimmaculata duodecimmaculata* (Fabricius, 1781) = *Clythra gigas* Forsberg, 1821, syn. nov.; *Coptocephala plagiocephala* (Fabricius, 1792) = *Clythra bipunctata* Forsberg, 1821, syn. nov.; *Tituboea biguttata* (Olivier, 1791) = *Clythra sexpunctata* Forsberg, 1821, syn. nov.; *Tituboea macropus* (Illiger, 1800) = *Clythra coalita* Forsberg, 1821, syn. nov.; *Tituboea octopunctata* (Fabricius, 1787) = *Clythra quadrisignata* Forsberg, 1821, syn. nov. Colour photographs of all taxa described by Forsberg are also provided.

Key words. Coleoptera, Chrysomelidae, Cryptocephalinae, Clytrini, Megalopodidae, new synonymy, new combination, taxonomy, Carl Peter Forsberg, Carl Peter Thunberg

Introduction

The life and career of Carl Peter Forsberg (1793–1832) is closely connected with a famous Swedish botanist and naturalist Carl Peter Thunberg (1743–1828). Forsberg was the son of Thunberg's half-brother and from 1804 lived with Thunbergs in their estate outside Uppsala. Forsberg became a physician and a surgeon. At a young age he also worked as a botanical demonstrator in Uppsala. After Thunberg's death in 1828, his large entomological collection was left to Forsberg, who took responsibility to arrange and donate it to the Uppsala University (Callisen 1831, Wikström 1833, Forbes 1986; Svanberg, pers. comm. 2016).

Forsberg is an author of just two entomological publications: *Monographia Clythrae* (Forsberg 1821a) and *De Gyrinis Commentatio* (Forsberg 1821b). Both these papers were published in the same volume of *Nova Acta Regiae Societatis Scientiarum Upsaliensis* where Thunberg (1821) published the first part of his *Coleoptera Capensia*, also including the genus *Clythra* Fabricius, 1798 (nowadays *Clytra* Laicharting, 1781). While Thunberg's paper has pagination 157–193, Forsberg's *Monographia Clythrae* follows it on the pages 258–292. Due to poor health Thunberg published only short, two-line descriptions in his *Coleoptera Capensia* and Forsberg was asked to provide extended redescriptions. This is explained in the introduction of his *Monographia Clythrae*. Since Forsberg strictly used the references to Thunberg's *Coleoptera Capensia*, the authorship must be assigned to Thunberg, although both publications were released in the same year and journal and some authors attributed the species to Forsberg. Besides these redescriptions, Forsberg (1821a) also described several available new species. Furthermore, it is evident that Forsberg used Thunberg's specimens for both descriptions and redescriptions and thus the type specimens of his taxa are found in the Thunberg's collection deposited in the Museum of Evolution of the Uppsala University and were catalogued by Wallin (2001).

It is necessary to mention the structure of Forsberg's *Monographia Clythrae*. Two-paged introduction is followed by a 'key' section (pages 260–273) with all species of *Clythra* known to Forsberg. This is followed by a second part introduced by '*Descriptiones specierum novarum et Capensium*' (pages 274–290) which contains either extended redescriptions of the species of *Clythra* published by Thunberg (1821) and also the descriptions of additional new species. At the end of Forsberg's paper there is a list of localities associated with particular taxa (pages 291–292), which is, however, incomplete as some described taxa are not listed.

Forsberg (1821a) introduced 13 new names, ten of them refer to descriptions of new species and additional three names are treated here as substitute names, which, however, require a comment. Three newly established names (*Clythra trinotata*, *C. grandipes* and *C. costalis*) are found only in the 'key' part and are associated with the short description and also with the exact reference to previously described species by other authors. These names are absent in the second part where all other descriptions can be found. This arrangement suggests that Forsberg really meant to propose *Clythra trinotata*, *C. grandipes* and *C. costalis* as substitute names. It should also be mentioned that the replaced names are really homonymous and there are no specimens labelled as *C. grandipes* and *C. costalis* in Thunberg's collection. On the other hand, two specimens of *Clythra trinotata* are present there. As a result, I accept *Clythra trinotata*, *C. grandipes* and *C. costalis* as substitute names but not as validly described species.

Material and methods

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.

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.

Status of type specimens. Because Forsberg used only specimens in Thunberg's collection (which is in its original condition) for descriptions and there is no indication that Forsberg's specimens could be deposited in other institutions, I treat all single type specimens as holotypes.

Under each species I list only newly synonymized taxa. For the complete list of synonyms of Palaearctic taxa see Regalin & Medvedev (2010), for Neotropical taxa see Agrain (2013).

The examined material is housed in the following collections:

BMNH The Natural History Museum, London, United Kingdom (Michael Geiser);
UUZM Museum of Evolution, Uppsala University, Sweden (Hans Mejlon);
ZMUC Zoological Museum, University of Copenhagen, Copenhagen, Denmark (Alexey Solodovnikov).

List of taxa

Megalopodidae

Mastostethus ruficauda (Forsberg, 1821) comb. nov.

(Figs 1–6)

Clythra ruficauda Forsberg, 1821a: 261, 274 (original description).

Type locality. 'America meridionali'.
Type material examined. Holotype: spec. unsexed, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8230 / Typsaml. nr. 1580 / *Clythra ruficauda* Forsberg 1821 [r, p] // ruficauda. / 9 / Amer. merid. [box label, w, h]' (UUZM).

