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The Malcolm Burr collection of Palaearctic Orthoptera

BY

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The collection of Palaearctic Orthoptera formed by Dr. Malcolm Burr has been presented by him to the Hope Museum, Oxford University. Owing to the kindness of Professor Sir Edward Poulton, it has been kept until recently in the British Museum (Natural History), where it formed a most useful supplement to the Museum collection. In the meantime, I was able gradually to work through the Burr collection, to check the determinations and bring the nomenclature up to date. This work has been now completed and the collection removed to Oxford, while a duplicate set of more interesting species has been kindly presented to the British Museum.

The collection proved to be of outstanding interest, in spite of the lamentable fact that the specimens suffered greatly from having been stored in a depository during the Great War, previous to their removal to London. As a consequence, many specimens are covered with mould, while pins of others are badly corroded. Still more unfortunate is the loss of apparently one or two boxes, containing specimens of the genera *Dericorys* and *Podisma*. In this way, the type of *Podisma koenigi* Burr has been lost.

The majority of the specimens are, however, in fairly good condition and form a very representative collection of the Palaearctic fauna, more particularly of the Western Europe.

The main component part of the collection was formed by the collection which Dr. Burr purchased in 1897 from A. de Bormans. This proved to contain cotypes of some species described by de Bormans himself, by Azam, I. Bolivar, Brisout, Brunner von Wattenwyl, Krauss, Lucas, Pantel, Saulcy and Seoane. Other cotypes must have been received by Dr. Burr himself from I. Bolivar, Brunner von Wattenwyl, Konnikov, Pictet and Saussure. Most of these cotypes have

no special labels on them, but the fact that they belong to the typical series could be established by comparing the locality and date labels with the data in the original descriptions.

Apart from the material received from other specialists, Dr. Burr's collection includes good series of many species collected by him during his travels. These took him to Rumania, Bosnia, Hercegovina, Dalmatia and Montenegro in 1898; to Dalmatia and Montenegro again in 1900, 1901 and 1909; to the Canaries and Madeira in 1910; to Spain in 1904 and again in 1911; to the Caucasus in 1912; and at times to Normandy, Belgium, Austria, etc. Since the collecting of Orthoptera always received a special attention during these voyages, many of which have been undertaken with this sole purpose, the collection is now very rich in interesting species from the countries visited and is particularly valuable because the results of some of the collecting trips have been recorded by Dr. Burr in a series of most vividly written articles, containing a mass of interesting observations on the distribution and habits of Orthoptera.

My work on the collection was a very pleasant and interesting task and I am greatly obliged to Sir Edward Poulton for the permission to undertake it.

The present paper consists of two parts. In the first, some new species found in the collection are described and notes on certain less known species included. The second part comprises a list of the species which are represented in the collection by types of any denomination (types, cotypes and paratypes), with original references. This is followed by an alphabetical index to the types, which will make it easier to use the paper.

1. NOTES ON NEW OR LESS KNOWN SPECIES

Mantidae.

Iris oratoria *tiflisina* Giglio-Tos.

In a recent paper on the genus *Iris* (Ann. Mag. Nat. Hist., ser. 7, vol. VIII, pt. 1, p. 236) I suggested that *Iris tiji* as a sub-

species of *I. oratoria* and is synonymous with *polystictica* Fischer-Waldheim, described from Dauria and not known to me by specimens. Two females of an *Iris* from Mongolia have been recently studied by Sjöstedt (Ark. Zool., Bd. 25 A, 1932, p. 2) and found to have no hyaline windows in the discoidal field of wings. Since the Mongolian specimens are almost topotypical for *polystictica*, my suggestion of the latter being identical in this character with *tiflisina* proved to be correct. On the other hand, the series of specimens from Transcaucasia in the Burr collection exhibits a difference from the true *polystictica* in the coloration of spines on the anterior femora. These spines are either darkened, or bear a dark basal spot, in the Transcaucasian specimens, but are pale with only the apex dark, in the Mongolian form. Of course, more material from different localities must be studied to see whether this difference is constant, but in the meantime it would be wiser to regard *polystictica* and *tiflisina* as two distinct subspecies of *I. oratoria*.

The subsp. *mongolica*, which Sjöstedt described on finding that his Mongolian specimens differ from the Transcaucasian ones, represents of course a pure synonym of *polystictica*, as follows:

Iris polystictica (sic!) subsp. *mongolica* Sjöstedt, 1932 = *Iris oratoria polystictica* Fischer-Waldheim, 1846.

Tettigoniidae.

Rhacocleis maura Bonnet.

(Fig. 1 m.)

Tunisia: Ile de Galita, VIII-1877, 1 ♂, 1 ♀ (Doria), 1 ♂, 1 ♀ (Violanti). (Ex coll. Bormans).

