CURRICULUM VITAE

SURNAME: Boroday **FIRST NAME:** Vira

Date and place of birth: 19.08.1972, Kyiv region, Ukraine **Nationality:** Ukraine

Scientific interests: microbial metabolites, biopreparation, environmental and industrial biotechnologies, phytopathology

Scopus (2025): number of publications: **19;** h-index **=5** (*Boroday V.V.* author identifier 55258972200).

Scientific degree: Doctor of Sciences (Agric.), specialty 03.00.16 – Ecology, Institute of Agroecology and Environmental Management of NAAS, Kyiv (2019).

Academic status: associate professor (2005).

Position: Associate Professor of the Department of Ecobiotechnology and Biodiversity, National University of Life and Environmental Sciences of Ukraine (NULES).

Affiliation and official address:
National University of Life and Environmental Sciences of Ukraine (NULES), Department of Plants Physyology, Biochemistry and Bionergetics, Heroyiv Oborony Str., 15, 03041 Kyiv, Ukraine
E-mail: veraboro@gmail.com

Education

1989-1994	M.Sc. in Biology and Chemistry Ukrainian State Pedagogical Dragomanov University, Kiev, Ukraine
1996-1999	PhD students of the Phytopathology Department of National Agricultural University of Ukraine (renamed as National University of Life and Environmental Sciences of Ukraine)
2000	PhD in Biology (specialty 06.00.11 – Phytopathology). National Agricultural University of Ukraine.
2019	Doctor of Agricultural Science (specialty 03.00.16 – Ecology). National University of Life and Environmental Sciences of Ukraine

Career/Employment

2024	**Erasmus+Mobility activity** type: Staff mobility for teaching Dates of mobility activity: 10/06/2024 - 19/06/2024 Country of mobility activity: Ukraine Sending organization: Name: National University of Life and Environmental Sciences of Ukraine City: Kyiv Country Ukraine Receiving organisation: Name: Česká zemědělská univerzita v Praze City: Praha - Suchdol Country Czechia Contribution ID: 53abf509-db92-4250-9965-9e49b21b8110
2017-	Senior research fellow of the Laboratory of Biocontrol of Agroecosystems and

present (additional employer)	Organic Production of the Department of Agrobiological Resources and Environmentally Safe Technologies Supervising of 1 PhD students
Name and address of main employer	National University of Life and Environmental Sciences, Kyiv 13, Heroiv Oborony str, Kiev 03041, Ukraine
2006 – present	Associate Professor of Ecobiotechnology and biodiversity Department of National University of Life and Environmental Sciences, Kyiv Supervising of 2 PhD students
2005-2006	Associate Professor of the Phytopathology Department of National Agricultural University of Ukraine
2002-2005	Senior lecturer of the Phytopathology Department of National Agricultural University of Ukraine
2000-2002	Assistant of Agromicrobiology and Virology Department of National Agricultural University of Ukraine
1999-2000	Junior researcher of the research topic110/31-PL
1994-1996	Researcher of the Institute of new technologies for storage of agricultural products

Dissertation defense of a postgraduate student

2024	Dissertation defense of a postgraduate student Kosovska Nadia. The theme: "Allelopathic properties of metabolites of *Glycine max* (L.) Merr., as an ecological factor in the regulation of the phytopathogenic mycobiome" Dissertation for obtaining the scientific degree of Doctor of Philosophy in specialty 101 – Ecology (10 - Environmental Science). Institute of Agroecology and Nature Management of the National Academy of Sciences of Ukraine, Kyiv, 2024

Specialization

(i) main fields: Industrial Biotechnology

(ii) other fields: Biopreparations, Metabolites, Phytopathology

(iii) current research interest: Secondary metabolites as regulators of functional synergism in plant-microbial systems

Courses taught

Regulatory support for biotechnological production
Industrial biotechnology
Industrial technologies of biological active compounds

Honours, Awards, Fellowships, Membership of Professional Societies

2015 –2025 – fundamental topics of the Ministry of Education and Science of Ukraine.
2012 – present - member of the Ukrainian Microbiological Society.
Member of the Scientific Council and Academic Council of the Faculty of Plant Protection, Biotechnology and Ecology.

