# Corsican Trichoptera and Neuroptera (s. l.) 1931

BY

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(Láms. IV-V.)

In the late spring of 1928, I spent seventeen days in Corsica collecting Trichoptera and Neuroptera (s. l.). The results, in the discovery of new species and establishing fresh records for this Mediterranean island, were so encouraging that I decided there and then to revisit the island if possible another year to see what could be obtained in July and August. In the summer of 1931 I found myself once more in Corsica. In 1928 I made Corte my headquarters but during my visit in 1931, I established myself in the forest of Vizzavona at an altitude of 1.000 m. in order to escape the great heat that prevails at all lower levels.

On my previous visit, I had spent a couple of days at Vizzavona and found there springs in plenty and numerous streams pouring down the mountain side into the deeply sunk valley, all yielding their quota to the collector.

1931 unfortunately proved to be a year of great drought. On my arrival, towards the middle of July, I found the country to a very large extent dried up. No rain had fallen since May and bush fires were breaking out in all quarters so that often for days the mountains were veiled in smoke. All the minor tributary streams and practically all the springs had disappeared. In the two chief rivers at Vizzavona, the Vecchio and the Fulminato, its tributary, there was a mere trickle of water flowing in and out between the huge granite boulders that filled the river bed.

Collecting areas were thus strictly limited and even in the Vecchio and the Fulminato, conditions were difficult as the boulders provided a secure shelter for adult forms which could only be discovered by the exercise of great patience and perseverance.

The nature of the country at Vizzavona, with rivers running through the forest in very deep, nearly sunless valleys, renders it less suitable for collecting Trichoptera than that of Corte during the spring, when the rivers are running through open sunny meadows. As a consequence the results of the expedition were disappointing.

Many species taken early in the season in 1928 were found in 1931 to continue into the summer and in some instances I was able to make long series when on my previous visit I had only secured one or two examples. On the other hand, many of the spring species had disappeared so that on the whole, my visit extending for more than six weeks produced smaller results than were obtained in 1928 in a period of only seventeen days. Nevertheless eight Trichoptera, one Ephemeroptera and six Neuroptera new records for Corsica have been established.

I paid a visit to my old quarters at Corte and stayed there two days. I was disappointed to find that a little stream which had yielded abundantly in 1928 had practically disappeared. Only a few stagnant pools remained and only one example of Trichoptera was secured along its banks.

Two visits were paid to Aleria, on the east coast, and there, near the mouth of the Tavignano, two or three species hitherto unknown in Corsica were secured. It was unfortunate, for collecting purposes, that each of these visits coincided with exceptionally high winds. On my second visit to the coast, my collecting ground was restricted to about ten yards which received the shelter of a group of trees, a veritable tempest raging outside this limited area. But for the wind, which, in fact, prevailed during almost every day of my stay in the island, results might have been more fruitful.

Two undescribed species of Trichoptera were secured at Vizzavona, a *Polycentropus* and another species of particular interest and of so unusual a form that it has been necessary to erect a new genus to contain it. This new genus, *Beraeodina*, is perhaps unique in that it lies across Kolenati's two main divisions in the Trichoptera classification, the *Inaequipalpia* and the *Aequipalpia*. With the palpi pertaining to the former, all its other characters show clearly that it belongs to the latter group and with a plan of wing neuration the like of which can only be found amongst the *Beraeidae*. I know of no other species

with a rudimentary fourth terminal joint to the or maxillary palpus and the species evidently forms a link between the *Beraeidae* and the *Sericostomatidae* and justifies Martynov in placing the two families in sequence. In all probability, the partial atrophy of the fourth joint has followed the complete atrophy of the fifth and in the *Sericostomatidae*, this gradual disappearance of the joints of the palpi is carried a stage further and we get a three or even two-jointed maxillary palpus <sup>1</sup>.

