

Gianfranco Sama

**PRELIMINARY NOTE ON THE CERAMBYCID FAUNA OF
NORTH AFRICA WITH THE DESCRIPTION OF NEW TAXA**
(Insecta Coleoptera Cerambycidae)

Riassunto

[Nota preliminare per una fauna dei Cerambycidae (Coleoptera) del Nord Africa con descrizione di nuovi taxa].

Nel presente lavoro i seguenti nuovi taxa vengono descritti: *Stictoleptura gladiatrix* sp. nov. (Marocco), *Neocarolus* gen. nov., specie tipo: *Neomarius thomasi* Holzschuh, 1993 (Pakistan); Lygrini trib. nov., genere tipo: *Lygrus* Fähræus, 1872; *Zygoferus* gen. nov., specie tipo: *Trichoferus pubescens* (Sama, 1987) (Tunisia e Algeria); Hesperophanini subtrib. Daramina nov., genere tipo: *Daramus* Fairmaire, 1892; *Daramus sahwari* n. sp. (Marocco mer.); Vesperellini trib. nov., genere tipo: *Vesperella* Dayrem, 1933; *Vesperella maroccana* sp. nov. (Marocco); Brachypteromini trib. nov., genere tipo: *Brachypteroma* Kraatz, 1863; Ceroplesini subtrib. Crossotina Thomson, 1864, stat. nov., genere tipo: *Crossotus* Serville, 1835. Le seguenti nuove sinonimie sono proposte: *Mesoprionus besikanus* (Fairmaire, 1855) = *Prionus tangerianus* Slama, 1996; *Smodicum cucujiforme* Say, 1826 = *Nothorhinomorpha deplanata* Pic, 1930; *Derolus lepautei* Lepesme, 1947 = *Derolus mirei* Breuning & Villiers, 1960; Deilini Mulsant, 1862 = Pytheini Thomson, 1864, genere tipo: *Pytheus* Newman, 1840; *Plagionotus* Mulsant, 1842 = *Neoplagonotus* Kasatkin, 2005; *Plagionotus scalaris* Brullé, 1832 = *Clytus siculus* Castelnau & Gory, 1836 = *P. scalaris* ssp. *validus* Rungs, 1952 = *P. scalaris* ssp. *vivesi* Lopez Colon, 1997; Lamiini Latreille, 1825 = Pachystolini Gistel, 1848 = Dorcadionini Thomson, 1860 (nomen protectum), genere tipo: *Dorcadion* Dalman, 1817 [= Dorcadodiidae Gistel, 1856 (nomen oblitum), genere tipo: *Dorcadodium* Gistel, 1856] = Phrissomini Thomson, 1860; *Monochamus galloprovincialis* Olivier, 1795 = *M. g. pistor* (Germar, 1818); Pogonocherini Mulsant, 1839 = Exocentrini Pascoe, 1864; *Saperda scalaris* Linnaeus, 1758 = *Saperda scalaris* ssp. *algeriensis* Breuning, 1952; *Phytoecia tenuilinea* Fairmaire, 1877 = *P. tenuilinea* ssp. *mateui* Breuning, 1951. I seguenti atti nomenclaturali vengono proposti: *Prionus aegyptiacum* Guérin, 1844 è designato come specie tipo di *Monocladum* Pic, 1898; *Cerambyx paludivagus* Lucas, 1842 specie distinta, non sottospecie o varietà di *C. scopoli* (Fuesslins, 1775); *Rusticoclytus* Vives, 1977 genere distinto, non sinonimo di *Xylotrechus* Chevrolat, 1860; Obereini Thomson tribù distinta, non sinonimo di Phytoeciini Mulsant; *Phytoecia tenuilinea* Fairmaire, 1877 viene trasferita al genere *Opsilia* Mulsant, 1862; il lectotypus è designato per *Clytus scalaris* Brullé, 1832 (*Plagionotus*) e *Callidium glaucum* Fabricius, 1781 (*Chlorophorus*). Dall'esame del materiale tipico è emerso che *Leptura pilosa* Forster, 1771 non appartiene al genere

Chlorophorus Chevrolat, 1863 come attualmente ritenuto, ma a *Vadonia* Mulsant, 1863 ed è sinonimo di *V. unipunctata* (Fabricius, 1787) sul quale avrebbe priorità; tuttavia, per la stabilità della nomenclatura, viene proposta l'inversione di precedenza fra i due taxa, mantenendo l'utilizzo prevalente di *L. unipunctata* (nomen protectum) e considerando *L. pilosa* Forster, 1777 nomen oblitum; infine *Chlorophorus glaucus* (Fabricius, 1781) viene proposto come nome sostitutivo per *C. pilosus* auctorum nec Forster, 1771.

Abstract

The following new taxa are described in this paper: *Stictoleptura gladiatrix* n. sp. (Morocco), *Neocarolus* n. gen., type species: *Neomarius thomasi* Holzschuh, 1993 (Pakistan); Lygrini n. tribe, type genus: *Lygrus* Fåhræus, 1872; *Zygoferus* n. gen., type species: *Trichoferus pubescens* (Sama, 1987) (southern Tunisia and Algeria); Hesperophanini subtribe Daramina nov., type genus: *Daramus* Fairmaire, 1892; *Daramus sahwari* n. sp. (southern Morocco); Vesperellini n. tribe, type genus: *Vesperella* Dayrem, 1933; *Vesperella maroccana* n. sp. (Morocco); Brachypteromini n. tribe, type genus: *Brachypteroma* Kraatz, 1863; Ceroplesini subtribe Crossotina Thomson, 1864, type genus: *Crossotus* Serville, 1835. The following new synonymies are proposed: *Mesoprionus besikanus* (Fairmaire, 1855) = *Prionus tangerianus* Slama, 1996; *Smodicum cucujiforme* Say, 1826 = *Nothorhinomorpha deplanata* Pic, 1930; *Derolus lepautei* Lepesme, 1947 = *Derolus mirei* Breuning & Villiers, 1960; Deilini Mulsant, 1862 = Pytheini Thomson, 1864, type genus: *Pytheus* Newman, 1840; *Plagionotus* Mulsant, 1842 = *Neoplagonotus* Kasatkin, 2005; *Plagionotus scalaris* Brullé, 1832 = *Clytus siculus* Castelnau & Gory, 1836 = *P. scalaris* "n. f. an ssp.?" *validus* Rungs, 1952 = *P. scalaris* ssp. *vivesi* Lopez Colon, 1997; Lamiini Latreille, 1825, type genus: *Lamia* Fabricius, 1775 = *Pachystolini* Gistel, 1848, type genus: *Pachystola* Dejean 1835 (= *Lamia* Fabricius, 1775) = *Dorcadionini* Thomson, 1860, type genus: *Dorcadion* Dalman, 1817 [= *Dorcadodiidae* Gistel, 1856 (nomen oblitum), type genus: *Dorcadodium* Gistel, 1856] = *Phrissomini* Thomson, 1860, type genus: *Phrissoma* Dejean, 1835; *Monochamus galloprovincialis* Olivier, 1795 = *M. galloprovincialis pistor* (Germar, 1818); Pogonocherini Mulsant, 1839, type genus *Pogonocherus* Dejean, 1821 = *Exocentrini* Pascoe, 1864, type genus: *Exocentrus* Dejean, 1835; *Saperda scalaris* Linnaeus, 1758 = *Saperda scalaris* ssp. *algeriensis* Breuning, 1952; *Phytoecia tenuilinea* Fairmaire, 1877 = *P. tenuilinea* ssp. *mateui* Breuning, 1951. *Prionus aegyptiacum* Guérin, 1844 is designated as the type species of *Monocladum* Pic, 1898. *Cerambyx paludivagus* Lucas, 1842 is regarded a distinct species, not subspecies or variety of *C. scopolii* (Fuesslins, 1775); *Rusticoclytus* Vives, 1977, type species: *Leptura rustica* Linnaeus, 1758, is restored from the synonymy with *Xylotrechus* Chevrolat, 1860, type species: *Clytus sartorii* Chevrolat, 1860 from Mexico; *Exocentrus* Dejean, 1835 and *Parmenopsis* Ganglbauer, 1881 are transferred to Pogonocherini from Acanthocinini Blanchard, 1845 and *Parmenini* Mulsant, 1839 respectively; *Obereini* Thomson, 1864 is regarded a distinct tribe, not a synonym of *Phytoeciini* Mulsant, 1839; *Phytoecia tenuilinea* Fairmaire, 1877 is transferred to the genus *Opsilia* Mulsant, 1862; the lectotype is designated for *Clytus scalaris* Brullé, 1832 (currently in *Plagionotus*) and *Callidium glaucum* Fabricius, 1781 (currently in *Chlorophorus*). The type examination proved that *Leptura pilosa* Forster, 1771 does not belong to *Chlorophorus* Chevrolat, 1863 as currently stated, but to *Vadonia* Mulsant, 1863 and is a senior synonym of *V. unipunctata* (Fabricius, 1787); however, the reversal of precedence is here proposed: the prevailing usage of *L. unipunctata* (nomen protectum) is to be maintained instead of *L. pilosa*

Forster, 1777 (nomen oblitum); *Chlorophorus glaucus* (Fabricius, 1781) is here proposed as a replacement name for *C. pilosus* auctorum nec Forster, 1771. The authorship of the tribe Tetropini is briefly discussed.

Key words: Cerambycidae, new tribes, new subtribes, new genus, new species, new synonymies, new status, North Africa.

Introduction

A few years ago was published the first part of the monograph “Atlas of the Cerambycidae of Europe and the Mediterranean Area” (SAMA, 2002) dealing with the fauna of Northern and Central Europe. The second and third parts, dealing with the cerambycid Fauna of North Africa and the Atlantic Islands respectively, will probably be published in a single volume during the year 2009, with a great delay, certainly much later than it was expected, mostly because I have preferred to study personally the type material of all taxa occurring in the area covered by the book and preserved in different public institutions.

The present paper is intended to illustrate some of the preliminary results of this study comprising primarily important nomenclatural acts (new synonymies, descriptions of new tribes, subtribes, genera and species), which no doubt will also have an impact on the prepared publication of the part of the Catalogue of Palaearctic Coleoptera dealing with the family Cerambycidae.

Acronyms

CCECL	Centre de Conservation et d'étude des Collections, Lyon (F)
LSL	Linnean Society, London (GB)
MHNG	Muséum d'Histoire Naturelle, Genève (CH) (coll. Breuning)
MNHNP	Muséum National d'Histoire Naturelle, Paris (F)
NHMB	Naturhistorisches Museum, Basel (CH)
NMP	Narodni Muzeum, Praha (CZ)

Mesoprionus besikanus (Fairmaire, 1855)

Prionus besikanus Fairmaire, 1855, Ann. Soc. entomol. France, 3(3): 319. Type locality: “Baie de Besika dans le Bosphore” (Turkey).

