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COMPTES RENDUS

Book collection *LUMEA VEGETALĂ ȘI LUMEA ANIMALĂ A MOLDOVEI* [*Vegetal World and Animal World of Moldova*], scientific editorial project, made within the period 2003–2007, realized at Publishing and Printing Enterprise „Știința” of the Science Academy of Moldova, also supported by the National Ecologic Fund.

Collection includes the results of the complex scientific studies (taxonomic, biologic, ecologic and chorological) made on the natural biodiversity of Moldova, along the last five decades, and presented in eight volumes according to a concept and an unique algorithm at the kingdom, phylum, class, order and species level of the vegetal and animal world of Moldova. The eight volumes are grouped into two series:

A – Vegetal World of Moldova.

Volume 1 - Fungi. Non-flowering plants/2005 - 2007 – Algae, lichens, moss, equisetophyta, ferns, gymnosperms. Authors: Adam Begu, Ștefan Manic, Vasile Șalaru, Gheorghe Simonov: 1 – 202.

Volume 2 – Flowering plants - I/2005 - 2007 – Class Magnoliopsida, Subclasses: Magnoliidae, Ranunculidae, Crayophyllidae, Hamamelididae, Rosidae. Authors: Andrei Negru, Ana Ștefirța, Valentina Cantemir, Gheorghe Gânju: 1 – 202.

Volume 3 - Flowering plants - II/2006 - 2007 – Class Magnoliopsida, Subclasses: Dilennidae, Lamiidae, Asteridae. Authors: Andrei Negru, Ana Ștefirța, Valentina Cantemir, Veaceslav Ghendov: 1 – 207.

Volume 4 - Flowering plants - III/2007 – Class Liliopsida, Subclasses: Alismatidae, Liliidae, Arecidae. Authors: Alexandru Ciubotaru, Gheorghe Postolache, Alexandru Teleuță: 1 – 183.

B – Animal World of Moldova.

Volume 1 - Invertebrates/2007 – Authors: Ion Toderaș, Mihail Vladimirov, Zaharia Neculiseanu: 1 - 199

Volume 2 – Fish. Amphibians. Reptiles/2003 – 2007 – Authors: Tudor Cozari, Marin Usatâi, Mihail Vladimirov: 1 – 151.

Volume 3 - Birds/2006 – 2007 – Authors: Andrei Munteanu, Tudor Cozari, Nicolae Zubcov: 1 – 218.

Volume 4 - Mammals/2004 – 2007 – Authors: Andrei Munteanu, Mina Lozanu: 1 – 131.

In this collection there are presented: 49 fungus species, 118 non-flowering plant species (34 alga species, 31 moss species, 6 equisetophyte species, 11 fern species, 1 gymnosperm species), 524 flowering plant species; 180 invertebrate species, 80 fish species, 13 amphibian species, 12 reptile species, 201 bird species, 70 mammal species.

The entire volume of the collection is made of 160 editorial sheets of papers, including the illustration, which consists of 2,464 original coloured photos and 233 drawings. Totally, there are 1,492 book pages, edited by a team of 50 authors.

The collection is the present evaluation of the Moldovian biodiversity from taxonomical, floral and faunal point of view, based on ecological monitoring studies made along the last years, which were made in the natural and anthropic ecosystems

of the Republic of Moldova. All authors focused their effort in estimating the present ecological state of the flora and fauna, ecological factors which generated constant changing during the last decades and mentioned the protection methods and rational and durable using of the autochthonous vegetal and animal resources.

Each volume is made at an *autecologic level* – that is the authors describes each species according to an unitary principle, for all species, namely: *Exterior aspect* – it includes the specific morphological parameters, according to which the reader can easily recognize the species in nature; *Distribution* – it is specified the species range, which allows to the reader to have the general perspective of the natural distribution of the respective species; *Habitat* – there are indicated the characteristic living places of the species; *Biological and ecological particularities* – includes a brief but complete information on the main aspects of biology, ecology and ethology of each species from the Republic of Moldova; this kind of information being useful both for knowing a certain species and for establishing the specific of its features in that area; *Its importance in nature and in man's life* – presents the functional value of the vegetal and animal organisms in natural and anthropized ecosystems as well as in the national economy, and underlines the necessity of the species protection everywhere; *Frequency and the limitative factors* – presents important data on the ecological state of each species and of the anthropic factors which contributed to their bad state. This kind of information gives us the possibility of organizing efficiently the protection of a certain species, when necessary. Data from the *Biological card* can be used as a very good source for creating the data base of the Moldovian biodiversity.

The scientific-editorial project and the authors' team (50 scientists) were coordinated mainly by five specialists from the Academy of Sciences of Moldova, together with its president, university professors and directors of some institutes of scientific research.