Distribution. South America (Forsberg 1821a).
Comments. *Clythra ruficauda* was usually classified as a possible synonym or variety of *Anomoea laticlavia* (Förster, 1771) (e.g. Lacordaire 1848, Gemminger & Harold 1874, Jacoby & Clavareau 1906). However, the holotype is not representative of Clytrini but belongs to Megalopodidae. As it is characterized by a raised anterior part of the metasternum, it has to be transferred to the genus *Mastostethus* Lacordaire, 1845.

The genus *Mastostethus* comprises of approximately 140 species distributed in South and Central America, but has never been revised. Based on the catalogues by Jacoby & Clavareau (1905), Clavareau (1913) and Blackwelder (1946) the morphologically most similar species are *M. nigricollis* Jacoby, 1904 (completely orange abdomen in *M. ruficauda*, while black with last ventrite pale in *M. nigricollis*) and *M. rufipennis* (Mannerheim, 1826) (pronotum black with small orange spot in the middle near basal margin in *M. ruficauda*, completely black pronotum in *M. rufipennis*). However, these differences may result from intraspecific variability, as the species of *Mastostethus* display a great variability in coloration. Nevertheless, I avoid to propose any new synonymy without study of the appropriate type material. Hence, I transfer *Clythra ruficauda* to *Mastostethus* as a valid species.

Chrysomelidae: Cryptocephalinae: Clytrini

Babia (*Babia*) *costalis* (Forsberg, 1821)

Clythra humeralis Fabricius, 1801: 37 (original description, junior objective homonym).
Clythra costalis Forsberg, 1821a: 271 (new substitute name for *Clythra humeralis* Fabricius, 1801: 37, nec *Clytra humeralis* Schneider, 1792: 192, now in *Labidostomis*)

Type locality. 'Carolina'.
Type material examined. None.

Distribution. USA: South Carolina (Fabricius 1801, Olivier 1808), Mexico (Lacordaire 1848; Moldenke 1970, 1981).
Comments. As explained previously, Forsberg (1821a) used the name *Clythra costalis* only in the 'key' part of his publication and associated it with a reference to *Clythra humeralis* Fabricius, 1801: 37 which is homonymous to *Clytra humeralis* Schneider, 1792: 192 (now classified in *Labidostomis* Chevrolat, 1836). *Clythra costalis* is treated here as a new substitute name and not as a valid description in the agreement with Monrós (1953). Both names, Fabrician *Clythra humeralis* and *Clythra costalis*, are objective synonyms and have the same name bearing type, in agreement with Article 72.7 (ICZN 1999).

The identity of this species requires further investigation. Fabricius (1801) described *Clythra humeralis* from 'Carolina' based on material collected by Louis Augustin Guillaume Bosc. As mentioned by Blake (1952), Bosc collected exclusively in the surroundings of Charleston in South Carolina and two syntypes of Fabrician *Clythra humeralis* are deposited now in the Muséum National d'Historie Naturelle in Paris. All subsequent authors probably misidentified this taxon using the specimens from Mexico (Lacordaire 1848; Jacoby 1880, 1889; Moldenke 1970, 1981). Riley et al (2003) mentioned *Clythra humeralis* among 'names of uncertain application' and suggested that *Clythra humeralis* is the species known in North America as *Babia quadriguttata* (Olivier, 1791). The study of both Fabrician and Olivier's type specimens is necessary to resolve the identity of the two taxa.

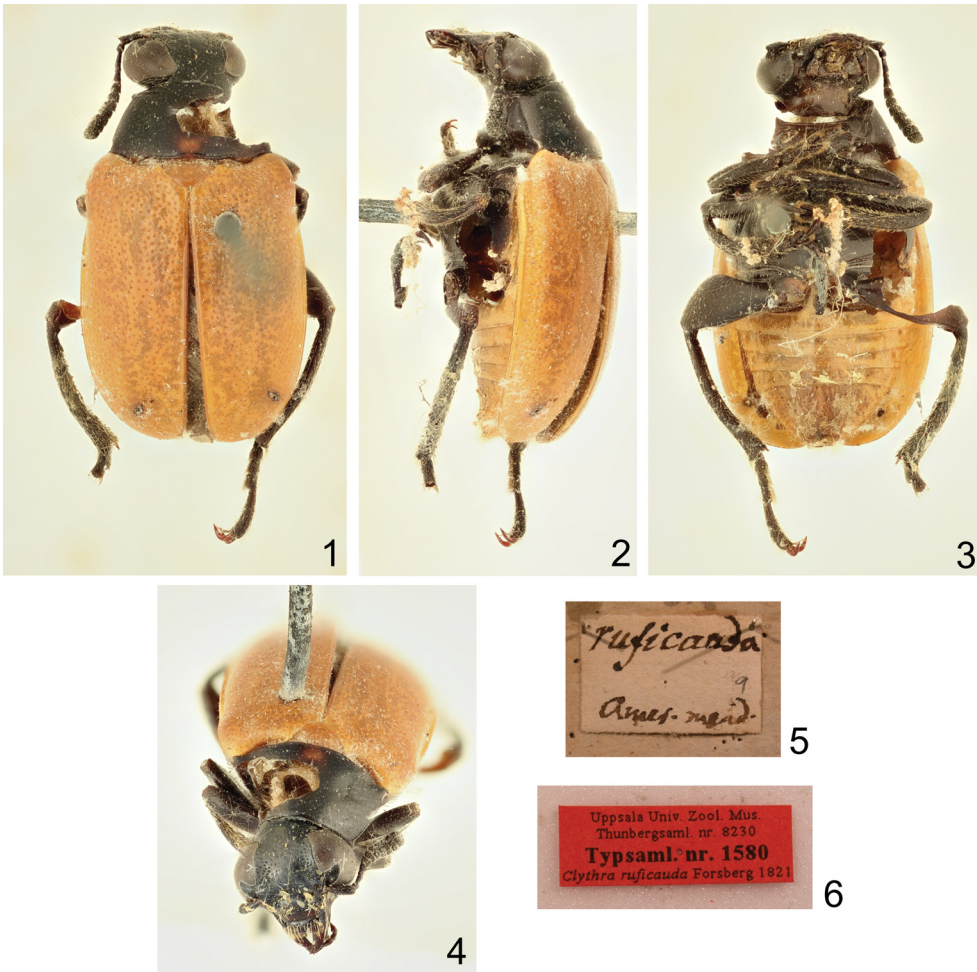
Clytra (*Clytra*) *duodecimmaculata duodecimmaculata* (Fabricius, 1781)

