



Liubov Kalynivna Taranenko

In loving memory of a plant breeder, teacher, expert

On September 12, 2017, at the seventy-ninth year of life, the heart of **Liubov Kalynivna Taranenko** stopped beating. She was a person filled with love and compassion for the surrounding world, an outstanding scientist, teacher, talented organizer, philanthropist, doctor of biological sciences, professor, active member of the Vavilov Society of Geneticists and Breeders of Ukraine, Director General of Research and Production Small Enterprise “Antaria” LLC.

Liubov Kalynivna was born on November 5, 1938, in Holokhvasty village of Volochyskiy district of Khmelnytsky region. In 1955, she graduated from the secondary school in Volochyskiy district of Khmelnytsky region. In 1960, she graduated from Kamianets-Podilskiy

Agricultural Institute (Agronomy Department).

From 1960 to 1966 she was an agronomist, a lead specialist in the Seed Agronomy Service of Pochayiv and Borshchivsky districts of Ternopil region. From 1967 to 1969 she was a postgraduate student majoring in breeding and seed production.

In 1970 she received a degree of a PhD in Agricultural sciences, having defended her thesis paper on the topic “Impact of pollinic regime on kernel percentage and seed productivity of tetraploid buckwheat” in specialty “breeding and seed production”.

From 1966 to 2016 she worked at the National Scientific Centre “Institute of Agriculture of the National Academy of Agricultural Sciences”, holding positions of a junior research scientist, senior research scientist, and from 1985 to 2013 she was the Head of the Cereal Crops Breeding Department.

The main direction of her research was the development of scientific principles of buckwheat breeding related to genetics of quantitative features of reproductive system components – a method for overcoming the species self-incompatibility, creation of inbred species and application of hybrid vigor effect during crop breeding. Liubov Kalynivna Taranenko developed principles, techniques and methods of buckwheat breeding for creation of the high-quality varieties of this crop.

For the first time, a unique method for overcoming interspecies incompatibility of buckwheat with the purpose of introgression of valuable features of wild species into a crop (the method is protected by the patent) was developed.

She made a significant contribution to the expansion of buckwheat polymorphism. The development of buckwheat genome improvement as a crop with unlimited growth processes is also unique, and is aimed at changing buckwheat architectonic, improving ratio of features and phases of its morphogenesis, thus ensuring high crop yields even in stressful conditions.

At the same time (1993-1998) she was the Head of Genetics, Breeding and Seed Production Department of Kyiv National Agrarian University. She created a scientific school in the field of “breeding and seed production”. Under the supervision of Liubov Kalynivna Taranenko, seven candidate theses in specialty 0601.05 – breeding and seed production - were defended.

The varieties of buckwheat created by Liubov Kalynivna Taranenko are used on more than 55% of buckwheat crop acreage of Ukraine (Astra, Kyivska, Lileia, Ukrainka, Antaria, Oranta, Sin-3/02, Olha, Nadiyna, Malva, Sofia and Volia). Some of these varieties are widespread abroad: buckwheat variety Oranta is entered into the Register of Plant Varieties in Poland, in Azerbaijan – variety Antaria, in Germany – variety Sofia.

After studying international practices, in 1992 she founded the first privately-owned breeding and seed production company “Antaria” in Ukraine, which reproduces high quality original and elite seeds of the most promising varieties of grain and cereal crops. She is the author of 128 scientific papers and 8 books. She delivered reports at international congresses and academic conferences in Bulgaria, Poland, China, Japan, Czech Republic, Russia, Korea and other countries. For many years she was a member of specialized councils for defense of thesis for a doctor’s degree at the National Agrarian University, the National Scientific Centre “Institute of Agriculture of the National Academy of Agricultural Sciences” and the Institute of Biological Fuel and Sugar Beets of the National Academy of Agricultural Sciences; of the commission on state awards at the National Academy of Sciences of Ukraine; was a member of IBRA international organization, etc.

In 2017, she initiated the creation and became the co-founder of the International Buckwheat Association in Ukraine.

For lasting personal contribution and outstanding achievements in the agricultural sector, she was awarded with certificates of honor of the Cabinet of Ministers of Ukraine, the Ministry of Agrarian Policy and Food of Ukraine, with the Order of Princess Olga (3rd class), international awards and IBRA medals.

The credo of this radiant and many-sided person was “I have devoted all my life to people, and there is nothing more valuable than my native land, freedom and bread in my land”.