

POLISH ACADEMY OF SCIENCES

MUSEUM & INSTITUTE OF ZOOLOGY

FRAGMENTA FAUNISTICA

Vol. 46 • No 1

WARSAW

2003

<http://rcin.org.pl>

FRAGMENTA FAUNISTICA
An International Journal of Faunology
Warszawa

FRAGMENTA FAUNISTICA is a specialist journal published by the Museum and Institute of Zoology of the Polish Academy of Sciences. The journal, first published in 1930, appeared under the title *Fragmenta Faunistica Musei Zoologici Polonici* until 1953. Now the journal is issued semi-annually and publishes the papers devoted to fauna, its differentiation, distribution and transformations. These are the results of original studies, review articles and syntheses dealing with faunology and related sciences such as zoogeography or zoocoenology.

By way of exchange, **FRAGMENTA FAUNISTICA** is distributed among over 350 institutions in 80 countries. It has been cited in the *Zoological Record*, *Biological Abstracts*, *Biosis*, *Pascal Thiema* and *Referativnyj Zhurnal* and indexed by *Polish Scientific Journal Contents – AGRIC.&BIOL.SCI.*, available through the INTERNET at <http://psjc.icm.edu.pl/>

Editorial Office:

Muzeum i Instytut Zoologii Polskiej Akademii Nauk
(Museum and Institute of Zoology of Polish Academy of Sciences)
Wilcza 64, 00-679 Warszawa

Editor-in Chief: Dr. Jolanta Wytwer
e-mail: jolawyt@miiz.waw.pl

Editorial Secretary: Dr. Irmina Pomianowska-Pilipiuk

Editorial Board: Dr. Elżbieta Chudzicka, Dr. Waldemar Mikołajczyk,
Prof. Dr. Regina Pisarska, Dr. Ewa Skibińska, Dr. Maria Sterzyńska

Advisory Board:

Prof. Dr. Józef Banaszak (Bydgoszcz)

Prof. Dr. Czesław Błaszak (Poznań)

Prof. Dr. Wiesław Bogdanowicz (Warszawa)

Dr. Thomas Bolger (Dublin)

Prof. Dr. Jarosław Buszko (Toruń)

Dr. R. Henry L. Disney (Cambridge)

Prof. Dr. Reiner Ehrnsberger (Vechta)

Prof. Dr. Charles Gaspar (Gembloux)

Prof. Dr. Sergei Golovatch (Moscow)

Prof. Dr. Andrzej Leśniak (Kielce)

Prof. Dr. Wojciech Niedbała (Poznań)

Prof. Dr. Bogusław Petryszak (Kraków)

Prof. Dr. Adolf Riedel (Warszawa)

Prof. Dr. Josef Rusek (České Budějovice)

Prof. Dr. Wojciech Starega (Siedlce)

Prof. Dr. Andrzej Szeptycki (Kraków)

Prof. Dr. Przemysław Trojan (Warszawa)

© Copyright by Museum and Institute of Zoology, PAS
ISSN 0015-9301

Printed in Poland
Drukarnia ARKUSZ-DRUK, Czarnocińska 10, 03-110 Warszawa

The journal is printed on acid-free paper

INSTRUCTIONS TO AUTHORS

Only papers written in English (preferred language), German or French are published in FRAGMENTA FAUNISTICA. A paper submitted to the FRAGMENTA FAUNISTICA must not have been offered, previously or simultaneously, to any other scientific magazine. Although the author bears responsibility for the merits of the paper, the editors reserve the right to suggest alterations and abridgements. When submitting a manuscript, the author(s) thereby agree to assign Copyright to this journal. Papers should be concise and linguistically correct. Contributions should be submitted in two copies, complete with the text, tables and figures. The relevant letter from Author(s) accompanying the manuscript is required, where the author(s) address(es) for correspondence is placed, with the original and officially accepted name of institution(s), number of fax, phone or e-mail address.

Submitted papers will be accepted for publication after positive reviews have been obtained, mainly from the members of the Fragmenta faunistica Advisory Board. The final version of the work, after the verification made by reviewers' and editor's advice, should be submitted as a printout and on a computer disk (MS-DOS/Windows), and must conform to the requirements below.

Title of work should be concise and proper to its contents. **Abstract** should not be longer than 200 words. **Key words** must be in number 3 to 7. **Text** should have a standard layout (introduction, material and methods, results, summary, references). All Latin names must be italicised. The names of authors must be added to all species (genus) names first appearing in the text. **Tables** should be as simple as possible, printed on separate pages with captions and numbered with Roman numerals. **Figures**, identified with Arabic numerals, can be computer printouts (B&W, good quality) or made by hand in black ink on tracing paper or white cardboard, with all captions printed on a separate page. Numerical data should be attached to plots. **References** should conform to the format used in published issues of FRAGMENTA FAUNISTICA. **Summaries** of papers will be published in Polish.

Printing costs are covered by the author. Information about the cost is available from the Editorial Board. The author (first person listed) will receive 25 copies free of charge. Authors who cannot afford to pay for the publication can request a reduction or free of charge publication.

Subscriptions and orders should be addressed to the Museum & Institute of Zoology, PAS, Library, Wilcza 64, 00-679 Warszawa. Annual subscription (2 issues) institutional: USD 60, personal: USD 40. Orders paid on the account on the Museum & Institute of Zoology at:

BPH PBK SA, III O/Warszawa,
No. 11101053-401050001016
Krucza 24/26, 00-950 Warszawa, Poland

CONTENTS

I. Pilipiuk. Enchytraeid fauna (<i>Oligochaeta</i> , <i>Enchytraeidae</i>) in the Białowieża Primeval Forest	1
K. Jażdżewski. An invasive Ponto-Caspian amphipod – <i>Dikerogammarus haemobaphes</i> (Eichwald, 1841) – conquers Great Masurian Lakes, north-eastern Poland	19
N. A. Kuznetsova. The biotopic group spectrum as a <i>Collembola</i> community characteristic	27
B. Burakowski and D. Pollock. Description of the immature stages of <i>Dircaea quadriguttata</i> (PAYKULL, 1798) with notes on adult copulative organs (<i>Coleoptera: Melandryidae</i>)	37
A. Radchenko, G. W. Elmes, W. Czechowska, A. Stankiewicz, W. Czechowski and M. Sielezniew. First records of <i>Myrmica vandeli</i> BONDROIT and <i>M. tulinae</i> ELMES, RADCHENKO et AKTAÇ (<i>Hymenoptera: Formicidae</i>) for Poland, with a key for the <i>scabrinodis</i> -and <i>sabuleti</i> -complexes	47
G. Winiarska. Butterflies and moths (<i>Lepidoptera</i>) in urban habitats: II. The butterflies (<i>Rhopalocera</i>) of Warsaw	59
G. Winiarska. Long-term changes in communities of <i>Noctuidae</i> , <i>Pantheidae</i> and <i>Nolidae</i> (<i>Lepidoptera</i>) of Warsaw city center	69
Z. Michalska. <i>Agromyzidae</i> (<i>Diptera</i>) in urban green areas in Poland	93