(Figs 7–11)

Cryptocephalus 10-maculatus Fabricius, 1775: 106 (original description, junior objective homonym).
Cryptocephalus 12-maculatus Fabricius, 1781: 139 (new substitute name for *Cryptocephalus decemmaculatus* Fabricius, 1775 nec *Cryptocephalus decemmaculatus* (Linnaeus, 1758)).
Clythra gigas Forsberg, 1821a: 266, 283 (original description), **syn. nov.**

Type localities. *Cryptocephalus decemmaculatus*: 'Capite bonae spei' [South Africa, Cape of Good Hope; patria falsa]. *Clytra gigas*: not stated.
Type material examined. *Cryptocephalus decemmaculatus*: not examined. Photographs of the holotype were sent from BMNH (ex collection Banks): 'Chr: 10-maculatus. [h] / Fab. Entom. p. [p] 106. n. 3. [w, h] // Type. [w, h]'.
Clytra gigas: Holotype: ♂, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8215 / Typsaml. nr. 1761 / *Clythra gigas* Forsberg 1821 [r, p] // gigas. / 26 [box label, w, h]' (UUZM).

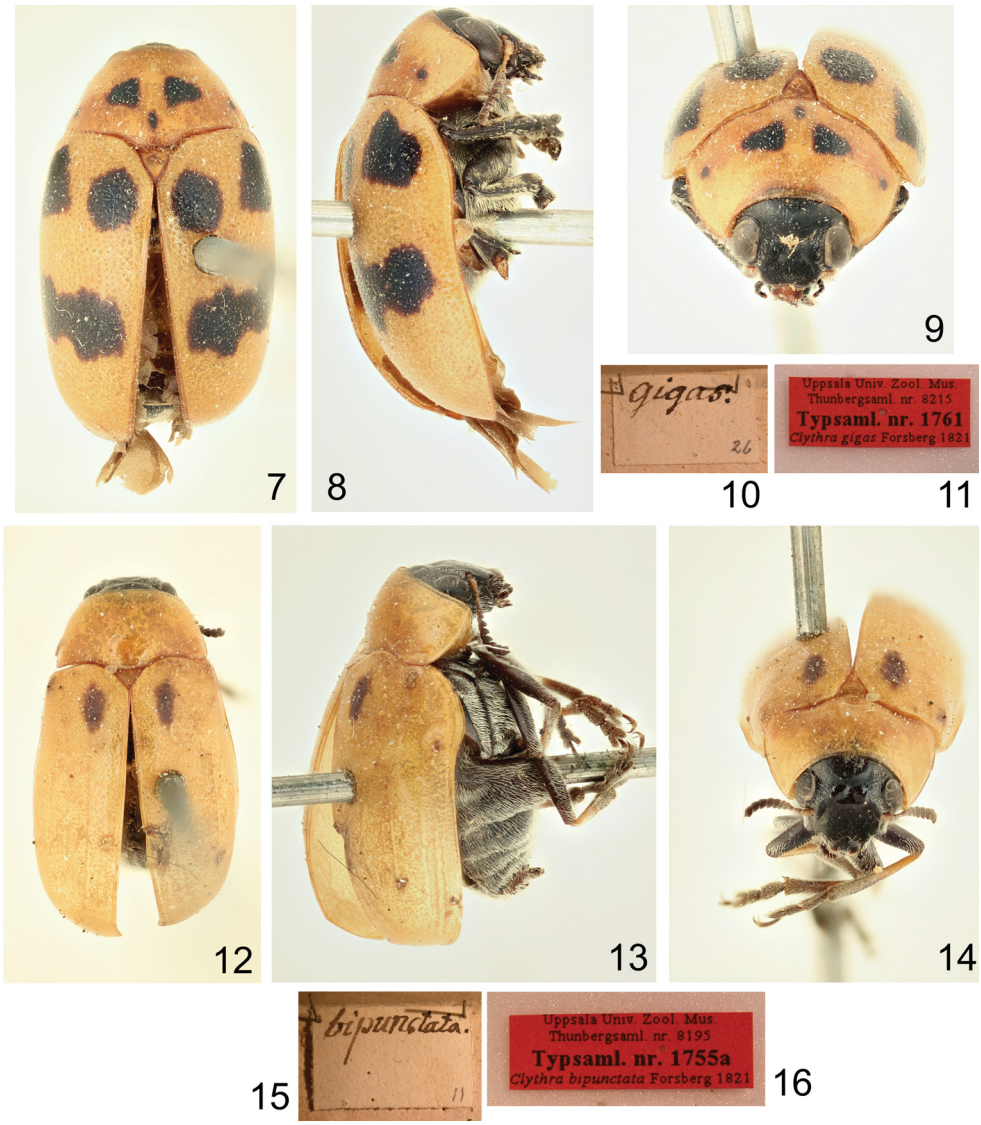
Distribution. South China (Gressitt & Kimoto 1961), SE Asia (Kimoto & Gressitt 1981), Sumatra, Java (Lacordaire 1848).



