

Ionian Isles. Mr. Carr, pupae of the cheese-fly, *Piophilæ casei* (Dipt.). Mr. Bunnett, the black aberration of *Coccinella hieroglyphica* (Col.) from Keston with the type.

September 23rd, 1920.—Mr. K. G. BLAIR, B.Sc., F.E.S., President, in the Chair.

An Exhibition of Lantern Slides. Mr. Tonge, the resting habit of several British Geometers. Mr. Main, seasonal forms of *Pieris napi*, stages and pupal chamber of *Timarcha laevigata* (Col.), ravages and metamorphoses of *Donacia* sp. (Col.). Mr. Bedford (Eastbourne), rare species (Lep.) captured in Sussex, local birds, rare and local orchids, abnormal growths, etc. Mr. Withycombe, *Chrysopa*, *Hemmerobius*, *Syrphus*, and *Stratiomys*. Mr. Colthrup, positions of rest of butterflies and moths, and habits of birds. Mr. Grosvenor, many species and forms of the genus *Terias* from India. Mr. Bowman, a bred series of *Tricopteryx carpinata* from Oxshott, with numerous forms having well-emphasised transverse lines on the fore-wings. Mr. H. J. Turner, three species of *Eac'es* (Lep. Het.), *E. imperialis*, New York, *E. grandis*, São Paulo, and *E. sp.*? from Córdoba, Argentine, sent by Mr. Lindeman, with coloured photographs of the larvae of the two last.

October 14th, 1920.—The President in the Chair.

Mr. J. B. Farmer presented a box of British Odonata to the Society's collection. Mr. Riley, on behalf of Mr. South, for Mr. Dalton, aberrations of (1) *Agriades coridon*, between ab. *albicans* and var. *apennina*; (2) *Hibernia leucophaearia*, conspicuous wavy lines on a clear ground; (3) dark grey-brown *Bupalus piniaria*. Mr. Turner, a small race of *Zygæna filipendulae* from Box Hill, with 6th spot very feebly developed, including ab. *cytisi* and other aberrations. Mr. Newman, living full-fed larva of *Hyloicus pinastri* from Suffolk. Mr. B. S. Williams, three *Pieris rapae* showing a discal spot on the hind-wings, and a striate asymmetrical form of *Rumicia phlaeas*. Mr. Johnson, banded females of *Pieris napi* from Ireland, one being yellow-suffused; confluent *Zygæna trifolii* from Folkestone, and a gynandromorph of *P. rapae*. Mr. Grosvenor, *Pieris canidia* (various forms), *P. krueperi*, and *P. rapae* from India. Mr. Mera, *Polia chi* closely approaching form *olivacea*. Mr. Blenkarn, *Carabus nitens* and other *Coleoptera* from Poole. Seasonal notes from several members.—H. J. TURNER (*Hon. Editor of Proceedings*).

RESTING POSITIONS OF SOME NEMATOCEROUS DIPTERA.

BY F. W. EDWARDS, B.A., F.E.S.

All students of Diptera and of Medical Entomology are familiar with the fact that many flies, such as the malarial and non-malarial mosquitoes, the tse-tse flies, and some others, may be recognised in life at a glance by the positions in which they hold their wings and legs when in a state of rest. Systematists have made some use of these points, Meigen in many of his generic diagnoses laying great stress on

the position in which the wings are held, whether in the shape of a roof, or lying flat over the back. The subject has not, however, received the amount of attention from entomologists which it deserves. The following notes, regarding certain families of Nematocera, are not by any means exhaustive, but will serve to draw attention to the interest of the subject. It will be seen that genera, groups of genera, subfamilies or families can frequently be recognised by their resting positions, but, as might be expected, there are some exceptions to most of the rules, and even the same species may not always settle in the same position. Copulatory attitudes are not noticed here, though some very interesting notes could be collected regarding them.

CECIDOMYIIDAE, SCATOPSIDAE, AND SCIARIDAE.

In these families, so far as observed, the legs are always held touching the surface, the body horizontal, the wings completely overlapping and lying flat over the back. This may be regarded as the normal position for the Nematocera.

MYCETOPHILIDAE.

There is great diversity in this family in respect of the resting positions, but some groups adopt very characteristic attitudes.

Ceroplatus and *Platyura* rest with the wings overlapping, flat over the back; the hind legs, and frequently the middle ones also, raised slightly from the surface, so that the insect is often hanging by its front claws only.

Macrocera holds its wings flat, but divergent at an angle of about 45° on each side of the body; all the legs touch the surface. *Diadocidia* behaves in a similar way.

Bolitophila, so far as I have noticed, keeps all its feet touching the surface, and its wings overlapping. Curtis, however, states that *B. saundersi* was found resting with its hind legs raised.