This interesting species has been apparently never recorded since its description by Bonnet from Ain Drahm in Kroumirie, Tunisia, and its occurrence on the small island Galita half way between the Tunisian coast and Sardinia is of interest. I take the opportunity to figure the male genitalia; those of the female are very striking and have been very well described by Bonnet.

Rhacocleis algerica sp. n.

(Fig. 1 a.)

A striking, large species allied to *Rh. buccichi*, but differing from it in the longer cerci and in the shape of the posterior tergite in the male sex.

Face and cheeks ivory-yellow, the former with two black dots. Frons between the eyes with a black fascia, which extends as lateral

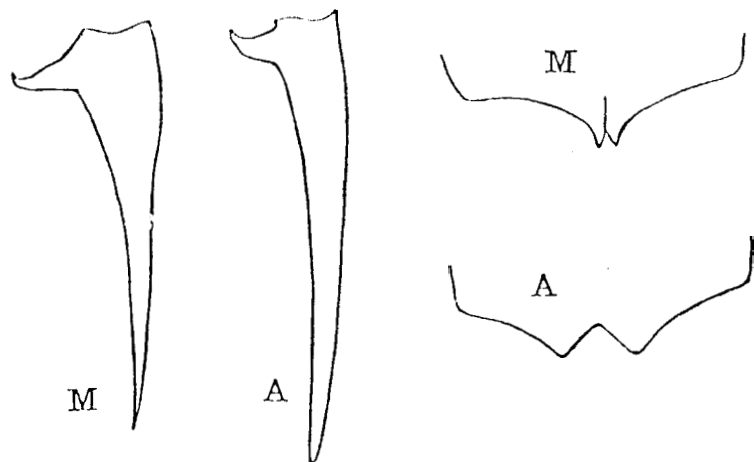


Fig. 1.—M, *Rhacocleis maura* Bonnet, and A, *Rh. algerica* sp. n. Cerci and last tergite of male.

fascia behind the eyes. Pronotum brown above; lateral lobes castaneous-black, with a broad, sharply defined, ivory-yellow lower and hind margin. Metazona of pronotum with a faint median carinula behind.

Front femur with two black spinules on the inner lower margin. Median femur unarmed. Hind femur with 5 small black spinules in the basal half of the inner lower margin; outer face with a narrow black stripe along the middle.

Last tergite somewhat prominent behind, with a triangular emargination and two triangular lobes. Cerci more than twice the length of the subgenital plate with the styli, slightly incurved; basal tooth small, stout, recurved. Subgenital plate with a parabolic emargination behind.

Total length, 22; pronotum, 8; elytra, 5; hind femur, 27 mm.

Material: Bône, 5. XI. 1904, 1 ♂.

Metrioptera burriana sp. n.

(Fig. 2.)

Very similar and closely allied to *M. marqueti* (de Buysson) but differing from it in the genitalia of both sexes.

♂. Last tergite with the lobes small, almost rectangular and placed very close to each other. Cerci inflated in the basal half; apical half slender, cylindrical; inner tooth placed a little proximally of the middle. Subgenital plate with a rectangular excision.

General coloration brown; sides of pronotum deep chocolate brown.

♀. Subgenital plate with a thin median keel, but without definite depressions alongside it. Lobes long, acute, not carinate, enclosing a parabolic space, the apices subparallel, seen in profile not ascending.

Length of body ♂ 16, ♀ 16; pronotum ♂ 5.8, ♀ 5.5; elytra, ♂ 10.5, ♀ 8.9; hind femur ♂ 14, ♀ 15.7; ovipositor ♀ 8 mm.

Described from one male (type) and one female (paratype) taken by Dr. M. Burr at the Picos de Europa, N. Spain, 1,500-2,000 m., VIII-IX, 1904.

The male cercus in *M. marqueti* is stout, conical, with the inner tooth placed quite close to its base.

Acrometopa italica Ramme

Ramme has recently (Fos, III, 1911, p. 114) described this insect as a subspecies of *A. marqueti*, without giving any reasons. It is true that *italica* is closely allied to *marqueti*, but the differences

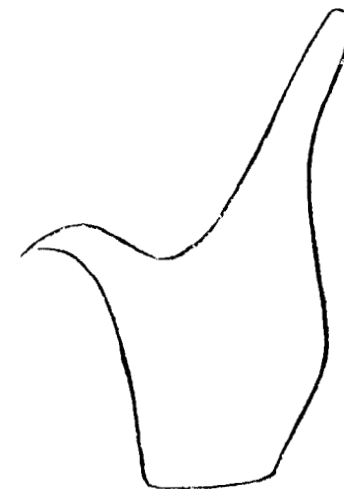


Fig. 2. *Metrioptera burriana* sp. n. Male cercus.

between the external genitalia of the two insects are sufficient to consider them of specific value. Moreover, the areas of two insects overlap, since in the Burr collection there are specimens of unquestionable *italica* from Dalmatia, where true *macropoda* also occurs. I consider *italica* a good species.