Prionus besicanus auctorum.

= *Prionus tangerianus* Slama, 1996, Folia Heyrovskyana, 4(3) : 76. Type locality: Tangerang. Type material. Holotype ♂ “Tanger / 1910” (NMP), examined (**n. syn.**).

Remark. The description of *P. tangerianus* was based on a single old specimen labelled [mislabelled?] “Tanger / VI.1909” [white, printed]; “Holotypus / *Prionus*

/ *tangerianus* sp. n. / M. Slama det. 1996” [red, printed]. I was able to study the holotype (a well preserved specimen, lacking all tarsomeres of the left hind leg; aedeagus and maxillary palpi glued on a separated label); moreover I have examined one specimen of a *Mesoprionus* (coll. A. Drumont, Bruxelles), identified as *M. tangerianus* by J. Lorenç and generically labelled “Maroc, Moyen Atlas, VI.1996”. Both specimens do not significantly differ from *M. besikanus*. I regard collecting labels of these specimens quite suspect; it is extremely unlikely that professional entomologists such as Antoine, Rungs, Kocher and many others never recorded this species, all the more that it is very easily attracted to light.

***Monocladum* Pic, 1898**

Polyarthron (sbg.) *Monocladum* Pic, 1898, Mat. Long., 2: 27. Type species: *Prionus aegyptiacum* Guérin, 1844 (designated herein).

Polyarthron (sbg.) *Monocladum* Pic, 1893a, Ann. Soc. entomol. France, 61 (1892), Bull.: CCLIX (not available, nomen nudum).

Polyarthron (sbg.) *Monocladum* Pic, 1893b, Ann. Soc. entomol. France, 61: 110 (not available, nomen nudum).

Remark. The true description date of this genus is 1898, not 1892 (in fact 1893) as previously stated; *Monocladum* Pic, 1893 is a nomen nudum, since it was described without any reference to a species name “.. pour faciliter la classification du genre d’après la forme de ces organes si différents bipectinés ou unipectinés, je crois bon de créer le sous genre *Monocladum* pour toutes les espèces à antennes unipectinées ...”. The name was validly described in 1898 when Pic, proposing an identification key to *Polyarthron*, quoted the species names *P. (Monocladum) unipectinatum* White, *P. (Monocladum) aegyptiacum* Guérin and *P. (Monocladum) afrum* Baudi.

***Stictoleptura gladiatrix* n. sp. (Fig. 24)**

Type series. Holotype ♂: Maroc, Haut Atlas: Tizi n’Test, 2000m, 16.VI.1986, ex larva from *Quercus rotundifolia*, 25.VI.1986, leg. G. Sama (author’s collection).

Description. Length 18 mm. Similar to *S. tangeriana* Tournier, 1875 and chiefly to the “var.” *atlasica* Escalera, 1914: antennae totally red, clothed with golden hair, shorter (extending about the apical third of elytra), with segments shorter and stouter, the 3rd and 4th ones distinctly swollen apically (these articles are cylindrical in *S. tangeriana*). Legs shorter and stouter, with tarsi shorter, tibiae more robust and swollen apically. Head red, densely punctate, with temples longer, angulate behind (shorter and rounded behind in *S. tangeriana*). Pronotum red with a basal black band, more densely punctate (punctures are larger and contiguous in *S. tangeriana*) and with more robust erect hair. Elytra totally red, more densely and more finely punctate, apically truncate with outer angle rounded, the inner one obtusely angulate, not spined. Abdomen red except the two first segments

which are black except the apical margin; last sternite very slightly impressed before the base, rounded at apical angles (distinctly angulate in *S. tangeriana*), sparsely and very finely punctate and clothed with very sparse, short grey recumbent pubescence.

Range. So far known only from the type locality: Tizi n'Test in western High Atlas mountains range, Morocco. The only known specimen emerged from one larva found in the decayed part of a living large tree of *Quercus rotundifolia*.

Vadonia unipunctata (Fabricius, 1787)

Leptura unipunctata Fabricius, 1787, Mant. Ins., 1: 157 (maintained according to ICZN, 1999, Art. 23.9.2, nomen protectum). Type locality: "Dresdae" (Germany).

= *Leptura pilosa* Forster, 1771: 45 (nomen oblitum) (**n. syn.**). Type locality: "Habitat in Hispanii ad Calpen freti Ganditani (Gibraltar). Type material. Holotype ♂, Forster's collection (LSL) examined.

Remark. I have recently been able to study the type specimen of *Leptura pilosa* Forster, 1771 held by the Linnean Society of London; it is a male, totally black, the hind tibiae with two apical spines, which belongs without any doubt to a black form (known as "var." *jacqueti* Pic, 1900) of the well known species later described under the name *Vadonia unipunctata* (Fabricius, 1787), not to "*Clytus quadripunctatus* F. var. *glaucus* Lap." [currently *Chlorophorus pilosus* Forster, 1771)] as firstly suggested by HEYDEN (1878: 419), undoubtedly without type examination. This specimen perfectly agrees with Forster's original description which allows to exclude a subsequent mislabelling or rehandling. *L. pilosa* Forster would take priority over *L. unipunctata* Fabricius; however the latter name is maintained according to ICZN (1999), Article 23.9.2 (reversal of precedence for prevailing usage).

Smodicum cucujiforme (Say, 1826)

Callidium cucujiforme Say, 1826, Journ. Acad. Nat. Sci. Philadelphia, 5: 277. Type locality: United States. Type material not examined.

= *Nothorhinomorpha deplanata* Pic, 1930, Bull. Soc. ent. roy. Egypte: 63. Type locality: "Egypte: Le Caire" (Nile Valley by Hawamdia, Giza, Egypt). Type material: Holotype male (NHMB) examined.

Remark. Although not stated by Pic, *N. deplanata* was probably described on a single specimen as confirmed by ALFIERI (1976): "Hawamdia, V, the type; in Museum Frey, Munich". I have studied the holotype (currently deposited in the Museum Frey, NHMB), a male which does agree with the original description, perfectly preserved and labelled as follows: "Caire, le soir / a la lampe / 10.6.27" [white, probably handwritten by Alfieri]; "Coll. Alfieri / Egypte" [white, printed label]; "*Nothorhinomorpha* / n. gen. (TYPE) / *deplanata* n. sp. (TYPE) / (Pic, 1930) "[white, probably handwritten by Alfieri]; "1858" [white, handwritten by ?]; "= *Smodicum cucujiforme* (Say) / det. G. Sama, 2003".

Neocarolus n. genus (Oemini)

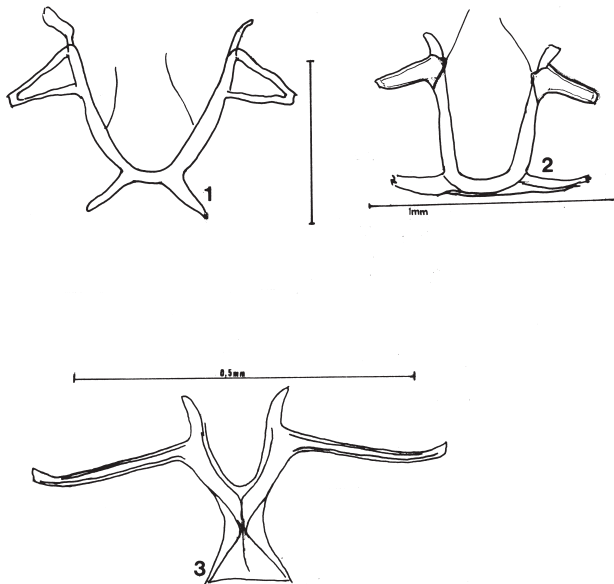
Type species: *Neomarius thomasi* Holzschuh, 1993; this species was described and is still known on a single female from NW Pakistan.

Description. *Neocarolus thomasi* is similar to the female of *Neomarius gandolphii* Fairmaire, 1872, an endemic species to Northern Algeria, from which it differs as follows: head nearly flattened between the eyes, not convex posteriorly; pronotum less transverse; eye lobes smaller, elytra conspicuously elongate (7.3 times longer than the pronotum; 4.4 times longer than wide at shoulders) (in *Neomarius* elytra are less elongate: 6.1 times longer than pronotum, 3.3 times longer than wide at shoulders); legs more slender, tarsi very elongate, first segment of hind tarsi much longer (1.73 x) than the two following united.

Tribe **Lygrini** nov.

Type genus: *Lygrus* Fåhræus, 1872.

Description. Head with occipital region longer than gula, the latter emarginate at base, forum occipitalis elongate. Mandible short, gradually curved at side, without a fringe of hair and usually toothed along the inside border, galea and lacinia normally developed; ligula corneous and reduced, without lateral lobes. Mesonotum with undivided stridulatory file, without medial endocarina. Metendosternite of very peculiar shape (Fig. 1). Male genitalia: IX tergite absent.



Figs 1-3. Metendosternites. 1: *Lygrus becvari* Sama, 1999, Egypt, Sinai; 2: *Nathrius berlandi* (Villiers, 1946), Morocco, Agadir; 3: *Brachypteroma ottomanum* Kraatz, 1863, Italy, Puglia, Foresta Umbra.

Discussion. *Lygrus* cannot be maintained in either Methiini THOMSON, 1860, or in Oemini Lacordaire, 1868 and does not entirely fit with any known tribe. It differs from *Neomarius* Fairmaire, 1872 (Oemini) by male genitalia with IX tergite absent, mesonotum with undivided stridulatory file, intermediate coxal cavities closed externally to the epimera; from both *Neomarius* and *Hypoeshrus* (Thomson, 1864) by the shape of prosternal process and mesocoxal cavities laterally closed to epimera. Moreover, it shows a peculiar type of metendosternite (Fig. 1) (not-Hylecoetoid metendosternite sensu CROWSON, 1967), analogous to that of *Nathrius* Brèthes, 1916 (Fig. 2) and *Gracilia* Serville, 1834, very different from the Hylecoetoid metendosternite of the family Cerambycidae (e.g. in *Molorchus* Fabricius, 1793, Fig. 4). MARTINS (1980), provisionally included *Lygrus* in the tribe Methiini, although he regarded the genus “related to Callidiopini”. He noticed the shape of anterior coxae “with articular surface”, similar to that of *Niophis* Bates, 1867, a genus from South America included in Achrysonini by MONNÉ & GIESBERT (1994) and later on separated in the tribe Ectenessini Martins, 1998.

