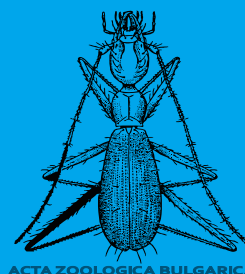


# ACTA ZOOLOGICA BULGARICA

## 68 (1)

2016  
March



**Institute of Biodiversity and Ecosystem  
Research**

Bulgarian Academy of Sciences

ISSN 0324-0770

## **Acta zoologica bulgarica**

---

**68 (1) • Sofia • March • 2016**

*An open access international journal of animal diversity, ecology and evolution published by the Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences*

**ISI Impact Factor (2014) = 0.532**

Honorary Editor-in-Chief: *Vassil Golemansky*

Editor-in-Chief: *Boyko B. Georgiev*

Managing Editor: *Rositsa Kaneva*

Language Editor: *Vesela Evtimova*

### **Co-editors:**

*Apostolos Apostolou*

*Dragan Chobanov*

*Rumyana Metcheva*

*Paraskeva Mihailova*

*Ivan Pandurski*

*Vasil Popov*

*Pavel Zehtindjiev*

### **Advisory Board:**

*Hristo Delchev (Sofia)*

*Victor Fet (Huntington)*

*Georgi Georgiev (Sofia)*

*Peter Glöer (Hettingen)*

*Victor V. Glupov (Novosibirsk)*

*Borislav Guéorguiev (Sofia)*

*Boris Kryštufek (Ljubljana)*

*Jean Mariaux (Geneva)*

*Josef Matena (Česke Budejovice)*

*Georgi Markov (Sofia)*

*Yuri M. Marusik (Magadan)*

*Vladislav Monchenko (Kiev)*

*Boris Nikolov (Sofia)*

*Anastasios Legakis (Athens)*

*Toshko Ljubomirov (Sofia)*

*Vlada Peneva (Sofia)*

*Aleksi Popov (Sofia)*

*Mitko Subchev (Sofia)*

*Milcho Todorov (Sofia)*

*Margarita Topashka (Sofia)*

*Nikolay D. Tzankov (Sofia)*

*Yordan Uzunov (Sofia)*

*Jiri Vavra (Prague)*

*Jan Zima (Brno)*

**© Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, 2016**

---

Copy editor: *R. Kaneva*

Desktop publishing: *R. Kaneva*

Size: 60x84/8

Printers sheets: 18

Total print: 200

**Cover:** Large whipsnake, *Dolichophis caspius* (Gmelin, 1789), from Pastrina Hill, Bulgaria. Photo M. Slavchev (see p. 55).

**Printed by:** DEDRAX printing house

**Address:** Institute of Biodiversity and Ecosystem Research, 1 Tsar Osvoboditel Blvd., 1000 Sofia, Bulgaria

Tel: (+359) 884499726; (+359 2) 988 51 15; Fax: (+359 2) 988 28 97

E-mail: [actazoologicabulgarica@gmail.com](mailto:actazoologicabulgarica@gmail.com)

---

## Instructions to the Authors

### General Information

Submissions to *Acta zoologica bulgarica* can be works with subject matter dealing with the basic fields of zoology, ecology of aquatic and land animals, parasitology, biology of development, population genetics, animal evolution, and new methodical contributions in zoology. Manuscripts are accepted on the assumption that they have not been published elsewhere nor have been submitted for publication in any other journal. Manuscripts must conform strictly with the instructions to authors and will be sent to the editor. Papers with systematic content should follow the International Code of Zoological Nomenclature. Incoming manuscripts are initially judged by the editor. If the manuscript is acceptable in principle, it will be forwarded to referees for evaluation. After final edition and approval by the editorial board, the manuscript will be accepted for publication. The editor reserves the right to make editorial changes. Authors agree, after the manuscript's acceptance, with the transfer of copyright to publisher. Manuscripts, proofs, reviews, etc., concerning editorial matters should be addressed to the Editorial Office.

### Manuscripts

Manuscripts must be submitted in correct English on a data medium (CD or mail) for PC and in two paper copies. The following formats are accepted: Winword, Word Perfect, InDesign. The text should be left-justified, with font size 12, without column or page breaks, double-spaced (about 30 lines per page), without word hyphenations at the end of lines, on one side of A4 (210 x 297 mm) paper with margins at least 30 mm on each side. The pages must be numbered in Arabic numerals. Positions within the text of figures and tables should be indicated. Generic and species names must be cited completely once in the text and should be typed in italic. Family names of authors of taxa and of publications listed in references must be in SMALL CAPITALS, but never for collectors, preparators, acknowledgements, etc.

**Four categories** of contributions are published in *Acta zoologica bulgarica*, with the following volume of standard manuscript pages: 1. Research articles: 20 pages maximum length including the list of literature, figures, captions to figures and tables (on separate sheets); 2. Review articles (invited or consulted with editor before submitting): 10-25 pages; 3. Short communications: up to 8 pages; 4. Book reviews: 2-3 pages. Information about scientific events, past or forthcoming, will also be accepted.

