## **CURRICULUM VITAE**

# **GENERAL INFORMATION**



Name and Surname: Mila Grahovac

Date of Birth: June 13, 1983

Current Employer: University of Novi Sad, Faculty of

Agriculture, Serbia

Academic Title: Doctor of Biotechnical Sciences

**Academic Position:** Full Professor

**E-mail:** mila.grahovac@polj.edu.rs **Phone Number:** +381 21 485 3347

**Orcid ID:** https://orcid.org/0000-0001-9800-4103

# **EDUCATION**

- Undergraduate Studies:
  - University of Novi Sad, Faculty of Agriculture, Major: Plant Protection (2002–2008)
- Master's Studies:

University of Novi Sad, Faculty of Agriculture, Major: Phytomedicine (2008–2009)

• Doctoral Studies:

University of Novi Sad, Faculty of Agriculture, Major: Agronomy (2009–2014)

# **EMPLOYMENT**

- 2007–2008: English translator, Timline System d.o.o., Novi Sad, Serbia
- 2009–2012: Scholar of the Ministry of Education, Science, and Technological Development of the Republic of Serbia, University of Novi Sad, Faculty of Agriculture

- 2012–2015: Teaching assistant, University of Novi Sad, Faculty of Agriculture
- 2015–2020: Assistant professor, University of Novi Sad, Faculty of Agriculture
- 2020–2025: Associate professor, University of Novi Sad, Faculty of Agriculture
- 2025 present: Full professor, University of Novi Sad, Faculty of Agriculture

