

Margarita Markova

### **Bogdan Kuzmanov (1934-1991)**

Dr. B. Kuzmanov died suddenly of a heart attack on December 22, 1991 at the age of 57. His untimely death is a great loss for the Institute of Botany and Botanical Garden of the Bulgarian Academy of Sciences. He was among the most enthusiastic, restless and learned Bulgarian scientists working in the fields of taxonomy, biosystematics and evolution of plants.

From the time of his studies at the Faculty of Biology, Geology and Geography of Sofia University, Kuzmanov showed interest in the vast diversity of the Bulgarian flora. After finishing the University with excellence he was accepted at the Botanical Institute of the Bulgarian Academy of Sciences as a postgraduate in plant taxonomy and evolution.

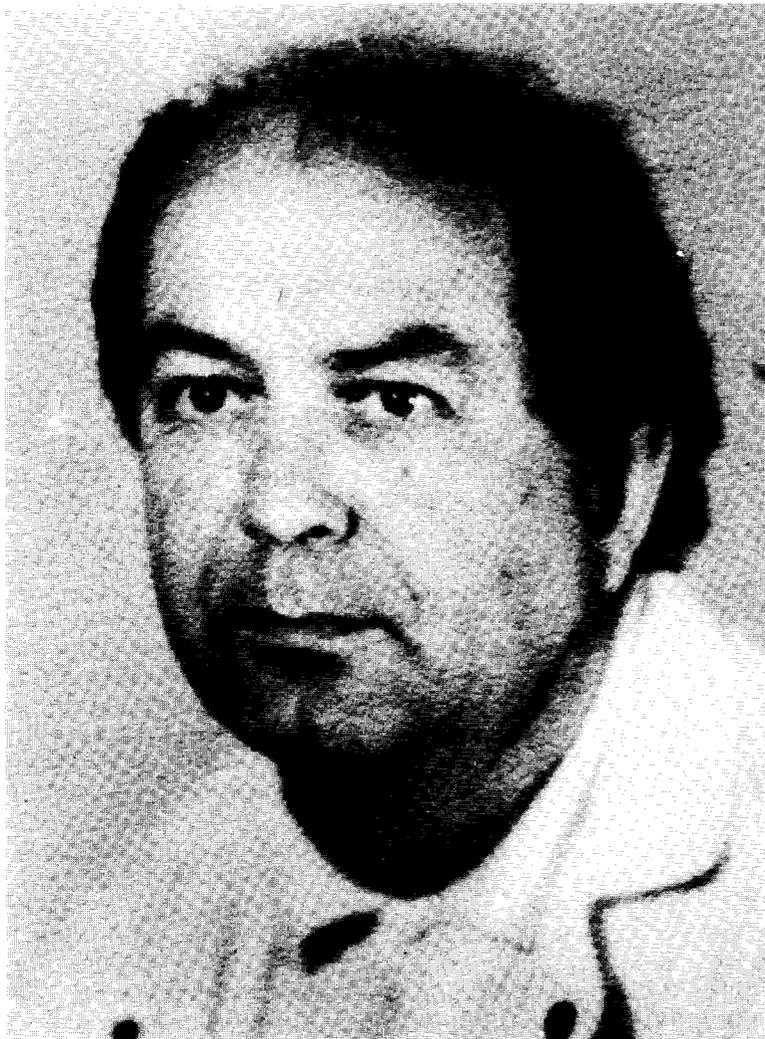
In 1961 he defended his Ph.D. thesis on a "Taxonomical, ecologo-geographical and economic study of the Bulgarian species from genus *Euphorbia* L.". In the same year he was appointed scientific research worker, and in 1970 he was elected as Docent in the Department of Higher Plant Systematics of the Institute. In 1985 he obtained his Dr. habil. degree with a study on "Taxonomy and evolution of Bulgarian *Asteraceae*", and two years later he was elected Professor.

Kuzmanov was a key figure in the Institute of Botany and Botanic Garden, where he was head of the Department of Applied Botany and one of the authors and editorial board members of "Flora R. P. Bulgaricae". His studies for that basic national Flora and for his doctoral thesis included about 1150 species of flowering plants, belonging to 180 genera and 19 families.

His contributions to the published volumes of the Flora include treatments of a number of critical genera of the *Cyperaceae*, *Liliaceae*, *Chenopodiaceae*, *Caryophyllaceae*, *Ranunculaceae*, *Papaveraceae*, *Saxifragaceae*, *Fabaceae*, *Convolvulaceae* and *Asteraceae*, which he authored either alone or in with others (mostly with Acad. D. Jordanov and Prof. S. Kožuharov); the genus *Mentha* he worked out jointly with its monographer, Dr. W. Harley. He was the editor of the following volumes of the Flora: 3 (1966, with D. Jordanov); 6 (1976, with D. Jordanov and S. Kožuharov); 7 and 9 (1979, 1990, alone); he failed to see printed volume 10, which was also edited by him.