Zygoferus n. gen. (Hesperophanini)

Type species : *Trichoferus pubescens* (Sama, 1987).

Description. Head short, posteriorly concealed under the pronotum; temples very short, eyes coarsely faceted, very large, deeply emarginate, lower lobes nearly reaching the mandibles; antennal supports depressed, the space between them wide, not longitudinally sulcated, but, sometimes, with a longitudinal glabrous median line. Antennae short, in both sexes hardly extending beyond the middle of elytra; 3rd segment shorter than both scape and 5th, hardly longer than 4th. Pronotum strongly swollen, subquadrate, rounded on anterior and posterior angles, sides parallel; the disc with a pair of slight impressions a little before the middle and one slight basal longitudinal impression on each side of the middle. Elytra parallel-sided, widely rounded apically. Prosternal process nearly flat, subtriangular basally, narrow, parallel between coxae, wider apically. Legs relatively short, all tarsi (the front ones included) with pad greatly reduced and grooved beneath like in *Hesperophanes sericeus*; onychium longer than the tarsal segments combined. Internal sac of aedeagus with distinctive distal sclerites.

Discussion. The new genus, the size except, is more similar to *Hesperophanes* Dejean, 1835 and chiefly to *Hesperoferus* Demelt, 1971 from the Canary Islands than to *Trichoferus* Wollaston, 1854. The former differs from *Zygoferus* by the first three segments of antennae densely fringed beneath, the 3rd one evidently curved and nearly twice longer than 4th, prosternal process distinctly convex at base, pronotum strongly swollen and rounded laterally. *Hesperoferus* has all segments of tarsi with a dense pad of hair not longitudinally grooved; *Trichoferus* differs from the new genus, among other, by the front tarsi not grooved ventrally and the shape of the pronotum.

Hesperophanini subtribe **Daramina** nov.

Type genus: *Daramus* Fairmaire, 1892.

Description. Similar to Hesperophanini but mandibles without a fringe of hair along the inner edge; palpi unequal, maxillary palpi very long, 1st segment hardly shorter than 2nd; last segment of maxillary and labial palpi securiform, strongly dilated at apex, chiefly in male; ligula reduced, deeply bilobed, without lateral lobes; prosternal process subtriangular in front, laminiiform between coxae, coxal cavities widely angulate laterally; mesonotum without stridulatory plate, with median endocarina; mesocoxal cavities widely open externally to the epimera, metepimera shortly produced beyond the posterior margin of episterna. Metendosternite with lateral arms elongate, longer than lateral laminae, which are short, moderately enlarged, truncate apically, divided by a deep notch. Male genitalia: ventral arc (IX sternite) fork shaped; dorsal arc (IX tergite) absent. Larva conspicuously elongate, with dorsal ampullae protruding.

Range. I provisionally refer to the new subtribe only the genus *Daramus* from North Africa, Arabian Peninsula and Tropical Africa, but further genera from Africa would probably be also included.

Daramus saharawi Sama & Rapuzzi n. sp. (Fig. 25)

Type series. Holotype ♂: Western Sahara, Saguia el Hamra, 33 km West of Es Smara, 28.IV.2004, ex larva from *Acacia raddiana*, emerged 15-28.IX.2004, leg. G. Sama; paratypes, 5 ♂♂, 11 ♀♀: same data, emerged 15-30.IX.2004; 1 ♂: same locality, emerged 25.X.2004; 1 ♂, 4 ♀♀: emerged 30.VIII-30.X.2004, leg. P. Rapuzzi; 2 ♂♂, 2 ♀♀: 33 km West and 15 km North of Es Smara, 6.III.2008, ex larva from *Acacia raddiana*, emerged 4/10.IX.2008, leg. G. Sama; idem, 3 ♀♀: emerged 10.X.2008. Holotype in coll. G. Sama, paratypes in coll. P. Rapuzzi (Cialla di Prepotto, Udine) and G. Sama.

Etymology. The new species is named after the Sahrawi people originally living in the Western Sahara, formerly Spanish Sahara, currently administrated by Morocco.

Description of the holotype. Length 12 mm. Integument red brown, disc of pronotum, antennae from the 3rd segment, sides and apex of elytra, outer side of tibiae and abdomen evidently blackened. Eyes very large, coarsely faceted, narrowly separated above, deeply emarginate; the lower lobes totally covering the cheeks and reaching the mandibles. Palpi unequal: maxillary palpi much longer than the labial; last segment of both maxillary and labial palpi strongly dilated apically, subtriangular. Head densely clothed with ocellate setigerous punctures, antennal tubercles strongly prominent, contiguous, separated by a deep longitudinal median groove. Pronotum wider than long, gradually arcuate at sides, strongly narrowed in front and behind, the widest about at middle, with very dense, deep, contiguous ocellate punctures, except for a median longitudinal unpunctate area

before the base, and sparsely clothed with short uncinata and oblique setae mixed with long erect brown hair, somewhat denser at sides. Mesonotum without stridulatory file, but with a convex plate, divided in the middle by a longitudinal furrow. Elytra parallel-sided, apices distinctly attenuate, the sutural angle acute, not spined, surface densely and deeply punctate, clothed with short yellowish oblique setae and, chiefly at base and along the suture, with some longer erect golden hair; antennae short, extending to about $\frac{3}{4}$ of elytra; all segments, except the 2nd and 11th similar in length, 3rd to 10th strongly flattened and serrate, angulate on the outer apex, 11th segment longer and moderately apiculate. Two first segments with long erect yellow hair, the following ones densely clothed with sericeous recumbent brown pubescences. First segment of intermediate and posterior tarsi not longer than the following ones combined. All tarsi without a median longitudinal groove. Prosternum with a transverse row of punctures in front, shining, very sparsely, finely punctate, process very narrow, entirely dividing coxae, moderately narrowed toward the apex, coxae contiguous, coxal cavities strongly angulate externally, open posteriorly; mesosternum shining, very sparsely and deeply punctate, with process narrow, subtriangular, anterior and median coxal cavities open laterally to the epimera. Abdomen densely and deeply punctate, sparsely clothed with long brown erect setae. Legs short, hind tibiae sparsely, deeply punctate on their outer face.

Female differs from male by antennae shorter, not exceeding the basal fourth of elytra, with segments short, not flattened, moderately serrate from the 4th segment, 3rd segment slightly longer than both the 4th and 5th, 11th very short, not longer than 10th; 1st and 3rd with short uncinata setae and some erect hair on both the dorsal and ventral sides, segments 3rd to 5th shining, coarsely punctate, sparsely clothed with short semi recumbent hair, eyes moderately smaller, the space between upper lobes larger; head, pronotum, elytra and four first segments of antennae with numerous, very long erect hair; submentum with some distinct transverse carinae. prosternum, in front, with several transverse carinae, interrupted by numerous deep, setigerous punctures, process coarsely deeply punctate. Prosternum and metasternum with sparse, deep punctures, with processes wider, subtriangular; both pro- and mesosternum nearly unpunctate. Sternites sparsely, very finely punctate.

The new species differs from *D. serricornis* Fairmaire, 1892, type of the genus, by shorter antennae, shorter elytral semi-erect setae, pronotal and elytral punctation.

Biology, host plants & flight period. Development in *Acacia raddiana*. Larval bionomics similar to *D. major* Pic, 1924; larvae feed in living twigs (0.5 - 1.0 cm in diameter). Pupation from early August; adults emerge from the end of August to the end of October. Larvae are frequently killed by an unidentified species of *Trigonura* Sichel, 1865 (Hymenoptera, Chalcidinae, Phasgonophorini), chiefly known as ectoparasitoid of Saharan Buprestidae (MATEU, 1972). Moreover, all immature stages are attacked by females of Bethyilidae (Hymenoptera) and the Acarine mite *Pediculoides ventricosus* (Newport).

Cerambyx paludivagus Lucas, 1842 (n. status)

Hamaticherus paludivagus Lucas, 1842, Ann. Sc. nat., 2(18): 185. Type locality: "Lac Tonga, environs de La Calle" (El Kala, northern Algeria).

Discussion. *C. paludivagus* was originally described as a distinct species (LUCAS, 1842), then (LUCAS, 1846) regarded as "une variété du *C. cerdo*" [very likely *C. cerdo* Scopoli (not Linnaeus), currently *C. scopolii* Fuesslins, 1775]. It is, in facts, a distinct species, more similar to *C. multiplicatus* Motschulsky, 1860 than to *C. scopolii*, not a variety of the latter as stated by PIC (1893, 1896), NORMAND (1937), VIVES (2000) or an aberration (PLAVILSTSHIKOV, 1931), or a subspecies (VILLIERS, 1946). It differs from *C. scopolii* by pronotum and basal half of elytra with long erect setae, hind femora densely clothed with long golden hair, on the upper side, with dense recumbent pubescence and some longer setae erect or bent backwards on the inferior side. *C. scopolii* has pronotum with erect setae on only the latero-basal margin, rarely with some erect setae on the disc, elytra always without erect setae, hind femora with sparser, shorter and usually greyish setae on the upper side, only with recumbent pubescence or with short uncinata on the inferior surface.

Range. *C. paludivagus* is only known from the northern oak forests of Tunisia and Algeria, not in southern Spain as stated by PLAVILSTSHIKOV (1931) and VILLIERS (1946).

Derolus lepautei Lepesme, 1947

Derolus lepautei Lepesme, 1947, Bull. Soc. entomol. France: 152 Type locality: "Port Etienne" (currently Nouadhibou) (Mauritania). Type material: Holotype ♀ (CCECL): "Port-Etienne / Mauritanie / Janvier 1947" [white, handwritten by Lepesme]; "Type" [red, printed]; « *Derolus / Lepautei* / Type mihi / P. Lepesme det." [white, handwritten by Lepesme], examined.

= *Derolus mirei* Breuning & Villiers, 1960, Bull. IFAN, 22, sér. A, 4: 1300 (**new synonymy**).

Type locality: "Tibesti, Gorrom (Chad). Type material: Holotype ♂, allotype ♀ and two paratypes male and female "Korrom, 6.I.59, à la lampe"; one paratype female "Ficus ingens, Gorrom, 2000m, éclos à Paris, 9.XII.1959" (MNHNP), examined.

Discussion. BREUNING & VILLIERS (1960) did not compare the type series of *D. mirei* to *D. lepautei* (the collection Lepesme was probably not available for study at that time); the two taxa do not appear significantly different from each other. On the other hand, the synonymy stated above (although not formally established) was already presumed by Breuning & Villiers (1960) themselves, who recorded *D. mirei* from southern Mauritania (Edderoum, Tagant) on the basis of specimens collected by Mateu.