## SELECTED SIGNIFICANT PUBLICATIONS IN THE LAST EVALUATION PERIOD:

- 1. Dudaš T, Cotugno P, Budakov D, **Grahovac M**, Stojšin V, Mihajlović M, Ippolito A, Sanzani SM: Diversity and Patulin Production of *Penicillium* spp. Associated with Apple Blue Mold in Serbia, 2025, Journal of Fungi, 11(3):175 (M21, https://doi.org/10.3390/jof11030175)
- 2. Dudaš T, Celano G, Budakov D, Cotugno P, **Grahovac M**, Incerti O, Stojšin V, De Angelis M, Ippolito A, Sanzani AM: Efficacy and mode of action of the biocontrol yeast Meyerozyma caribbica BBJ against blue mold and patulin production by Penicillium expansum, International Journal of Food Microbiology, 2025, 111442, (M21 <a href="https://doi.org/10.1016/j.ijfoodmicro.2025.111442">https://doi.org/10.1016/j.ijfoodmicro.2025.111442</a>)
- 3. Tamindžić G, Miljaković D, Ignjatov M, Miladinović J, Đorđević V, Milošević D, Jovičić D, Vlajić S, Budakov D, **Grahovac M:** Impact of Simultaneous Nutrient Priming and Biopriming on Soybean Seed Quality and Health, 2024, Plants, 13 (18): 2557. (M21 <a href="https://doi.org/10.3390/plants13182557">https://doi.org/10.3390/plants13182557</a>)
- 4. Tamindžić G, Azizbekian S, Miljaković D, Ignjatov M, Nikolić Z, Budakov D, Vasiljević S, **Grahovac M**: Assessment of Various Nanoprimings for Boosting Pea Germination and Early Growth in Both Optimal and Drought-Stressed Environments, 2024, Plants, 13 (11): 1547. (M21, https://doi.org/10.3390/plants13111547)
- 5. Mihajlović M, Hrustić J, Vučurović A, **Grahovac M**, Budakov D, Dudaš T, Pešić B: First Report of Collar and Root Rot of Lettuce Caused by *Plectosphaerella cucumerina* in Serbia, 2024, Plant Disease, 108:4, 1112 (**M21**, <a href="https://doi.org/10.1094/PDIS-12-23-2711-PDN">https://doi.org/10.1094/PDIS-12-23-2711-PDN</a>)
- 6. Petreš M, Loc M, Budakov D, Dudaš T, Stojšin V, Stankov Petreš A, **Grahovac M**: First Report of Brown Spot on Stored Apple Fruits Caused by *Stemphylium vesicarium* in Serbia, 2024, Plant Disease, 108:3, 809, (**M21**, DOI: <a href="https://doi.org/10.1094/PDIS-10-23-2131-PDN">https://doi.org/10.1094/PDIS-10-23-2131-PDN</a>)
- 7. Popov M., **Grahovac M.**, Loc M., Prvulović D., Budakov D., Konstantinović B., Samardžić N., Stojanović T.: Antimicrobial activity of the *Asclepias syriaca* L. root extract, Romanian Agricultural Research, 2023, 40:1-7. (**M23**, DOI: 10.59665/rar4053)
- 8. Petreš M, Hrustić J, Vučinić N, Ma LJ, Ayhan DH, **Grahovac M**: Genome Sequence Resource of *Fusarium graminearum* TaB10 and *Fusarium avenaceum* KA13, Causal Agents of Stored Apple Rot, Molecular Plant-Microbe Interactions, 2023, 36:1, 64-67 (**M21**, DOI: <a href="https://doi.org/10.1094/MPMI-03-22-0069-A">https://doi.org/10.1094/MPMI-03-22-0069-A</a>)
- 9. Vlajkov V, Pajčin I, Vučetić S, Anđelić S, Loc M, **Grahovac M**, Grahovac J. *Bacillus*-Loaded Biochar as Soil Amendment for Improved Germination of Maize Seeds. Plants, 2023, 12, 1024, (**M21**, DOI: <a href="https://doi.org/10.3390/plants12051024">https://doi.org/10.3390/plants12051024</a>)
- 10. Stankov Petreš A, Stojšin V, Nagl N, Petreš M, **Grahovac M**, Ćurčić Ž, Budakov D. *Trichoderma harzianum* as a potential biological agent in control of the charcoal root rot of sugar beet. Journal of Plant Diseases and Protection, 2023, 130, 843–851. (**M22**, DOI: <a href="https://doi.org/10.1007/s41348-023-00716-w">https://doi.org/10.1007/s41348-023-00716-w</a>)
- 11. Hrustić J, Mihajlović M, Stevanović M, Gašić S, **Grahovac M**, Tanović B. Effectiveness of an indigenous *Bacillus subtilis* B6 strain in the control of postharvest apple fruit rot, European Journal of Plant Pathology, 2023. (**M22**, DOI: <a href="https://doi.org/10.1007/s10658-023-02719-7">https://doi.org/10.1007/s10658-023-02719-7</a>)

