# SERHIIENKO OKSANA VOLODYMYRIVNA The Institute of Vegetable and Melon growing of the National Academy of Agrarian Sciences of Ukraine

Date of birth: 1971 y. **Contact Information:** phone number. 050-174-49-52 e-mail: oksana.sergienko71@ukr.net

Scientific degree: Doctor of Agricultural Sciences Specialty 201 - ''Agronomy'', 2020; Specialization 06.01.05 – Breeding and seed production Academic status -Senior Research Fellow Specialty 06.01.05 - Breeding, 2008



### Education:

Kharkiv National Agrarian University named after V.V. Dokuchayev – *honors degree* 

specialty - "breeding and genetics of agricultural crops", qualification - academic agronomist-breeder (1995).

The Institute of Vegetable and Melon growing of the National Academy of Agrarian Sciences of Ukraine

Postgraduate studies (full-time) in the specialty 06.01.05 - breeding and seed production (1996-2000), candidate of agricultural sciences diploma in the specialty 06.01.14 - seed production (2005)

# Field of activity: selection, genetics, seed production, vegetable growing

The researches are aimed at the theoretical generalization and practical solution of an important scientific problem regarding the establishment of ways of optimization, the development of new methodological approaches to increase the efficiency of the selection process of vegetable and melon crops and the selection of selection-valuable forms, the creation of new genotypes using a systematic approach and new forms. Establishment of genetic mechanisms and organization of manifestation of selection traits of vegetable and melon crops. Creation of new competitive genotypes: varieties, lines, F1 hybrids. Development of new and improvement of existing methods of seed production of vegetable and melon crops, and their implementation in practice to increase the efficiency of production of new genotypes both in open and protected soil. Carrying out assortment selection for different agro-climatic zones and growing conditions (open and sheltered soil). Establishing the peculiarities of varietal technologies for growing products and seeds of vegetable and melon crops.

#### Employment.

Ukrainian research station of sericulture, Ministry of Agrarian Policy of Ukraine - working scientific group (1988); a technician of the 2nd category of the implementation laboratory (1988-1989); a laboratory assistant at the Department of Plantation (1989);

Kharkiv National Agrarian University named after V.V. Dokuchayev – *a student of the agronomy faculty (1989-1995)* 

The Institute of Vegetable and Melon growing of the National Academy of Agrarian Sciences of Ukraine – a *junior researcher at the pumpkin breeding laboratory (1995-1996); a graduate student (1996-2000); a junior researcher at the pumpkin plant selection laboratory (2000-2002); a scientific employee of the pumpkin plant selection laboratory (2002-2004); a senior researcher of the pumpkin plant breeding laboratory (2004-2011).* 

The Institute of Vegetable and Melon growing of the National Academy of Agrarian Sciences of Ukraine – the *head of the pumpkin plant selection laboratory* (2011-2016); the head of the laboratory for selection of nightshade and pumpkin crops (2016-2019); the head of the department of selection and seed production of vegetable and melon crops (2020-2021); an academic secretary (2021–present); the acting deputy director for scientific work. (2022 to the present).

I have developed and implemented **3 selection methods** in the breeding process: identification of  $F_1$  watermelon hybrids by commercial productivity (Pat. No. 38793), creation of fusarium-resistant cucumber starting material (Pat. No. 106769), and production of apomictic cucumber seeds (Pat. No. 124120).

Also, I have developed and implemented **3 methods in the seeding process**: seeding of heterosis cucumber hybrids (Pat. No. 30222); seed production of heterosis hybrids, the parental components of which are morphologically similar (Pat. No. 30223), and seed production of heterosis hybrids, the parent forms of which contain a marker trait (Pat. No. 30590).

On the basis of the developed methodological approaches, under my leadership, there were created **15 new F**<sub>1</sub> varieties and hybrids adapted to the conditions of the Forest Steppe, 32 lines for use in heterosis selection of vegetable and melon crops.

In a co-authorship, there were developed 5 state standards of Ukraine.

#### Publication, popularization, and advisory activity

The results of my own research are shown in more than **300 scientific publications**, including 6 in Scopus and Web of Science Core Collection publications; 10 – monographs, textbooks and book parts; 91 professional articles; 27 methodological recommendations; 3 innovative business projects; theses and materials of conferences and articles in scientific and practical and popular publications.

I have experience in public speaking - teaching activities, speaking with reports (scientific and practical conferences, symposiums, round tables, field days, internships, agricultural exhibitions, radio appearances, television appearances, etc.).

Also, I have experience in providing agro-consultations to producers in online and offline formats and agro-support for the cultivation of vegetable and melon crops.

#### Teaching experience, project management.

Annual reports on professional development courses in the field of scientific research. Speeches with lectures for university and college students, and for students under the extracurricular education project.

I am a teacher under the educational-scientific program "Agronomy" of the third level of higher education at the Institute of Vegetable and Melon growing of the National Academy of Agrarian Sciences of Ukraine in the disciplines: "Methodology of selection of vegetable and melon plant species", "Methodological foundations of the organization and conduct of scientific research", "Seed production with the basics of selection of vegetable and melon crops" and "Genetic resources of vegetable and melon crops".

I actively introduce new scientific approaches among my colleagues and young scientific personnel. Also, I am a supervisor of 4 post-graduate scientific studies, 1 doctoral research, and 15 scientific research tasks.

# Internship and professional development.

In the field of genetics and breeding: Instytut Roslynnytstva Imeni V. Ya. Yur'yeva Naan (2002, 2013, 2021), Breeding and Genetic Institute (2002), Instytut Zroshuvanoho Zemlerobstva Naan (2019), Kharkiv National Agrarian University named after V.V. Dokuchayev, (2020); increasing the level of teaching skills: Sumy State University (2021), Instytut Badawczo-Rozwolowy (Польща, 2020), Molapolska School and the Public Administration University of Economics in Krakov (Poland, 2021), online seminar at Dnipro National University"UkrINTEI" (2021), a series of informative and analytical resources and training webinars ClarivateTM – Web of Science (2021); according to the principles of modern scientific cooperation at National Scientific Center Institute of Beekeeping named after P. I. Prokopovich (2022).

I have been an agricultural expert-advisor (certificate No377) since 2019, and I can carry out agricultural advisory activities in the provision of socially oriented advisory services on issues of selection and genetics of agricultural crops.

# Personal and professional qualities

Proactive, responsible, communicative, have systemic thinking and use a complex approach to solving tasks, I strive for professional development and improvement, I am always open to constructive discussion, and find effective solutions when solving hard issues.

I have a desire to actively use my analytical skills and practical work experience when solving all the questions that arise for scientists when performing scientific tasks, for students when mastering the disciplines of producers of agricultural products at all stages of their production, etc. My main goal is always a positive result and high efficiency in each work.

Scientific profiles Scopus Author ID: 57208444308 https://scholar.google.com.ua/citations?user=APogQV4AAAAJ&hl=uk https://orcid.org/0000-0002-2754-306X/print https://www.webofscience.com/wos/woscc/basic-search?state=%7B%7D https://www.researchgate.net/profile/Oksana-Sergienko