Tribe **Vesperellini** nov.

Type genus: *Vesperella* Dayrem, 1933.

Description. Head with eyes coarsely faceted, distinctly smaller in female than in male; labium short, transverse, truncate at apex; mandibles without a fringe of hair on the inner edge (Fig. 5). Mesonotum with undivided stridulatory file, its anterior margin very feebly emarginate. Prosternal process very narrow, front coxae globose, coxal cavities angulate externally, open behind; mesosternum with process wider, subtriangular, extending to about the half of coxae, mesocoxal cavities open laterally to the epimera. Male genitalia: ventral arc (sternite IX) fork shaped (Fig. 9b); dorsal arc (tergite IX) present (Fig. 9a).

Discussion. The genus *Vesperella* is usually associated with *Axinopalpis* Dejean, 1835 currently assigned to the tribe Graciliini (Villiers, 1946, 1978). *Gracilia* differs from *Vesperella* by front coxal cavities rounded externally, mesocoxal cavities closed externally, hind coxae far from each other, male genitalia: tergite IX absent, basal apophyses of median lobe conspicuously elongate, lateral lobes of tegmen reduced and mostly fused. *Vesperella* and *Axinopalpis*, also resemble Callidiopini Lacordaire, 1868. Unfortunately, I could not find any specimen of *Callidiopis* Lacordaire, 1868 available for dissection, but I could dissect some species belonging to genus *Ceresium* Newman, 1842 (referred to the same tribe),

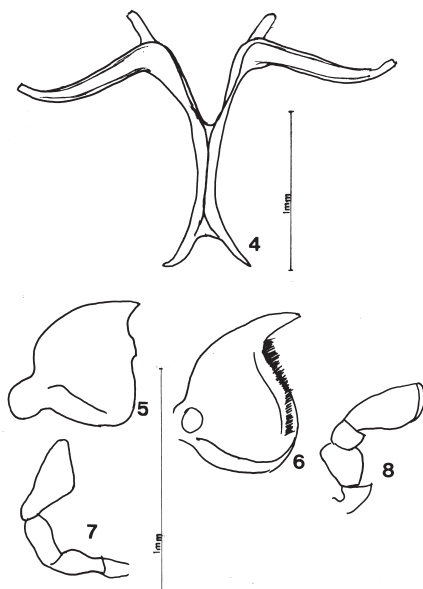


Fig. 4. *Molorchus minor* (Linnaeus, 1758), Italy, Alto Adige, Mules: metendosternite.

Fig. 5. *Vesperella maroccana* n. sp.: mandible.

Fig. 6. *Ceresium simile* Gahan, 1890, Japan, Amami-Oshima isl.: mandible.

Fig. 7. *Vesperella maroccana* n. sp., paratype: maxillary palpus.

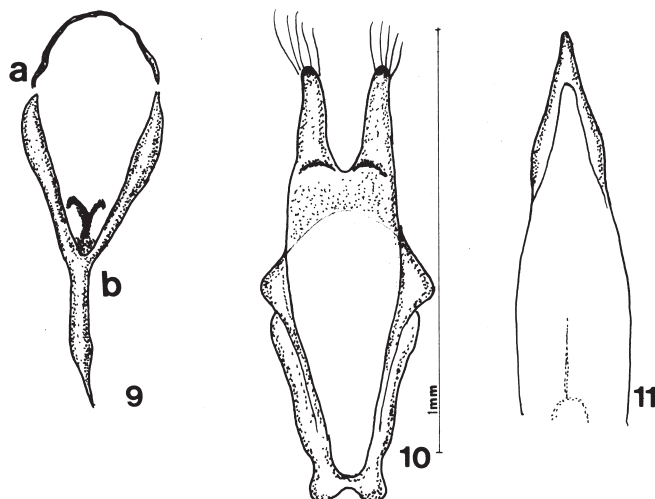
Fig. 8. *Ceresium simile* Gahan, 1890, Japan, Amami-Oshima isl.: maxillary palpus.

among which *C. simile* Gahan, 1890; the latter substantially differs from *Vesperella* by mandibles untoothed and densely fringed on internal side (Fig. 5, 6), maxillary palpi with 2nd segment longer than 3rd (Fig. 7, 8), front coxal cavities rounded externally, metepisterna angulate on the inner margin at base. On the other hand, according to the larval morphology (only exuviae of larvae available) *Vesperella* is apparently unrelated to Molorchini, Graciliini and Hesperophanini (ŠVÁCHA, pers. comm.).

***Vesperella maroccana* n. sp.**

Type series. Holotype ♂: Maroc, Haut Atlas: Tizi n'Test, 2000 m, ex larva from *Quercus rotundifolia*, 3/10.VII.2003, leg. G. Sama; 2 paratypes ♂♂: same locality, 3/10.VII.2003, VII.2004; 7 ♀♀: same locality, 10/20.VII.1990; 8.VIII.1991, 3/10.VII.2003, VII.2004; 1 ♂: "Massif Aurés, Alger. Est, *Axinopalpis gracilis* ?" (CPS); 1 male: "Maroc, Tizi n'Ticka, 2200 m, 1933"; 1 ♂: Morocco, Haut Atlas, Tizi-n-Test SW Marrakech, 2043 m, 25.V.2005, emerged IV.2006, leg. M. Rejzek. Holotype in coll. G. Sama, paratypes also in coll. C. Holzschuh (Villach), P. Rapuzzi (Cialla di Prepotto) and M. Rejzek (Norwich).

Description. Length: 8.5 - 10 mm (holotype: 8.5mm). Similar to *Vesperella pallida* Dayrem, 1933 from northern Algeria (Holotype ♂, 1 paratype ♀, CCECL, examined) from which it can be distinguished as follows: integument testaceous brown, body distinctly more robust and less elongate; pronotum with some shallow almost unpunctate calluses, the rest of the discal surface more densely and more deeply punctate than in *V. pallida*; elytra, in comparison, distinctly shorter and



Figs 9-11. *Vesperella maroccana* n. sp., paratype. 9a: ventral arc (IX sternite); 9b: dorsal arc (IX tergite); 10: tegmen; 11: aedeagus.

wider: length/width at base ratio in male 2.85 (male), 2.7 (female), surface more densely and deeply punctate; antennae shorter, extending one segment beyond the elytral apex in male, not or just reaching the middle of elytra in female; elytra, in female, very densely clothed with long erect setae. Male genitalia as in Fig. 9-11.

Range. The new species is known from the mountain evergreen oak forests of Tizi n'Test and Tizi n'Ticka in the High Atlas in Morocco. Its occurrence in Eastern Algeria (Djebel Aurés) (one specimen without further collecting data, identified as *Axynopalpis gracilis*, in the collection of my late friend P. Schurmann) in my opinion, needs confirmation because of a possible mislabelling.

Biology, host plants & flight period. *Quercus rotundifolia* is the only known host plant of the new species. Bionomics of immature stages similar to *Trichoferus ilicis* Sama, 1987 with which it has been reared. Larvae feed in apical twigs of small living branches which they girdle to interrupt the sap circulation. Pupation takes place in the living part of the twig under the last girdle. Life cycle probably lasts one year. Adults emerge from early July to August and are probably attracted to light analogously to *V. pallida*. Larval morphology unknown.

Tribe **Brachypteromini** nov.

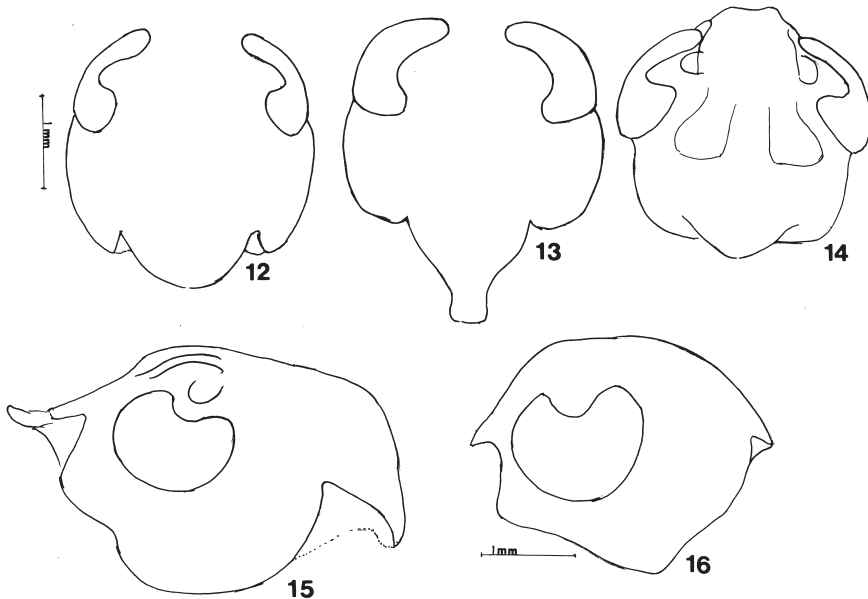
Type genus: *Brachypteroma* Heyden, 1863.

Description. Similar to Molorchini, except eyes reduced and lateral (upper lobes absent) and with short erect hair between the ommatides; mandibles without a short tooth and not fringed on the inner edge, mesonotum with stridulatory plate, front coxal cavities closed behind, metendosternite of peculiar shape (Fig. 3), without lateral arms, lateral laminae extremely narrow, anterior projections for tendons well developed, the stalk widened; wing venation: A1 absent; male genitalia: endophallus without basal sclerites; female genitalia: ovipositor with styli inserted laterally.

Xylotrechus Chevrolat, 1860

Xylotrechus Chevrolat, 1860, Ann. Soc. Entomol. France (3), 8: 456. Type species: *Clytus sartorii* Chevrolat, 1860, designated by THOMSON (1860), not by original designation as stated by Linsley (1964); not by CHEVROLAT (1863) as stated by SAMA (2002).

Remark. CHEVROLAT (1860) originally listed only one species he knew from Mexico and added, without any further details, that some taxa from Europe may also belong to this genus. This, of course, does not constitute a valid type designation (ICZN, art. 67.5). Later, the same author (1863: 311) wrote: “*nous avons établi ce genre sur une espèce du Mexique, le X. Sartorii, et nous y avons adjoint les Clytus hafniensis F., arvicola ...* », which could be regarded as a valid designation. However, before this, THOMSON (1860) validly designated *X. sartorii*.