- 12. Loc M, Milošević D, Ivanović Ž, Ignjatov M, Budakov D, Grahovac J, **Grahovac M**: Genetic diversity of *Pectobacterium* spp. on potato in Serbia, Microorganisms, 2022, 10 (9), 1840 (**M22**, DOI: 10.3390/microorganisms10091840)
- 13. Vukotić J, Stojšin V, Nagl N, Petreš M, Hrustić J, **Grahovac M**, Tanović B. Morphological, Molecular, and Pathogenic Characterization of *Neofabraea alba*, a Postharvest Pathogen of Apple in Serbia. Agronomy, 2022, 12(9):2015. (**M21**, DOI: <a href="https://doi.org/10.3390/agronomy12092015">https://doi.org/10.3390/agronomy12092015</a>)
- 14. Loc M, Milosevic D, Ignjatov M, Ivanović Ž, Budakov D, Grahovac J, Vlajkov V, Pajčin I, **Grahovac M:** First Report of *Pectobacterium punjabense* Causing Potato Soft Rot and Blackleg in Serbia. Plant Disease, 2022, 106(5) 1513 (**M21**, DOI: https://doi.org/10.1094/PDIS-06-21-1199-PDN)
- 15. Mihajlović M, Hrustić J, **Grahovac M**, Tanović B: First Report of *Sclerotinia minor* on Lettuce in Serbia. Plant Disease, 2022, 106(10) 2754 (**M21**, DOI: https://doi.org/10.1094/PDIS-12-21-2735-PDN)
- 16. Dmitrović S, Pajčin I, Lukić N, Vlajkov V, **Grahovac M**, Grahovac J, Jokić A. Taguchi Grey Relational Analysis for Multi-Response Optimization of *Bacillus* Bacteria Flocculation Recovery from Fermented Broth by Chitosan to Enhance Biocontrol Efficiency. Polymers, 2022, 14(16): 3282 (**M21**, DOI: <a href="https://doi.org/10.3390/polym14163282">https://doi.org/10.3390/polym14163282</a>).
- 17. Dmitrović S, Pajčin I, Vlajkov V, **Grahovac M**, Jokić A, Grahovac J. Dairy and Wine Industry Effluents as Alternative Media for the Production of *Bacillus*-Based Biocontrol Agents. Bioengineering (Basel), 2022, 8, 9(11): 663. (M22, DOI: 10.3390/bioengineering9110663).
- 18. Vlajkov V, Anđelić S, Pajčin I, **Grahovac M**, Budakov D, Jokić A, Grahovac J. Medium for the Production of *Bacillus*-Based Biocontrol Agent Effective against Aflatoxigenic *Aspergillus flavus*: Dual Approach for Modelling and Optimization. Microorganisms, 2022, 10(6): 1165. (**M22**, DOI: 10.3390/microorganisms10061165).
- 19. Mitrović I, Grahovac J, Hrustić J, Jokić A, Dodić J, Mihajlović M, **Grahovac M.** Utilization of waste glycerol for the production of biocontrol agents nigericin and niphimycin by *Streptomyces hygroscopicus*: bioprocess development. Environ Technol., 2022, 43(19): 3000-3013. (**M22**, DOI: 10.1080/09593330.2021.1913241).
- 20. Vlajkov V, Pajčin I, Loc M, Budakov D, Dodić J, Grahovac M, Grahovac J. The effect of cultivation conditions on antifungal and maize seed germination activity of Bacillus-Based Biocontrol Agent., 2022, Bioengineering (Basel), 9 (12): 797. (M22, DOI: https://doi.org/10.3390/bioengineering9120797).
- 21. Vlajkov V, **Grahovac M**, Budakov D, Loc M, Pajčin I, Milić D, Novaković T, Grahovac J. Distribution, Genetic Diversity and Biocontrol of Aflatoxigenic *Aspergillus flavus* in Serbian Maize Fields. Toxins, 2021, 13(10):687, (**M21**, DOI: <a href="https://doi.org/10.3390/toxins13100687">https://doi.org/10.3390/toxins13100687</a>).
- 22. Focker M, Van der Fels-Klerx HJ, Magan N, Edwards S, **Grahovac M,** Bagi F, Budakov D, Suman M, Schatzmayr G, Krska R, Nijs M, The impact of management practices to prevent and control mycotoxins in the European food supply chain: MyToolBox project results, World Mycotoxin Journal, 2021, 14, 1-16, (**M22**, DOI: 10.3920/WMJ2020.2588).
- 23. Kurz M, Carnal S, Dafny-Yelin M, Mairesse O, Gottsberger R, Ivanović M, **Grahovac M**, Lagonenko A, Drenova N, Zharmukhamedova G, Doolotkeldieva T, Smits T, Rezzonico F: Tracking the dissemination of *Erwinia amylovora* in the Eurasian continent using a PCR targeted on the duplication of a single CRISPR spacer. *Phytopatholgy Research* **3**, 18, 2021, (**M21**, DOI: <a href="https://doi.org/10.1186/s42483-021-00096-9">https://doi.org/10.1186/s42483-021-00096-9</a>).
- 24. Mitrović I, Lukić N, **Grahovac M**, Jokić A, Dodić J, Grahovac J. Optimization of *Streptomyces hygroscopicus* Cultivation Parameters in a Lab-scale Bioreactor, Chem. Eng. Technol., 2021, 44: 349-358. (**M23**, DOI: https://doi.org/10.1002/ceat.202000380).
- 25. Božić V, Vuković S, Grahovac M, Lazić S, Aleksić G, Šunjka D. Fungicide Application and

