



# Curriculum Vitae

Viktoriia Belava

## PERSONAL INFORMATION



## BELAVA VICTORIIA NASARIVNA

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Scopus Author ID: 35558130400  
Web of Science Researcher ID AAD-3648-2022

Sex F | Date of birth 04/07/1969 | Citizenship Ukraine

Scientific degree (degree, specialty)	PhD degree in Plant Physiology
Academic rank	Associate Professor
Position	Associate Professor
Department	Plant biology
Faculty / Institute	Educational and Scientific Center "Institute of Biology and Medicine"
Part-time position	–

## EDUCATIONAL DISCIPLINES IN WHICH WAS INVOLVED:

Current year	<ol style="list-style-type: none"><li>1. «Plant Physiology», 2-nd and 3-rd years of Bachelor's degree (Educational program "Biology"), laboratory classes.</li><li>2. «Ornamental plants grow indoors and fundamentals of biotechnology» (Educational program "Landscape design and decorative gardening"), 4-th year of Bachelor's degree, lectures and practical course.</li><li>3. «Decorative nurseries and seeds», 4-th year of Bachelor's degree (Educational program "Landscape design and decorative gardening"), lectures and practical course.</li><li>4. «Inventory and operation of garden and park facilities», lectures and practical course for 4-th year of Bachelor's degree (Educational program "Landscape design and decorative gardening").</li><li>5. «Formation of recreational landscape and balneology», 4-th year of Bachelor's degree (Educational program "Landscape design and decorative gardening"), lectures and practical course.</li><li>6. «Labor protection and life safety during garden and park works», 1-th year of Bachelor's degree (Educational program "Landscape design and decorative gardening"), lectures and practical course.</li><li>7. «Poisonous and medicinal plants in an urbanized environment», 1-th year of Master's degree, lectures and practical course.</li></ol>
Previous years	<ol style="list-style-type: none"><li>1. «Plant anatomy», for BSc students, the 1-st year.</li><li>2. «Botany» for BSc students, the 1-st year.</li><li>3. «Plant Physiology» for BSc students, the 2-nd year.</li><li>4. «Plant Physiology and Biochemistry» for BSc students, the 3-rd year.</li><li>5. «Floriculture» for BSc students, the 3th year.</li><li>6. «Laboratory Workshop on Plant Biology» for BSc students, the 3-4-th year.</li></ol>

	<p>7. «Plant Physiology and Biochemistry», for BSc students, the 4-th year, extramural course.</p> <p>8. «Root nutrition of plants», for BSc students, the 4th year.</p> <p>9. «Embryogenesis of vascular plants», for MSc students, the 2-nd year.</p> <p>10. «Plant growth regulators» for MSc students, the 2-nd year.</p> <p>11. «Biologically active substances of plants», for MSc students, the 2-nd year.</p> <p>12. «Regulation systems in plants» for MSc students, the 1-st Year.</p> <p>13. «Environmental management» for MSc students, extramural course, the 1-st year.</p> <p>14. «Environmental management» for MSc students, the 1-st year.</p> <p>15. «Embryogenesis of plants» for MSc students, the 2-nd year.</p> <p>16. «Physiology and biochemistry of seeds» for MSc students, the 2-nd year.</p> <p>17. «Phytohormonology», for MSc students, the 1-st year..</p> <p>18. «Biodiversity conservation strategies», lectures and practical course for MSc students, the 1-st year (Educational program "Biology").</p> <p>19. «Growth regulators and plant protection products in urban environments», lectures and practical course for MSc students, the 1-st year (Educational program "Landscape design and decorative gardening ").</p> <p>20. «Biology of medicinal plants», 4-th year of Bachelor's degree (Educational program "Biology").</p>
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#### SCIENTIFIC AND PEDACOGICAL EXPERIENCE

Period (starting from last)	Description
Since 02.02.2017	Associate Professor of Plant Biology Chair Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . Education
01.09.2011 – 01.02.2017	Associate Professor of Plant Physiology and Ecology Chair Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . Education
01.09.2010 – 30.06.2011	Assistant Professor of Plant Physiology and Ecology Chair Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . Education
03.11.2008 – 31.08.2011	I category engineer at the Research Laboratory "Physiological bases of plant productivity" of Biological Department (10.11.2010 – Educational and Scientific Center "Institute of Biology") Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . Science
12.11.2012 – 03.10.2005	I category specialist of the Department of Human and Animal Physiology Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . Education
02.12.1991 – 11.11.2012	Engineer of the Department of Human and Animal Physiology

	Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> .
	Education
01.08.1991 – 18.11.1991	Engineer of the Department of Plant Physiology M.G. Kholodny Institute of Botany NAS of USSR 2, Tereshchenkivska st., 01601, Kyiv, Ukraine; <a href="http://www.botany.kiev.ua/">http://www.botany.kiev.ua/</a> .
	Science

## EDUCATION AND TRAINING

Period (starting from last)	Description
2021	Taras Shevchenko National University of Kyiv KNU Teach Week.
15.10.2020 – 15.11.2020	Internship M.G. Kholodny Institute of Botany NAS of Ukraine «Investigation of seed condition at the stages of germination and maturation under stress conditions».
01.10.2005 – 30.09.2008	PhD student Kyiv State T.G. Shevchenko University Title of PhD thesis «Protective reactions of wheat varieties of different resistance to <i>Pseudocercospora herpotrichoides</i> »
01.09.1986 – 30.06.1991	Student Kyiv State T.G. Shevchenko Universit Title of Master's thesis «The content of phytohormones in seeds of beans at different stages of formation and germination».

## PERSONAL SKILLS

Name	Level (description)
Native language	Ukrainian
Foreign language	English
Communicative competence	She acquired skills of cultivation of phytopathogenic fungi in vitro at the Institute of Plant Protection of NAAS of Ukraine. She mastered the RT-PCR method at the Institute of Experimental Pathology, Oncology and Radiobiology named after R.Ye. Kavetsky National Academy of Sciences of Ukraine. She mastered biochemical methods of plant research at the Taras Shevchenko National University of Physics of Plant Productivity Research Institute.
Organizational / management competence	Supervisor of practices, course works and Master's thesis. Member of the jury of the student's scientific works competition, student's olympiad, competition INTEL ECO Ukraine. Member of SMC ESC "Institute of Biology and Medicine". Curator
Other computer skills	Use the software to create presentations, posters, statistical processing of scientific research results, to edit pictures and photos.
Professional skills (not mentioned above)	Methods of obtaining and cultivation plants, phytopathogenic fungi and suspension cultures in vitro, estimation of plant growth in vitro. Methods of assessing the plants response to the stressors action.
Fields of professional interests	Sick plant anatomy and physiology, mechanisms of interaction in a plant-pathogen system. Secondary metabolites in the plant and in vitro environment.

## ADDITIONAL INFORMATION

Item	Titles of publications, projects, conferences, awards and prizes, memberships in academies and societies etc

Publications

Olga Olkhovych, Taran Nataliia, Svitlana Hrechishkina, Olena Voitsekhivska, Olga Panuta, Volodymyr Voitsekhivskyi, Victoriia Belava Evaluation of Hyper-Tolerance of Aquatic Plants to Metal Nanoparticles // Journal of Ecological Engineering 2022, 23(8), 249–259, License CC-BY 4.0 (SCOPUS)

Anastasiia Revutska, Victoriya Belava, Anastasiia Golubenko, Nataliya Taran, Minglei Chen Plant secondary metabolites as bioactive substances for innovative biotechnologies // E3S Web of Conferences 280, 07014 (2021) (SCOPUS)

M.V. Savchuk, M.M. Lisovyy, O.P. Taran, O.V. Voitsekhivska, V.N. Belava, O.O. Panyuta, S.O. Tkachyk, O.S. Demyanyuk, I.M. Klymchuk Impact of SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, and ZnO nanomaterials on the physiological parameters of winter rape // Ukrainian Journal of Ecology, 2021, 11(3), 305-311, doi: 10.15421/2021\_176. (Web of Science)

L.M. Skivka, S.O. Hudz, O.I. Prysiazhniuk, I.V. Svystunova, O.V. Voitsekhivska, S.P. Poltoretskyi, V.N. Belava Enzymatic activity of soil microbiota under different fertilizer systems // EurAsian Journal of BioSciences Eurasia J Biosci 14, 6113-6118 (2020). (SCOPUS)

O. Smirnov, L.-A. Karpets, A. Zinchenko, M. Kovalenko, V. Belava, N. Taran Changes of morphofunctional traits of Triticum aestivum and Triticum dicoccum seedlings caused by polyethylene glycol-modeling drought // Journal of Central European Agriculture. – 2020. – 21 (2), p.268-274. (SCOPUS)

Panyuta O.O., Belava V.N., Olkhovych O.P., Taran N.Yu. Effect of phosphate-mobilized microbial preparations and pathogenesis on protective reactions and photosynthetic apparatus of winter wheat seedlings // Microbiologichny Z. – 2018. – Vol. 80, №6. – P. 66-78. (SCOPUS)

Belava, V.N., Panyuta, O.O., Yakovleva, G.M., Pysmenna Yu.B., Volkogon M. The Effect of Silver and Copper Nanoparticles on the Wheat-Pseudocercospora herpotrichoides Pathosystem / Nanoscale Research Letters, Springer US – 2017, 12: 250. doi:10.1186/s11671-017-2028-6. (SCOPUS). Springer US.