The *Plecoptera* provided no special feature of interest. I obtained four or five examples, all Q Q, of *Chloroperla insularis* and two Q Q of the *Chloroperla* that Mr. K. J. Morton, in his description of the new species collected by me in 1928, has provisionally placed, in the absence of the Q, under grammatica. In 1928 I collected *Plecoptera* in fluid. On the present occasion I pinned out all the *Chloroperla* and a comparison of the pinned insect with a pinned British grammatica suggest strongly that the species are distinct. But it is undesirable to describe new species from the female sex and a new name for this *Chloroperla* must await the capture of a male.

Isopteryx hamata was abundant on my arrival but disappeared during August. The genus Nemoura was represented only by corsicana, the species taken in 1928. It was fairly plentiful during the latter part of August but scarce in July. Only one other Nemoura species has been recorded in Corsica.

Leuctra fraterna was also captured in fair numbers more particularly at a spot where a small stream had been diverted for irrigation purposes and had spread over a grassy field. Towards the end of August, Leuctra budtzi appeared in great numbers and was perhaps the most plentiful of the Plecoptera that I saw. None of the larger stone-flies were seen, nor did a diligent search under stones in the river-bed reveal any of their larvae. Morton records that he saw, in the neighbourhood of Zonza «a large species in flight, presumably a Perla», but as he failed to capture the insect and determine it more precisely, this cannot be accepted as definite evidence that the genus occurs in Corsica. Zonza, however, is at some considerable distance from Vizzavona and is at a rather lower altitude so that it is by no

<sup>&</sup>lt;sup>1</sup> A preliminary description of these two species was published in *The Entomologist*, LXIV, pp. 253-4, Nov. 1931.

means impossible that the *Plecoptera* fauna may differ in the two localities.

I collected also Ephemeroptera and Neuroptera. Mr. D. E. Kimmins, who determined the collection in both these orders informs me that the only feature of interest in the former is the addition *Choroterpes picteti* Eaton, of which two of were taken at Aleria, to the Corsican list. He adds that, according to Eaton, the species has a wide distribution, ranging from Belgium to southern Italy and Portugal. It is not therefore surprising that it should turn up in Corsica.

Mr. Kimmins also writes of the Neuroptera as follows:

«The Neuroptera brought back on this trip include several additions to the Corsican fauna. Of these perhaps the most interesting is *Megalomus tineoides* Ramb., a small and rather uncommon species which, I believe, has hitherto been recorded only in Spain. This species is represented by one of from Corte.

Hemerobius humulinus L. and Boriomyia betulina Ström., both taken at Vizzavona, and recorded as Corsican for the first time, are widely distributed European species. Coniopteryx pygmaea End. and Nothochrysa capitata F., further additions to the list, are also represented each by a single example. Of the last addition, Chrysopa flavifrons Brauer, ten examples in all were taken at Aleria and Vizzavona. Hemerobius micans Ol. and Neurorthus fallax Ramb. both of which were also taken in 1928 by Mr. Mosely, were very common. One example of Hemerobius stigma Steph. was secured and this is the first Corsican record of this species since that of Hagen in 1864. As this is a very common European species amongst conifers, it would seem that it is either scarce or local in Corsica or else the paucity of Corsican records is due to the difficulty of working the lofty branches of the Corsican pines.

The collection also includes a series of over a dozen examples of Dilar corsicus Navás, in which males largely predominate. The series exhibits considerable variations in size, males ranging from 16 mm. to 24 mm. in expanse. A small colony of antlions was found and these have been brought home to England in the hope of rearing them to maturity and establishing their identity. They were found by the side of a path bordering the river, and Mr. Mosely informs me that although he kept a look out, he saw none elsewhere. Mr. Mosely

failed to discover scorpion-flies though one species, *Panorpa annexa* McL. is known to occur in Sicily. There are no records as yet for Corsica and as scorpion-flies are generally abundant in localities where they occur at all, it seems probable that they are either very local or entirely absent from the island».

The figures in this paper have been drawn by Mr. D. E. Kimmins.

#### TRICHOPTERA

With the exception of Beraea aureomarginata, Plectrocnemia corsicana and Stactobia furcata, the following species are new to the Corsican list.