Other specimens of *A. italica* in the Burr collection are from Pegli (near Genoa), and in the British Museum there is a pair from Rome.

Acrididae.

Euchorthippus madeirae sp. n.

♀. Differs from all known species of the genus by the strongly abbreviated elytra and very distinctly incurved pronotal keels.

Antennae short, not exceeding the head and pronotum taken together, distinctly flattened, their longest middle joints less than half again as long as wide.

Head short, thicker than pronotum. Foveolae of vertex relatively long and distinctly excavate. Fastigium of vertex triangular, a little broader than long, distinctly concave.

Pronotum with the metazona considerably shorter than the prozona. Median keel distinctly raised. Lateral keels thick, distinctly incurved towards the posterior portion of the prozona, divergent behind. Lateral lobes punctured, more densely in metazona. Epimeres of mesonotum and metanotum punctured.

Elytra reaching the middle of hind femur. Venation as in *E. declivus* (Bris.), but the third radial vein is more bent backwards and the discoidal field is distinctly broader than the interular. Wings shorter than elytra.

General coloration light-buff, with the sides of pronotum chocolate-brown near the lateral keels. Elytra with an ivory-white stripe in the scapular field, and brown radial veins.

Total length 21; pronotum 4; elytron 0.5; hind femur 13.5 mm.

Described from 2 ♀♀ (one of them the type) taken in the Grand Corral, Madeira, 2.X.1910, by M. Burr. One paratype in the British Museum (Natural History).

This well marked species was found by Dr. Burr (on the steep mountain slopes, above the pines, in the Grand Corral (The Entomologist's Record, xxiv, 1912, p. 30). It was identified by him as *Chorthippus fulviventris* (F. W.), since at that time neither the genus *Euchorthippus*, nor its different species, have been properly understood.

Arminda burri sp. n.

(Fig. 3.)

♂. Antennae a little longer than head and pronotum together, their middle joints more than twice as long as wide.

Face very strongly reclinate, rugulose. Frontal ridge sulcate throughout, laterally compressed and somewhat projecting forward

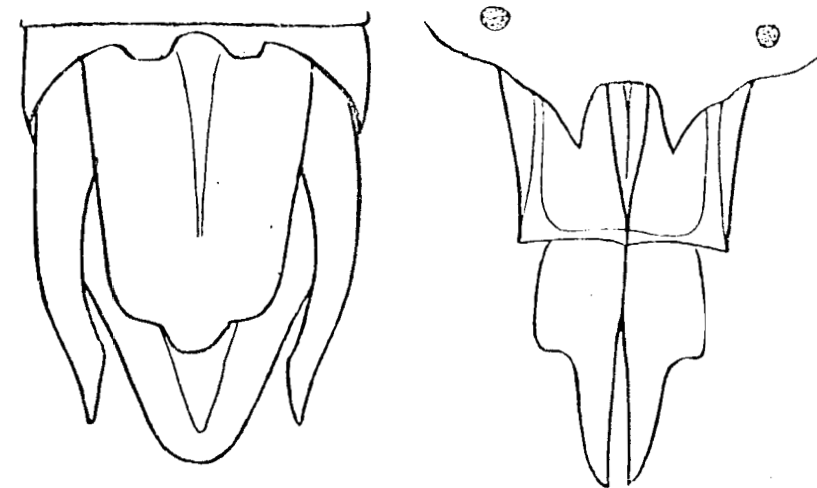


Fig. 3—*Arminda burri* sp. n. End of the male abdomen from above and of the female from below.

between the antennae. Fastigium of vertex sloping, very narrow, the median sulcus scarcely widened in front.

Pronotum rugulose on the disc, slightly convex in profile. Median carina weak. Lateral carinae distinct throughout, broadly bow-shaped, more widely distant behind than in front. First transverse sulcus scarcely perceptible, not cutting the lateral carinae; second sulcus distinct, placed at the middle of the disc. Third sulcus distinct. Meta-

zona one third the length of the prozona, densely punctured; hind margin very obtusely excised. Lateral lobe longer than deep, shiny, with scattered punctures; lower margin bisinuate. Lateral pronotal carinae prolonged on to the mesonotum and metanotum where they are more obtuse. Mesonotum, metanotum and the first abdominal tergites punctured.

Last abdominal tergite with a pair of broad projections. Supra-anal plate elongate, slightly narrowed behind, with rounded angles and a rounded median projection; a shallow sulcus runs along the raised median line reaching beyond the middle of the plate; margins of the plate slightly reflexed. Cercus longer than the anal plate, incurved, with the apex very obliquely truncate. Subgenital plate obtuse.