- Residues in Control of Blumeriella Jaapii (Rehm) Arx in Sweet Cherry, Emirates Journal of Food and Agriculture, 2021, 33 (3): 253-9. (M23, DOI: https://doi.org/10.9755/ejfa.2021.v33.i3.2659).
- 26. Ivanović Ž, Milošević D, Ignjatov M, Majanović Jeromela A, Karaman M, **Grahovac M**: First report of *Fusarium equiseti* as the causal agent of seed rot of *Matthiola longipetala* in Serbia. Plant Disease, 2020, 104(9) 2516 (**M21**, 3.268, DOI: <a href="https://doi.org/10.1094/PDIS-03-20-0602-PDN">https://doi.org/10.1094/PDIS-03-20-0602-PDN</a>).
- 27. Pajčin I, Vlajkov V, Frohme M, Grebinyk S, **Grahovac M**, Mojićević M, Grahovac J: Pepper bacterial spot control by *Bacillus velezensis*: bioprocess solution. Microorganisms, 2020, 8(10):1463. (**M21**, DOI: 10.3390/microorganisms8101463; https://doi.org/10.3390/microorganisms8101463)
- 28. Savić Z, Dudaš T, Loc M., **Grahovac M**, Budakov D, Jajić I, Barošević T, Krska R, Sulyok M, Stojšin V, Petreš M, Stankov A, Vukotić J, Bagi F: Biological Control of Aflatoxin in Maize Grown in Serbia, Toxins, 2020, 12(3): 162 (**M21**, DOI: 10.3390/toxins12030162).
- 29. Petreš, M., Kalajdžić, J., Milić, B., Magazin, N., Stankov, A., Vukotić, J., Grahovac, M.: Effect of hot water treatments on apple fruit rot caused by *Fusarium* spp. Journal of Plant Diseases and Protection, 2020, 127, 651-655 (**M22**, DOI: <a href="https://doi.org/10.1007/s41348-020-00302-4">https://doi.org/10.1007/s41348-020-00302-4</a>.
- 30. Grahovac J, Mitrović I, Dodić J, **Grahovac M**, Trivunović Z, Dodić S, Jokić A: Biocontrol agent for apple Fusarium rot: optimization of production by *Streptomyces hygroscopicus*. Žemdirbyste Agriculture, 2020, 107 (3), 263 -270 (**M22**, DOI: 10.13080/z-a.2020.107.034)
- 31. Grahovac M (2023): Mikoze i pseudomikoze voćaka, vinove loze i ukrasnih biljaka. Univerzitet u Novom Sadu, Poljoprivredni fakultet. Textbook <a href="https://encr.pw/L11rj">https://encr.pw/L11rj</a>

## LECTURES (INVITED) DURING THE MOST RECENT ELECTION PERIOD

- **Grahovac M.** (2023): How does RRI enable institutional change in university practices? Co-Change final conference, 6-7 February, Budapest, Hungary. <a href="https://cochangeproject.eu/event/co-change-final-conference">https://cochangeproject.eu/event/co-change-final-conference</a>
- **Grahovac M.**, Aćimović M., Budakov D., Stojšin V., Loc M., Petreš M., Dudaš T. (2022): Essential oils and hydrolates in control of plant pathogens, 4. International Conference on Plant Biology, Belgrade, pp. 91. (M32, <a href="https://www.dfbs.org.rs/invited-speakers-4/">https://www.dfbs.org.rs/invited-speakers-4/</a>
- **Grahovac M.** (2022): Gender equality and open access: from small talk to institutionalization at FAculty of Agriculture". GRIPP Closing Conference, 1-2 December 2022, Gran Canaria, Spain. <a href="https://grrip.eu/grrip-closing-conference/">https://grrip.eu/grrip-closing-conference/</a>
- **Grahovac M.**, Grahovac J, Vlajkov V., Loc M. (2022): Bioagents as powerful control tools against toxigenic fungi in agricultural production, 7. The 7th International Scientific Meeting: Mycology, Mycotoxicology, and Mycoses, Novi Sad, pp. 64-65. (**M32**)