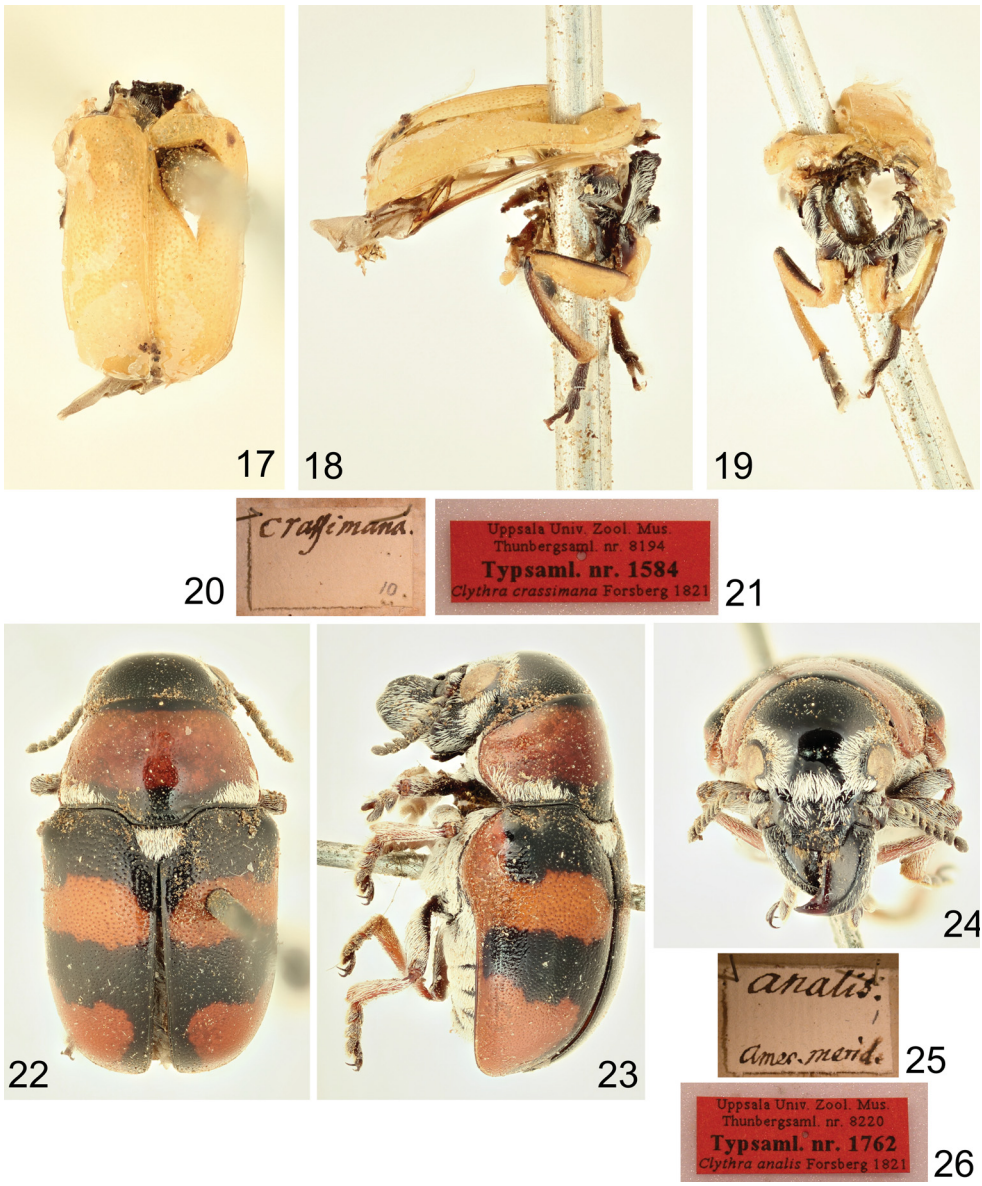
Figs 1–6. *Mastostethus ruficauda* (Forsberg, 1821) (holotype, 9.5 mm): 1 – dorsal habitus; 2 – lateral habitus; 3 – ventral habitus; 4 – frontal habitus; 5 – box label; 6 – label of holotype.

Comments. Forsberg (1821a) did not mention the origin of his specimen. It is possible that the holotype was collected by Thunberg in Java during his two visits to the island in the years 1775 and 1777.

Clythra gigas disappeared from the entomological literature. It is mentioned neither in Lacordaire (1848) who treated or at least commented on all Forsberg's taxa, nor in all subsequent catalogues by Gemminger & Harold (1874), Jacoby & Clavareau (1906) and Clavareau (1913). Comparison of the holotype of *Clythra gigas* with the photograph of the holotype of *Clytra duodecimmaculata* shows with reasonable certainty that they are conspecific and they are thus synonymized here.