#### Fam. LIMNOPHILIDAE

## Limnophilus sparsus Curt.

Three examples of this species were taken, all at Vizzavona.

#### Limnophilus bipunctatus Curt.

One male and one female were taken, each, curiously, with one of the wings deformed. They were found by a spring at the summit of the Col de Vizzavona, at an altitude of 1.100 m. and lack the brownish tinge to the wings which is a character of the lowland example. Similar alpine forms have been taken by me at Arosa and Cierfs in Switzerland.

### Fam. LEPTOCERIDAE

## Setodes Iusitanica McL. (Setodes galaica Navás.)

A single of was taken at Aleria on August 1st. This species was first found in Portugal and was subsequently recorded in Spain under the name Setodes galaica Navás. I have also taken it in France at St. Pierre de-Varax near Lyons, and at Itxassou in the Basses-Pyrénées and at Cahors on the river Lot.

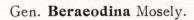
## Setodes argentipunctella McL.

One example was taken at Aleria and the species was plentiful at Corte in the trees lining the bank of the Tavignano.

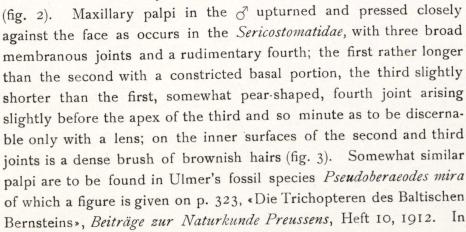
### Fam. BERAEIDAE

## Beraea aureomarginata Mosely (fig. 1).

In the original description of this species, published in Eos 1930, the ventral figure of the genitalia of is not altogether satisfactory so I give an amended figure here.



Head rather broad with a pair of conical warts between and behind the antennae, more strongly developed in the ♂ than in the ♀ and touching each other so that there is a vertical impressed line at their apices. Antennae with the basal joint long and stout, in the ♂, carrying a mass of minute bristles on its outer surface, second joint short and round, remaining joints each slightly longer than the second



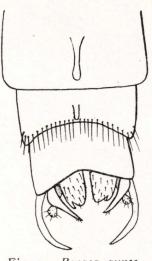
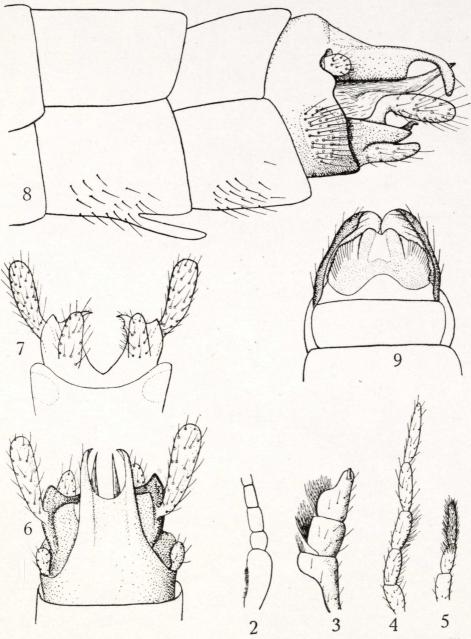


Fig. 1.—Beraea aureomarginata Mosely, of genitalia from beneath.

P. mira, however, the maxillary palpi lacks the fourth rudimentary



Figs. 2-9.—Beraeodina palpalis Mosely: 2,  $\bigcirc$ , base of antenna; 3,  $\bigcirc$ , maxillary palpus; 4,  $\bigcirc$ , maxillary palpus; 5,  $\bigcirc$ , labial palpus; 6, genitalia  $\bigcirc$ , from above; 7,  $\bigcirc$ , inferior appendages from beneath; 8, genitalia  $\bigcirc$  from the side; 9 genitalia  $\bigcirc$  from beneath.

joint. In the  $\mathbb{Q}$ , the maxillary palpi are five-jointed, first and second

joints rather short and equal in length, third slightly longer, fourth slightly longer than the third, fifth slightly longer than the fourth (fig. 4). Labial palpi in both sexes three-jointed, first and second joints equal in length, third slightly longer; terminal joint and terminal portion of the second joint in both sexes clothed with dense black hairs (fig. 5).