Figs 12-14. Head (dorsal) of Clytini. 12: *Rusticoclytus rusticus* (Linnaeus, 1758); 13: *Xylotrechus arvicola* (Olivier, 1795); 14: *Turanoclytus namaganensis* (Heyden, 1885).

Figs 15-16. Head (lateral). 15: *Xylotrechus arvicola* (Olivier, 1795); 16: *Turanoclytus namaganensis* (Heyden, 1885).

Rusticoclytus Vives, 1977 (status rev.)

Rusticoclytus Vives, 1977, L'Entomologiste, 33(3): 130. Type species: *Leptura rustica* Linnaeus, 1758, by original designation.

Description. Head without occipital protruding apodeme (occiput rounded, similar to *Clytus*) (Fig. 12); foramen occipitalis rounded; vertex, in male, with two large shallow depressions finely punctate or chagreened. Palpi very short, equal; last segment of maxillary and labial palpi subequal in length, subtriangular, expanded apically and twice longer than the preceding one. Antennae very short, with 3rd segment slightly shorter than the scape and slightly longer than the 4th, 2nd segment shorter than the 8th. Prosternum moderately convex, with coxal cavities angulated externally, open posteriorly; prosternal process wider, not expanded apically; mesosternum with intercoxal process wide, gradually declivous and nearly flat in front, gradually declivous and bilobed behind; coxae open externally to the epimera. Differs from *Xylotrechus* by the head with occipital apodeme not protruding (Fig. 12), the vertex with dimorphic punctation and the coxal cavities angulated externally.

Remark. Despite its large heterogeneity, only few taxa have been separated from *Xylotrechus* since the original description: *Xyloclytus* Reitter, 1912 (type species: *Clytus chinensis* Chevrolat, 1852), *Rusticoclytus* Vives, 1977 (type species: *Leptura rustica* Linnaeus, 1758) and *Turanoclytus* Sama, 1994 (type species: *X. namaganensis* Heyden, 1885). The first one is currently regarded as a subgenus of *Xylotrechus*, while *Rusticoclytus* is usually regarded as a synonym (SAMA, 1988, 2002; ALTHOFF & DANILEVSKY, 1997). According to recent studies on the morphology of the group, *Rusticoclytus* indeed constitutes a distinct genus. The same will apply to *Turanoclytus* whose status has been sometimes discussed (DANILEVSKY, 2005). These two taxa differ from *Xylotrechus sartorii* from Mexico by the absence of a protruding apodeme on the hind part of the head (occiput) and the presence of two large sensory areas on the vertex of male head (Figs 12-16). **Range.** According to the present definition, the genus *Rusticoclytus* can be regarded as Holarctic, including species from the northern (chiefly north-eastern) palaeartic region such as *R. adspersus* (Gebler, 1830), *R. pantherinus* (Savenius, 1825), *R. salicis* (Takakuwa & Oda, 1978) and from the Western Hemisphere such as *R. nauticus* (Mannerheim, 1843), *R. annosus* (Say, 1827) and certainly others. Most of these species are ecologically associated with dead and dying trees of the family Salicaceae.

***Plagionotus* Mulsant, 1842**

Plagionotus Mulsant, 1842, Col. France, 32 (Rectif. et Addit. Long.): 1 (new name for *Platynotus* Mulsant, 1839).

Echinocerus Mulsant, 1862, Hist. Nat. Coléopt. France, Longic., 2: 143 (nec *Echinocerus* White, 1848, Crustacea, unavailable). Type species: *Leptura floralis* Pallas, 1773 (monotypy), not *Clytus arietis* as stated by Monné (2005).

= *Paraplagionotus* Kasatkin, 2005 (new name for *Echinocerus* Mulsant, 1862) (synonymy in ALONSO-ZARAZAGA, 2007).

= *Neoplagionotus* Kasatkin, 2005, Caucasian entomol. Bull., 1(1): 51 (**n. syn.**). Type species: *Clytus bobelayei* Brullé, 1832 (original designation).

Discussion. KASATKIN (2005) recently divided *Plagionotus* into three separate genera according to the different structure of the everted endophallus, a character which is, in my opinion, overestimated and merely specific. A very careful comparative study of the morphology of *P. detritus* (type of the genus), *P. bobelayei* (type species of *Neoplagionotus*), *P. scalaris* Brullé, 1842 and *P. floralis* (type species of *Paraplagionotus*) did not show any significant difference, except the shape of the pronotum, which is more or less transverse in *P. detritus*, *P. arcuatus* and in the *P. scalaris* species group, and about as wide as long in *P. floralis*. I therefore regard the three taxa as synonyms of *Plagionotus*. ALONSO-ZARAZAGA (2007) proved that *Echinocerus* White, 1848 is an unavailable name (incorrect subsequent spelling of *Echidnocerus* White, 1842, Crustacea) and correctly resurrected *Echinocerus* Mulsant 1862 from the homonymy.

Plagionotus scalaris (Brullé, 1832)

Clytus scalaris Brullé, 1832, Exped. Sci. Morée, Ins., 3: 254, Tab. 43, Fig. 10. Type locality: “Morea” (Peloponnese, southern Greece). Type material: lectotype ♂ (MNHNP) designated herein.

= *Clytus siculus* Castelnau & Gory, 1836, Mon. Clyt.: 46, t. 9, fig. 54. Type locality: “Sicilia”. Type material: holotype ♂ (MNHNP), examined (**n. syn.**).

= *Plagionotus scalaris* “n. f. an ssp.?” *validus* Rungs, 1952, Bull. Soc. entomol. France: 85. Type locality: “Maroc: Aghbal, entre Taza et Mçoun”. Type material. holotype ♂: “R.Pasquier / Ch.Rungs / et Thami”, “Maroc / Aghbal / 9-15.VI.49”; “Plagionotus / scalaris / validus / Type » (MNHNP), examined (**syn. n.**).

= *Plagionotus scalaris* ssp. *vivesi* Lopez Colon, 1997, Lambillionea, 97(2): 221. Type locality: Oujda: Aïnsfa (north-eastern Morocco). Type material not examined (**syn. n.**).

Type material. *Clytus scalaris* Brullé: I have examined (MNHNP) three specimens well preserved, belonging to the type series: the lectotype is a male, 12.5 mm long, “2866 / 34” [round label, greyish, handwritten]; “Muséum Paris / Morée / Brullé 4187-33” [bluish, printed, recent]; “Lectotype” [red, printed, recent]; 1 paralectotype male, 13 mm: “Museum Paris / Morée / Brullé 4187-33”; “Paralectotype”; 1 paralectotype female: 12.5 mm, same labels as the preceding one. It is not clear whether all these specimens really belong to the type series. The original description is apparently based on a single specimen, 11 mm long, with legs totally reddish; the lectotype and the paralectotype female agree to the original description except the length; the paralectotype male, besides the longer body has blackish femora.

Clytus siculus: the type series was not reported, but the original description is certainly based on a single specimen. The holotype is a male, 12 mm long, well preserved, labelled as follows: “siculus / nobis” [white, handwritten by ?]; “Sicilia” [white, handwritten by ?]; “Lectotype” [red, printed, recent]; Museum Paris [red, printed, recent]; “Holotypus / *Plagionotus siculus* G. Sama det. 2008”. The type material of both *Clytus scalaris* Brullé and *Clytus siculus* Castelnau & Gory were probably identified by A. Villers; the type designation, to the best of my knowledge, has never been published; I think not necessary to designate a lectotype.

Plagionotus scalaris ssp. *vivesi* Lopez Colon, 1997: I was unable to study the holotype of this taxon, but I have examined a series of specimens collected in the same locality by the same collector.

Chlorophorus glaucus (Fabricius, 1781) (status rev.)

= *Callidium glaucum* Fabricius, 1781, Spec. Ins., 1: 236. Type locality: “India orientali” (error). Type material: Lectotype ♀, coll. Banks (BMNH), designated herein.

= *C. griseus*: Castelnau & Gory, 1836, Mon. Clyt.: 80, Tab. 15, fig. 92bis. Type locality. “Espagne”. Type material not examined (probably lost).

Type material. The lectotype of *Callidium glaucum* Fabricius is a female, 14 mm long, damaged (hind left leg and almost all tarsi missing), but well recognizable and labelled as follows: “*Call. glaucum* / Fabr. Sp. Ins. n.44 [handwritten, probably by a curator of the Banks collection]; “Lectotypus ♀ / *Callidium / glaucum* Fabr. 1781 / G. Sama des. 2005”.

Remark. This species is currently called *Chlorophorus pilosus* (Forster, 1771). However, the single specimen found in Forster’s collection (Linnean Society, London) under the name *Leptura pilosa*, does not belong to *Chlorophorus* as suggested by HEYDEN (1878: 169), very likely without type examination, but to *Vadonia unipunctata* (Fabricius, 1787) (see above the chapter regarding this species).

Tribe **Lamiini** Latreille, 1825

Lamiinae Latreille, 1825: 401. Type genus: *Lamia* Fabricius, 1775.

= Pachystolini Gistel, 1848.

Pachystolaeidae Gistel, 1848: 2. Type genus: *Pachystola* Dejean 1835 (= *Lamia* Fabricius, 1775).

= Dorcadionisidae Gistel, 1848 (unavailable). Type genus: *Dorcadion* Dalman, 1817.

= Dorcadionini Thomson, 1860 (nomen protectum) (**n. syn.**).

Dorcadionitae Thomson, 1860, Ess. Class. Ceramb.: 2. Type genus: *Dorcadion* Dalman, 1817 (maintained according to ICZN, 1999, Art. 23.9.2).

= Dorcadodiidae Gistel, 1856, Myst. Eur. Insectenw.: 376 (nomen oblitum).

Type genus *Dorcadodium* Gistel, 1856 : 263.

= Phrissomini Thomson, 1860 (**n. syn.**).

Phryssomitae Thomson, 1860: 25. Type genus: *Phrissoma* Dejean, 1835.

= Morimini Thomson, 1864.

Morimitae Thomson, 1864: 77. Type genus: *Morimus* Brullé, 1832.

