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## CONTRIBUTION OF PROFESSOR A.A. OSIPCHUK (1937–2015) TO THE DEVELOPMENT OF POTATO SELECTION IN UKRAINE

## **Summary**

The article is devoted to the study of the life and work of Andriy Antonovich Osipchuk, a well-known in Ukraine and abroad prominent scientist-breeder, doctor of agricultural sciences, professor, leading specialist in the field of potato-growing.

The breeder constantly worked on the study and selection of the source material as parental forms for hybridization, the nature of the inheritance of the signs, their combination and an increase in the level of indicators, the interaction of the genotype with the environment. Applied effective methods of evaluation and selection of breeding material.

The practice of breeding research has been to investigate that the introduction of foreign genes into cultivars based on the use of interspecific source material made it possible to obtain resistant varieties against diseases and pests with higher qualitative indices, as well as to increase the heterosis effect on yield and other characteristics.

The scientists have disclosed the principles of creating potato varieties suitable for cultivation in different soil-climatic zones of Ukraine and the role of using heterosis in the selection of potatoes on yield. It has been investigated that high-

yielding heterozosis forms can be obtained not only from interbreeding of interspecific hybrids and their baccid species with cultural varieties, but also through moderate inbreeding and self-pollination of interspecific hybrids.

Professor AA Osipchuk sets criteria for selecting parental pairs in breeding for yield, resistance to diseases and pests, adaptability and other valuable attributes. The schemes of the use of the source material of interspecific origin were studied and applied for the creation of new varieties of potatoes with valuable features. The scheme of the selection process is introduced, which includes new elements that allow more efficiently to select a potato for a set of features.

The successes of Andrew Antonovich in the selection of potatoes, which he was engaged in for almost fifty years, is significant. Over 80 sorts of potatoes were created with direct participation and under its leadership in breeding subdivisions, of which 64 were zoned or entered in the Register of Plant Varieties of Ukraine, the Republic of Belarus, the Russian Federation, Lithuania, and Latvia.

In the portfolio of Andriy Antonovich more than 250 scientific works, including monographs and inventions.

**Key words**: Andriy Antonovich Osipchuk, scientist, breeder, scientific activity, hybridization, source material, varieties, potatoes.