LIST OF ISOMETOPIDAE (HETEROPTERA : CIMICOIDEA)

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(Received for publication, 2 November 1971)

Summary

A list of the 21 genera and 62 species of Isometopidae, and notes on the zoogeography and habitat of the group, are given.

Introduction

The Isometopidae or jumping tree bugs are closely allied to the Miridae, having a cuneus which is declivous with the membrane, but differing in the presence of ocelli, the lygaeid-like antennae (segments III and IV not narrower than a normal first segment), and in some genera by the enormous eyes which may occupy almost the entire head. Often the hind femora are saltatorial. The tarsi may have two or three tarsomeres.

The relative scarcity of species is no doubt a reflection of the jumping habit (combined with small size, 1.5-2.8 mm) and lack of knowledge of their habitat. Most species were described from one to four specimens. with a large proportion, at least 48%, described from single specimens. Heidemann (1907) highlights the elusiveness of these species when he records that in spite of close searching during the summers, a species described in 1891 was not collected again until 1902 (one specimen resting on the bark of a maple) and not again until 1907 (when a nymph and adults were taken on a tree). Contributions to the habitat of the family are: in wooded district (Uhler, 1891); in damp and shady places on the twigs of dead trees (Heidemann, 1907); under bark of native fig (Kirkaldy, 1908); on an orange tree (McAtee & Malloch, 1924); predacious upon the red scale of citrus (Hesse, 1947); on bark of Albizzia stipulata (Carvalho, 1951); in forest under low plants and shrubs (Hoberlandt, 1952); and at light (Hoberlandt, 1952; Carvalho & Fonseca Rosas, 1962). It is anticipated that as entomologists become more familiar with their habits, far more species of Isometopidae will become known.

Bergroth (1924) planned a revision of the Isometopidae but died the following year. As the number of described species has gradually increased

since that time and, as there is no published list of species, it is the purpose of the present paper to assemble the names of the 21 genera and 62 species of Isometopidae.

ZOOGEOGRAPHY

This family, though small in number of species, occurs in all zoo-geographical regions and most of Wallace's zoogeographical sub-regions (Table 1). Most of the genera and species have so far been recorded from single sub-regions. Alcecoris is shared between the Oriental and Australian regions; Isometopus between the Palaearctic, Ethiopian, and Oriental regions; Myiomma between the Palaearctic, Ethiopian, Oriental, and Neotropical regions; and Lidopus between the Neotropical and Nearctic regions. Isometopus and Corticoris are shared between some sub-regions. Of the species, Isometopus intrusus and Myiomma fieberi are shared between North Europe, and the Mediterranean sub-regions, Isometopus peltatus is shared between the East and West African sub-regions, and Isometopus mirificus is shared between the Palaearctic and Oriental regions.

Table 1—Known Numbers of Genera and Species of Isometopidae Occurring in Wallace's Zoogeographical Regions and Sub-regions

Palaearctic	Gen.	Spp.	Ethiopean	Gen.	Spp.	Oriental	Gen.	Spp.
North Europe	2	4	East Africa	3	7	Central India	1	1
Mediterranean	2	. 5	West Africa	4	14	Ceylonese	5	6
Siberia			South Africa	3	3	Indo-China	2	5
Manchuria	` 1	3	Madagascar			Indo-Malaya	1	. 1
Totals*	2	10		6	23		, 6	13
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Australian			Neotropical			Nearctic		
Austro-Malaya	1	1	Chile			California		
Australia	1	1	Brazil	3	3	Rocky Mts	3	5
Polynesia	1	1	Mexico	2	2	East U.S.	4	4
New Zealand	-		Antilles		-	Canada	, -	
	_						-	
Totals*	3	3		5	5		6	9

^{*} Totals are less where genera are common to two or more sub-regions or a genus and species is common to two sub-regions.