Acad. Gheorghe Duca was the initiator of the idea and of the concept in editing the collection *Vegetal and animal world of Moldova*, as well as the organizer of the collection publication. Gh. Duca, together with Prof. Dr. T. Cozari and Dr. Gh. Prini, proposed the concept of each volume, basing on the following fundamental principles: a) information presentation regarding *Vegetal World of Moldova and Animal World of Moldova* according to the latest taxonomic classifications; b) information presented as in the editions with an encyclopaedic character; c) the edition had to be made from a scientific-popular perspective, basing on the scientific results of the scientists specialized in the national flora and fauna; d) the presentation of information at an autecologic level and in a phylogenetic order; e) description of the species according to a unique algorithm; f) cognitive character of each volume addressed to the general public; g) collection will be a methodological and practical support for other scientific papers and for the documentation of those interested in it.

Acad. Gh. Duca's contribution was also the argumentation of the necessity of publishing each of these volumes and the identification of the scientific and practical value of the respective information, especially those biological, ecological and ethological ones, as well as of the ecological problems which contributed to the publication of these books.

Prof. Dr. Tudor Cozari, together with Acad. Gheorghe Duca and Dr. Gheorghe Prini, implied in the elaboration of the project *Vegetal World and Animal World of Moldova*, proposed an algorithm of each description which sums up the main

biological, ecological and ethological parameters of the species – *exterior aspect, distribution, habitat, biological and ecological particularities, its importance in nature and in man's life, frequency and limitative factors, biological card.*

T. Cozari was the scientific secretary of the National Committee for the publishing of the collection *Vegetal World and Animal World of Moldova*. He coordinated the teams of authors' activity on the manuscripts editing, their review and verification according to the algorithm.

At the same time Prof. Dr. Tudor Cozari is the co-ordinating author of the second volume of the series *Animal World of Moldova – Fish. Amphibians. Reptiles*. As a matter of fact, it is him who made the complete description of the amphibians and reptiles, and partially, of the fish, representing 40% of the text of the volume.

He is also one of the authors of the third volume - *Birds*, where he made the General Characterization of the class, the description of 7 bird orders and 60 species, i.e. 30% of the entire volume. Also Tudor Cozari made most of coloured images of the 4 volumes of the series *Animal World of Moldova* – totally 774 images (vol. 1 – 39, vol. 2 – 107, vol. 3 – 501, vol. 4 – 127 images).

Dr. Gheorghe Prini distinguished by his scientific and editorial work for the collection *Vegetal World and Animal World of Moldova*, a subsequent book to the Red Book (2nd edition in 2001), made of his own initiative.

In fact, being the general manager of the entire activity (beginning with the conception and the unique algorithm for the species description, minute study of all texts presented by the authors and finishing with the monitoring of all editorial and printing processes), Dr. Gh. Prini was also responsible for respecting the deadlines during the editing of the entire collection, all eight volumes; he coordinated the authors' activities, analyzed the manuscripts, as well as the reviews of the specialists from Moldova and abroad; he selected the illustration; he created the book design of all volumes of the collection.

Beginning that the success of the collection is mostly due to its exceptional editorial and printing aspect (an editorial novelty of this kind in that region of Europe), Dr. Gh. Prini's special merit is that of co-ordinating the extremely complex editorial work: unification of the presented manuscripts, editing and proofs, design as well as the selection of a qualitative illustration, either of that presented by the authors or of those ordered to some Moldovian or foreign agencies (from Romania, Great Britain, etc.).

Academician A. Negru also implied deeply in establishing the concept and structure of the volumes, in selecting the criteria, principles, and space dedicated to the plant descriptions in the series *Vegetal World of Moldova*.

As editor in chief of the series *Vegetal World of Moldova* and as co-ordinating author of two volumes *Flowering Plants - I* and *Flowering Plants - II*, Acad. A. Negru made not only co-ordinating activities, organization and design of both volumes but also wrote articles and made photos. He made the general characterization of the Phylum Magnoliophyta, Class Magnoliopsida, respective subclasses (8) and orders (43). As biologist and passionate photographer he worked hard in making the coloured photos, over 1,000, which represent 97% of all photos included in these two volumes.

Professor Dr. Andrei Munteanu was the co-ordinating author of two volumes from the series *Animal World of Moldova*: vol. 3, *Birds* and vol. 4, *Mammals*. From this position he structured this series, establishing the theoretic and practical priorities and methodological particularities in the description and graphic

presentation of the species of the classes *Birds* and *Mammals*. So, he selected and established the whole list of the species which had to be included in the two volumes, fully respecting the scientific rigour.

Dr. Andrei Munteanu's contribution can be remarked in: volume 3. *Birds* – general characterization, description of 73 species and the respective orders; volume 4. *Mammals* – general characterizations, description of 35 species; he scientifically edited these volumes.

This collection can be included within the encyclopaedic type books, with a rich scientific content, with present data on the state of the plant and animal species of Moldova. It includes records in size, velocity, weight, height, etc., combining in an attractive mode scientific data with those of general interest. The eight volumes of the collection has to find a place in each biologist's library, as well as in that of the professors, researchers, specialists from the museums of natural history, of the students specialized in biology, agronomy, silviculture, etc.

All authors, together with their distinguished collaborators, deserve all our appreciation for their impressive effort in organizing such a project, in finding proper solutions for surpassing difficulties, and especially in making the original illustration of the volumes. It is published in excellent graphic conditions and it will remain a book of reference on the Moldovian biodiversity, printed in the first decade of the 21st century.

DUMITRU MURARIU