Wings of both sexes black, narrow and pointed, no dilatation towards the apex. In the  $\mathcal{O}$  the wings are densely clothed with brownish black hairs, in the anterior, intermingled with thickened hairs or scales but these are absent in the  $\mathcal{O}$ . In the  $\mathcal{O}$  wings there are grooves along the centre of both anterior and posterior; neuration very irregular but following the general plan of neuration in the *Beraeidae*. Dr. G. Ulmer very kindly examined the  $\mathcal{O}$  wings and figures of those of the  $\mathcal{O}$  and he has named the nervures and forks in figs. 10 and 11.

He considers that forks I, 2 and 3 are present in both wings but that the two fork-like apical cells which would seem to be forks 2 and 3 are false forks, the real ones being the adjacent cells; in both wings the cubitus is not branched and in the posterior wing the subcosta and  $R_1$  are united.

Spurs 2. 4. 4.

Genotype: Beraeodina palpalis Mosely.

Beraeodina palpalis Mosely (figs. 2-11. Pl. IV, figs. 1 and 2).

General characters as given in the generic description.

Genitalia 3: there is a membranous dorsal plate beneath which can be seen two strongly chitinised spines with very broad and rectangular bases as seen from the side; terminal portions slender and down-curved, superior appendages small and oval; upper penis cover in the form of two spines, whose extremities are directed slightly upward between the two dorsal spines; penis, broad, short and membranous; inferior appendages carrying a membranous arm directed backward at right angles from a rather slender base. This base arises from a strongly chitinised plate which, from above, carries an inwardly directed process on its upper margin towards the apex; from the side the process is directed upward with the apex turned outward; from

beneath, the upper margin of this plate is sinuous with the processes pointed and directed inward. Attached to the lower surface of the plate is a membranous process which from the side is directed back-

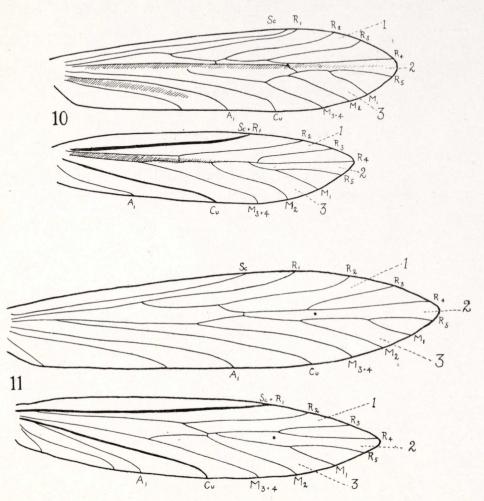


Fig. 10-11.—Beraeodina palpalis Mosely: 10, of wings; 11, & wings.

wards and extends rather beyond the plate. There is a strong yellowish process to the anti-penultimate segment.

Q: terminal segment is divided into two rounded plates projecting beyond the ventral segments. Beneath them can be seen, from the ventral aspect, a plate, the sides of which are strongly striated.

Length of anterior wing  $\bigcirc$  4 mm. Length of anterior wing  $\bigcirc$  5 mm. Type  $\mathcal{O}$  in the author's collection. Paratypes  $\mathcal{O}$  and  $\mathcal{O}$  in the author's and British Museum collections.

Corsica, Vizzavona, VII-VIII, 1931.

This species appears to link the *Beraeidae* with the *Sericostoma-tidae*.

#### Fam. HYDROPSYCHIDAE

## Hydropsyche exocellata Dufour.

Two or examples of this species were found at Aleria. They are rather smaller than the continental form.