Discussion. LACORDAIRE (1869) included *Dorcatypus* Thomson, 1864 (= *Herophila* Mulsant, 1862), *Morimus* Serville, 1835 and *Lamia* Fabricius, 1775) to the same tribe, and excluded *Phrissoma* by the antennal scape with cicatrix and *Dorcadion* by the metasternum shortened and the epistoma indistinct. These characters are obviously adaptive modifications associated with loss of flight capability (metasternum shortened) or variable within the same genus (antennal cicatrix and epistomal membrane). Moreover, a distinct apical cicatrix on the first antennal segment is also present in some groups of “Dorcadionini”, such as *Eodorcadion* Breuning, 1947 and in some species of *Iberodorcadion* Breuning, 1942. On account of their retracted metasternum and antennal scape with a cicatrix, BREUNING (1942) transferred to the tribe Phrissomini several genera such as *Morimus*, *Dorcatypus*, *Brimus* Pascoe, 1862 and closely related genera previously referred to the tribe Lamiini (LACORDAIRE, 1869; AURIVILLIUS, 1921). In my opinion, all these genera belong to the same tribe together with *Phrissoma* [*P. crispum* (Fabricius, 1776), type genus, examined]. To be noted that *Herophila fairmairii* Thomson, 1857 (the type species of this genus), was originally described under

the name *Dorcadion*; on the other hand, BREUNING himself described *Dorcadion veluchianum* Breuning, 1943 from Greece, which belongs to *Herophila* (SAMA & RAPUZZI, in prep.).

Dorcadionisidae Gistel, 1848 (type genus: *Dorcadion* Dalman, 1817) is invalid since not formed in accordance with the stem of the type genus (ICZN, 1999, Art. 11.7.1.1); *Dorcadodium* Gistel, 1856 has recently been restored by VIVES & ALONSO-ZARAZAGA (in VIVES, 2000) who designated *Lamia morio* Fabricius, 1787 as the type species. Since *L. morio* is regarded (BREUNING, 1962) as a junior synonym of *Cerambyx aethiops* Scopoli, 1763, now in *Carinatodorcadion* Breuning, 1943, this latter would become a junior synonym of *Dorcadodium*. However, I regard *Carinatodorcadion* (currently in use) as a valid name (nomen protectum) and *Dorcadodium* a nomen oblitum since never been used as a valid name after 1899 (ICZN, 1999, 23.9.2). Analogously, the tribe *Dorcadodiidae* Gistel, 1856 should take priority over Dorcadionini Thomson, 1860; this latter is here maintained according to ICZN (1999), Article 23.9.2 (prevailing usage).

Monochamus galloprovincialis (Olivier, 1795)

Cerambyx gallo-provincialis Olivier, 1795, Entomologie, 4(67): 125, Tab. 3, Fig.17. Type locality: "Gallia" (France).

= *M. galloprovincialis pistor* (Germar, 1818). Type locality: "Krain, Curland" (Slovenia, Latvia); restricted type locality Krain (**n. syn.**).

Remark. *M. galloprovincialis* is a very polymorphic species showing a high individual variability in North Africa like everywhere in its distributional range. The population found in northern Algeria (about 20 specimens examined from Skikda: Dorsale de Collo) is rather similar to the topotypical population from southern France, characterized by reddish-brown appendages, elytral patches of yellowish and ochraceous or grey pubescence. Four specimens from northern Morocco (Tanger: Cap Malabata), with blackish antennae and legs, do not apparently differ from specimens from Slovenia, the type locality of *M. g. pistor*. Two specimens (a pair) from Tunisia (Haïdra) show a distinctive pattern with elytra uniformly covered with grey-greenish pubescence, almost totally lacking spots of light pubescence; both specimens have black legs, while antennae are reddish in male, black, annulated with white pubescence in female. Because of the elytral pattern, these specimens should be referred to *M. parendeli* Théry, which, however, according to the original description, differs from the *M. galloprovincialis* also by the scutellum with undivided pubescence. In my opinion, these two taxa fall within the variability of *M. galloprovincialis*. On the other hand, morphological division of *M. galloprovincialis* and *M. pistor* in two subspecies is not supported genetically (CESARI & ALII, 2005).

***Neoludwigia* nom. nov.**

Neoludwigia nomen novum for *Ludwigia* Pic, 1892.

Agapanthia (*Ludwigia*) *lixoides* Pic, 1892. Ann. Soc. entomol. France, 61 (Bull.): CXLVII, nec Bayle, 1878 (Mollusca, Cephalopoda, Ammonoidea). Type species: *Agapanthia lixoides* Lucas, 1846 (monotypy).

Agapanthia s.g. *Ludwigia* Pic, 1891, Mat. Long. 1: 47 (nomen nudum).

Agapanthia s.g. *Ludovica* Pic, 1891, Mat. Long. 1: 47, footnote (nomen nudum).

Discussion. Pic's description (1891) is invalid since the author, although providing the distinguishing characters of his new taxon, did not mention any species name (ICZN, 1999, art. 12.1). *Ludovica* Pic, 1891 is also invalid since contemporarily proposed as a not necessary emendation "pour les correcteurs puristes" for *Ludwigia*. The genus was validated one year later when Pic (1892) proposed the new combination *Agapanthia* (*Ludwigia*) *lixoides*. However, *Ludwigia* Pic, 1892 is a homonym of *Ludwigia* Bayle, 1878 previously described in the order Ammonoidea of Mollusca and currently in use.

Tribe **Ceroplesini** Thomson, 1860

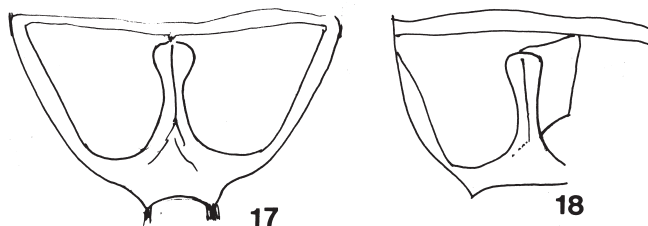
Subtribe **Ceroplesina** s. str. (status nov.)

Ceroplesitae Thomson, 1860, Ess. Class. Ceramb.: 93. Type genus: *Ceroplesis* Serville, 1835.

Ceroplesini subtribe **Crossotina** Thomson, 1864 (status nov.)

Crossotitae Thomson, 1864, Syst. Ceramb.: 64. Type genus: *Crossotus* Serville, 1835.

Discussion. THOMSON (1860: 93) described Ceroplesini as a subtribe of Monochamini, and included (1860: 36) *Crossotus* Serville, 1835 (as well as *Dichostates* Thomson, 1860) within the tribe Mesosini. In 1864 (Syst. Ceramb.: 64) he described the tribe Crossotini (including *Crossotus*, *Ranova* Thomson, 1864, *Dichostates*, *Frea* Thomson, 1858, etc.), and regarded Ceroplesini as a part ("15e division") of "Lamitae verae". In fact, he regarded Crossotini as a distinct tribe and Ceroplesini (by its subcylindrical antennal segments) as a subtribe of Lamiini. LACORDAIRE (1869) separated "Céroplésides" from "Crossotides" by



Figs 17-18. Last tergite of *Ceroplesis aestuans* (Olivier, 1795), female. 17: internal side from above (outline, sternite removed); 18: idem, lateral view.

“antennes très longues chez les mâles, sillonnées ou munies de fossettes à partir du 4^e article”. In fact, besides the antennae distinctly furrowed and carinate longitudinally on the outer and inner sides from the apex of 4th segments, I cannot find any important character to divide Crossotini and Ceroplesini, which appear closely related, as also proved by the last abdominal segment with internal septum (Fig. 17, 18) and by the distinctive shape of male and female genitalia, and joined by transitional forms such as *Titoceres* Serville, 1835. However, I think reasonable to maintain Crossotini as a subtribe, based on the antennal feature described above and their rather homogeneous short and stout distinctive shape.

Tribe **Pogonocherini** Mulsant, 1839

Pogonochérais Mulsant, 1839: 151. Type genus: *Pogonocherus* Dejean, 1821.

= Exocentrini Pascoe, 1864: 7. Type genus: *Exocentrus* Dejean, 1835 (**n. syn.**).

Discussion. MULSANT (1839) originally separated this tribe from the other Lamiinae by femora clavate (in comparison to Lamiini), wings present (in comparison to Parmenini) and antennae fringed beneath. Besides *Pogonocherus*, he included in the tribe *Exocentrus* Dejean, 1835 and *Stenosoma* Mulsant, 1839 (currently *Deroplia* Dejean, 1835) and later (MULSANT, 1862), *Acanthoderes* Serville, 1835 and *Oplosia* Mulsant 1862. AURIVILLIUS (1923) included the palaeartic taxa *Parmenopsis* Ganglbauer, 1881 and *Eurycotyle* Blessig, 1873 (= *Pterolophia* Newman, 1842); BREUNING (1963), revising the tribe at world level, only included in the tribe *Pogonocherus* and *Pityphilus* Mulsant, 1862) together with many Nearctic genera. LINSLEY & CHEMSAK (1985) substantially confirming the definition of Breuning, excluded from the tribe *Acanthoderes* and *Oplosia* moved to Acanthoderini Thomson, 1860 and *Exocentrus* to Acanthocinini. The tribe Exocentrini Pascoe, 1864 is usually regarded as a synonym of Acanthocinini (AURIVILLIUS, 1923, BREUNING, 1962). *Exocentrus* differ from palaeartic Acanthocinini by the characteristic shape of the last segment of the abdomen of females: the last two tergites are longitudinally divided internally by a longitudinal, cartilaginous apodeme, beginning as a narrow lamina from the middle of the 4th sternite and ending at the apex of the 5th where it is enlarged laterally. As written above an analogous structure exists in *Ceroplesis* and *Crossotus* (Ceroplesini) as well as in other genera of Lamiinae such as *Idactus* Pascoe, 1864 (Ancytonotini), *Sophronica* (Apodasyini) and *Pogonocherus* (Pogonocherini) (Figs 17, 18), and never in Acanthocinini. *Exocentrus* and closely related genera and subgenera must be consequently transferred to the tribe Pogonocherini. According to Švácha (pers. comm.), this systematic change is supported by the immature stages morphology. According to both preimaginal and adult morphology the tribe Pogonocherini will also include (as already proposed by AURIVILLIUS, 1923) the genus *Parmenopsis* Ganglbauer, 1881 currently included in Parmenini.

Tribe **Saperdini** Mulsant, 1839

Saperdaires Mulsant, 1839, Long. France : 165, 181. Type genus: *Saperda* Fabricius, 1775.

Saperda Fabricius, 1775

Saperda Fabricius, 1775, Syst. Entomol.: 184. Type species: *Cerambyx scalaris* Linnaeus, 1758, designated by Curtis (1829) [not *Cerambyx carcharias* Linnaeus, 1758, designated by WESTWOOD (1838) as stated by MARINONI (1977), LINSLEY & CHEMSAK (1995) and VIVES (2000)].

