

Dr Viktor Burlov

Dr Viktor Burlov was born in 1938 in Odessa, Ukraine. He graduated from the Faculty of Agriculture in Odessa in 1960 and worked for several agricultural enterprises as an agronomist between 1961 and 1966. During the 1967-1970 period, he worked on his master's thesis at the Plant Breeding and Genetics Institute in Odessa. Upon receiving his master's degree, he began working at the said institute and has been at the helm of its sunflower breeding program since 1971 until the present day. In 1988, he received his PhD degree with a thesis on the study of heterosis and resistance to diseases and broomrape (at the time, it was not possible in the USSR to receive a doctorate before one was of a certain age, which explains the large gap between the MSc and PhD degrees).

It is important to note that from his very first day on the job at the Odessa institute, Dr Burlov resolutely insisted on conducting research on inbreeding, heterosis and development of hybrids in sunflower despite the fact that there was a lot of opposition to this type of research in the USSR of the time.

Dr Burlov has developed and studied the combining abilities of a large number of inbred lines. As early as 1974, he developed the first sunflower hybrid based on genetic male sterility containing the marker gene Rassvet. This achievement was soon followed by the development of a whole series of hybrids based on cytoplasmic male sterility, including Od-122, Od-123, Od-504, Zgoda and others (Official Catalogue, Ukraine, 1979-1990). These were the first Ukrainian hybrids used on a large scale in commercial sunflower production. Most of them are grown even today.

More recently, Dr Viktor Burlov has developed a batch of breeding materials that was the basis for the development of a number of new sunflower hybrids, the most important of which are Zliva, Zachist, Znachidka, and some others (Official Catalogue, Ukraine, 1999-2006). These hybrids are genetically resistant to broomrape races E and F and have resistance to races 710 and 730 of downy mildew as well as tolerance of Phomopsis, Sclerotinia and Rhizopus.

The breeding material developed by Dr Burlov is of great international importance as well, as it has been used in a number of programs on joint hybrid development run in partnership with various international organizations working on sunflower breeding. The first among these organizations were the Institute of Field and Vegetable Crops in Novi Sad, Rustica, and the GKI from Hungary. The joint program with Rustica has produced the joint hybrids Medalion and Ursus, which are resistant to race E of broomrape and are successfully grown in Turkey, Romania, Italy and some other European countries. In the last 10-15 years, Dr Burlov has also established joint hybrid programs with a number of other companies, including Soltis (Limagrain), Advanta, Danisco, and others. Joint hybrids developed by Dr Burlov and various partner companies play a major role in European sunflower production.

In total, Dr Burlov has thus far developed more than 30 Ukrainian and over 10 joint sunflower hybrids.

At present, Dr Burlov is developing a new set of inbred lines with special emphasis on productivity and resistance to broomrape, downy mildew, drought, Rhizopus, Sclerotinia, and Phomopsis.

Besides developing sunflower hybrids, Dr Burlov has authored or co-authored more than 100 scientific papers and has participated in a large number of domestic and international conferences. He has also mentored nine MSc theses and has in the course of his career proven himself to be an outstanding educator, earning him the title of university professor. Overall, Dr Burlov is a figure of great authority among sunflower breeders and growers, especially in Ukraine and other former Soviet republics.