Publications

Number of monographs: **5**;
Number of papers in refereed journals: **115**;
Number of patents: **5**

LIST OF SELECTED PUBLICATIONS

Book Section

International monographs included in scientometric databases, in particular Scopus

1. Rayichuk, L., Draga, M., Boroday, V. (2023). Life Cycle Assessment and Product Environmental Footprint: Recommendations for Integral Optimization of Economic and Environmental Performance. In: Ferreira da Rocha, J.M., Figurek, A., Goncharuk, A.G., Sirbu, A. (eds) Baking Business Sustainability Through Life Cycle Management. Springer, Cham. https://doi.org/10.1007/978-3-031-25027-9_3
2. Rayichuk, L., Draga, M., Boroday, V. (2023). Product Environmental Footprint and Bread Industry. In: Ferreira da Rocha, J.M., Figurek, A., Goncharuk, A.G., Sirbu, A. (eds) Baking Business Sustainability Through Life Cycle Management. Springer, Cham. https://doi.org/10.1007/978-3-031-25027-9_2
3. Bolokhovskyi, Vladyslav & Nagorna, Olga & Bolokhovska, Valentyna & Yakovenko, Dmytro & Boroday, Vira & Zelena, Liubov & Likhanov, Artur & Bukhonska, Yaroslava. (2024). The Role of Biologicals Azotohelp®, Liposam®, and Organic-Balance® as Mitigators of Abiotic Stress in Maize Plants. 10.4018/979-8-3693-8307-0.ch018. In book: Sustainable Soil and Water Management Practices for Agricultural Security. Information Science Reference; IGI Global. 495 – 526. https://doi.org/10.4018/979-8-3693-8307-0.ch018

Monographs

1. Бородай В.В., Колтунов В.А., Парфенюк А.І., Данилкова Т.В.. Регуляція фітопатогенного фону в агроценозах картоплі (протокол № 4 від 25 листопада 2020 року засідання Вченої Ради НУБіП). К.:Компринт, 2020. 329 с.
2. Екологічна та біологічна безпека України: колективна монографія/за науковою редакцією О.І.Дребот, А.І.Парфенюк. Київ: Видавництво НУБіП України, 2022. 322с.
3. Бондарчук А.А.,Колтунов В.А., Олійник Т.М., Бородай В.В., Захарчук Н.А., Вишневська О.В., Фурдига М.М. Картоплярство: Методи оцінки якості/За ред.А.А. Бондарчука, Олійник Т.М. Вінниця:ТОВ «Нілан-ЛТД», 2021. 456 с.

Utility model patents:

1. Ліханов А.Ф., Бородай В.В., Коломієць Ю.В. Спосіб розробки препарату з антимікробною дією проти фітопатогенних мікроорганізмів на основі хітозану/ Патент на корисну модель № 143283МПК (2006):A01N 61/00. Патент опубліковано 27.07.2020, бюл. № 14/2020
2. Василишин Р.Д., Бородай В.В., Ліханов А.Ф., Марчук Ю.М., Гриб В.М., Лакида П.І., Білоус С.Ю. Спосіб біозахисту сіянців дуба звичайного проти збудників інфекційного вилягання за дії ендофітних бактерій. Патент на корисну модель № 154294, опубл. 01.11.2023, бюл. № 44.
3. Коломієць Ю. В., Ліханов А. Ф., Бородай В. В., Оверченко В. В., Буценко Л.М. Спосіб біозахисту рослин томатів проти збудників мікозів та бактеріозів за дії ріcстимулювальних ендофітних бактерій. Патент на корисну модель № 15778120. Опубл. 11.2024, бюл. № 47/2024.

Original Papers

Publications in scientific periodicals included in scientometric databases, in particular Scopus, Web of Science Core Collection

1. Kucher, L., Boroday, V. et al. Peculiarities of the Primary Process of the Soil Formation on the Mine Rock Dumps Under the Influence of Biotic Factors. Journal of Ecological

Engineering, 23(11), pp.101-108. (2022). https://doi.org/10.12911/22998993/153399(Scopus, **Q3**).

