

IN MEMORIAM OF ADELAIDA DMITRIEVNA NIKITINA (PETROVA) 1932–2011



On 14th of February, 2011 a talented scientist, Senior Researcher of the Department of Entomology of the Faculty of Biology, Moscow Lomonosov State University Adelaida Dmitrievna Nikitina (Petrova) passed away. Adelaida Nikitina was one of the most prominent acarologists of the former USSR and Russia, who trained a number of young researchers in the field of Acarology.

Adelaida Nikitina was born on 25th of May, 1932, in the city of Vitebsk in the family of a military officer. Her childhood was not easy. In the summer of 1941, when the war with Germany started, she moved to her relatives in a small village close to Vitebsk. For three years, young Adelaida suffered hardships of life under the German occupation. On one occasion, the Nazis, suspecting local villagers in ties with partisans (resistance fighters), lined up all the inhabitants of the village shooting every third person, including children. Adelaida was the second in the line and survived. She also was fortunate to overcome the epidemic typhus disease. Thanks to her strong character that formed since the early childhood she stayed alive.

All scientific activities of Adelaida Dmitrievna were closely connected with Lomonosov Moscow State University. In 1950 Adelaida has become a student of the Faculty of Biology and specialized at the Entomology Department. She has chosen gamasid mites for her study. This taxonomic group of mites has become her major research interest for years. In 1955 Adelaida Dmitrievna successfully defended the her diploma thesis entitled “Materials on Gamasoid Mites of the Issyk-Kul’ Basin”. Alexander Lange, her scientific advisor was the county’s leading acarologist. Adelaida Nikitina graduated the Biology Faculty with honors and entered the graduate school.

Immediately after its completion she was invited to the Complex Zoology and Entomology Laboratory of the Biological Faculty of Moscow Lomonosov State University in the village of Chashnikovo as a junior researcher. Since 1964 Adelaida Nikitina worked at the Department of Entomology of the Biology Faculty of Moscow University where she spent the following 50 years of her career. In 1979 she became a senior researcher.

In 1969 Adelaida Nikitina defended the Candidate of Science thesis “The Mites of the Family Macrochelidae” that has become the first monographic research work on this widely distributed, diverse and economically important family of gamasid mites. In her dissertation she investigated various aspects related to macrochelid mites, including morphology, biology, fauna, and biocenotic relationships with other invertebrates. The economical importance of the group was also studied.

The priority areas of research for Adelaida Nikitina for many years were fauna and taxonomy of mites. She described 5 genera and 70 species new to science. As a result of her long-term study of the free-living mesostigmatic mites she compiled chapters for the “Identification Guide to Soil Inhabiting Mites (Mesostigmata)” covering the families Parholaspidae, Zerconida, and also the cohorts Trachytina and Uropodina. This identification key has become the major step forward for the Soviet and Russian acarology. The authors of this 3-volume edition were awarded with the State Prize of the Soviet Union (1980), one of the highest country’s awards. To collect material for her research, Adelaida Nikitina took part in many research expeditions in the middle part of the European Soviet Union, Crimea, Caucasus, Tian-Shan’, Trans-Baikal, Turkmenistan, Kamchatka peninsula, Southern Primorye, Kuril Islands, Magadan Province, and many other places.

The sphere of research interests of Adelaida Nikitina included various aspects of ecology of free-living and parasitic mites, such as their distribution patterns, biotopic affinity, biocenological associations, dispersal. Jointly with her students Adelaida Nikitina studied how microarthropod communities develop in natural and anthropogenic landscapes and their changes under anthropogenic pressures (e.g., recreation, pollution from the metallurgic industry, traffic). A series of research papers were on taxonomic diversity and

community structure of hydrophilous acariform mites. A number of research papers were on formation and succession changes of microbiocenoses in the animal nests, which could serve as the infection source in natural foci of diseases.

A special interest for Adelaida Nikitina was to study synanthropic species and groups of mites. A. Nikitina, along with E. Dubinina and V. Pletnev, published pioneering studies on the mite fauna in human houses, most importantly the family Pyroglyphidae in the USSR. She was closely cooperating with the I.I. Mechnikov Research Institute of Vaccines and Serums to study allergenic properties of house dust mites. That research has resulted in developing two medical drugs to diagnose and cure the mite allergies. Based on multi-year monitoring (more than 20 years of research) the principles of house dust mite complex formation were developed for the city of Moscow, the seasonal dynamics of the mite allergen exposition was revealed, which directly improved the prevention and treatment of allergenic diseases. A special interest, of both scientific and practical value, was the research made by Adelaida Nikitina on biocenotic relationships of house dust mites and micromycetes fungi. Another medically important group of mites she studied was the hematophagous gamasid mites parasitic on synanthropic vertebrates. As an example, her student, as part of her Candidate of Science thesis, has published a monograph on the rat mite, *Ornithonyssus bacoti*, its host-parasite relationships, medical importance and peculiarities of the rat dermatitis foci formation as well as the development of their elimination measures.

Adelaida Nikitina was one of the leading acarologists in the country and a leader of Moscow school of acarology. She published more than 150 research works, including several monographs and textbooks together with her former students, such as “Soil Invertebrates of the White Sea Islands of the Kandalaksha Reserve” (1986), “Biogeocenoses of Alpine Deserts Using the Western Caucasus as an Example” (1987), “Manual on Collecting and Identifying of Acariform Mites of the Continental Water Bodies” (1997), “Acarological and Mycological Surveys of Houses as a Basis of the Prevention of Allergic Diseases (Tasks and Principles)” (2002). For many years Adelaida Petrova was a member of the Editorial Board of “Acarina” (1993–2011).

Adelaida Nikitina was always happy to share her extensive knowledge, consulting on numerous aspects of biology, ecology, and taxonomy of

mites. All people who had a chance to meet Adelaida Nikitina remembered her friendly and open character, her fantastic sense of humor and optimism. When remembering Adelaida Nikitina, the first thing that comes to mind is her charming smile. Being a distinguished scientist Adelaida Nikitina always reserved time to advise young researchers asking for her assistance, including undergraduate and graduate students. All of them were impressed by the scope of her knowledge, ability to work hard, and genuine hospitality.

Since 1964 Adelaida Nitikina for more than 40 years delivered lectures and gave practical classes for the Acarology course by keeping the best traditions of the Moscow school of Acarology built by Alexey Zakhvatkin and Alexander Lange. Adelaida Nikitina was an amazing lecturer and instructor. She was always attractive for the students and generously shared with them her dedication and love of the science of Acarology.

All students of Adelaida Nikitina remember the basics of zoological drawings, which were taught by her, and the high standards she expected from their work. Adelaida Nikitina always demanded from her students deep knowledge of the research literature, thorough analysis of the obtained results, and exceptional quality of work. When a research paper has been finished, she would put it aside, explaining that it should “stay alone” for some time to have a better chance for a further quality revision before submitting it to the journal.

Adelaida Nikitina was a scientific advisor to five Candidates of Science and one Doctor of Science. She was an advisor to 90 diploma and course works. It means that 45 trained experts in Acarology nowadays work in various cities of Russia and abroad. Most former students of Adelaida Nitikina continued to communicate with their teacher, visited her, shared their news, both personal and scientific, asking for advice or looking for support. She was always sincerely concerned about her students, celebrated their achievements and supported them in difficult situations. The senior and mid-aged generations of professors and researchers from the Department of Entomology always remember the humorous presentations of Adelaida Nikitina at many department informal meetings.

The memories of Adelaida Nikitina, a scientist, teacher and marvelous personality will always stay in the hearts of people, which had a privilege to know her.

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