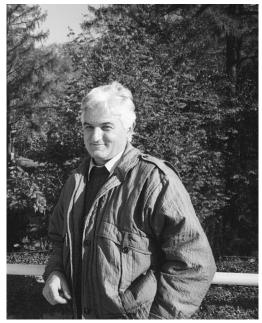
Prof. Emanuel Palamarev, DSc

April 24, 1933 - January 28, 2004



Phot. E. Zastawniak

On January 28, 2004, Professor Emanuel Palamarev, Doctor of Biological Sciences, an outstanding Bulgarian scientist in the field of palaeobotany with a high international reputation, passed away. On this day we lost an excellent scientist who occupied a place of prominence in Bulgarian botany, to the advancement and achievements of which he dedicated forty five years of his life.

Professor E. Palamarev was born on April 24, 1933 in the town of Doupnitsa, in the family of a medical doctor. He completed secondary school in his hometown in 1950. Because of his father's ideas, which were of incongruity with the official communist ideology, the Municipality of Doupnitsa town refused for two years his requests to obtain the necessary permission for his application for higher education. Finally, in 1952 he was authorized and applied to the Faculty of Biology, Geology and Geography of St Kliment Ohridski University of Sofia, in the specialty of biology.

Since enrolling in the University, Palamarev showed special interest in botany, which was accordingly noticed by his teachers. From these years his colleagues and friends remember him not only with his love of nature, but also to music and with his skill in playing the piano. In 1957, Palamarev completed his MSc thesis entitled "Palaeobotanical studies of the Palaeogene in the area of Samokov", under the scientific guidance of Prof. B. Kitanov. In the same year he enrolled as a regular post-graduate student at the Institute of Botany with Botanical Garden at the Bulgarian Academy of Sciences. Over the next three years, under the guidance of Prof. B. Kitanov as supervisor, he worked on his PhD Thesis titled "Palaeobotanical studies of the Chukurovo Coal Basin", successfully completed in 1961. In the same year he was appointed as a Research Associate at the Institute of Botany, where he developed further studies in the field of Tertiary palaeobotany: the floras of NW Bulgaria, Melnik Basin, Sofia Basin, Gotse-Delchev Basin, Brezhani Coalbearing Basin (Pirin Mts.), Palaeogene floras from Rhodopes Mts., etc.

The professional development of Palamarev continued as a Research Fellow in 1963 for three months at the Palaeobotany Department of the German Academy of Sciences (Berlin), and later, in 1967 for one year at the Institute of Palaeontology of the University of Bonn under the support of a award from the Alexander von Humboldt Foundation. The work at these institutes with palaeobotanists from the German Palaeobotanical School contributed greatly to the increase of his knowledge, brought him new ideas, and established friendship and partnership for many years onward.

In 1970 he received the academic degree of a Senior Research Associate -2^{nd} class (Associate Professor), and in 1991 he completed his DSc Thesis on the theme "Composition, structure and main stages in the evolution of the Miocene palaeoflora of Bulgaria", obtaining the scientific degree as Doctor of Biological Sciences. Next year brought him the title of a Professor.

From 1989 to 2002 Prof. Palarnarev was head of the Department of Palaeobotany and Palynology at the Institute of Botany. For three years (1980–1992) he was Scientific Secretary of the

Institute of Botany, and later, from 1993 to 2003 the Director of the same institute. He managed and administrated the Institute of Botany in one of the most difficult periods for Bulgarian science and society, but regardless of the problems, he contributed to the stabilization of the Institute and to improve the research work in terms of the requirements of European and world science.

The scientific interests of Prof. Palamarev were focused on studying the Tertiary flora in Bulgaria, especially focusing on taxonomy, palaeoecology, and the evolution of the flora and vegetation. He studied taxonomically and ecologically 118 local Tertiary floras, described 60 fossil taxa new to the science, including one new subfamily *Eostangerioideae*, and identified more than 400 new species in the Bulgarian palaeoflora.

He applied to palaeobotanical research in Bulgaria the methods of standard palaeofloras, of chronological areals, the method of determination and relative domination of taphocoenoses. Prof. Palamarev determined the age of Carboniferous and palaeoecologically important sediments in many basins on the territory of the country. On the basis of data obtained from chronostratigraphic studies he evolved a phytostratigraphic scheme of the Bulgarian Miocene.