Mycomyia holds its wings much like *Macrocera*, but not quite flat; all the legs touch the surface. *Boletina* (sometimes) and *Acnemia* adopt a similar position.

Sciophila (*Lasiosoma*) and *Monoclona* resemble *Mycomyia*, but the wings are much less divaricate and sometimes partially overlap.

Exechia, *Rhymosia*, *Allodia*, *Brachypeza*, and *Cordyla* all raise their middle legs high above the body, the tarsi being curved towards each other so that they almost meet. The wings completely overlap,

but are raised up at an angle with the abdomen (this last feature more pronounced in *Cordyla* and *Brachypeza* than in the others).

Sceptonia sometimes, if not habitually, turns its wings downward at the sides of or more or less beneath the abdomen. It will be of interest to know whether a similar habit exists in the probably allied genera *Epicrypta* and *Delopsis*.

Most of the remaining genera (e. g., *Leptomorphus*, *Apolephthisa*, *Tetragoneura*, *Leiomyia*, *Trichonta*, *Phronia*, *Mycetophila*, *Zygomyia*) exhibit no striking peculiarity, the wings being held flat and overlapping over the back, and all the legs touching the surface.

DITOMYIIDAE.

Both *Ditomyia* and *Symmerus* rest like *Ceroplatus*, with the hind legs slightly raised, the wings flat and overlapping over the back. In view of Keilin's account of the early stages, the assumption which might have been made that this was an indication of relationship, cannot be maintained.

ANISOPODIDAE (RHYPHIDAE).

There is a curious difference in the resting attitudes adopted by *Rhyphus punctatus* and *R. fenestralis*. Both hold their legs and wings in the normal position, with the abdomen somewhat curved downwards, but the former has the front part of the body raised, the tips of the wings almost or quite touching the surface, while the latter has the head a little nearer the surface than the tail. *Mycetobia* when alive resembles in shape and attitude a small *R. fenestralis*.

CULICIDAE.

The habit of raising and waving the hind legs is well known, as is the difference in posture between Culicines and Anophelines, but the fact is often overlooked that during hibernation both *Culex* and *Anopheles* rest with their legs and bodies close up against the surface, all the legs widely extended. Knab has recorded that the members of the tropical tribe, Sabethini, raise their hind legs to a greater extent than do other mosquitoes, even curving them forward over the head.

Chaoborus resembles *Anopheles* in the position of the body; *Mochlonyx* has a more *Culex*-like attitude, but in neither genus are the hind legs raised.

CHIRONOMIDAE.

Chironominae.—All the members of this subfamily (except sometimes *Metriocnemus*) keep their front legs raised, but the position of the

REVISED PRICES FOR BACK VOLUMES.

1ST SERIES, 1864-1889.—Parts, 3/6 net each; Volumes, 22/6 net,
Vols. 1 to 25. bound 3/6 extra.

These can be obtained in many cases in complete Volumes. Many of the single parts can also be supplied separately. Particulars on application to the Publishers.

2ND SERIES, 1890-1914.—Parts, 2/6 net each; Volumes, 20/- net each,
Vols. 1 to 25 (Vols. 26 to 50 of the entire Series). bound 3/6 extra.

3RD SERIES, Vol. 1 (1915).—Parts, 2/6 net each; Vols. 17/6 net each,
bound 3/6 extra.

„ „ „ 2 (1916).— „ 2/6 net each; Vols. 17/6 net each,
bound 3/6 extra.

„ „ „ 3 (1917).— „ 2/6 net each; Vols. 17/6 net each,
bound 3/6 extra.

„ „ „ 4 (1918).— „ 2/6 net each; Vols. 17/6 net each,
bound 3/6 extra.

„ „ „ 5 (1919).— „ 2/6 net each; Vols. 17/6 net each,
bound 3/6 extra.

„ „ „ 6 (1920).— „ 2/6 net each; Vols. 17/6 net each,
bound 3/6 extra.

SUBSCRIPTION FOR 1921 (payable in advance), 15/- net, *post free*.

All applications for the above should be made to—

MESSRS. GURNEY & JACKSON, 33 PATERNOSTER ROW, LONDON, E.C. 4.

ENTOMOLOGICAL NEWS.

A forty-eight page illustrated magazine, issued monthly, except in August and September, devoted to the study of INSECT LIFE. It contains a resumé of the proceedings of a number of Entomological Societies, and also articles by the leading Entomologists in the United States and Canada. Valuable information for the beginner, the economic entomologist, and the systemist. TWO DOLLARS a year in advance. Single copies, 25 cents. Address—

ENTOMOLOGICAL NEWS,

The Academy of Natural Sciences,

1900 RACE STREET. PHILADELPHIA, Pa.

THE CANADIAN ENTOMOLOGIST.