The manuscripts should conform to the following format:

**Title:** It should be concise but enough informative. Author(s) and date of publication of taxa should be avoided. In papers dealing with lower taxa, the higher ones should be noted in the title.

**Author(s):** Full first name(s), middle initials and surname(s) in small capitals.

**Address(es):** As complete as possible, including e-mail address(es).

**Abstract:** It should consist of only one paragraph of up to 15 lines, briefly describing main results and conclusions with no description of methods, discussions, references and abbreviations.

**Key words:** Normally 3-6 items suitable for information-retrieval system, not repeating already those contained in the title.

**The standard order of sections should be:** Introduction, Study Area (optional), Material and Methods, Results, Discussion (or Results and Discussion), Conclusions (optional), Acknowledgements, References, Summary in Bulgarian (translation of the abstract).

**Tables:** They must not repeat information already presented in the figures or in the text. Each table must be self-explanatory and as simple as possible, it should be double-spaced within an A4 page size. No fold-outs are accepted. Tables must be numbered consecutively. They should be typed on separate sheets and enclosed after the bibliography. An explanatory caption, located on the top of the table, should be provided.

**Illustrations:** Lines and letters in figures must be able to be enlarged or reduced without reduction in quality. They should conform to the size of the type area (16.5 x 24 cm) which is the limit for all illustrations. Magnification should be shown by scale bars. Illustrations must be submitted in electronic medium such in e-mail or CD's in TIF format in minimum 300 DPI and as printed copies. Black and white photographs must be sharp, of high quality, glossy prints, presented on plates (14x17 cm in size). Figures must be numbered consecutively and should be provided with an explanatory legend on a separate sheet (titled 'Text under figures'). All tables and figures must be referred to in the text:

### Citations and References

Each citation in the text (including synonymy lists) must be accompanied by a full reference in the list of references and vice versa. The text citations are as follows: BURESH, ZONKOV (1941) or (BURESH 1941: 35) or (BURESH 1941) or (BURESH 1941, IVANOV 1996, PETROV 1956) or BURESH *et al.* (1949), if three authors or more. The references should start on a separate page. They should be arranged alphabetically by the author's family name(s), and chronologically. In case of papers written in other than Latin letters, if there is an English (or German, or French) title in the summary, it may be used. If there is not such a summary, the author's name must be transcribed (using Anglo-American transcription) and the title of the paper must be translated into English. This should be noted in round brackets at the end of the paragraph, for instance: (In Bulgarian, English summary).

The reference list is as follows:

AUTHOR A. V. 1990a. Title of the article. – *Full title of the journal*, **56** (3): 35-105. (In English, Bulgarian summary).

AUTHOR A. V., C. P. AUTHOR 1990a. Title of the article. – *Full title of the journal*, **56** (2): 35-105.

AUTHOR A. V., B. B. AUTHOR and C. P. AUTHOR 1990a. Title of the article. – *Full title of the journal*, **56** (1): 35-105.

AUTHOR A. V. 2000b. Title of the book. I-IX. Place of publication (publishing house). 220 p.

AUTHOR A. V., C. P. AUTHOR 1990. Title of the contribution. – In: AUTHOR V. A. (Ed.): Title of the book or volume. Place of publication (publishing house), **14** (3): 235-265.

### Corrections

The (senior) author will receive only one proof for checking (a paper copy or PDF file). Only printer errors may be corrected. Corrections must be carried out within two weeks. The corrected version should be sent back to the journal editor (corrected files on diskettes or other electronic medium, together with the printed version).

# CONTENTS

## DEDICATION

Professor Venelin Beschovski .....	3
------------------------------------	---

## INVITED REVIEW

PATKÓ L., N. UJHEGYI, M. HELTAI – More Hair than Wit: A Review on Carnivore Related Hair Collecting Methods .....	5
--	---

## SYSTEMATICS AND PHYLOGENETICS

ZIELKE E. – Description of a New Species of the Genus <i>Drymeia</i> Meigen, 1826 (Diptera: Muscidae) from Tajikistan .....	15
ÖZDIKMEN H., G. KAYA – A New Species of <i>Dorcadion</i> Dalman, 1817 (Coleoptera: Cerambycidae) from Turkey .....	21
SU J., Y. YANG, A. KOPETZ – A New Species of the Genus <i>Themus</i> Motschulsky, 1858, <i>T. (Haplothemus) fissus</i> sp. n., and a Redescription of <i>T. (H.) particularis</i> Pic, 1929 (Coleoptera, Cantharidae) .....	25
KHARADOV A. V., T. T. MAMUTBEKOVA, B. K. AKYSHOVA – A New Species of Chigger Mites, <i>Aboriginesia akimovi</i> sp. n. (Acariformes: Trombiculidae) from Kyrgyzstan .....	31
NIKOLOVA V. P., S. M. DELIMITREVA, R. S. ZHIVKOVA, I. V. CHAKAROVA, V. P. HADZHINESHEVA, M. D. MARKOVA – Immunocytochemical Study of Mouse Oocytes Suggests Conserved Keratin Organisation in Tetrapod Oogenesis .....	35

