

Mladenov Velimir, Ph.D.



I BASIC INFORMATION

Surname Mladenov
Name Velimir
Affiliation University of Novi Sad, Faculty of Agriculture (UNSFA), PanCrop Lab
Address Sq. Dositeja Obradovića 8
21000 Novi Sad, Republic of Serbia
Phone - office +381/21 485 32 36
Phone - mobile +381/64 21 35 402
e-mail add. velimir.mladenov@polj.edu.rs

II ACADEMIC RECORDS

Professional experience

2011– University of Novi Sad, Faculty of Agriculture

Progress in Higher Education & Professional Specialisation

2008 Bachelor of Science (B.Sc.), Field and Vegetable Crops, University of Novi Sad, Faculty of Agriculture
2011 Master of Science (M.Sc.), Agronomy – Genetics, Plant Breeding and Seed Science, University of Novi Sad, Faculty of Agriculture
2017 Doctor of Philosophy (Ph.D.), Agronomy (Plant Breeding), University of Novi Sad, Faculty of Agriculture

Main research areas

- Climate changes in agriculture
- Crop responses to abiotic stresses
- Plant breeding

Engagements in Scientific Project (Selected)

- 1 ClimaPannonia- Building climate resilience via large scale uptake of systemic solutions in agricultural ecosystems in the Pannonian region (2025-2029). *Horizon Europe*. Coordinator of the project.

- 2 Bioeconomy excellence alliance for stimulating innovative and inclusive green technology-Beaming 2024-2027. *Horizon Europe*.
- 3 Developing Intercropping for agrifood value chains and ecosystem services delivery in Europe and Southern Countries – IntercropValuES (2022-2026) *Horizon Europe*.
- 4 Cost action 22157: ReCrop: Reproductive Enhancement of CROP resilience to extreme climate (2023-2027) – Science Communication Coordinator.
- 5 Cost action 19125: EPI CATCH: EPIgenetic mechanisms of Crop Adaptation To Climate cHange (2020-2024) – Science Communication Coordinator.
- 6 Cost action 24156: PrimSeedPower: Seed Priming Solutions: Boosting Crop Resilience for a sustainable Future (2025-2029) – Managment Comitee
- 7 Interreg IPA Croatia-Serbia: Enhancing wheat genetical resistance to FHB and grain yield in the era of precision agriculture - RES Wheat (2026-2028)
8. Analysis of Drought Development and Support for Drought Adaptation in Serbia through Slovak Expertise, Slovak Aid (2025-2027)

III ADDITIONAL ACADEMIC RECORDS

Progress in Academic/Research position

2011-2018 Researcher, University of Novi Sad, Faculty of Agriculture

2018-2023 Assistant Professor, University of Novi Sad, Faculty of Agriculture

2023- Associate Professor, University of Novi Sad, Faculty of Agriculture

Language skills

- Fluent in English

Technical trainings and specialisations

- 2010** Certification for agricultural commodities and accreditation for certifying bodies, Germany
- 2011** Food Security & Grain Storage – Technology and Management, Israel
- 2013** Research Methodology and Scientific Writing, TRAIN, Serbia
- 2015** “Conduct Outcomes – based Assessments” Programme, SAZM, Serbia
- 2018** Training course on NIR technology, conducted on BOKU University in Vienna, Austria
- 2021** International Training Workshop on Modern Breeding and Cultivation Technology of Vegetables – China I online
- 2022** COST Communication Seminar – Brussels, Belgium

IV LIST OF PUBLICATIONS – TR list

1. Mladenov N, Hristov N, Kondic-Spika A, Djuric V, Jevtic R, Mladenov V. (2011): Breeding progress in grain yield of winter wheat cultivars grown at different nitrogen levels in semiarid conditions. *Breeding Science* (61): 260-268 .
2. Mladenov V, Banjac B, Krishna A, Milošević M. (2012): Relation of grain protein content and some agronomic traits in European cultivars of winter wheat. *Cereal Research Communication*. 40(4): 532-541.