LIST OF DESCRIBED GENERA AND SPECIES OF ISOMETOPIDAE

Alcecoris McAtee and Malloch 1924

globosus Carvalho 1951, India

periscopus McAtee and Malloch 1924, Timor

Aristotelesia Carvalho 1947

carioca Carvalho 1947, Brazil

Corticoris McAtee and Malloch 1922

libertus (Gibson, 1917), North America

pulchellus (Heidemann, 1908), North America

signatus (Heidemann, 1908), North America

unicolor (Heidemann, 1908), North America

Diphleps Bergroth 1924

unica Bergroth 1924, North America

Eurocrypha Kirkaldy 1908

thanatochlamys Kirkaldy 1908, Australia

Heidemannia Uhler 1891

cixiiformis Uhler 1891, North America

Isometocoris Carvalho and Sailer 1954

blantoni Carvalho and Sailer 1954, Panama

Isometopidae Poppius 1913

lieweni Poppius 1913, Ceylon

Isometopus Fieber 1860

angolensis Hoberlandt 1952, Angola

bicolor McAtee and Malloch 1932, East Africa

canariensis Lindberg 1936, Canary Is.

cuneatus (Distant, 1904), Ceylon

fasciatus Hsiao 1964, China

feanus (Distant, 1904), Burma

hananoi Hasegawa 1946, Japan

hainantus Hsiao 1964, Hainan Is.

heterocephalus Puton 1898, Algeria

intrusus (Herrich-Schaeffer, 1840), Central and South Europe and North

Africa (alienus syn. by Atkinson 1889) japonicus Hasegawa 1946, Japan

kaznakovi Kiritshenko 1939, Caucasus

mirificus Mulsant and Rey 1879, South Europe and Himalayas (Jehania mahal syn. by Carvalho 1951)

peltatus McAtee and Malloch 1932, Tongo and Sudan

taeniaticeps Puton 1898, Syria

tianjinus Hsiao 1964, China

typica (Distant, 1910), Borneo

Letaba Hesse 1947

bedfordi Hesse 1947, South Africa nitida Smith 1967, Ghana

Lidopus Gibson 1917

heidemanni Gibson 1917, North America schwartzi McAtee and Malloch 1924, Guatemala

Lindbergiola Carvalho 1951

aureopilosa Carvalho 1951, Uganda jarmilae Hoberlandt 1952, Angola

Magnocellus Smith 1967

wacuiensis Smith 1967, Ghana ghanaiensis Smith 1967, Ghana

Myiomma Puton 1872

affinis (Hoberlandt, 1952), Angola albiocoxa Smith 1967, Ghana albiscutellata Smith 1967, Ghana dundoensis (Hoberlandt, 1952), Angola fasciata Smith 1967, Ghana fieberi Puton 1872, France

var. kabylia McAtee and Malloch 1932, Algeria var. riffia McAtee and Malloch 1932, Algeria

fulva Smith 1967, Ghana

hemialba (Carvalho, 1951), South Africa

impunctata Smith 1967, Ghana

lansburyi (Carvalho, 1951), India

lutea McAtee and Malloch 1932, India

milleri (Hoberlandt, 1959), South Africa

nigra Smith 1967, Ghana

rubra Smith 1967, Ghana

rubrovenata Smith 1967, Ghana

surinamensis (Carvalho and Fonseca Rosas, 1962), Surinam

verticata Smith 1967, Ghana

vittata McAtee and Malloch 1932, Ceylon

Nesocrypha Kirkaldy 1908

corticicola Kirkaldy 1908, Fiji

Plaumannocoris Carvalho 1947

rarus Carvalho 1947, Brazil

Ptisca McAtee and Malloch 1932

blattiformis McAtee and Malloch 1932, Cameroun

Sophianus Distant 1904

alces Distant 1904, Ceylon

Teratodia Bergroth 1924 emoritura Bergroth 1924, North America Turnebiella Poppius 1915 pallipes Poppius 1915, Formosa Wetmorea McAtee and Malloch 1924 notabilis McAtee and Malloch 1924, North America

There may be other species described in the Miridae, but it is not possible to know if they are isometopids without examining the specimens. However, from 1907 (when the group became more widely known) most species would have been assigned to Isometopinae or Isometopidae. Heidemann (1907) mentions most of the few previously described species.

Bilia Distant 1904, Bilianella Carvalho 1951, and Biliola Carvalho 1951 have been transferred to the Anthocoridae by Carayon (1958).

ACKNOWLEDGMENTS

Grateful acknowledgment is made to Dr L. Hoberlandt, Narodni Museum, Prague for bringing to my attention the genus and twelve species described in 1967 and synonymy of Paramyiomma with Myiomma in a paper not yet abstracted in the Zoological Record, and three other ommissions, and to Mr. J. Herring, U.S. Department of Agriculture, for supplying a Xerox copy of that paper.

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