## PROJECT PARTICIPATION AND COORDINATION (RECENT PERIOD)

- **2025–2029** Project Number 101156281: Building climate resilience via large scale uptake of systemic solutions in agricultural ecosystems in the Pannonian region (ClimaPannonia) Program: HORIZON-MISS-2023-CLIMA-01. **Role:** Participant.
- **2024–2025** Project Number 14906: *Eco-innovative circular bioprocess design for grey mold management in wine production*. Program: ECOINVENT, Proof of Concept, Science Fund of the Republic of Serbia. **Role:** Participant.

**2023–2027** Project Number 101094435: *Responsible Territories and Institutions Enable and Foster Open Research and Inclusive Innovation for Transitions Governance* (REINFORCING). Program: HORIZON-CSA, HORIZON-WIDERA-2022-ERA-01, European Union. **Role:** Participant.

**2022–2024** Project Number 50487: *Increased sustainability of plant protection by innovative approaches in Bacillus-based biological plant disease and pest control.* Innovation Fund, Republic of Serbia. **Role:** Work Package Leader.

**2022–2023** Project Number 104-401-7365/2022-01: *Optimization of quarantine bacterium Ralstonia solanacearum detection using real-time PCR*. Provincial Secretariat for Agriculture, Water Management, and Forestry. **Role:** Project Leader.

**2020–2023** Project Number 873112: *Co-Create Change in Research Funding and Performing* (Co-Change). Program: SWAFS, Horizon 2020, European Union. **Role:** Local Coordinator.

**2022–2023** Project Number 142-451-2161/2022-01: *Sustainable production of health-safe food within the Croatian national community in Vojvodina*. Provincial Secretariat for Higher Education and Scientific Research. **Role:** Project Leader.

**2020–2022** Project Number 6064541: *Bioprocess solution for the production of biocontrol agent against aflatoxigenic Aspergillus species* (BioSolAfla). Program for Excellent Projects of Young Researchers (PROMIS), Science Fund of the Republic of Serbia. **Role:** Participant.

**2020–2021** Project Number 592918470: *Valorization of waste through the production of microbial biocontrol agents*. EU4TECH Proof of Concept Project. **Role:** Participant.

**2016–2020** Project Number 678012: *Safe food and feed through an integrated Toolbox for Mycotoxin Management* (MyToolBox). Program: Horizon 2020, European Union. **Role:** Participant.

### MEMBERSHIPS IN EDITORIAL BOARDS OF SCIENTIFIC JOURNALS:

- Section Editor for the journal *Biljni lekar (Plant Doctor)* from 2016 to 2023.
- English Language Proofreader for the journal *Pesticides and Phytomedicine* during 2011–2012.

### **TECHNICAL SOLUTIONS**

- Ivana Danilov, Jovana Grahovac, Vanja Vlajkov, Aleksandar Jokić, Mila Grahovac, Marta Loc: Formulation of a cultivation medium for the production of biobactericide based on raw glycerol from biodiesel production. Faculty of Technology, Novi Sad, University of Novi Sad, in collaboration with FERTICO DOO INDIJA. Approved at the 27th session of the Biotechnology and Agriculture Scientific Board (MNO BiP) on April 24, 2024, under category M85 (New Technical Solution, not commercialized).
- 2. Tanović B., Gašić S., Hrustić J., Mihajlović M., Stevanović M., Đorđević T., Grahovac

M.:

Preparations based on thyme essential oil for protecting fruit from brown rot pathogens. Approved at the session of the Biotechnology and Agriculture Scientific Board (MNO BiP) on May 20, 2022, under category M82 (New National Technical Solution).