#### Fam. POLYCENTROPIDAE

# Plectrocnemia corsicana nom. nov. for *Plectrocnemia confusa* Mosely nec Sibley (Betten MSS.)

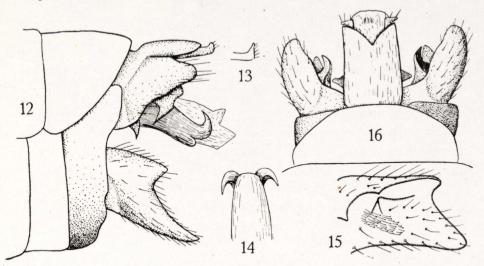
Professor Cornelius Betten informs me that there is a *Plectrocne-mia confusa* in the list of American species in *A Preliminary Biological Survey of the Lloyd-Cornell Reservation* published by C. K. Sibley in 1926. I therefore change the name to *Plectrocnemia corsicana*.

# Polycentropus corsicus Mosely (figs. 12-16).

General appearance resembling closely *P. kingi* McL. Antennae pale fuscous with slightly darker annulations.

Genitalia of: dorsal plate membranous, deeply excised; beneath and only slightly projecting beyond the margin are the intermediate appendages with apices directed strongly outward at right angles to the main stem. Superior appendage large and pale, inner surface furnished with a keel-like projection; penis large, membranous, its apex armed with two strong hooks arising from its lateral margin and directed towards the base; inferior appendages wide at the base, nar-

rowing to an acute apex, upper margin from the side shows a wide obtuse excision; from within the upper margin is folded over making a flap the centre of which is produced in a pointed blackened process;



Figs. 12-16.—Polycentropus corsicus Mosely: 12, of genitalia, from the side; 13, apex of intermediate appendage from the side (from a second example); 14, apex of penis from above (from a second example); 15, inferior appendage from within; 16, of genitalia from above.

from the inner surface of the appendage arises a blunt point nearly meeting the central process of the inturned edge.

Q: as usual in the genus.

Length of anterior wing of 7,5 mm.

Length of anterior wing Q 10 mm.

Corsica, Vizzavona, Corte, VII-VIII, 1931.

Type  $\sigma$  in the author's collection, paratypes  $\sigma$  and  $\varphi$  in the author's and British Museum collections.

This species is evidently allied to P. telifer McL.

## Fam. PHILOPOTAMIDAE

## Chimarrha marginata L.

Two males were taken at Aleria. They are paler and smaller than the continental form.

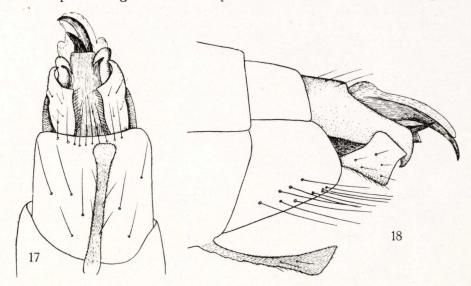
### Fam. HYDROPTILIDAE

## Hydroptila tigurina Ris. (pl. V, fig. 1).

One example, a of was taken at Corte. It may be added that the scent-organ of the Corsican example takes the form of membranes covered with androconia situated at the back of the scent-organ caps (lobes of the head), and a tuft of scent hairs at the base of each cap. I have no continental or British examples of this species and so am unable to say if this form is constant. A photograph appears on pl. V, fig. I.

## Stactobia furcata Mosely (figs. 17-18).

The original description of this species published in *Eos* 1930 was based upon a single male example mounted in balsam. During my



Figs. 17-18.—Stactobia furcata Mosely: 17, of genitalia from beneath; 18, from the side.

last visit I obtained two more males and am now able to amplify the brief note in which I described the type and give rather more satisfactory figures.

Head. There is a patch of white hairs between the antennae, remainder clothed with black hairs.

Anterior wing. Black with patches of snowy-white hairs, one patch midway along the costal margin, a second nearer the apex, arising from the subcosta or perhaps the radius.

