

U.D.K. 9;58:58.006



DAVYDENKO

Maryna M.,

Candidate of Historical Sciences,
Research Fellow of department
science-methodics work and
abstracting

National Scientific Agricultural Library
of the National Academy of Agrarian
Sciences of Ukraine
(a city of Kyiv)

**SCIENTIFIC RESEARCH OF AS USSR ACADEMICIAN
A.M. GRODZINSKY (1926–1988) IN CHEMICAL INTERACTION OF
PLANTS (ALLELOPATHY)**

Summary

The study purpose is comprehensive report of famous botanist's contribution, plant physiologist, director of the Central Republican Botanical Garden of USSR Academy of Sciences Academician A.M. Grodzinsky in the formation and development of chemical interaction between plants (allelopathy) as a scientific direction.

By the method of historical and scientific analysis the author highlights the main achievements and research of the scientist on the problem. In particular, A.M. Grodzinsky and colleagues first introduced the concept of donor-acceptor interactions of plants, studied mechanisms of physiological effects of allelopathic substances, examined the chemical nature of allelopathic complex substances and the effect of chemical compounds on plant growth, proposed biotests that allow to judge the allelopathic activity of substances, developed original methods of studying allelopathic soil fatigue and ways of practical application of knowledge, measured the place of allelopathy in the system of biological sciences, which helped to transform allelopathy as an original direction in biology into scientific discipline and make CRBG the world famous center for the study of chemical interactions of plants.

Being on the leading position of the world science of plants allelopathy, A.M. Grodzinsky and his colleagues developed an experimental allelopathy and used

this direction in plant growing and biotechnology. Thus, allelopathy should be considered as one of the fundamental areas of plant physiology. Study on allelopathy that intensively developed in Ukraine in 1970–1980's and were associated with the name of A.M. Grodzinsky, are widely conducted in different countries nowadays, especially those which has export-oriented agriculture and forestry.