## ZOOGEOGRAPHY AND FAUNISTICS

DEVETAK D., V. SLAVEVSKA-STAMENKOVIĆ, I. SIVEC – Alderflies (Insecta: Megaloptera: Sialidae) from Serbia and Macedonia, with Notes on their Occurrence in the Neighbouring Balkan Countries .....	39
OLSZEWSKI P., B. WIŚNIEWSKI, P. BOGUSCH, T. PAWLIKOWSKI, M. KRZYŻYŃSKI – Distributional History and Present Status of the Species of the Family Scoliidae (Hymenoptera) in Poland and the Czech Republic .....	43
TZANKOV N. D., M. SLAVCHEV – Diversity and Relationships of Vertebrate Fauna of Pastrina Hill, a Poorly Studied Hot-spot Karstic Region in North-western Bulgaria .....	55
KARAKAŞ R. – Status and Distribution of Red-wattled Lapwing <i>Vanellus indicus</i> (Boddaert, 1783) (Charadriiformes: Charadriidae) in Turkey .....	71

## TERRESTRIAL ECOLOGY AND BEHAVIOUR

MICHALCZUK J., M. MICHALCZUK – Differences in Reproductive Investment between Male and Female Syrian Woodpeckers <i>Dendrocopos syriacus</i> (Hemprich and Ehrenberg, 1833) in a Newly-colonised Area .....	77
SHAFAEIPOUR A., M. SIVERIO, F. SIVERIO – Data on Habitat and Breeding Biology of the Barbary Falcon, <i>Falco peregrinus pelegrinoides</i> Temminck, 1829, from South-western Iran .....	85

## AQUATIC ECOLOGY

PETOVIC S., J. KRPO-ČETKOVIĆ – How Depth and Substratum Type Affect Diversity and Distribution Patterns of Echinoderms on the Continental Shelf in the South-eastern Adriatic Sea? .....	89
POPOVIĆ N. Z., J. A. ĐUKIĆ, J. Ž. ČANAK ATLAGIĆ, M. J. RAKOVIĆ, N. S. MARINKOVIĆ, B. P. TUBIĆ, M. M. PAUNOVIĆ – Application of the Water Pollution Index in the Assessment of the Ecological Status of Rivers: a Case Study of the Sava River, Serbia .....	97
YANCHEVA V. S., S. G. STOYANOVA, I. G. VELCHEVA, E. S. GEORGIEVA – Histological Response of Fish Gills to Metal Pollution: Common Carp, <i>Cyprinus carpio</i> L., and Common Rudd, <i>Scardinius erythrophthalmus</i> L., from Topolnitsa Reservoir, Bulgaria .....	103

## PARASITOLOGY

YAKAR O., S. DEMIR, H. SAMI YILDIRIMHAN, S. BIRLIK – Gastrointestinal Helminths of the Oriental Tree Frog <i>Hyla orientalis</i> Bedriaga, 1890 (Amphibia: Hylidae) from İzmir Province, Western Turkey .....	111
--	-----

## APPLIED ZOOLOGY

PILARSKA D., A. E. HAJEK, M. KEENA, A. LINDE, M. KERESLIDZE, G. GEORGIEV, M. GEORGIEVA, P. MIRCHEV, D. TAKOV, S. DRAGANOVA – Susceptibility of Larvae of Nun Moth, <i>Lymantria monacha</i> (Linnaeus, 1758) (Lepidoptera), to the Entomopathogenic Fungus <i>Entomophaga maimaiga</i> Humber, Shimazu and Soper (Entomophthorales) under Laboratory and Field Conditions .....	117
YAMAN M., G. ALGI, S. ÜNAL, B. GONCA GÜNER – Survey of Pathogens and Parasites of the Engraver Beetle <i>Ips acuminatus</i> (Gyllenhal, 1827) (Coleoptera: Curculionidae: Scolytinae) in Turkey .....	127
DOYCHEV D., M. KECHEV, I. TODOROV, P. MIRCHEV, S. BENCHEVA, G. GEORGIEV – New Entomophagous Enemies of <i>Ips typographus</i> (Linnaeus, 1758) (Coleoptera: Curculionidae) from Bulgaria .....	131

## SHORT COMMUNICATIONS

YOVKOVA M., A. PENCHEVA – First Record of <i>Elatobium abietinum</i> (Walker, 1849) (Hemiptera, Sternoryncha, Aphididae) on <i>Picea</i> spp. in Bulgaria .....	135
ZAEMDZHIKOVA G., I. TODOROV, A. STOJANOVA – Two New Chalcidoid Parasitoids (Hymenoptera: Chalcidoidea) of <i>Tortrix viridana</i> L. (Lepidoptera: Tortricidae) for the Fauna of Bulgaria .....	139
SUBCHEV M. – First report of <i>Branchiobdella</i> Odier, 1823 in Belgium .....	141

## BOOK REVIEW

GOLEMANSKY V. – Petar Beron, 2015. Cave Fauna of Bulgaria .....	144
---	-----