Genitalia on: from the side there is a long membranous dorsal plate beneath which are seen the long asymetric penis sheathes. These take the form of two stout black spurs, the apical spur slightly longer than the dorsal plate, curving downward, the other curving upward so that it meets the apical spur about midway. Superior appendages very broad, truncate, lower apical angle produced in a small down turned hook. Inferior appendages quadrangular, tri-pointed rather than trifurcate as in the original description, somewhat constricted at the base; from beneath they are parallel and terminate in in-turned hooks with right-angled projections on the inner margins towards the apex.

Ventral process as is usual in the genus.

One new example taken at Vizzavona and another at Corte.

#### **PLECOPTERA**

I have dealt with this Order in my introductory remarks and, excepting as regards *Leuctra budtzi* Esb.-Peters. I have nothing to add.

## Leuctra budtzi Esb.-Peters. (pl. V, fig. 4).

Dr. Esben-Petersen describes this species in *Ent. Med.*, 11 Roekke, IV Bind, pp. 352-3, 1912, and gives good, recognisable figures of both the male and female. There is, however, one point about the male which requires some explanation, namely the small rudimentary processes indicated on the fifth dorsal segment.

Some years ago when collecting *Plecoptera* in Switzerland, I obtained a long series of the species which Morton subsequently described as *Leuctra moselyi*. I made a great many preparations and when handing over the material to Morton for description, I pointed out that in some examples rudimentary processes to the fifth segment were present, in others entirely absent whilst there were various gradations between the extreme forms.

I have made a good many preparations of Leuctra budtzi but so far have found no examples with processes to the fifth segment as much developed as those shown in Dr. Esben-Petersen's figure. Accordingly I gave a photograph of one of the preparations showing a rather more normal form than that of the type.

In the following lists, \* signifies taken by the Author 21.V-8.VI. 1928, † taken by the Author 13.VII-5.IX.1931, †† taken in 1931 and a new Corsican record.

# Recorded Corsican Trichoptera.

## Limnophilidae.

†\* Limnophilus lunatus Curt.

† — affinis Curt.

†\* — auricula Curt.

— griseus Linn.

\* — hirsutus Pict.

†† — bipunctatus Curt.

† Stenophylax permistus McL.

\* — crossotus McL.

† Micropterna sequax McL.

— lateralis Steph.

Halesus corsicus Ris.

\* Potamorites budtzi Ulmer.

#### Sericostomatidae.

- †\* Sericostoma clypeatum Hagen. Silo piceus Brauer.
  - \* rufescens Ramb.
- †\* Selis aurata Hagen.
- †\* Micrasema togatum Hagen.

- †\* Micrasema cinereum Mosely.
- †\* Thremma sardoum Costa.
  - \* Helicopsyche revelieri McL.
  - \* Lepidostoma hirtum F.
  - fimbriatum Ed. Pict.

## Leptoceridae.

Leptocerus aterrimus Steph.
— genei Ramb.

- †\* Mystacides azurea L.
- †† Setodes lusitanica McL.
- †† argentipunctella McL.

#### Beraeidae.

Beraea maurus Curt. (doubtful).

- †\* aureomarginata Mosely.
  - \* pallida Mosely.
  - \* Ernodes nigroaurata Mosely.
- †† Beraeodina palpalis Mosely.

# Hydropsychidae.

- †\* Hydropsyche pellucidula Curt.
- instabilis Curt.
- exocellata Dufour. ++
- †\* Diplectrona meridionalis Hagen.
- +\* magna Mosely.

# Polycentropidae.

Plectrocnemia conspersa Curt.

- corsicana (confusa) Mosely.
  - Polycentropus flavomaculatus Pict. (doubtful).
- mortoni Mosely.
- divergens Mosely.
- corsicus Mosely.

## Psychomyidae.

- \* Tinodes waeneri L.
- \* \_ cortensis Mosely.
- †\* aureola Zett.
- †\* agaricinus Mosely.
  - \* Lype flavospinosa Mosely.
- †\* Psychomyia pusilla Fabr.

## Philopotamidae.

- †\* Philopotamus siculus Hagen.
- †\* flavidus Hagen.
  - ludificatus McL. (doubtful).