- 3. Ivana Mitrović, Jovana Grahovac, Jelena Dodić, Mila Grahovac, Zorana Rončević (2020):
  - Application of an enhanced formulation of a nutrient substrate for biosynthesis of antagonists against apple storage pathogens using the production strain Streptomyces hygroscopicus.
  - Faculty of Technology, Novi Sad, University of Novi Sad, in collaboration with POLLINO AGRAR d.o.o., Jazak. Approved at the 39th session of the Biotechnology and Agriculture Scientific Board (MNO BiP) on July 30, 2020.
- 4. Aleksandar Jokić, Jovana Grahovac, Ivana Pajčin, Nataša Lukić, Bojana Ikonić, Mila Grahovac, Zita Šereš, Žana Šaranović, Jelena Dodić, Zorana Rončević (2020): Application of two-phase flow during microfiltration for the primary separation of Bacillus sp. biomass intended for use in phytomedicine. Faculty of Technology, Novi Sad, University of Novi Sad, in collaboration with **BACILLOMIX** CO. DOO, Veternik. Approved at the 39th session of the Biotechnology and Agriculture Scientific Board (MNO BiP) on July 30, 2020, under category M85.
- 5. Tanović B., Gašić S., Hrustić J., Mihajlović M., Stevanović M., Grahovac M.: *Application of Bacillus subtilis B6 in the protection of stored apples*. Approved at the session of the Biotechnology and Agriculture Scientific Board (MNO BiP) on July 18, 2019, under category M82 (New National Technical Solution).
- 6. Aleksandar Jokić, Jovana Grahovac, Nataša Lukić, Jelena Dodić, Mila Grahovac, Zita Šereš, Bojana Ikonić, Ivana Pajčin: Improvement of permeate flux during microfiltration of Bacillus sp. cultivation fluids using Kenics turbulence promoters.

  Faculty of Technology, Novi Sad, University of Novi Sad, in collaboration with AMAKS DOO Novi Sad.

  Approved at the session of the Biotechnology and Agriculture Scientific Board (MNO BiP) on April 18, 2019, under category M85 (New Technical Solution in the implementation phase, tested in an authorized institution, facility, production line, or laboratory).

#### PARTICIPATION IN FACULTY GOVERNANCE BODIES

- Vice Dean for Science and International Cooperation, Faculty of Agriculture, University of Novi Sad (2024 present).
- Deputy Chair of the Council, Faculty of Agriculture, University of Novi Sad (2023 2024).
- Member of the Council, Faculty of Agriculture, University of Novi Sad (2019 2023).

#### AWARDS AND RECOGNITIONS

- Award for the Best Science-Industry Collaboration Project, 2022.
- Co-mentor to candidates Marta Loc and Monja Milićević **1st Prize at the International Student Project Contest in the field of Biology and Agricultural Sciences**, Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timișoara, Faculty of Agriculture, 2018.

- Mentor to candidate Marta Loc 1st Prize at the 10th Conference of Agronomy Students with International Participation, Faculty of Agronomy in Čačak, University of Kragujevac, 2017.
- University of Novi Sad Award for Outstanding Results during Master Studies, 2010.
- Award for Best Students of the Republic of Serbia, Ministry of Education and Eurobank, 2006.

# **OTHER SIGNIFICANT INFORMATION**

- **Head of the Biological Research Division in Phytopathology**, Laboratory for Biological Research and Pesticides (accredited), Department of Phytomedicine and Environmental Protection, Faculty of Agriculture, University of Novi Sad (2022 present).
- Authorized officer in plant health diagnostics and protection, certified by the Ministry of Agriculture, Forestry, and Water Management.
- Authorized officer and lead examiner for the biological efficacy testing of fungicides and bactericides, certified by the Ministry of Agriculture, Forestry, and Water Management.
- Leads and participates in special monitoring of plant disease pathogens on potatoes in Serbia, as well as quarantine plant disease pathogens on imported and exported plant material (potatoes, corn, blueberry).
- Representative of the Faculty of Agriculture, University of Novi Sad, in NALED's Alliance for Environmental Protection (2022 present). NALED Environmental Protection Alliance
- Chair of the **Gender Equality Committee**, Faculty of Agriculture, University of Novi Sad.