General colour buff, with broad chocolate-brown lateral stripes. Lower part of lateral pronotal lobes ivory-yellow, sharply separated from the brown upper part. Front and middle femora spotted with brown on the posterior surface. Hind tibia dirty grey.

♀. Subgenital plate with a pair of acute teeth on the hind margin, and a pair of round black sublateral spots.

Total length ♂ 16, ♀ 24; pronotum ♂ 3.5, ♀ 5; hind femur ♂ 9.5, ♀ 12 mm.

Described from 3 ♂♂ (including the type), 3 ♀♀ and one larva taken by Dr. M. Burr on 9-15.IX.1910, in the barranco de Tirajana, Sta. Beigida, Grand Canary.

This is the first species on an endemic Canarian genus to become known from the Grand Canary, and it is the largest of all in size. The other species so far described are the genotype, *Arminda brunneri* Kr., *A. striatifrons* End. (Wien. Ent. Zeit., 46, 1929, p. 101; Zoolog. Anz., 92, 1930, p. 54) and *A. appenhageni* End. (*l. c.*, 1929, p. 100; *l. c.*, 1930, p. 54) from the Teneriffe; *A. hierrensis* End. (*l. c.*, 1930, p. 55) from the Hierro; and *A. latifrons* End. (*l. c.*, 1930, p. 56) from the Gomera. All these species are so imperfectly described, that a comparison becomes impossible, but the considerably greater size of our species and its occurrence on the Gran Canary whence no species have been described before, make me feel justified in regarding it as new.

Cyclopternacris hemiptera sp. n.

(Fig. 4.)

♂. Antennae considerably longer than head and pronotum together, slightly thickened in the middle.

Face strongly reclinate, with shallow scattered punctures. Frontal ridge constricted at the fastigium, parallel sided elsewhere, scarcely

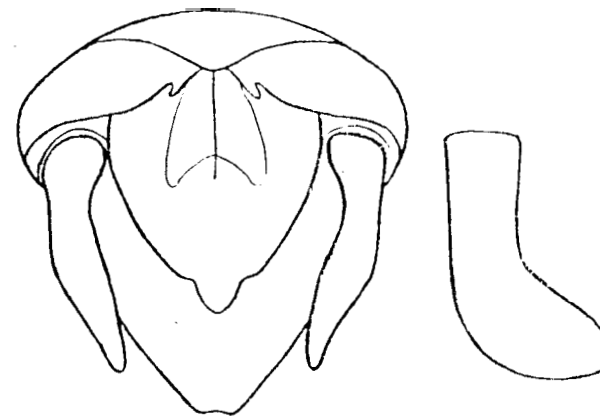


Fig. 4. — *Cyclopternacris hemiptera* sp. n. End of the male abdomen from above and cercus from the side.

concave at the ocellum. Fastigium of vertex sloping, feebly concave, longer than broad.

Pronotum rounded above, with no lateral carinae very obtuse, almost obsolete, but perceptible. Median carina low. Disc punctured, much more densely so in the metazona, which is a little more than half the length of the prozona; hind margin very obtusely angulate. Lateral lobe longer than deep, very coarsely punctured; lower margin rounded and sinuate. Prosternal tubercle conical, blunt.

Elytra extending to the middle of hind femur, not covering the abdomen; its greatest width is in front of the middle; apex narrowly parabolic; veins thick, practically straight, little branched. Wing short, very broad.

Hind femur rather short, strongly incrassate in the basal half. Hind tibia shorter than the femur, with 10 outer and 11 inner spines. Penultimate tergite visible only in the middle where it comes in direct contact with the supraanal plate, the ultimate tergite being interrupted in the middle and bearing a pair of short submedian projections. Supraanal plate oval, with a parabolic apex; it has a median basal sulcus enclosed between two thick longitudinal convexities and branched at about the middle of the plate. Cercus as in species of the genus *Thisocetrus*. Subgenital plate short, with truncate apex.

General coloration light-buff (the type has been apparently preserved in fluid). Antennae darker below. Occiput with an acutely triangular median brown stripe, which is continued on to the pronotum, but is almost obsolete in its middle third; lateral pronotal lobe with a brown stripe along the upper edge becoming broader anteriorly. Elytra with the membrane brownish, while the veins and veinlets are light coloured and incrassate. Wings with the main veins brownish. Hind femur above with a median and a preapical fascia of blackish colour; the median fascia extends to the middle of the outer area and almost to the lower margin of the inner area; the preapical fascia is complete both on the inner and the outer area; knee blackened laterally and below. Hind tibia with the base and a broad fascia black.

♀. Considerably larger than the male. Pronotal pattern reddish brown. Fasciae of the hind femur reddish brown.