Wormaldia triangulifera McL.

- †\* -- variegata Mosely.
- †† Chimarrha marginata L.

## Rhyacophilidae.

- †\* Rhyacophila trifasciata Mosely.
- †\* pallida Mosely.
  - \* \_ tristis Pict.
- †\* pubescens Pict.
  - rougemonti McL. (doubtful).
- †\* Agapetus cyrnensis Mosely.
- \* quadratus Mosely.

# Hydroptilidae.

- †\* Allotrichia pallicornis Eaton.
- †\* Hydroptila maclachlani Klap. var. corsicanus Mosely.
- †\* uncinata Morton.
- †\* acuta Mosely.
- \* \_ bifurcata Mosely.
- †† tigurina Ris.
- †\* Stactobia furcata Mosely.

# Recorded Corsican Plecoptera.

Chloroperla grammatica Scop.

- †\* insularis Morton.
- †\* sp. ♀♀ only captured.

Isopteryx apicalis Newman (doubtful).

- torrentium Pict. (doubtful).
- †\* hamulata Morton.

Nemoura nitida Pict. (doubtful).

- †\* corsicana Morton.
  - † Leuctra budtzi Esben-Petersen.
- †\* fraterna Morton.

# Recorded Corsican Ephemeroptera.

## Leptophlebiidae.

- † Habrophlebia budtzi Esb.-Peters. Vizzavona & Corte.
  - nervulosa Eaton.

Habroleptoides modesta Hagen.

†† Choroterpes picteti Eaton. Aleria.

# Ephemerellidae.

† Ephemerella ignita Poda. Vizzavona.

#### Baëtidae.

Baëtis binoculatus L.

- † niger L. Vizzavona.
  - pumilus Burm.
- † rhodani Pict. Vizzavona.

Cloeon dipterum L.

# Ecdyonuridae.

Rhithrogena eatoni Esb.-Peters.

- insularis Esb.-Peters.

- †\* Ecdyonurus corsicus Esb.-Peters. Vizzavona.
- †\* fallax Hagen. Vizzavona, Corte.
  - forcipula Pict.
  - \_\_ zebrata Hagen.

# Recorded Corsican Neuroptera.

## Raphidiidae.

Raphidia corsica Hagen.
— insularis Alb.

Inocellia maclachlani Alb.

# Myrmeleonidae.

Palpares libelluloides L. Creagris aegyptiacus Ramb.

- \_ submaculosus Ramb.
- \_ V-nigrum Ramb.
- † Formicaleo tetragrammicus F. Vizzavona. Macronemurus appendiculata Latr. Nelees nemausensis Berk.
- †† Myrmeleon formicarius L.

# Ascalaphidae.

Theleproctophylla australis F. \* Ascalaphus corsicus Ramb.

# Osmylidae.

† Osmylus chrysops L. Vizzavona.

## Dilaridae.

† Dilar corsicus Nav. Vizzavona.

budtzi Esb.-Peters.

†\* Neurorthus fallax Ramb. Vizzavona.

#### Hemerobiidae.

- † Micromus gradatus Nav. Vizzavona.
- †\* Sympherobius pygmaeus Ramb. Vizzavona.
  - fuscescens Wall. (inconspicuus McL.)

Hemerobius lutescens F.

- †† humulinus L. Vizzavona.
- †\* micans Ol. Vizzavona.
  - nitidulus F.
- † stigma Steph. Vizzavona.
- † Megalomus pyraloides Ramb. Vizzavona.
- †† tineoides Ramb. Corte.
- †† Boriomyia betulina Ström. Vizzavona.

## Coniopterygidae.

Coniopteryx tineiformis Curt.

†† — pygmaea End. Vizzavona.

Conwentzia pineticola End.

## Chrysopidae.

- \* Chrysopa alba L.
  - bimacula Hagen.
- \* prasina Burm.
- †† flavifrons Brauer. Vizzavona, Aleria.
  - † tenella Schn. Vizzavona, Corte.
- † carnea Steph. (vulgaris Schn.) Vizzavona.
- †† Nothochrysa capitata F. Vizzavona.

