



## Volodymyr TROTSENKO

**19.06.1966**  
Ukrainian

### Contact information \*

Sumy, H. Kondratiieva Str., 144/2, apt. 29, 40021

+38067 542 0855

vtrotsenko@ukr.net

[https://agro.snau.edu.ua/kafedri/kafedra-agrotehnologii\\_ta\\_gruntoznavstva/sklad-kafedri/trocenko-volodimir-ivanovich/](https://agro.snau.edu.ua/kafedri/kafedra-agrotehnologii_ta_gruntoznavstva/sklad-kafedri/trocenko-volodimir-ivanovich/)

### Personal profiles in scientometric databases\*

- *ORCID*: <https://orcid.org/0000-0001-8101-0849>
- <http://www.scopus.com/inward/authorDetails.url?authorID=57211326000&partnerID=MN8TOARS>
- *Google Scholar*:  
<https://scholar.google.com/citations?authuser=1&hl=uk&user=xJujoZwAAAAJ>

### Education \*

Specialty – “Agronomy”, specialization – Scientific Agronomist  
Sumy branch of the Kharkiv Agricultural Institute named after Dokuchaev,  
HB №855589 від 28.12.1989 р.

### Academic degree \*

PhD of Botany  
ДК № 045908, 1.02.2018 .

Doctor (Agricultural Science) , in Specialty Plant Breeding and Seed Production (ДД № 002882, 17.01.2014 .





<b>Academic title *</b>	Associate professor , ДЦАЕ №001015, 24.12.1998 . Professor, 12 ПП №010731, 30.06.2015 .
<b>Professional work experience *</b>	<p><i>1992-2021 held positions:</i>  <i>Assistant, Senior Lecturer, Associate Professor, Vice-Rector for Academic Affairs, Head of the Department of Plant Production of Sumy National University;</i>  <i>2021 till now - Professor, Head of the Department of Agrotechnology and Soil Science of Sumy National Agricultural University</i>  <i>2010 till now – Senior Researcher at the Institute of Agriculture of the North-East of the National Academy of Sciences of Ukraine (part-time).</i></p>

**MAIN RESEARCH ACTIVITIES**

<b>Participation in collective research projects</b>	<ul style="list-style-type: none"> <li>• Creation of starting material for Chenopodium Quinoa Wild varieties adapted to the conditions of the northeastern Forest-Steppe and Polissya of Ukraine, State Registration No 0118U004748, 2018-2022, (<i>scientific supervisor</i>).</li> <li>• Management of sunflower yield formation processes in the conditions of the northeastern Forest-Steppe of Ukraine, State Registration No 0121U114228, 2021-2025, (<i>scientific supervisor</i>).</li> <li>• Development of a genotype model and creation of sunflower starting material resistant to cadmium accumulation, State Registration No 0121U108674, 2021-2024, (<i>scientific supervisor</i>).</li> <li>• Creation and evaluation of sunflower lines with controlled levels of cadmium accumulation State Registration No 0124U001397, 2024-2025, (<i>scientific supervisor</i>)</li> <li>• Monitoring of land affected by hostilities for agricultural production, State Registration, No 0125U002368, 2025-2026, (<i>scientific supervisor</i>).</li> </ul>
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<p><b>Main research publications</b></p> <p><i>(no more than 10 items for the last 10 years)</i></p>	<ul style="list-style-type: none"> <li>• M.V. Radchenko, V.I. Trotsenko, Z.I. Hlupak, E.A. Zakharchenko, O.M. Osmachko, V.V. Moisiienko, V.Z. Panchyshyn, S.V. Stotska Influence of mineral fertilizers on yielding capacity and quality of soft spring wheat grain. Agronomy Research, 2021, 19 (4), 1901–1913. <a href="https://doi.org/10.15159/AR.21.104">https://doi.org/10.15159/AR.21.104</a></li> <li>• Yuanzhi Fu, Halyna Zhatova, Yuqing Li, Qiao Liu, Volodymyr Trotsenko and Chengqi Li Physiological and transcriptomic comparison of two sunflower (<i>Helianthus annuus L.</i>) cultivars</li> </ul>
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with high/low cadmium accumulation. *Front. Plant Sci.*, 09 May 2022 | <https://doi.org/10.3389/fpls.2022.854386>