Figs 7–16. 7–11 – *Clytra duodecimmaculata duodecimmaculata* (Fabricius, 1775) (holotype of *Clythra gigas* Forsberg, 1821, ♂, 11.5 mm): 7 – dorsal habitus; 8 – lateral habitus; 9 – frontal habitus; 10 – box label; 11 – label of holotype. 12–16 – *Coptocephala plagiocephala* (Fabricius, 1792) (holotype of *Clythra bipunctata* Forsberg, 1821, ♀, 7.5 mm): 12 – dorsal habitus; 13 – lateral habitus; 14 – frontal habitus; 15 – box label; 16 – label of holotype.



Figs 17–26. 17–21 – *Macrolenes dentipes* (Olivier, 1808) (holotype of *Clythra crassimana* Forsberg, 1821, ♂, length of elytra 4.0 mm): 17 – dorsal habitus; 18 – lateral habitus; 19 – frontal habitus; 20 – box label; 21 – label of holotype. 22–26 – *Megalostomis analis* (Forsberg, 1821) (holotype, ♂, 9.5 mm): 22 – dorsal habitus; 23 – lateral habitus; 24 – frontal habitus; 25 – box label; 26 – label of holotype.

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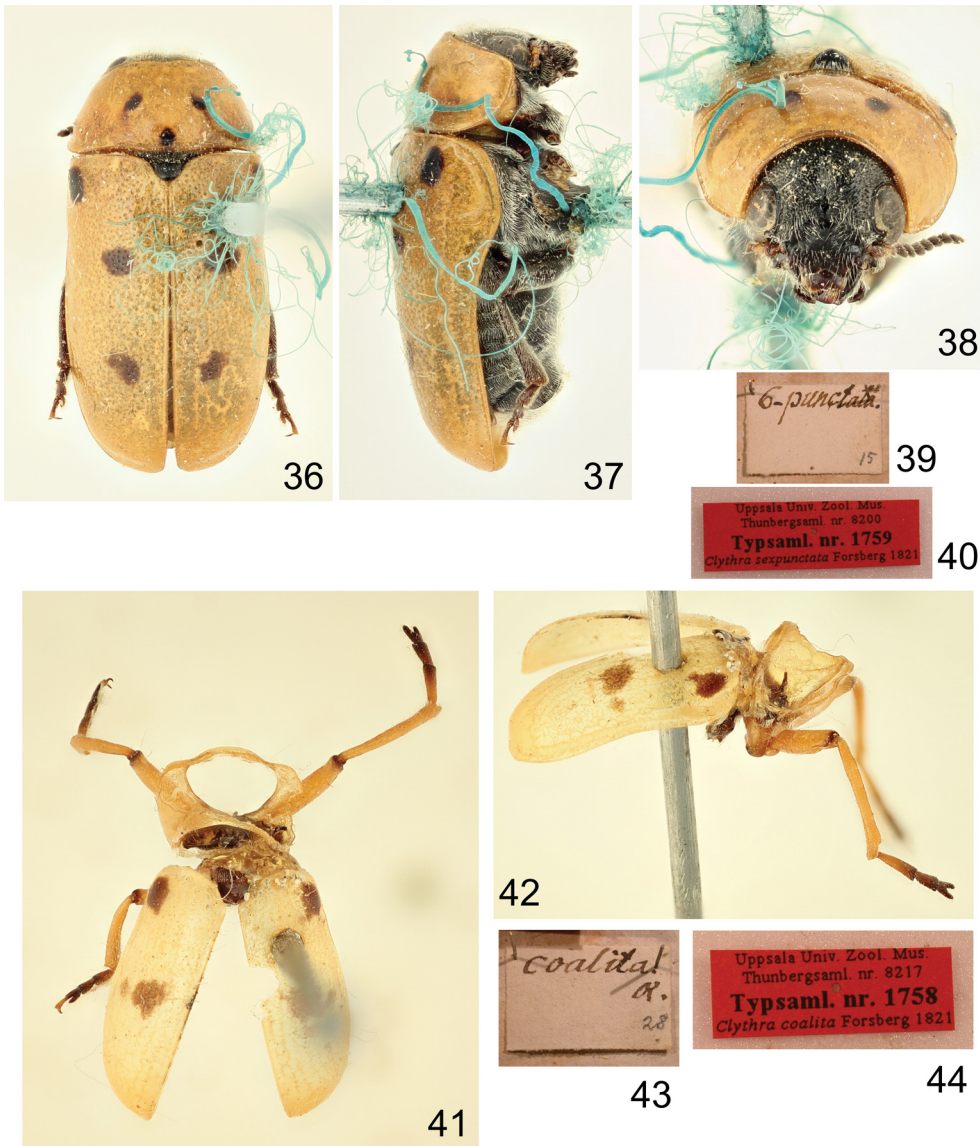
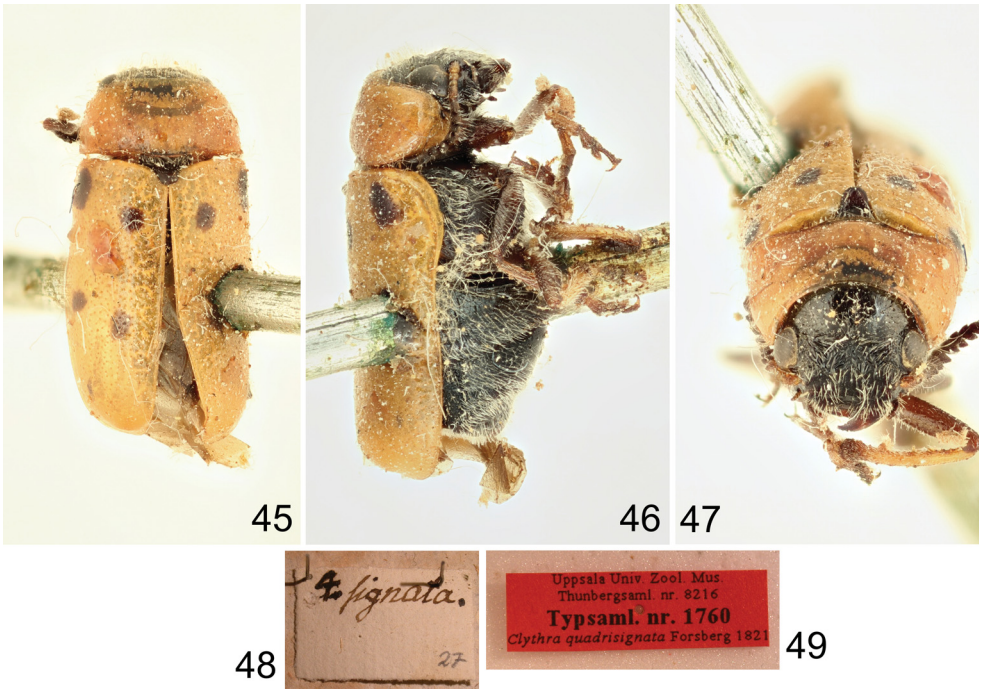
Figs 27–35. 27–31 – *Megalostomis grandis* (Forsberg, 1821) (holotype, ?♀, 12.0 mm): 27 – dorsal habitus; 28 – lateral habitus; 29 – frontal habitus; 30 – box label; 31 – label of holotype. 32–35 – *Megalostomis grossa* (Forsberg, 1821) (holotype, ♂, 12.5 mm): 32 – dorsal habitus; 33 – lateral habitus; 34 – frontal habitus; 35 – box label.