Prof. Palamarev offered a detailed scheme of the palaeosuccession cycles in the development of Bulgarian Miocene flora, identifying 6 palaeosuccession cycles and 9 palaeoflora types for the time span from the Upper Oligocene – Villafranchian. He distinguished and described palaeoclimatic phases in the Balkan realm based on comparative studies of fossil plant communities to recent ones from subtropical and warm temperate areas of Asia and North America. Thus he distinguished the phase of the Middle Miocene climatic optimum and two semiarid phases at the and of Sarmatian s.l. and end of Pontian. The studies on Palaeogene floras from the Rhodopes mountains permitted him to identify two palaeofloristic complexes with the rank of phytostratigraphic zones for the Upper Eocene and Lower Oligocene.

An excellent expert on the fossil Tertiary flora, Prof. Palamarev proposed a hypothesis on the origin and evolution of the Mediterranean sclerophyllous dendroflora in the Tethyan realm. The detailed investigation of Bulgarian palaeofloras and their comparison to synchronous palaeofloras from the other Balkan countries permitted him to introduce a new palaeophytochorion on the territory of the Balkan peninsula, with the rank of a palaeofloral subprovince, which he termed the "Miocene Central Balkan Subprovince".

Summarizing his extensive palaeobotanical studies, Prof. Palamarev traced out the Tertiary history in Bulgaria of number of important taxonomic groups, e.g. the genera *Stratiotes*, *Acer*, *Glyptostrobus*, *Taivania*, the families Blechnaceae, Aspidaceae, Pteridaceae, Fagaceae, Theaceae and others.

Prof. Palarnarev participated in the elaboration of the Flora of the Republic Bulgaria, working on families mainly of tree representatives and submitting data on the fossil finds for some families within the territory of the country.

The results of his active work in the field of Palaeobotany were published in more than 150 papers, references and critical articles in Bulgarian and prestigious foreign publications. He participated and presented results at 13 international symposia and congresses in addition to numerous national conferences within Bulgaria. His studies are well known to experts in palaeobotany and to date have been cited more than six hundred times in scientific monographs and papers.

As a scholar of great experience and knowledge with high responsibility, Prof. Palamarev passed on his experience and knowledge to numerous younger colleagues. He successfully supervised four PhD and six MSc students within Sofia University, all of which developed, completed and successfully defended their PhD and MSc theses. He lectured specialized courses on "Palaeobotany" and the "Evolution and Phylogeny of Plants" at the Biological Department of Sofia University, and at the University of Plovdiv "P. Hilendarski".

He actively worked in the frame of international projects, including different projects including IGCP projects supported by UNESCO as well as other projects such as NECLIME, EEDEN and Academic exchange projects with the Botanical Institute of the Polish Academy of Sciences (Kraków). In addition he played important role in numerous other projects funded by Bulgarian organizations.

As a prominent scientist, broadly accepted and with a high prestige, Prof. Palamarev was a member of a number of scientific commissions, e.g. Vice-chairman of the National Scientific

Commission on Biological and medico-biological Sciences of the Higher Attestation Commission, Steering Committee of the National Science Fund of Bulgaria, Scientific council of the Institute of Botany and the Scientific council of the University of Forestry, Sofia. He was a member of numerous international and national organizations, including the International Organisation on Palaeobotany, the Bulgarian Botanical Society, the Union of Scientists in Bulgaria, the National Committee for Global Changes in Geosphere and Biosphere and the National Committee for Biological Sciences, etc. In each of these he undertook an active part in their work.

Prof. Palamarev actively worked on the editorial boards of the Proceedings of the Institute of Botany (1970–1975), of the Fitologiya series (1970–1990), and of collections and reference books. He rendered his experience, energy and knowledge to organize and publish the journal Phytologia Balcanica, and served as Editor in Chief since 1995.

In admission of his services to botanical science, the Governing Body of the Bulgarian Academy of Sciences awarded Prof. Palamarev the medal of honor "Marin Drinov" in 2003, and the Bulgarian Botanical Society elected him as Honorary Member of the Society.

We, his colleagues, friends and students, will miss him not only as a very active scientist but also as an exceptionally likeable person and good colleague.

Dr Dimiter Ivanov Institute of Botany, Bulgarian Academy of Sciences Acad. G. Bonchev Str., 23, BG-1113 Sofia, Bulgaria