Total length ♂ 21, ♀ 35; pronotum ♂ 5.5, ♀ 8; elytron ♂ 10, ♀ 17; hind femur ♂ 13, ♀ 18 mm.

One male (type) from Hadaba belad, Galitée, Yemen, IX.1879 (*Manzoni*; ex de Bormans collection); one female in the British Museum from Hadramaut (taken by the collector who accompanied Theodore Bent).

The new species differs well from others of the same genus recently revised by Ramme (*Éos*, IV, 1928, p. 113) by the much smaller size, abbreviated elytra and the coloration, particularly of the pronotum and hind femora.

The genus *Cychopternopsis* is very closely allied to *Thisocetrus*, differing from it mainly in the peculiar shape of the wings. It is also very close to *apropoensis*, in which the elytra became lateral and the wings more rudimentary.

2. LIST OF TYPES IN THE COLLECTION

Blattidae.

1. *Ectobius albicinctus* (Br. W.)

1861. *Blatta albicincta* Brunner von Wattenwyl, Verh. Zool.-bot. Ges. Wien, xi, pp. 98, 286.

Two males from de Bormans collection labelled «Dalmatic, Brünner» must be considered cotypes. One of them presented to the British Museum.

2. *Hololampra* SS. UKOBYNKOVY 1913.

1913. *Hololampra schellernibovi* Burr, Mitt. Kaukas. Mus., 7, p. 172.

Three male and five female cotypes; one male and two females presented to the British Museum.

3. *Hololampra larrinae* (L. Bol.)

1881. *Aphlebia larrinae* L. Bolivar, Anales Soc. Esp. Hist. Nat., x, p. 500.

Two females from de Bormans collection labelled «Alger, Bolivar» must be cotypes; one of them presented to the British Museum.

Mantidae.

4. *Geomantis larvoides* Pantel.

1896. *Geomantis larvoides* Pantel, Anales Soc. Esp. Hist. Nat., xxv, p. 67. One male and one female from Uclés are apparently cotypes.

Gryllidae.

5. *Pteronemobius saussurei* (Gyll.)

1808. *Nemobius saussurei* Scop., Trans. Ent. Soc. Lond., p. 10. Two female cotypes in the collection are in very poor condition and have lost their hind femora. The specimens must be close

to *P. gracilis* B. Jak. and perhaps identical with it, but a study of good topotypical material would be necessary to decide this question. One of the specimens presented to the British Museum, another is here selected as the type.

6. *Gryllodes littoreus* L. ♂

1885. *Gryllodes littoreus* L. Bol., Le Naturaliste, vii, p. 174.

Five males and one female from Talavera belong to the original series and are cotypes; two specimens presented to the British Museum.

7. *Sciobia finoti* (Br. Watt.)

1882. *Platyblemmus finoti* Brunner von Wattenwyl, Prodrömus Europ. Orth., p. 442.

One male and one female larva from Tlemcen, 15.IV.1880 (Finot) belong to the original series and can be considered cotypes.

Tettigoniidae

8. *Dolichopoda bormansi* Br. Watt.

1889. *Dolichopoda bormansi* Brunner von Wattenwyl, Prodrömus Europ. Orth., p. 414.

This species has been described from a single damaged specimen, but in the Burr collection there are four topotypes taken by de Bormans together with the type. Two of them presented to the British Museum.

9. *Bradyporus montandoni* (Burr)

1898. *Callinicus montandoni* Burr, Trans. Ent. Soc. London, p. 51.

1934. *Bradyporus montandoni* Uvarov, Eos, x, p. 73.

The typical series includes two males, one female (selected here as the type) and two female larvae; one male and one female larva presented to the British Museum.

10. *Uromenus* [♂] *scieri* (Krauss).

1893. *Ephippigera scieri* Krauss, Jahrb. Ver. Würtemb., p. 94.

Two male cotypes; one presented to the British Museum.

11. *Uromenus lobatus* (Sauss.)

1898. *Ephippigera lobata* Saussure, Rev. Suisse Zool., v, p. 236.

One male and two female cotypes.

12. *Uromenus* [♂] *vauchermani* (Sauss.)

1898. *Ephippigera vauchermani* Saussure, Rev. Suisse Zool., v, p. 232.

One male and one female cotypes.

13. *Uromenus mauretanicus* (Sauss.)

1898. *Ephippigera mauretanicus* Saussure, Rev. Suisse Zool., v, p. 233.

One male and female cotypes.

14. *Steropleurus stähli* (L. Bol.)

1876. *Ephippiger stähli* L. Bolivar, Sin. Orth. Esp. Port., p. 202.

Two male and three female cotypes.

15. *Steropleurus brunnerii* (L. Bol.)

1876. *Ephippiger brunnerii* L. Bolivar, l. c., p. 190.