Discussion. The type species of *Saperda* Fabricius was designated in the same year by CURTIS (1829) who selected *Cerambyx scalaris* Linnaeus, 1758 and by GUÉRIN-MÉNÉVILLE (1829) who selected *Cerambyx carcharias* Linnaeus, 1758. Apart from the result of bibliographic investigation which would have to be conducted to ascertain which author takes priority, in my opinion the CURTIS designation is to be maintained to preserve nomenclatural stability.

Saperda scalaris (Linnaeus, 1758)

Cerambyx scalaris Linnaeus, 1758, Syst. Nat., ed. 10, 1: 394. Type locality: "Europa". Type material : 1♂, 2♀ (LSL) examined; lectotype not designated.

= *Saperda scalaris* ssp. *algeriensis* Breuning, 1952, Ent. Arb. Mus. Frey, 3: 176. Type locality: Yakouren, Algeria. Type material: Holotype female : "Yakouren / juin 29 Dayrem" ; "*Saperda scalaris* ssp. *algeriensis* mihi / Breuning det." [both handwritten by Breuning] and one paratype male: "Yakouren / Kabylie juin 1902 / dr. A.Chobaut" [white, printed], MHNG, examined (**n. syn.**).

Discussion. According to the original description ("Wie die Stammform, aber die gelben Zeichnungen ausgedehnter, auch die seitlichen Makeln alle mehr weniger mit einander verbunden".) *S. s. algeriensis* differs by its somewhat wider elytral yellow bands. Besides the pair belonging to the type series, I have seen four specimens collected by myself; in my opinion, the Algerian population does not differ from the nominotypical subspecies.

Tribe **Obereini** Thomson, 1864

Obereitae Thomson, 1864, Syst. Ceramb.: 119. Type genus: *Oberea* Dejean, 1835.

Obereinae Pascoe, 1864 [September]: 8.

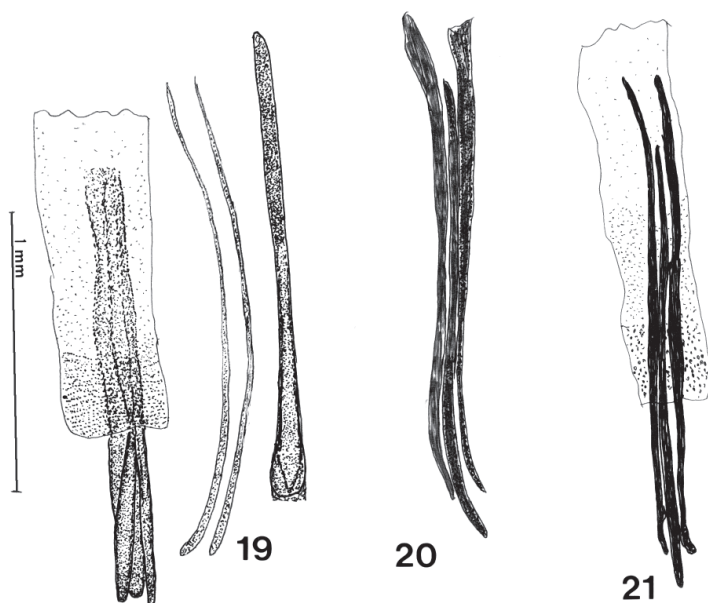
Discussion. This tribe is very closely related to Saperdini and Phytoeciini and usually regarded as a synonym of the latter. I regard these taxa as distinct tribes chiefly based on the different complex of male and female genitalia (shape of median and lateral lobes, endophallus sclerites and spermatheca). In fact, the complex of genitalia of Obereini (endophallus with three elongate flagelli, spermatheca globose) is so similar to that of Saperdini (Figs 19-22), that it appears incorrect to separate them and associate the former to Phytoeciini according to adaptative non-phylogenetic characters, such as the claws morphology, as did by

several authors (AURIVILLIUS, 1921; VILLIERS, 1978; LINSLEY & CHEMSAK, 1995; VIVES, 2000 and others). On this account the genus *Stenostola* Dejean, 1835, included within Phytoeciini by its tarsal claws appendiculate, belongs to Saperdini as well (Fig. 21).

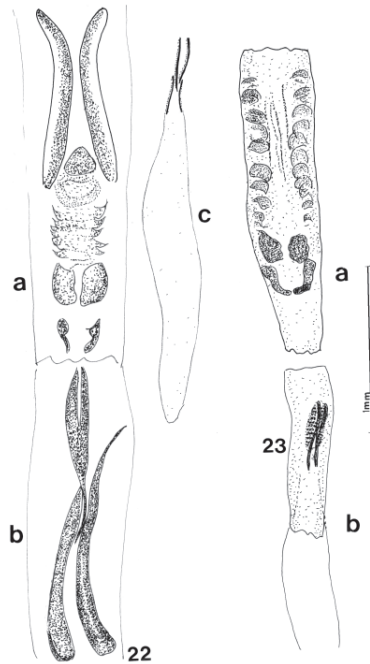
Tribe **Phytoeciini** Mulsant, 1839

Phytoeciares Mulsant, 1839, Long. France : 165. Type genus : *Phytoecia* Dejean, 1835.

Discussion. The tribe differs from Saperdini by epistomal membrane usually reduced or absent (the apical portion of epistoma is distinctly membranous in some *Semnosia* such as *S. herminae* Reitter, 1890), labium transversely divided before the apex and with the whole anterior margin abruptly truncate (only truncate at middle in *Saperda*), the lateral border of elytra usually abruptly declivous along the epipleurae on the basal half, meso-coxal cavities narrowly open externally to the epimera (usually broadly open in *Saperda*), all segments of tarsi with a ventral pad of dense and short pubescence, 2nd tarsomere not very short, usually somewhat longer than the last one, tarsal claws usually bifid or appendiculate (except in some *Semnosia* which have reduced internal tooth). In Saperdini the 2nd segment of tarsi is very short, usually shorter than the last one, the 1st and 2nd segments have a ventral pad of dense and short pubescence while the 3rd one has a pad of longer and more robust unciniate hair; the tarsal claws are divaricate. As written



Figs 19-21. Endophallus sclerites. 19: *Saperda scalaris* (Linnaeus, 1758) (at right the flagelli without membrane); 20: *Saperda populnea* (Linnaeus, 1758); 21: *Stenostola dubia* (Laicharting, 1784).



Figs 22-23. Endophallus sclerites. 22: *Oberea (Amaurostoma) erythrocephala* (Schrank, 1776) (22a: basal sclerites; 22b: apical sclerites); 23: *Phytoecia flavipes* (Fabricius, 1801) (23a: basal sclerites; 23b: apical sclerites; 23c: apical sclerites everted).

above, both male and female genitalia are very different. In Saperdini and Obereini, the endophallus apical sclerites are constituted by three very robust elongate flagelli, in form of long sticks kept together by a membrane (Figs 19-22) and the spermatheca is strongly sclerotized, globose and feebly dilated apically. In Phytoeciini the endophallus has a thin apical sclerite often in form of flagellum of variable length (Fig. 23) and the spermatheca is well sclerotized and very variable in shape, but rarely globose (e.g. in *Oxyilia* Mulsant, 1862 from Balcans and the Eastern Mediterranean, whose systematic status needs verification).

Opsilia tenuilinea (Fairmaire, 1877) (new comb.)

Phytoecia tenuilinea Fairmaire, 1877, Pet. Nouv. Ent.: 97. Type locality: “♀ Algérie, ♂ Aïn Zimara” (Algeria). Type material probably lost: not found at MNHN (“Type non retrouvé”) [label handwritten by Villiers].

= *Phytoecia tenuilinea* ssp. *mateui* Breuning, 1951, Ent. Arb. Mus. Frey, 2: 365 (n. syn.). Type locality: “Rio de Oro: U. Bomba” (Western Sahara, formerly Spanish Sahara).

Type material. According to BREUNING (1951) the holotype male of *P. t. mateui* would be deposited in the “Musée de Barcelone”. In fact, no type material of this taxon has been found there [E. Vives, pers. comm.]. However, I have examined two males paratypes preserved in the MHNG: “Rio de Oro / Mateu” (handwritten by Breuning); “*Phytoecia / tenuilinea / Mateui* mihi. Paratyp / Breuning det.” [handwritten by Breuning].

O. tenuilinea is a very distinctive species, endemic to North Africa, closely related to *O. uncinata* Redtenbacher, 1842 from Europe. It was known from Western Sahara and southern Morocco; a small isolated population has recently been discovered by G. Magnani in a very arid biotope in southern Tunisia (**a new record from Tunisia**). According to the original description, *P. tenuilinea mateui* differs from the nominotypical subspecies by denser pronotal punctation and elytral punctation and pubescence. Comparison of the two mentioned paratypes with specimens from Algeria and northern Morocco does not show substantial differences.

Tribe **Tetropini** Planet, 1924

Tetropides Planet, 1924, Long. France: 326. Type genus: *Tetrops* Stephens, 1829.

= Polyopsiates Mulsant, 1862, Long. France, 2: 340 (not available). Type genus: *Polyopsia* Mulsant, 1839, Col. France: 182 (= *Tetrops* Stephens, 1829).

Tetropini Vives, 2000: 508 (emendation).

= Tetraopini Auctorum nec Thomson, 1860. Type genus : *Tetraopes* Dalman, 1817.

Discussion. *Tetrops* Stephens and *Tetraopes* Dalman clearly belong to different tribes, therefore *Tetrops* cannot be referred to the tribe Tetraopini as proposed in the past and also written by Villiers (1978).

According to BOUSQUET & HEFFERN (in preparation), the name Tetropides Planet is not available (nomen nudum) since “proposed after 1899 not in a latinized form (ICZN 1999, Art. 11.7.1.1)” and Tetropini Vives, 2000 is not available (nomen nudum), since “name proposed after 1999 without explicit intention (ICZN 1999, Art. 16.1)”. However, according to the ICZN, art 11.7.1.1 and 11.7.1.3, Tetropini Planet is available since published after 1899 not in correct latinized form, but validated by VIVES, 2000.

Acknowledgements

For access to collections and loans of material, I wish to thank Mrs Gina Douglas, Librarian of the Linnean Society and Mike Fitton, Curator of the Linnean Collection; Sharon Shute and M. Barclay, Department of Entomology, The Natural History Museum (London, England); Daniel Burckhardt and Eva Sprecher, Naturhistorisches Museum (Basel, Switzerland), Thierry Deuve and Gérard Tavakilian, Muséum National d’Histoire Naturelle (Paris, France), Giulio Cuccodoro, Muséum d’Histoire Naturelle (Genève, Switzerland), Joël Clary, Harold Labrique and Virgile Marengo, Centre de Conservation et d’étude des



Fig. 24. *Stictoleptura gladiatrix* Sama n. sp., holotype male.