2. Borzykh O. I., Sergiienko V. G., Tytova L. V., Biliavska L. O., Boroday V. V., Tkalenko G. M.& Balan G. O. Potential of some bioagents in fungal diseases controlling and productivity enhancement of tomatoes. *Archives of Phytopathology and Plant Protection*, (2022). 55:15, 1750-1765, 10.1080/03235408.2022.2116685(Scopus, **Q3**).

3. Borodai V., Kolomiiets Yul., Likhanov A., Zelena L., Butsenko L., Shemetun K., Churilov A., Blume Y. The Growth-promoting and Antipathogenic Effects of Microorganisms Isolated from Solanum nigrum L. and Inoculated in Solanum lycopersicum L. The Open Agriculture Journal. 16. (2022).10.2174/18743315-v16-e2208180. (Scopus, **Q3**).

4. Beregniak, E., Beregniak, M., Boroday, V., et al. Ecological Analysis of the Current State of Forest Resources in Forest Steppe of Ukraine. Journal of Ecological Engineering, 24(1), (2023). pp.87-96. https://doi.org/10.12911/22998993/155951(Scopus, **Q3**).

5. Lishchuk, A., Parfenyk, A., Horodyska, I., Boroday, V., Ternovyi, Y., Tymoshenko, L. Environmental Risks of the Pesticide Use in Agrocenoses and their Management. Journal of Ecological Engineering, 24(3), (2023).199-212. https://doi.org/10.12911/22998993/158537(Scopus, **Q3**).

6. Lishchuk A. Boroday V, et al. Bioindication for Detecting Environmental Risks in Agrocenoses Contaminated with Heavy Metals. *J. Ecol. Eng.* 2023; 24(8):175–182. https://doi.org/10.12911/22998993/166395(Scopus, **Q3**).

7. Gunko, S., Vakuliuk, P., NaumenkoO., BoberA., Boroday, V., Nasikovskyi, V., & MuliarO. (2023). Мінеральний склад бульб картоплі та його вплив на потемніння м'якуша. Food Science and Technology, 17(1). https://doi.org/10.15673/fst.v17i1.2565 (Web of Science)

8. Bilous S, Likhanov A, Boroday V, Marchuk Y, Zelena L, Subin O, Bilous A. Antifungal Activity and Effect of Plant-Associated Bacteria on Phenolic Synthesis of *Quercus robur* L. *Plants*. 2023; 12(6):1352. https://doi.org/10.3390/plants12061352(Scopus, **Q1**).

9. Lishchuk, A., Boroday, V. et al.(2024). Ecotoxicological Hazard of Pesticide Use in Traditional Agricultural Technologies. *Journal of Ecological Engineering*, 25(2), 274-289. https://doi.org/10.12911/22998993/177275(Scopus, **Q2**).

10. Stefanovska, Tatyana, et al. "Effect of the Biostimulants of Microbiological Origin on the Entomopathogenic and Plant Parasitic Nematodes from Miscanthus × Giganteus Plantations" *Journal of Horticultural Research*, vol. 32, no. 1, Sciendo, 2024, pp. 13-24. 2024-0003 https://doi.org/10.2478/johr-2024-0003(Scopus, **Q3**).

11. Slobodianyk, Halyna, Boroday, Vira et al. Morphophysiological Parameters and Leek Seed Production Depending on Fulvohumin Treatment and Date of Planting Seedlings. *Journal of Horticultural Research*, 32 (1), 2024, pp.89-102. https://doi.org/10.2478/johr-2024-0007(Scopus, **Q3**).

12. Kosovska, N., Boroday, V. V., Parfenyuk, A., Lishchuk, A., Tertychna, O., Horodyska, I., Krut, V., Matsenko, Y. & Khitrenko, T. (2025). Ecological control of phytopathogenic micromycetes in agrocenoses of Ukraine. *Ecological Engineering & Environmental Technology*, 26(12), 263–273. https://doi.org/10.12912/27197050/214283(Scopus, **Q3**).

Participation in the international conferences

Oral presentation: **5**; Poster presentation: **7**