
REVIEWS

BIOLOGY – A SCIENCE OF LIVING MATTER

Monographs, catalogs, reference books and encyclopedic editions devoted to different spheres of biology have been acquired by the Informational-Librarian Center (ILC) of the Tyumen State University.

The classical scientific works include “Essays on the methodology of biological research: systems of methods in biology” [1] written by academician Ivan Frolov, the founder and first director of the Institute of Man of the Russian Academy of Sciences. The essays have already become classic works of biological science on the basis of which new methodologies are being built.

Another important acquisition is the monograph of one of the founders of modern genetics Ronald Fisher “Genetical theory of natural selection” [2]. This research published in Oxford in 1930 only now has become available for the Russian reader; its translation from the English language has been done by Professor Nikolay Glotov only recently.

Microbiology is one of the most significant component parts of biology as a science. A number of the books which only recently appeared in the ILC of the Tyumen State University are devoted to the achievements of Russian scientists in this sphere. They include a joint work of Professor and Academician of the Russian Academy of Natural Sciences Vsevolod Emtsev and Fellow of the Russian Academy of Sciences Evgeniy Mishustin “Microbiology” [3]; monograph of Professor of the Biological-Pedological Department of the Saint-Petersburg State University Nikolay Bityutskiy “The microelements of higher plants” [4] – the result of a 20-year-research of the scientist who discovered over 80 elements of the famous Periodic table of elements by D.I. Mendeleev in plants.

A joint research of Elena Ermilova, Zhanetta Zalutskaya and Tatiana Lapina is devoted to achievements in the spheres of microbiology, molecular biology and genetics “Mobility and behavior of microorganisms. Eukaryotes” [5].

A significant part of the newly acquired literature belongs to the sphere of applied biology and natural science. They include an original research of Professor of the Russian State Agrarian University of the Moscow Agricultural Academy named after K.A. Timiryazev Yuriy Zakhvatkin “Acarology – a science of mites and ticks. History, development and contemporary stage” [6]. According to Yu. Zakhvatkin “these creatures are more spiders than insects. Saprophages, carnevores, phytophages and ixodic ticks belong to the arthropods. In 2004 they were singled out as a separate superorder “Acarina” as opposed to the other arachnoids...”

Representatives of the fauna which are second most dangerous for people after malaria carriers have become the subject of the research of the Russian scientists Sergey Beer and Mikhail Voronin, the authors of the monograph "Biology of the schistosomiasis carriers" [7]. This work is very significant for the Russians working outside the Russian Federation in hot and swampy areas of the planet.

The family of "ant-lions" is a rare species inhabiting woodlands. There are 34 representatives of these neuropterous insects in Russia. The field guide "Ant-lions" composed by a researcher of the Zoological Institute of the Russian Academy of Sciences V. Krivokhatskiy offers their classification according to their types and habitats [8].

Another new interesting and educational book in the ILC fund of the Tyumen State University is "The Encyclopedia of the genus *Beta*. Biology, genetics and selection of the beetroot" [9]. This edition was prepared for publication by the Vavilov society of geneticists and plant breeders of the Institute of cytology and genetics of the Siberian department of the Russian Academy of Sciences and the Institute of the sugar beetroot of the Academy of sciences of Ukraine. On the pages of this serious tome published by the Novosibirsk publishing house "Sova" one can find the history of the beetroot selection along with the small radish, turnip, wild radish and cabbage from VI century BC to our times.

Of big interest for the specialists in biology and other natural sciences and for those interested in the history of Russian science is the two-volume "Pavlovskaya encyclopedia" [10]. It is devoted to life and work of the worldwide known maitre in physiology, the first Russian Nobel prize winner and privy councilor (in the "Table of Ranks" of the Russian Empire) Ivan Pavlov, the author of the reflex theory. On the pages of this impressive edition the reader can find 800 articles concerning the career stages and scientific discoveries of the great scientist, "The honored owner of the soviet miner's lamp", biographies of his followers and colleagues such as Semen Girgolav and Levon Orbeli who also left an imprint in Russian and world science.

In conclusion, the latest acquisitions of the ILC of the Tyumen State University on biology and its numerous fields will be of interest not only to a small circle of future specialists in the sphere of natural sciences and their teachers but also to a wide audience of readers who are curious about the history and modernity of biology.