Two male and two female cotypes from Aranjuez; one male and one female presented to the British Museum.

16. *Steropleurus saussurianus* (L. Bol.)

1878. *Ephippiger saussurianus* L. Bolivar, An. Soc. Esp. Hist. Nat., vii, p. 442.

One male and three female cotypes; one male and one female presented to the British Museum.

17. *Steropleurus perezii* (L. Bol.)

1876. *Ephippiger perezii* L. Bolivar, Sin. Orth. Esp. Port., p. 190.

Two male and two female cotypes; one male and one female presented to the British Museum.

18. *Steropleurus lucasi* (Br. W.)

1882. *Ephippigera lucasi* Brunner von Wattenwyl, Prodr. Europ. Orth., p. 386.

Two male and two female cotypes; one male and one female presented to the British Museum.

19. *Ephippigera cunii* (I. Bol.)

1876. *Ephippiger cunii* I. Bolivar, Sin. Orth. Esp. Port., p. 208.

One male and two female cotypes; one female presented to the British Museum.

20. *Ephippigera areolaria* (I. Bol.)

1876. *Ephippiger areolaris* I. Bolivar, Sin. Orth. Esp. Port., p. 210.

One male cotype from Albarracin.

21. *Ephippigera carinata* (I. Bol.)

1876. *Ephippiger carinatus* I. Bolivar, Sin. Orth. Esp. Port., p. 212.

Two male and two female cotypes; one male and one female presented to the British Museum.

22. *Ephippigera taeniata* Sauss.

1898. *Ephippigera taeniata* Saussure, Rev. Suisse Zool. ■ p. 238.

One male and one female cotypes.

23. *Callicrania miegii* (I. Bol.)

1876. *Ephippiger miegii* I. Bolivar, Sin. Orth. Esp. Port., p. 196.

One male and one female cotypes.

24. *Callicrania scoanei* (I. Bol.)

1876. *Ephippiger scoanei* I. Bolivar, Sin. Orth. Esp. Port., p. 197.

Two males and one female from Cabañas, one male from Ferrol; all cotypes; one male and one female presented to the British Museum.

25. *Callicrania bolivari* (Scoane)

1878. *Ephippigera bolivari* Scoane, C. R. Soc. Ent. Belg., xxi, p. lxxi.

Nine male and three female cotypes; one male and one female presented to the British Museum.

26. *Platystolus surcularius* (I. Bol.)

1876. *Ephippiger surcularius* I. Bolivar, Sin. Orth. Esp. Port., p. 191.

Two male and two female cotypes; one male and one female presented to the British Museum.

27. *Rhacocleis bormansi* Br. W.

1882. *Rhacocleis bormansi* Brunner von Wattenwyl, Prodr. Europ. Orth., p. 322.

Four male and four female paratypes from de Bormans collection; two males and two females presented to the British Museum.

28. *Rhacocleis algerica* Uvarov

See above, p. 74.

29. *Rhacocleis grallatus* (Pantel)

1886. *Scirtobaenus grallatus* Pantel, An. Soc. Esp. Hist. Nat., xv, p. 253.

Two male and one female cotypes; one male and one female presented to the British Museum.

30. *Hemictenodecticus algericus* Uv

1884. *Hemictenodecticus algericus* Uvarov, Trans. Ent. Soc. London, p. 518.

One male and two female paratypes; one female presented to the British Museum.

31. *Gampsocleis tamerlana* Burr = *G. sedakovii* (F. W.)

1899. *Gampsocleis tamerlana* Burr, Ent. Rec., xi, p. 297.
 1924. *Gampsocleis sedakovii* Uvarov, Trans. Ent. Soc. London, p. 518.

One male and one female cotypes.

32, 33. *Gampsocleis mitsuhito* Burr = *G. mikado* Burr
 = *G. buergeri* (De Haan).

1899. *Gampsocleis mitsuhito* Burr, Ent. Rec., xi, p. 297.
 1899. *Gampsocleis mikado* Burr, l. c., p. 296.
 1924. *Gampsocleis buergeri* Uvarov, Trans. Ent. Soc. London, p. 520.

G. mitsuhito is represented by a female type, and *G. mikado* by a male type.

34. *Gampsocleis fletcheri* (Burr) = *G. gratiosa* Br. W.

1899. *Dryadusa fletcheri* Burr, Ent. Rec., xi, p. 298.
 1924. *Gampsocleis gratiosa* Uvarov, Trans. Ent. Soc. London, p. 524.

One female type.

35. *Anterastes serbicus* Br. W.

1882. *Anterastes serbicus* Brunner von Wattenwyl, Prodr. Europ. Orth., p. 329.

Two male and two female cotypes; one male and one female presented to the British Museum.

36. *Pachytrachelus frater* Br. W.

