

## THE DEVELOPMENT OF LEARNING ABOUT THE PLANTS' ADAPTATIVE SYNDROME TO THE DROUGHT IN UKRAINE

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Last time in view of the negative changes of ecological situation in Ukraine the learning about plants' adaptative syndrome to the environment unfavorable factors, including drought, is developed quick rates.

Our researches aim consists of generalization of extensive factual materials about influence of water and hair-temperature stresses on plants in historical context. For attainment this aim it is posed such problems: to recognize and study the basic stages of learning formation about plants' adaptative syndrome to the drought in Ukraine; to characterize the contribution of domestic scientists to development of this researches region.

Domestic scientists from the beginning of XIX century elaborate the different aspects of drought influence on plants and their life-activity components depending on environment conditions. This stage is characterized the learning of plants' adaptation peculiarities to this stress factor on organism level in context of main generation processes of life-activity: water-change, growth, development, productivity (XIX-beginning of XX centuries). The Ukrainian phytophysiologists' works of this period was introduced the fragmental researches of question. The invaluable contribution to the learning making about plants' adaptation to drought is brought Kiev scientists: S.M. Bogdanov, V.R. Zalenskiy and V.V. Kolkunov.

Later it is happed the learning formation about plants' drought-stability as phytophysiology independent problems; the researches scales widening of this question on another organization levels: cell, tissue, organic; the first generation of experimental results (20-30 years, XX century). In the beginning of XX century the learning physiological basis of plants' water regime and drought-stability is layed the foundation by academicians E.Ph. Votchal and V.N. Lyubimenko. The considerable contribution to the plants' drought-stability learning is maked the scientists of Plant Physiology Institute of AS USSR: T.T. Demidenko, A.A. Vlasyuk, D.Ph. Prozenko, I.G. Shmatko, A.S. Okenenko, Ch.N. Pochinok and also All-Union scientific-research institute of maize: A.I. Zadonzhev, G.R. Pikush, V.I. Bondarenko, M.Ya. Tregubenko, V.I. Nepomnyashiy, G.A. Phyllipov.

At modern stage it is descended the widening of plants' drought-stability main problems' learning on genetic and biochemistry and their following differentiation on basis of researches methods' improvement and adjoining sciences' achievements: cell engineering, transgenesis, nuclear magnetic resonance and others, which in combination with classical method assure the getting of new main information. Domestic physiologists are always resided the complex approach to the definite phenomenon learning of plants' world. In connection with this the drought-stability concept formation is characterized considerable variability and different-level of adaptative rebuilding, which are generalized in concept of adaptative syndrome. It is activity studied the components of plants' adaptative syndrome to the acting of negative environment factors such Ukrainian scientists: N.N. Musienko, N.Yu. Taran, I.A. Grigoryuk, L.L. Kordyum, I.V. Kosakovskaya, E.A. Kazakov and others. The characteristic peculiarity of these scientists' researches is system approach to the learning of integral, cooperation phenomenon – plants' adaptation to the drought on different organization levels.

In that way, the learning of plants' adaptative syndrome to the drought began to develop in Ukraine at XIX century, in process of formation passed the stages' row and today is one of actual problem of modern phytophysiology.