- M.V. Radchenko, V.I. Trotsenko, A.O. Butenko, I.M. Masyk, Z.I. Hlupak, O.I. Pshychenko, N.O. Terokhina, V.M. Rozhko, O.Y. Karpenko. Adaptation of various maize hybrids when grown for biomass. *Agronomy Research*, 2022, 20(2), 404–413. <https://doi.org/10.15159/AR.22.028>
- Trotsenko, V. I., Zhatova, H. O., Kovalenko, I. M., Pysarenko, P. V., Skliar, Y. L., & Bondarieva, L. M. (2023). Efficiency of using morphometric analysis for identification of pumpkin varieties. *Bulletin of Sumy National Agrarian University. The Series: Agronomy and Biology*, 51(1), 120-128. <https://doi.org/10.32782/agrobio.2023.1.14>
- Radchenko, M., Trotsenko, V., Butenko, A., Hotvianska A., Gulenko O., Nozdrina N., Karpenko O., Rozhko V. (2024). Influence of seeding rate on the productivity and quality of soft spring wheat grain. *Agriculture and Forestry*, 70 (1): 91-103 <https://doi.org/10.17707/AgricultForest.70.1.06>
- Li, C., Fu, Y., Trotsenko, V. et al. Understanding the physiological and molecular mechanisms of grain cadmium accumulation conduces to produce low cadmium grain crops: a review. *Plant Growth Regul* 103, 257–269 (2024). <https://doi.org/10.1007/s10725-023-01105-x>
- Fu, Y., Trotsenko, V., Li, Y. et al. Combined bulked segregant analysis and Kompetitive Allele-Specific PCR genotyping identifies candidate genes related to the node of the first fruiting branch in upland cotton (*Gossypium hirsutum* L.). *Euphytica* 220, 175 (2024). <https://doi.org/10.1007/s10681-024-03432-0>
- Trotsenko, V., Butenko, Y., Ivchenko, O., Zakharchenko, E., Datsko, O., & Yatsenko, V. (2024). Phytoremediation potential of *Pisum sativum* L.: Iron and Chromium uptake efficiency. *Modern phytomorphology*, 18, 158-162. <https://www.phytomorphology.com/articles/phytoremediation-potential-of-pisum-sativum-l-iron-and-chromium-uptake-efficiency.pdf>
- Halyna Zhatova, Volodymyr Trotsenko, Nadiia Trotsenko, Mykola Radchenko, Andrii Butenko, Liudmyla Bondarieva, Inna Zubtsova. Quinoa microbiota and its importance for sustainable crop production *Modern Phytomorphology*: 2025





	<p>Volume: 19, 178-182 DOI: 10.5281/zenodo.200121 (10.5281/zenodo.2025-19)</p> <ul style="list-style-type: none"><li>• Volodymyr Trotsenko, Halyna Zhatova, Vladyslav Tiutiunnyk, Andrii Butenko, Inna Kolosok, Maryna Kovalenko. Approaches to control of winter rapeseed wintering. <i>Modern Phytomorphology</i>. 2025, Volume: 19. 128-132. <a href="https://doi.org/10.5281/zenodo.15301156">https://doi.org/10.5281/zenodo.15301156</a> (10.5281/zenodo.2025-19-128-132)</li></ul>
<p><b>Reports at scientific conferences* (seminars, symposia, etc.)</b> <b>(no more than 10 items in the last 10 years)</b></p>	<ul style="list-style-type: none"><li>• Trotsenko V. I., Kolosok I. O., Yatsenko V. M. Development of leaf surface and yield of sunflower hybrids in conditions of the northeastern Forest-Steppe of Ukraine. - "Gonchariv Readings": Materials of the International Scientific-Practical Conference (25-26.05.2020 p.) , 2020.43-44.</li><li>• Trotsenko V. I., Yatsenko V. M., Kolosok I. O. Prospects for the use of retardants on sunflower crops. - "Gonchariv Readings": Materials of the International Scientific and Practical Conference (25-26.05.2020). - Sumy, 2020, 98.</li><li>• Yuanzhi Fu, Volodymyr Trotsenko, Halyna Zhatova Effects of cadmium on the growth of sunflower. - "Gonchariv Readings": Materials of the International Scientific-Practical Conference (25.05.21 p.) - "Gonchariv Readings": Materials of the International Scientific-Practical Conference, 2021, 112.</li><li>• Fu Y., Trotsenko V., Zhatova H Low cd breeding varieties in sunflower. Trends and prospects development of science and practice in modern environment. - X International Scientific and Practical Conference Geneva, Switzerland (November 22 – 24, 2021), .15</li><li>• Sunflower in Sumy region <a href="https://agro-business.com.ua/agro/ahronomiia-sohodni/item/32598-soniashnyk-na-sumshchyni-ekonomichni-perspektyvy.htm">https://agro-business.com.ua/agro/ahronomiia-sohodni/item/32598-soniashnyk-na-sumshchyni-ekonomichni-perspektyvy.htm</a></li></ul>
<p><b>MAIN RESEARCH ACHIEVEMENTS</b> <b>(patents, copyright certificates, internships, etc.)</b></p>	<ol style="list-style-type: none"><li>1. Certificate. s. for plant variety No. 0536. Ukraine. Sunflower. Sumchanin Application No. 01017024. – Registered in the Register of Plant Varieties of Ukraine in 2005.</li><li>2. Certificate for plant variety No. 0742. Ukraine. Sunflower. ChaS Application No. 03017047. – Registered in the Register of Plant Varieties of Ukraine in 2006</li><li>3. Certificate. for plant variety No. 120138. Ukraine. Sunflower. Khutoryanyn, No. 08017001. – Registered in the Register of Plant Varieties of Ukraine in 2012</li><li>4. Certificate No. 220083 on state registration of plant variety Quartet (Loboda quinoa) 01/10/2022,</li></ol>