Figs 36–44. 36–40 – *Tituboea biguttata* (Olivier, 1791) (holotype of *Clythra sexpunctata* Forsberg, 1821, ♀, 8.5 mm): 36 – dorsal habitus; 37 – lateral habitus; 38 – frontal habitus; 39 – box label; 40 – label of holotype. 41–44 – *Tituboea macropus* (Illiger, 1800) (holotype of *Clythra coalita* Forsberg, 1821, ♂, 10.0 mm): 41 – dorsal habitus; 42 – lateral habitus; 43 – box label; 44 – label of holotype.



Figs 45–49. *Tituboea biguttata* (Olivier, 1791) (holotype of *Clythra quadrisignata* Forsberg, 1821, ♀, 6.2 mm): 45 – dorsal habitus; 46 – lateral habitus; 47 – frontal habitus; 48 – box label; 49 – label of holotype.

Coptocephala bistrinotata (Fabricius, 1801)

Clythra 6notata Fabricius, 1801: 35 (original description, objective junior homonym).
Clythra bistrinotata Fabricius, 1803: 293 (new substitute name for *Clythra sexnotata* Fabricius, 1801: 35, nec *Clythra sexnotata* Fabricius, 1801: 31).
Clythra trinotata Forsberg, 1821a: 264 (unnecessary new substitute name for *Clythra sexnotata* Fabricius, 1801: 35 ,nec *Clythra sexnotata* Fabricius, 1801: 31).

Type locality. Morocco: 'Tanger'.
Type material examined. *Clythra sexnotata*: not examined. The photos of ♀ syntype were sent from ZMUC: 'C: 6notata / No. 32. Tanger / Schousbo [w, h] // Vahl [w, h] // TYPE [r, p] // zmuc / 00031180 [w, p]'.

Distribution. Algeria, Morocco, Tunisia (Regalin & Medvedev 2010).
Comments. The name *Clythra trinotata* was published only in the 'key part' of Forsberg's publication. Although there is a short description, the name is associated also with the reference to homonymous *Clythra sexnotata* Fabricius, 1801: 35. As explained in the introduction section, the name *Clythra trinotata* is treated as a substitute name and not as a description of a new species.

The Thunberg's collection contains two females labelled as type specimens of *Clythra trinotata* (type numbers 1757a, 1757b). These specimens are treated here as invalid types,

since *Clythra trinotata* was proposed as a new substitute name for *Clythra sexnotata* Fabricius, 1801 and thus both names are objective synonyms and have the same name bearing type, in agreement with Article 72.7 (ICZN 1999).

The homonymous *Clythra sexnotata* Fabricius, 1801 was substituted with *Clythra bistrinotata* Fabricius, 1803 by Fabricius (1803) and *Clythra trinotata* Forsberg, 1821 represents its unnecessary new substitute name.

Coptocephala plagiocephala (Fabricius, 1792)

(Figs 12–16)

Cryptocephalus plagiocephalus Fabricius, 1792: 60 (original description).
Clythra bipunctata Forsberg, 1821a: 262, 277 (original description), **syn. nov.**

Type localities. *Cryptocephalus plagiocephalus*: 'Gallia meridionali' [= southern France]. *Clythra bipunctata*: not stated.
Type material examined. *Cryptocephalus plagiocephalus*: not examined. The photographs of 1 ♀ syntype were provided by ZMUC: 'plagiocep- / halus [w, h] // plagioce / phalus [w, h]'.