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## Legends for Plates.

PLATE IV:

Fig. 1.—Portion of anterior wing of *Beraeodina palpalis* Mosely, of enlarged. Fig. 2.—The same more enlarged.

PLATE V:

Fig. 1.—Scent-organ of *Hydroptila tigurina* Ris, of (one lobe removed and the other detached to show scent-hairs).

Fig. 2.—Leuctra budtzi Esb.-Peters. J.



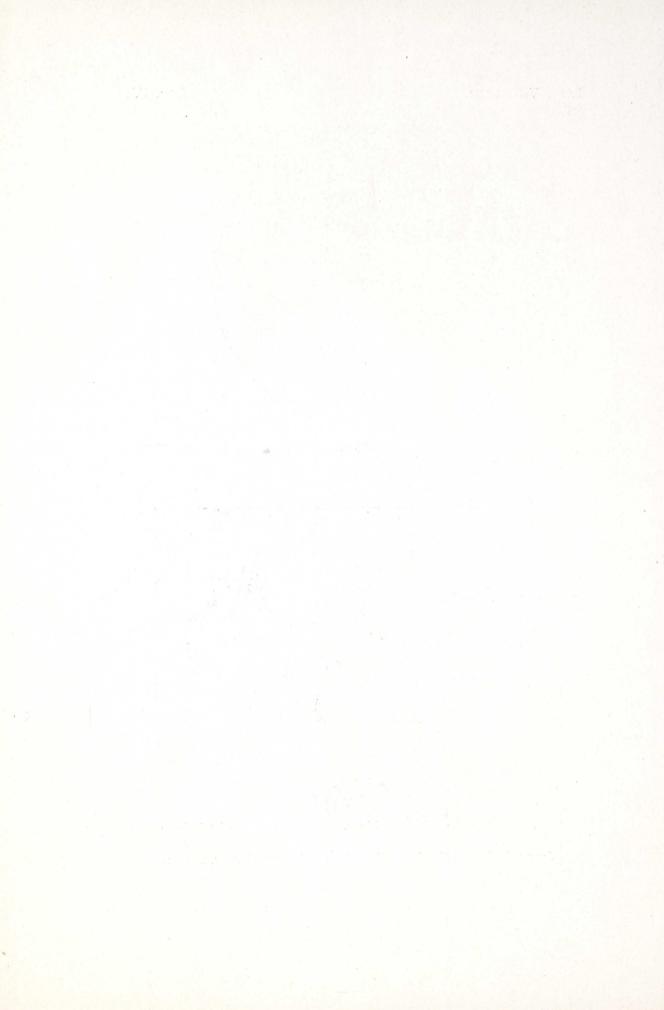
Fig. 1.



Fig. 2.

(Phot. M. E. M.)

MARTIN E. Mosely: Corsican Trichoptera and Neuroptera (s. l.) 1931.



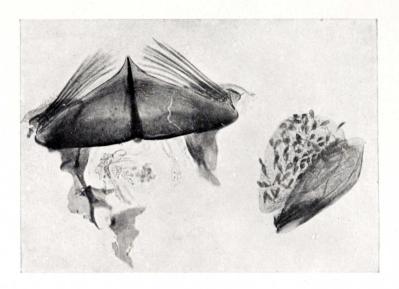


Fig. 1.

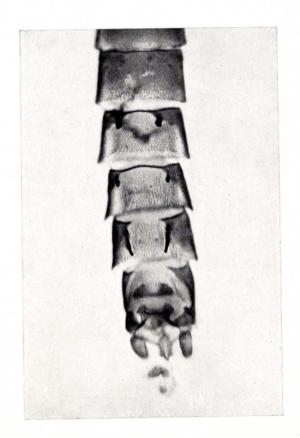


Fig. 2. (Phot. M.E. M.)

MARTIN E. Mosely: Corsican Trichoptera and Neuroptera (s. l.) 1931.

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