5. Certificate for plant varieties. Quinoa "Komyza", 240031 01/12/2024 .
6. Certificate of registration of a plant gene pool sample in Ukraine, population P-1926, No. 2534, 05/15/2024
7. Certificate of registration of a plant gene pool sample in Ukraine, population P-1932, No. 2536, 05/15/2024
8. Certificate of registration of a plant gene pool sample in Ukraine, population P-1941, No. 2535, 05/15/2024
9. 10. Patent No. 260107 for the plant variety Solomakha, edible buckwheat, 02/04/2026

## TEACHING ACTIVITY

### Main author's training courses in higher education institutions (developed on the basis of own research)

*(no more than 5 items for the last 10 years)*

- Crop production: I level of higher education, Sumy National Agrarian University, 9 credits ECTS (2020-2025), <https://cdn.snau.edu.ua/moodle/course/view.php?id=1106>
- Industrial crops, I level of higher education, Sumy National Agrarian University, 5 credits ECTS (2020-2025), <https://cdn.snau.edu.ua/moodle/course/view.php?id=1103>
- Modern world agricultural technologies: 3rd level of higher education, Sumy National Agrarian University ,3 credits ECTS (2025-26), <https://cdn.snau.edu.ua/moodle/course/view.php?id=1989>
- Plant Domestication and History of Agriculture: 3rd level of higher education, Sumy National Agrarian University, 5 credits ECTS (2025-26), <https://cdn.snau.edu.ua/moodle/course/view.php?id=5631>

### Major author's methodological developments (textbooks, manuals, teaching materials, curricula for higher education)

*(no more than 5 items for the last 10 years)*

- Technology systems in plant production : Textbook (English) / G. O. Zhatova, V. I. Trotsenko / Sumy: University Book, - 2018. – 230
- AGRONOMY: Textbook. Series "To help the PHD student". Edited by A.V. Melnyk, Y.I. Danko Odessa, 2025, Oldi, ISBN 978-617-8559-53-3, 523 p.





**Supervision of scientific work (scientific supervision or consulting of dissertation research that has been successfully defended)**

*(no more than 5 positions in the last 10 years)*

- Tyutyunnyk V. A. Optimization of winter and spring rapeseed cultivation in the conditions of the northeastern Forest-Steppe of Ukraine: dissertation of the candidate of agricultural sciences: 06.01.09 – crop production, 2016
- Nesmachna M. A. Creation and evaluation of buckwheat starting material for repeated sowings in the conditions of the northeastern Forest-Steppe of Ukraine: dissertation of the candidate of agricultural sciences: 06.01.05 – breeding and seed production, 2019
- Yuanzhi Fu, Breeding sunflower for resistance to cadmium accumulation: : PhD thesis, 201 – Agronomy, 2022
- Yatsenko V. M. Optimization of sunflower cultivation technology using growth regulators in the conditions of the northeastern Forest-Steppe of Ukraine: PhD thesis, 201 – Agronomy, 2022.
- Kolosok I. O. Adaptability and features of the formation of productivity of sunflower hybrids in the conditions of the northeastern Forest-Steppe of Ukraine: PhD thesis, 201 – Agronomy, 2023

**EXPERT ACTIVITY**

**Membership in specialised academic councils for the defence of dissertations**

*(no more than 5 positions in the last 10 years)*

- PhD , 7713, Zhu Yinhui, 20.03.2025 . ;
- PhD, 8073, Kalynov O. O., 20.05.2025 .;
- PhD, 8471, Mazur O. V., 28.05.2025 . ;
- PhD, 9413, Kurylych D. V., 24.07.2025 .;

**Work as part of the expert councils of the Ministry of Education and Science**

- Expert of the Ministry of Education and Science of Ukraine for conducting scientific and technical expertise in the field of scientific and scientific and technical activities (Order of the Ministry of Education and Science of Ukraine dated 12.07.2024 No. 982)

**IMPROVING OF SCIENTIFIC QUALIFICATIONS**

**Additional professional training (trainings, summer schools, educational seminars, workshops, courses, etc. to obtain relevant scientific knowledge, skills and abilities)**

- Special training. State Emergency Service. Certificate SUS No. 000750 (05.06.2019).
- NNI of Continuing Education and Tourism, National University of Life Resources and Environmental Sciences of Ukraine, CC 00493706/010282-19 (02.10.2019 p.),
- Educational process in wartime conditions. Center for Ukrainian-European Scientific Cooperation (6 ECTS credits)ADV-0403144-UDU від 14.04.2024





<p><i>(no more than 5 positions in the last 10 years)</i></p>	
<p><b>Activities in the specialty in professional and/or public associations</b></p>	<ul style="list-style-type: none"><li>• Agricultural advisor / qualification certificate No 22, 17.03.2010</li><li>• Member of the VGO "Ukrainian Society of Geneticists and Breeders named after M. I. Vavilov, №1817</li></ul>
<p><b>Knowledge of foreign languages</b></p>	<p>English – Level B2 №000203110 від 08.01.2020 р.</p>