A MONTHLY MAGAZINE DEVOTED TO THE STUDY OF SCIENTIFIC ENTOMOLOGY.

Volume 50 is now in course of publication. Back volumes can be supplied. It is the oldest established Magazine of the kind in America, and has a world-wide circulation. Subscription, \$2 per annum, payable in advance, which includes a copy of the Annual Report of the Entomological Society of Ontario to the Legislature. Editor, Dr. E. M. Walker, Biological Department, University of Toronto, Toronto, Canada.

Address: Entomological Society of Ontario, Guelph, Canada.

CONTENTS.

	PAGE
Notes on the Indian species of <i>Hypophloeus</i> Fabr., with descriptions of new species.— <i>K. G. Blair, B.Sc., F.E.S.</i>	1
Notes on Melandryidae (4).— <i>G. C. Champion, F.Z.S.</i>	8
Two new species of bees of the genus <i>Sphecodes</i> ,— <i>R. C. L. Perkins, M.A., D.Sc., F.R.S.</i>	9
<i>Henoticus germanicus</i> Reitt. and <i>H. serratus</i> Gyll.—synonymical note, etc.— <i>G. C. Champion, F.Z.S.</i>	12
A room infested with Lathridiidae.— <i>W. Wallace</i>	12
<i>Agabus melanarius</i> Aubé in Devonshire.— <i>E. C. Bedwell, F.E.S.</i>	13
<i>Henoticus germanicus</i> Reitt. in London.— <i>Id.</i>	13
Coleoptera in Guernsey.— <i>J. R. le B. Tomlin, M.A., F.E.S.</i>	13
Coleoptera from Wensleydale (Yoredale), Yorkshire.— <i>G. Ryle</i>	15
A note on Coleoptera in drift pine-logs.— <i>C. Bartlett</i>	15
<i>Leucania unipuncta</i> Hw. (extranea Gn.) in N. Cornwall.— <i>Id.</i>	16
Micro-Lepidoptera in the Oxford district.— <i>E. G. R. Waters, M.A.</i>	16
<i>Nabis boops</i> Schioedte in Wiltshire, etc.— <i>G. E. Hutchinson</i>	18
The egg-laying of Sawflies.— <i>Miss E. F. Chawner, F.E.S.</i>	19
<i>Archisotoma besselsi</i> (Pack.) Linnan on the South Coast of England.— <i>J. M. Brown</i>	19
REVIEWS.—Transactions of the Cardiff Naturalists' Society, Vol. li, 1918 :	
Diptera of Glamorgan. By Col. J. W. Yerbury.	20
"A Naturalist in Himalaya." By R. W. G. Hingston	20
Encyclopédie Scientifique, publiée sous la direction du Dr. Toulouse.	
Les Insectes. Anatomie et Physiologie générales. By C. Houlbert	21
SOCIETY.—South London Entomological and Natural History Society	21
Resting positions of some Nematoceros Diptera.— <i>F. W. Edwards, B.A., F.E.S.</i> ..	22

THE NATURALIST:

A MONTHLY ILLUSTRATED JOURNAL OF

NATURAL HISTORY FOR THE NORTH OF ENGLAND

EDITED BY

T. SHEPPARD, M.Sc., F.G.S., F.R.G.S., F.S.A.Scot.,

THE MUSEUM, HULL;

AND

T. W. WOODHEAD, Ph.D., M.Sc., F.L.S.,

TECHNICAL COLLEGE, HUDDERSFIELD;

WITH THE ASSISTANCE AS REFEREES IN SPECIAL DEPARTMENTS OF

GEO. T. PORRITT, F.L.S., F.E.S., JOHN W. TAYLOR, M.Sc.,

RILEY FORTUNE, F.Z.S.

The Journal is one of the oldest Scientific Periodicals in the British Isles, dating back to 1833, and is circulated widely amongst the principal Naturalists of the country.

LONDON: A. BROWN AND SONS, LIMITED, 5, FARRINGDON AVENUE E.C. 4.

And at Hull and York.

PRICE, 9d. NET. Prepaid Subscription, 8/6 per annum.



Edwards, F W. 1921. "Resting positions of some nematoceros Diptera." *The Entomologist's monthly magazine* 57, 22–26.

<https://doi.org/10.5962/bhl.part.22329>.

View This Item Online: <https://www.biodiversitylibrary.org/item/36035>

DOI: <https://doi.org/10.5962/bhl.part.22329>

Permalink: <https://www.biodiversitylibrary.org/partpdf/22329>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Smithsonian

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.