Clythra bipunctata: Holotype: ♀, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8195 / Typsaml. nr. 1755a / *Clythra bipunctata* Forsberg 1821 [r, p] // bipunctata. / 11 [box label, w, h]' (UUZM).

Distribution. Algeria, Italy (Sicily), Morocco, Tunisia (Regalin & Medvedev 2010).
Comments. Lacordaire (1848) listed *Clythra bipunctata* among the species not known to him and mistakenly reported it from 'Promont. Bonae Spei' [= Cape of Good Hope] although Forsberg (1821a) did not provide any type locality. This mistake probably led subsequent authors to assign this taxon in the predominantly South African genus *Miopristis* Lacordaire, 1848 (Gemminger & Harold 1874, Jacoby & Clavareau 1906, Clavareau 1913). However, it is in fact conspecific with West-Palaearctic *Coptocephala plagiocephala* and their synonymy is proposed.

Wallin (2001) listed two syntypes of *Clythra bipunctata* (under the catalogue numbers, 1755a and 1755b). However, the specimen No. 1775b does not match the original description, having the pronotum and scutellum completely black and elytra with a black humeral spot only while pronotum and scutellum are red and each elytron is provided with two black spots in *C. bipunctata*. The specimen No. 1775b should not be treated as the syntype of *Clythra bipunctata* anymore. On the other hand, specimen No. 1775a fits perfectly the original description and should be treated as holotype.

Macrolenes dentipes (Olivier, 1808)

(Figs 17–21)

Clytra dentipes Olivier, 1808: 857 (original description).
Clythra crassimana Forsberg, 1821a: 262, 276 (original description), **syn. reconfirmed**

Type localities. *Clytra dentipes*: 'midi de l'Europe, sur la côte de Barbarie, dans les îles de l'Archipel' [= southern Europe, coast of northern Africa, Mediterranean islands]. *Clythra crassimana*: not stated.
Type material examined. *Clytra dentipes*: not examined.

Clythra crassimana: Holotype: ♂, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8194 / Typsaml. nr. 1584 / *Clythra crassimana* Forsberg 1821 [r, p] // crassimana. / 10 [box label, w, h]' (UUZM).

Distribution. Mediterranean species (for details see Regalin & Medvedev 2010).

Comments. The holotype of *Clythra crassimana* is in very poor condition, the preserved parts are: elytra, hind wings, part of thorax and both mid legs. However, these parts well agree with the paler forms of *Macrolenes dentipes* including the characteristic shallow subapical emargination on the ventral side of mid femora. As a result, I confirm the synonymy of both taxa as was already published by Lacordaire (1848) and widely accepted by subsequent authors (e.g. Gemminger & Harold 1874, Clavareau 1913, Regalin & Medvedev 2010).

Megalostomis analis (Forsberg, 1821)

(Figs 22–26)

Clythra analis Forsberg, 1821a: 269, 289 (original description).

Type locality. 'America meridionali'.
Type material examined. Holotype: ♂, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8220 / Typsaml. nr. 1762 / *Clythra analis* Forsberg 1821 [r, p] // analis. / 1 / Amer. merid. [box label, w, h]' (UUZM).

Distribution. Argentina, Bolivia, Brazil, Paraguay, and Peru (Agrain 2013).
Comments. Agrain (2013) considered it as valid species in the recent revision of the genus *Megalostomis* Chevrolat, 1836. Although Agrain did not study Forsberg's type material, the identity of *Megalostomis analis* was correctly applied in his revision.

Megalostomis grandis (Forsberg, 1821)

(Figs 27–31)

Clythra grandis Forsberg, 1821a: 263, 278 (original description).

Type locality. 'America meridionali'.
Type material examined. Holotype: probably ♀, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8210 / Typsaml. nr. 1756 / *Clythra grandis* Forsberg 1821 [r, p] // grandis. / 21 / Amer. merid. [box label, w, h]' (UUZM).

Distribution. Brazil and Paraguay (Agrain 2013).
Comments. Agrain (2013) considered it as valid species in the recent revision of the genus *Megalostomis*. Although Agrain did not directly examine Forsberg's type material, the identity of *Megalostomis grandis* was correctly applied in his revision.

Megalostomis grossa (Forsberg, 1821)

(Figs 32–35)

Clythra grossa Forsberg, 1821a: 269, 290 (original description).

Type locality. 'America meridionali'.
Type material examined. Holotype: ♂, 'grossa. / 28 / Brasil. … [illegible] [box label, w, h]' (UUZM).

Distribution. Argentina, Bolivia, Brasil, Paraguay (Agrain 2013).
Comments. Agrain (2013) considered it as valid species in his recent revision of the genus *Megalostomis*. Although Agrain did not directly examine Forsberg's type material, the identity of *Megalostomis grossa* was correctly applied in his revision.

The holotype was overlooked by Wallin (2001) and was thus not mentioned in his catalogue of the type specimens deposited in UUZM.

Tituboea biguttata (Olivier, 1791)

(Figs 36–40)

Clytra biguttata Olivier, 1791: 34 (original description).
Clythra sexpunctata Forsberg, 1821a: 264, 280 (original description), **syn. nov.**

Type localities. *Clytra biguttata*: 'Espagne' [= Spain]. *Clythra sexpunctata*: not stated.
Type material examined. *Clytra biguttata*: not examined.