Panyuta O., Belava V., Fomaidi S., Kalinichenko O., Volkogon M., Taran N. The Effect of Pre-sowing Seed Treatment with Metal Nanoparticles on the Formation of the Defensive Reaction of Wheat Seedlings Infected with the Eyespot Causal Agent // Nanoscale Research Letters. Springer US – 2016. – V.11, №1. – P. 1–5. (SCOPUS). Springer US.

Panyuta O.O., Belava V.N., Taran N.Yu. // Infection method for assessing the level of resistance of winter wheat to the eyespot causal agent. Patent UA 89969 U. 2014.

Belava V.N., Zeleniy S.B., Panyuta O.O., Taran N.Yu., Pogribniy P.V. Expression of lectin and defensin genes in Mironovskaya 808 and Roazon wheat cultivars infected with *Pseudocercospora herpotrichoides* // Biopolymers and Cell. – 2010. – V.26, N1. – P. 45-50. (SCOPUS)

Paniuta O.O., Shabliy V.A., Belava V.N. Jasmonic acid and its participation in defence reactions of plant organism // The Ukrainian biochemical journal. – 2009. – Vol. 81, №2. – P. 14-26. (SCOPUS)

Belava V., Panyuta O., Taran N. Biochemical markers of wheat eyespot resistance // Zemdirbyste-Agriculture. – 2008. – V. 95, N3. – P. 298-303. (SCOPUS)

Belava V.N., Voitsekhivska O.V., Smirnov O.E. Educational and methodical recommendations "Physiology of secondary metabolism of plants" for MSc students (Educational program "Biology"). – K.: AVEGA, 2020. – 48 p.

Paniuta O.O., Belava V.N., Taran N.Yu. Early diagnosis of plant resistance to phytopathogens by the state of the antioxidant system (Guidelines) – K.: AVEGA, 2019. – 48 p.

Conferences	<p>16TH HORIZONS IN MOLECULAR BIOLOGY. International PhD Student Symposium and Career Fair for Life Sciences 9th-12th September 2019 Göttingen, Germany.</p> <p>The development of nature sciences: problems and solutions: Conference Proceedings, April 27-28, 2018. – Brno: Baltija Publishing.</p> <p>Joint CzechoSlovak Virology Conference 2019, 13-15th of February 2019, Bratislava, Slovakia.</p> <p>Międzynarodowa konferencja naukowo-praktyczna «Nowoczesne techniki, innowacje i doświadczenie praktyczne w dziedzinie nauk biologicznych». – Lublin, Polska, 2017.</p> <p>International conference "Plant cells in vitro: fundamentals &amp; applications II", Vienna, Austria, 2017.</p> <p>International and practice conference "Nanotechnology and nanomaterials (NANO-2017)". – Chernivtsi, 2017.</p> <p>XIII international scientific conference "Youth and Progress of Biology". – Lviv, 2017.</p> <p>International research and practice conference "Nanotechnology and nanomaterials" (NANO-2016) – Lviv, 2016.</p> <p>II International Scientific Conference Microbiology and Immunology – the development outlook in the 21st century. – Kyiv, 2016.</p> <p>International research and practice conference "Nanotechnology and nanomaterials" (NANO-2014) – Lviv, 2014.</p>
Awards and prizes	
Membership in academies, professional and scientific associations	<p>Member of Ukrainian Society of Plant Physiologists</p> <p>Member of Ukrainian Biochemical Society</p>

## SUPPLEMENTS

Name	Links
Diplomas	<p>PhD Diploma in Plant Physiology (2011),</p> <p>Associate Degree Certificate (2018)</p>
Publications	<p>Belava V.N., Voitsekhivska O.V., Smirnov O.E. Educational and methodical recommendations "Physiology of secondary metabolism of plants" for MSc students (Educational program "Biology"). – K.: AVEGA, 2020. – 48 p.</p> <p>Paniuta O.O., Belava V.N., Taran N.Yu. Early diagnosis of plant resistance to phytopathogens by the state of the antioxidant system (Guidelines) – K.: AVEGA, 2019. – 48 p.</p>