1882. *Pachytrachelus frater* Brunner von Wattenwyl, Prodr. Europ. Orth., p. 330.

One male and two female cotypes; one female presented to the British Museum.

37. *Metrioptera prenjica* (Burr).

1899. *Platypleis prenjica* Burr, Ent. Rec., xi, p. 29.
 1924. *Metrioptera prenjica* Uvarov, Trans. Ent. Soc. London, p. 532.

Three males (one here selected as the type) and two females; one male and one female presented to the British Museum.

38. *Metrioptera orina* (Burr) = *M. nigrosignata* (Costa).

1899. *Platypleis orina* Burr, Ent. Rec., xi, p. 29.
 1924. *Metrioptera nigrosignata* Uvarov, Trans. Ent. Soc. London, p. 531.

Two males (one here designated as the type) and two females; one male and one female presented to the British Museum.

39. *Metrioptera raia* (Burr) = *M. brachyptera* (L.)
 and *M. roeselii* (Hag.)

1899. *Platypleis raia* Burr, Ent. Rec., xi, p. 19.
 1924. *Metrioptera brachyptera* Uvarov, Trans. Ent. Soc. London, p. 531.
 1924. *Metrioptera roeselii* Uvarov, l. c., p. 532.

The cotypes of *raia* are a male belonging to *roeselii*, and one male (here designated as the type of *raia*), one female and one female larva belonging to *M. brachyptera*. One female presented to the British Museum.

40. *Metrioptera moldavica* Uv. = *M. striata* (Kitt.)

1924. *Metrioptera moldavica* Uvarov, Trans. Ent. Soc. London, p. 530.
 1932. *Metrioptera striata* Umnov, Konowia, xi, p. 23.

The synonymy of my species with that of Kittary established by Umnov is correct. The collection contains one male type and one female paratype.

41. *Metrioptera barrettii* (Burr)

1912. *Metrioptera barrettii* Burr, Ent. Rec., p. 31.
 One male cotype and one female paratype presented to the British Museum.

42. *Metrioptera pylnovi* U

1924. *Metrioptera pylnovi* Uvarov, Trans. Ent. Soc. London, p. 534.
Five males (one the type) and nine females; two males and two females presented to the British Museum.

43. *Metrioptera marqueti* (Saulcy).

1887. *Platycleis marqueti* Saulcy, Bull. Soc. Hist. Nat. Metz, (2) xvi, p. 81.

Three male and three female cotypes from Bagnères de Bigorre. One male and one female presented to the British Museum.

44. *Metrioptera burriana* Uv.

See above, p. 75

45. *Metrioptera domogledi* (Br. W.)

1882. *Platycleis domogledi* Brunner von Wattenwyl, Prodr. Europ. Orth., p. 360.

Two male and two female cotypes; one male and one female presented to the British Museum.

46. *Tettigonia vaucheriana* (Pictet).

1888. *Eumetonymus vaucherianus* Pictet, Mém. Soc. Phys. Genève, xxx (6), p. 6.

One male and one female cotypes.

47. *Isophya costata* Br. W.

1872. *Isophya costata* Brunner von Wattenwyl, Prodr. Europ. Orth., p. 276.

One male and one female cotypes.

48. *Barbitistes yersini* (Br. W.)

1878. *Barbitistes yersini* Brunner von Wattenwyl, Monogr. Phaneropt., p. 55.

Two male and three female cotypes; one male and one female presented to the British Museum.

49. *Barbitistes sanzii* L. Bol. — *B. fischeri* (Yers.)

1878. *Barbitistes sanzii* L. Bolivar, An. Soc. Esp. Hist. Nat., vii, p. 439.

Two male and two female cotypes; one male and one female presented to the British Museum.

50. *Odontura algerica* Br. W.

1878. *Odontura algerica* Brunner von Wattenwyl, Monogr. Phaneropt., p. 75.

One male and one female cotypes.

Phasmidae.

51. *Leptynia hispanica* (L. Bol.)

1878. *Bacillus hispanicus* L. Bolivar, An. Soc. Esp. Hist. Nat., vii, p. 423.

One male and four female cotypes; one female presented to the British Museum.

Acrididae.

52. *Daroniella laurae* (Borm.)

1885. *Daronia laurae* de Bormans, An. Soc. Civ. Genova, xxx, p. 103.
No female paratype, one presented to the British Museum.

53. *Podismopsis ussuriensis* Ikonn.

1911. *Podismopsis ussuriensis* Ikonnikov, Ann. Mus. Zool. St. Petersburg, XVI, p. 246.

Four male and four female paratypes; one male and one female presented to the British Museum.

54. *Stenobothrus nigrogeniculatus* Kr.

1878. *Stenobothrus nigrogeniculatus* Krauss, Sitzber. Akad. Wiss. Wien, I. Abt., LXXXVIII, p. 27.