His taxonomical studies on two families basic for the Bulgarian flora deserve special attention: *Fabaceae* and *Asteraceae*. His work on critical genera with evolutionary centres in the Mediterranean and the Balkan Peninsula, as for example *Genista* and *Chamaecytisus*, are of a monographic character and have been highly praised by Bulgarian and foreign specialists.

In his doctoral thesis, the result of year-long efforts (1965-1985), Kuzmanov made use of a full range of methods of taxonomy and biosystematics in order to uncover the basic patterns of diversity and evolutionary strategies of the Bulgarian representatives of the *Asteraceae*.



Kuzmanov's studies on the Bulgarian flora were held in high esteem internationally. In 1967 he was invited to serve as a regional adviser for "Flora europaea" together with Acad. N. Stojanov, for volume 2 (1968), and later he was the sole adviser for Bulgaria for volumes 3-5 (1972-1980). He was also selected to be the author of the treatment of *Edraianthus* for volume 4 (1978). On the invitation of the Flora Europaea Organizing Committee, Kuzmanov attended a specialization course in Great Britain in 1966; subsequently he took part in most of the regular symposia of the Flora Europaea Organization, including its final session (1977). Since 1982 he has served as regional adviser for the multi-volume compendium of the Mediterranean flora, "Med-Checklist" (1, 1984; 3, 1986; 4, 1989).

Kuzmanov was a founding member of OPTIMA and represented Bulgaria on the International Board of this Organization from the beginning and until his death.

In his scientific investigations Kuzmanov applied sophisticated methods of study: comparative-morphological, karyological, anatomical, and chemotaxonomic. His studies of the genera *Plantago* (1984) and *Peucedanum* (1982-1983) may serve as examples in this

respect. Biogenetic processes in iridoid synthesis, combined with morphological and karyological data, reveal essential evolutionary patterns in *Plantago*, on a world-wide scale. Comparative-morphological, karyological and phytochemical studies evidenced important aspects of evolutionary strategy and morphological differentiation, within *Peucedanum*, in Bulgaria and on the Balkan Peninsula.

In collaboration with various (Bulgarian as well as foreign) specialists, Kuzmanov has contributed to the chemotaxonomic study of 160 species, representing 20 genera and 9 families, of the Bulgarian flora. His cytotaxonomic investigations concerned more than 410 species of 228 genera and 13 families.

His achievements in the field of biosystematics and evolution owe no little to two research fellowships on these problems, in Poland (1964) and at the University of California (1974).

It is extremely difficult to enumerate all scientific achievements of our late colleague Kuzmanov. More than 140 scientific publications and papers (46 of them in foreign scientific journals) published either independently or in co-authorship, bear witness of his scientific activities. Some of his results have been reported at 25 international symposia and two world congresses (1975 and 1987).

Kuzmanov was among the initiators of the "Red data book of Bulgaria. I. Plants", published in 1984. For that work he authored personally a number of species accounts, and was a member of the editorial board. He also was a member of the editorial board of the journal of the Institute of Botany, "Phitologia", and he served on the editorial boards of a number of other publications of the Institute: "Evolution of flowering plants and florogenesis", Parts 1 and 2; "Atlas of Bulgarian medicinal plants", "Collection in honour of Acad. D. Jordanov", etc.

Kuzmanov was also actively involved in lecturing at the Department of Botany, Faculty of Biology, Sofia University. He lectured for the integrated specialized courses for the 8th and 9th semestres on "Genetic resources and protection of medicinal plants" and "Taxonomy and evolution of higher plants". He was tutor of 12 graduate and 3 post-graduate students (Bulgaria, Vietnam and Guinea). He also lectured abroad: at the Free University, Institute of Systematic Botany, in Berlin (1979); at Saloniki University (1986); and at the University of South Australia and Botanical Gardens, Adelaide, Australia (1990).

Bogdan was dreaming of visiting in the spring of 1992 the village of Bosnek, on the southwestern foothills of the Vitoša Mountain, "because on the way there the flora is so rich and interesting". He was lucky to establish contacts with two other enthusiasts of his kind, Dr. Kirschner and Dr. Stepanek from Prague. He wanted the three of them to work out the genus *Taraxacum* on a world scale. He wanted to see volume 10 of the Bulgarian Flora published. He also waited for the last, 12th volume of that publication, where the greater portion of the *Asteraceae* treatment was done by him. He planned to visit his son in Washington, but, sadly enough, his heart broke and he passed away quickly, as he used to do everything in his lifetime — in constant struggle against time. He leaves a big empty space in Bulgarian botanical science.

Address of the author:

Dr. Margarita Markova, Institute of Botany and Botanic Garden, Bulgarian Academy of Sciences, Sofia 113, Bulgaria.