Fig. 25. *Daramus sahrawi* Sama & Rapuzzi n. sp., holotype male.

Collections (Lyon, France); Jiří Hájek (Narodni Muzeum, Praha). I also wish to thank my friends and colleagues Karl Adlbauer (Graz, Austria), Yves Bousquet (Ottawa, Canada), Christian Cocquempot (Montpellier, France), Alain Drumont (Bruxelles, Belgium), Dan Heffern (Houston, U.S.A.), Carolus Holzschuh (Villach, Austria), Gianluca Magnani (Cesena, Italy), Jérôme Sudre (Vulbens, France), Petr Švácha (České Budejovice, Czech Republic) and Eduard Vives (Terrasa, Spain) for their important collaboration during my entomological studies. A special thank to Martin Rejzek (Norwich, England) for revising the English language of this paper.

References

- ALFIERI A., 1976 - The Coleoptera of Egypt. *Atlas Press*, Cairo, 287 pp.
- ALONSO-ZARAZAGA M.A., 2007 - *Echinocerus* Mulsant, 1862 is a valid genus. *Bol. Soc. Ent. Aragonesa*, 40: 306.
- ALTHOFF J. & DANILEVSKY M., 1997 - A Check-list of Longicorn Beetles (Coleoptera, Cerambycoidea) of Europe. *Slov. Ent. Drustvo*, 64 pp.
- AURIVILLIUS C., 1921 - Cerambycidae, Lamiinae, I. In: Junk & Schenkling (eds.): *Coleopterorum Catalogus* 73: 1-322.
- AURIVILLIUS C., 1923 - Cerambycidae, Lamiinae, II. In: Junk & Schenkling (eds.): *Coleopterorum Catalogus* 74: 323-704.
- BOUSQUET Y., HEFFERN D. (in preparation) - Catalogue of family group names of Cerambycidae (Coleoptera).
- BREUNING S., 1942b - Etudes sur les Lamiaires.XI.Phrissomini. *Nov. ent.*, 12: 102-136.
- BREUNING S., 1951 - Revision du genre *Phytoecia*. *Ent. Arb. Mus. Frey*, 2: 1-103; 353-460.
- BREUNING S., Villiers A., 1960 - Coléoptères Cérambycides récoltées au Tibesti par Ph.Bruneau de Miré. *Bull. I.F.A.N.*, 22, s.A, 4: 1298-1305.
- BREUNING S., 1962 - Catalogue des Lamiaires du Monde. *Verlag Museums G. Frey*, Tutzing, 6 : 387-459.
- CESARI M., MARESCALCHI O., FRANCARDI V., MANTOVANI B., 2005 - Taxonomy and phylogeny of European *Monochamus* species: first molecular and karyological data. *Journ. Zool. Syst. & Evol. Res.*, 43(1): 1-
- CHEVROLAT A., 1860 - Description d'espèces de *Clytus* propres au Mexique. *Ann. Soc. ent. Fr.*, 3(8): 451-459, Tav.9, Figg.1-12.
- CHEVROLAT A., 1863 - Clytides d'Asie et d'Océanie. *Mem. Soc. roy. Liège*, 17: 253-350.

- CROWSON R.A., 1967 - The natural classification of the families of Coleoptera. *Classey Ltd. Ed.*, reprint 1967: 214 pp.
- FORSTER J.R., 1771 - Novae specie Insectorum. Centuria I. apud T. Davies, London: 1-100 (Cerambycidae: 37-45).
- CURTIS J., 1829 - British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland: containing coloured figures from nature of the most rare and beautiful species, and in many instances of the plants upon which they are found. Vol. VI. Published by the author, London. Plates 242-289.
- DANILEVSKY M.L., 2005 - Systematic list of Longicorn Beetles (Cerambycoidea) of the territory of the former USSR. http://www.zin.ru/Animalia/Coleoptera/eng/cer_su.htm.
- GUÉRIN-MÉNEVILLE, F.E. 1829 - Saperde. *Saperda*. Pag. 151 in: Bory de Saint-Vincent, J.B.G. (Ed.). Dictionnaire classique d'histoire naturelle... Tome quinzième. *Rey et Gravier*, Paris.
- HEYDEN L.V., 1878 - Bemerkungen zur Catalogi Coleopterorum Europae editio secunda, auctoribus Dr. J.P.E.Frdr. Stein et Jul. Weise. Berol. 1877. *Deutsche Entomol. Z.*, 21: 417-422.
- INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE, 1999 - International Code of Zoological Nomenclature, 4th ed.: 306 pp.
- KASATKIN D.G., 2005 - About a system of the genus *Plagionotus* sensu lato. *Caucasian entomol. Bull.*, 1(1): 49-54.
- LACORDAIRE T., 1869b - Histoire naturelle des Insectes, Genera des Coléoptères, ou exposé méthodique et critique de tous les genres proposés jusqu'ici dans cet ordre d'insectes. 9(1). Famille des Longicornes (suite). *Roret*, Paris : 2+ 409 pp.
- LINSLEY E.G., 1964 - The Cerambycidae of North America. V. Taxonomy and classification of the subfam. Cerambycinae, tribes Callichromini through Ancylocerini. *Univ. Calif. Publ. Ent.*, 22: 1-197.
- LINSLEY E.G., CHEMSAK J.A., 1985 - The Cerambycidae of North America, 7(1). Taxonomy and classification of the subfamily Lamiinae, tribes Parmenini through Acanthoderini. *Univ. Calif. Press*, 102: 258 pp., 57 figg.
- LINSLEY E.G., CHEMSAK J.A., 1995 - The Cerambycidae of North America, 7, 2: Taxonomy and classification of the Subfamily Lamiinae, Tribes Acanthocinini through Hemilophini. *Univ. Calif. Publ. Ent.*, 114: 1-292, 55 figg.
- LUCAS P. H., 1842 - Aperçu des espèces nouvelles d'insectes qui se trouvent dans nos possessions françaises du nord de l'Afrique. *Ann. Sc. nat.* (2), 18: 184-188.
- MARINONI R.C. : 1977 - Some genera of Lamiinae and their type species. *Dusenica*, 19,1: 37-55.

- MARTINS U.R., 1980a - Notes sur la tribu des Methiini et transfert de certains genres de l'ancien monde. *Rev. fr. Entomol.* (N.S.) 2(2) : 113-118.
- MATEU J., 1972 - Les insectes xylophages des Acacias dans les régions sahariennes. *Pubbl. Inst. Zool. A. Nobre*, Porto, n. 116: 326 pp.
- MONNE' M.A., GIESBERT E.F., 1994 - Checklist of the Cerambycidae and Disteniidae of the Western Hemisphere - *Wolfsgarden Books* (1993): 1-410.
- MONNE' M.A., 2005 - Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part I. Subfamily Cerambycinae. *Magnolia Press*, Auckland: 765 pp.
- MULSANT E., 1839 - Histoire naturelle des Coléoptères de France. Longicornes (1e ed.). *Imp. Maison*, Paris: 1-304, 3 tavv.
- MULSANT E., 1862-63 - Histoire naturelle des Coléoptères de France. Longicornes. *Magnin-Blanchard*, Paris : 1 -590 [1-480 = 1862 ; 481-590 = 1863].
- NORMAND H., 1937 - Contribution au Catalogue des Coléoptères de la Tunisie (11e fasc.) - *Bull. Soc. Hist. nat. Afr. Nord*, 28:116-119.
- PIC M., 1891 - Faune Franco-Algérienne (varieties). *Mat. Long.*, 1: 1- 50.
- PIC M., 1892 - Communications : Cerambycidae recoltés en Algérie. *Ann. Soc. entomol. France*, 61 (Bull.): CXLVII - CXLVIII.
- PIC M., 1893a - Sur les *Polyarthron* d'Algérie et du Sénégal. *Ann. Soc. entomol. France*, 61 (1892) (Bull.) : CCLIX-CCLX.
- PIC M., 1893b - Sur les *Polyarthron* d'Algérie et du Sénégal. *Ann. Soc. entomol. France*, 62: 105-110.
- PIC M., 1893c - Captures de Cérambycides en Algérie. *Ann. Soc. ent. Fr.*, (Bull.): CCXI.
- PIC M., 1896 - Deuxième liste de Coléoptères recoltés en Algérie en 1896. *Bull. Soc. entomol. France*: 415.
- PIC M., 1898 - Quelques habitats de Longicornes d'Algérie. *Mat. Long.*, 3(1): 25-26.
- PIC M., 1930 - Sur quelques Coléoptères recueillis en Egypte. *Bull. Soc. roy. Entomol. Egypte*, 14: 61-64.
- PLAVILSTSHIKOV N.N., 1931 - Bestimmungs-Tabellen der europäischen Coleopteren. Cerambycidae. I. Cerambycinae: Disteniini, Cerambycini I, *E. Reitter*, Troppau: 1-102.
- SAMA G., 1988 - Fauna d'Italia. Coleoptera Cerambycidae. Catalogo Topografico e Sinonimico. *Ed. Calderini*, Bologna, XXXVI+ 216 pp.
- SAMA G., 2002 - Atlas of the Cerambycidae of Europe and the Mediterranean Area. I: Northern, Western, Central and Eastern Europe. British Isles and Continental Europe

from France (excl. Corsica) to Scandinavia and Urals. *Kabourek*, Zlín: 173 pp., 36 col. plates.

THOMSON J., 1860 - Essai d'une classification de la famille des Cérambycides et matériaux pour servir à une monographie de cette famille - Paris: 1- 404.

THOMSON J., 1864 - Systema Cerambycidarum ou exposé de tous les genres compris dans la famille des Cerambycides et familles limitrophes. Liège: 1- 578 (idem, 1866, *Mem. Soc. roy. Sci. Liège*, 19: 1 - 538).

VILLIERS A., 1946 - Faune de l'Empire Français: V. Coléoptères de l'Afrique du Nord - *Ed. du Muséum*, Paris, 153 pp., 275 figg.

VILLIERS A., 1978 - Encyclopédie Entomologique, XLII: Faune des Coléoptères de France.I: Cerambycidae - *Ed. Lechevalier*, Paris, 611 pp., 1802 figg.

VIVES E., 2000 - Insecta, Coleoptera, Cerambycidae. In: Fauna Iberica, vol. 12. Ramos M. A. & al. (eds.), Museo Nacional de Ciencias Naturales. *CSIC*, Madrid: 1-724.

Author's address:

Gianfranco Sama
via Raffaello, 84
I - 47023 Cesena (FC)
e-mail: francosama@gmail.com