One male and one female cotypes.

55. *Stenobothrus amoenus* (Bris.)

1850. *Acridium amoenum* Brisout, Bull. Soc. Ent. Fr., (2) VIII, p. LVI.

Two male and three female cotypes from de Bormans collection; one male and one female presented to the British Museum.

56. *Omocestus minutissimus* I. Bol.

1878. *Gomphoceris (Omocestus) minutissimus* I. Bolivar, An. Soc. Esp. Hist. Nat., VII, p. 424.

One male and two female cotypes; one female presented to the British Museum.

57. *Aeropus sibiricus helveticus* Uv.

1931. *Aeropus sibiricus helveticus* Uvarov, Eos, VII, p. 91.

One male type, five male and four female paratypes; one male and one female presented to the British Museum.

58. *Chorthippus sandleyi daimei* (Azam).

1902. *Stenobothrus sandleyi* var. *daimei* Azam, Ann. Soc. Ent. Fr., LXX, p. 115.

Two male and two female cotypes; one male and one female presented to the British Museum.

59. *Euchorthippus madeirae* Uv.

See above p. 76.

60. *Arcyptera fusca albogeniculata* Ikonn.

1911. *Arcyptera fusca* var. *albogeniculata* Ikonnikov, Ann. Mus. Zool. St. Petersburg, XVI, p. 250.

Two male and one female paratypes; one male presented to the British Museum.

61. *Arcyptera tornosi* I. Bol.

1884. *Arcyptera tornosi* I. Bolivar, C. R. Soc. Ent. Belg., XXVIII, p. civ.

One male and one female cotypes.

62. *Aiolopus platypygius* (Pant.)

1886. *Epacromia platypygia* Pantel, An. Soc. Esp. Hist. Nat., XV, p. 241.

Four male and three female cotypes; one male and one female presented to the British Museum.

63. *Oedipoda collina* Pant. = *O. charpentieri* Fieb.

1886. *Oedipoda collina* Pantel, An. Soc. Esp. Hist. Nat., XV, p. 246.

One male and seven female cotypes; one male and two females presented to the British Museum.

64. *Aerotylus versicolor* Burr. = *A. insubricus* (Scop.)

1898. *Aerotylus versicolor* Burr, Trans. Ent. Soc. London, p. 50.

One female type.

65. *Tropiduauchen sabulosum* Uv.

1911. *Tropiduauchen sabulosum* Uvarov, Journ. Biolog. Nat. Hist. Soc. London, p. 640.

Female type.

66. *Ocneridia microptera* (Bris.)

1850. *Acinipe microptera* Brisout, Bull. Soc. Ent. Fr., (2) viii, p. lxxii
One male cotype.

67. *Ocneridia longicornis* (I. Bol.)

1878. *Pamphagus (Nocarodes) longicornis* I. Bolivar, An. Soc. Ent. P.¹₃,
xxi, p. 70.
One male and two female cotypes; one female presented to the
British Museum.

68. *Euryparyphes stalii* (Borm.)

1880. *Euryparyphes stalii* de Bormans, C. R. Soc. Ent. Belg., xxii, p. clvii.
One male and two female cotypes; one female presented to the
British Museum.

69. *Glaucia durieui* (I. Bol.)

1878. *Nocarodes durieui* I. Bolivar, An. Soc. Esp. Hist. Nat., vii, p. 452.
Female cotype.

70. *Acinipe mauretania* I. Bol.

1878. *Pamphagus (Acinipe) mauretanicus* I. Bolivar, An. Soc. Esp. Hist.
Nat., vii, p. 451.
Female type.

71. *Acinipe deceptoria* I. Bol.

1878. *Pamphagus (Acinipe) deceptorius* I. Bolivar, An. Soc. Esp. Hist. Nat.,
vii, p. 435.
Three male and three female cotypes; one male and one female
presented to the British Museum.

72. *Acinipe* (I. Bol.)

See above, p. 17.

73. *Cyclopternacris hemiptera* Uv.

See above p. 79.

74. *Eirenephilus debilis* Kohn

1911. *Eirenephilus debilis* Kohnilov, Ann. Mus. Zool. St. Petersburg VI
p. 265.
One male and one female paratypes.

75. *Acrydium türki* (Kr.)

1876. *Tettix türki* Krauss, Deutsch. Ent. Ztschr., xx, Heft 3 (Ent.
Monatsbl., I), p. 103.
Three male and three female cotypes; one male and one female
presented to the British Museum.

76. *Acrydium brachypterum* (Lucas).

1849. *Tetrix brachyptera* Lucas, Explor. Alg., iii, p. 506.
Two female cotypes from de Bormans collection; one presented
to the British Museum.

Alphabetical index to the types.

In the following index the types are arranged in alphabetical order
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