Clythra sexpunctata: Holotype: ♀, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8200 / Typsaml. nr. 1759 / *Clythra sexpunctata* Forsberg 1821 [r, p] // 6-punctata. / 15 [box label, w, h]' (UUZM).

Distribution. Mediterranean species (for details see Regalin & Medvedev 2010).
Comments. The only reference to *Clythra sexpunctata* Forsberg, 1821 was found in Lacordaire (1848), who mistakenly listed it as a simple reference of *Clytra sexpunctata* Olivier, 1808 (now synonym of *Tituboea biguttata*). However, Forsberg (1821a) did not associate his description with any reference and it must be accepted as a validly described taxon. It is conspecific with *Tituboea biguttata* and I propose to synonymize the two taxa.

Tituboea macropus (Illiger, 1800)

(Figs 41–44)

Clytra macropus Illiger, 1800: 128 (original description, senior homonym).
Clythra coalita Forsberg, 1821a: 264, 280 (original description), **syn. nov.**
Clythra grandipes Forsberg, 1821a: 262 (unnecessary new substitute name for *Clytra macropus* Illiger, 1800).

Type localities. *Clytra macropus*: 'Friaul' [= Northeastern Italia/Slovenia, Friuli region]. *Clythra coalita*: not stated. *Clythra grandipes*: 'Germania'.
Type material examined. *Clytra macropus*: not examined.

Clythra coalita: Holotype: ♂, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8217 / Typsaml. nr. 1758 / *Clythra coalita* Forsberg 1821 [r, p] // coalita. / α. / 28 [box label, w, h]' (UUZM).

Clythra grandipes: not examined.

Distribution. Central and Southeastern Europe, Turkey, Caucasus, Near East, Central Asia (for details see Regalin & Medvedev 2010).
Comments. Lacordaire (1848) placed *Clythra coalita* among the species not known to him, correctly stating that the type locality was not mentioned in the original description, but mistakenly proposed its origin as from 'Cap de Bonne Espérance' [= Cape of Good Hope]. This mistake was repeated in subsequent catalogues (Gemminger & Harold 1874, Jacoby & Clavareau 1906, Clavareau 1913) and, evidently, it is the reason why this taxon was not treated by specialists in Palaearctic fauna.

The holotype of *Clythra coalita* is in very poor condition, the preserved parts being: part of pronotum, elytra, part of thorax, both fore legs and left mid leg. However, there is no doubt about the identity of the holotype and *Clythra coalita* is proposed as a new junior synonym of *Tituboea macropus*.

Forsberg (1821a) proposed the new name *Clythra grandipes* to replace *Clytra macropus* Illiger, 1800. Although this nomenclatural act was not explained, it seems to be evident that Forsberg realized the homonymy of *Clytra macropus* Illiger, 1800 and *Clythra macropus* Thunberg, 1821, but mistakenly replaced the older name of Illiger, instead of the younger

name provided by Thunberg. *Clythra grandipes* should be listed in synonymy with *Tituboea macropus*, as can be found in all important publications and catalogues (Lacordaire 1848, Gemminger & Harold 1874, Jacoby & Clavareau 1906, Clavareau 1913, Regalin & Medvedev 2010).

Tituboea octopunctata (Fabricius, 1787)

(Figs 45–49)

Cryptocephalus octopunctatus Fabricius, 1787: 79 (original description).
Clythra quadrisignata Forsberg, 1821a: 266, 283 (original description), **syn. nov.**

Type localities. *Cryptocephalus octopunctatus*: 'Barbaria' [= North African coast from Morocco to Libya]. *Clythra quadrisignata*: not stated.
Type material examined. *Cryptocephalus octopunctatus*: not examined. The photos of dissected ♂ syntype were sent from ZMUC: 'C: 8 punctata / e Barbar: Vahl / e Tanger: Schousbo [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]'.

Clythra quadrisignata: Holotype: ♀, 'Uppsala Univ. Zool. Mus. / Thunbergsaml. nr. 8216 / Typsaml. nr. 1760 / *Clythra quadrisignata* Forsberg 1821 [r, p] // 4-signata. / 27 [box label, w, h]' (UUZM).

Distribution. Algeria, Morocco, Tunisia (Regalin & Medvedev 2010).
Comments. Lacordaire (1848) placed *Clythra quadrisignata* among the species not known to him. Although the type locality was not mentioned in the original description, Lacordaire mistakenly proposed its origin from 'Cap de Bonne Espérance' [= Cape of Good Hope]. As in the case of *Clythra coalita*, this mistake was repeated in subsequent catalogues where it is classified in the genus *Clytra* (Gemminger & Harold 1874, Jacoby & Clavareau 1906, Clavareau 1913). I have no doubt that the holotype of *Clythra quadrisignata* belongs to *Tituboea* Lacordaire, 1848 and originates from North Africa.

As mentioned by Bezděk & Regalin (2015), the females of *T. mecheriensis* Pic, 1895 and *T. octopunctata* are morphologically very similar. Identification of both species based on females can be supported by the colouration of basal antennomeres. In females of *T. octopunctata* these are always pale orange, while in females of *T. mecheriensis* they are dark brown, usually antennomere I is darkened, sometimes all basal antennomeres black. Because the holotype of *Clythra quadrisignata* has pale orange basal antennomeres, I propose *Clythra quadrisignata* as a new synonym of *Tituboea octopunctata*.

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