3. Mladenov V, Banjac B, Milošević M (2012): Evaluation of yield and seed requirements stability of bread wheat (*Triticum aestivum* L.) via AMMI model. *Turkish Journal of Field Crops* 17(2): 203-208.
4. Banjac B, Mladenov V, Dimitrijević M, Petrović S Boćanski J (2014): Genotype × environment interactions and phenotypic stability for wheat grown in stressful conditions - *Genetika*, 46(3): 799-806 .
5. Mitrović B, Stojaković M, Zorić M, Stanisavljević D; Bekavac G, Nastasić A, Mladenov V (2016): Genetic gains in grain yield, morphological traits and yield stability of middle-late maize hybrids released in Serbia between 1978 and 2010. *211(3): 321-330, Euphytica*.
6. Mladenov V, Dimitrijević M, Petrović S, Boćanski J, Kondić-Špika A, Trkulja D, Banjac B. (2018): Agronomic performance of wheat cultivars and their molecular characterization. *Genetika*, 50(2):591-602.
7. Cvejić S, Jocić S, Mladenov V, Banjac B, Radeka I, Jocković M, Jeromela Marjanović A, Miladinović D, Miklič V (2019): Selection of sunflower hybrids based on stability across environment. *Genetika*, 51(1):81-92.
8. Mladenov V, Dimitrijević M, Petrović S, Boćanski J, Banjac B, Kondić-Špika A, Trkulja D. (2019): Genetic analysis of spike length in wheat. *Genetika*, 51(1): 167-178
9. Ćuk N, Cvejić S, Mladenov V, Babec B, Miklič V, Miladinović D, Jocić S (2020): Variability of morphological traits in sunflower inbred lines, *Genetika*, 52 (3): 901-914, 10.2298/GENSR200901C.
10. Banjac B, Dimitrijević M, Petrović S, Mladenov V, Banjac D, Kiproovski B (2020): Antioxidant variability of wheat genotypes under salinity stress *in situ*. *Genetika* 52 (3): 1145-1160, 10.2298/GENSR2003145B.
11. Kuzmanović, B, Petrović S, Nagl N, Mladenov V, Grahovac N, Zanetti F, Eynck C, Vollmann J, Marjanović Jeromela A (2021): Yield-related Traits of 20 Spring Camelina genotype grown in Multi-Environment Study in Serbia. *Agronomy* 11(5):858. <https://doi.org/10.3390/agronomy11050858>.
12. Marjanović Jeromela A, Cvejić S, Mladenov V*, Kuzmanović B, Adamović B, Stojanović D, Vollmann J (2021): Technological Quality Traits Phenotyping of Camelina across Multienvironment Trials. *Acta Agriculturae Scandinavica, Section B – Plant&Soil Science* 71(8): 667-673. DOI 10.1080/09064710.2021.1933162.
13. Mladenov V, Fotopoulos V, Kaiserli E, Karalija E, Maury S, Baranek M, Segal N, Testillano P, Vassileva V, Pinto G, Nagel M, Hoenicka H, Miladinović D, Gallusci P, Vergata C, Kapazoglou A, Abraham E, Tani E, Gerakari M, Sarri E, Avramidou E, Gašparović M, Martinelli F (2021): Deciphering the epigenetic alphabet involved in stress transgenerational memory in crops. *International Journal of Molecular Sciences*.22(13), 7118. DOI 10.3390/ijms22137118.
14. Kokoulidou I, Avramidou E, Baranek M, Brunel-Muguet S, Farrona S, Johannes F, Kaiserli E, Lieberman-Lazarovich M, Martinelli F, Mladenov V, Testillano P, Vassileva V, Maury S. (2021): Epigenetics for Crop Improvement in Times of Global Change. *Biology Journal*. 10(8), 766. DOI 10.3390/biology10080766.
15. Banjac B, Mladenov V*, Petrović S, Matković-Stojšin M, Krstić Đ, Vujić S, Mačkić K, Kuzmanović B, Banjac D, Jakšić S, Begić D and Šućur R (2022): Phenotypic Variability of Wheat and Environmental Share in Soil Salinity Stress [3S] Conditions. *Sustainability* 14(14):8598, DOI 10.3390/su14148598.

16. Ćuk N, Cvejić S, Mladenov V, Miladinović D, Babec B, Jocić S, Dedić B (2022): Introducing cut-stem inoculation method for fast evaluation of sunflower resistance to *Macrophomina phaseolina*. *Phytoparasitica*. Published online 28.07.22. DOI 10.1007/s12600-022-01015-0.
17. Liebermann-Lazarovich M, Kaiserli E, Bucher E, Mladenov V (2022): Natural and induced epigenetic variation for crop improvement. *Current Opinion in Plant Biology*. 70:102297. <https://doi.org/10.1016/j.pbi.2022.102297>.
18. Popović B, Agić D, Ždero Pavlović R, Jurić T, Mladenov V (2023): α -Glucosidase inhibitory activities of natural deep eutectic systems and their components: Ascorbate is a powerful inhibitor of α -glucosidase. *Journal of Molecular Liquids*, 383: 122086, DOI 10.1016/j.molliq.2023.122086.
19. Agius D, Kapazoglou A, Avramidou E, Baranek M, Carneros E, Caro E, Castiglione S, Cicutelli A, Radanovic A, Ebejer JP, Gackowski D, Guarino F, Gulyás A, Hidvégi N, Hoenicka H, Inácio V, Johannes F, Karalija E, Lieberman-Lazarovich M, Martinelli F, Maury S, Mladenov V, Morais-Cecilio L, Pecinka A, Tani E, Testillano P, Todorov D, Valledor L and Vassileva V (2023): Exploring the crop epigenome: a comparison of DNA methylation profiling techniques. *Frontiers in Plant Science*. 14:1181039. DOI 10.3389/fpls.2023.1181039.
20. Krstić M, Mladenov V, Banjac B, Babec B, Dundžerski D, Ćuk N, Gvozdenac S, Cvejić S, Miklič V, Jocić S, Ovuka J (2023). Can a modification of sowing date and genotype selection reduce the impact of climate changes in seed sunflower production? *Agriculture*. doi.org/10.3390/agriculture13112149.
21. Mladenov V, Banjac B, Petrović S, Šučur R, Jocković B. (2023): Mitigating abiotic stresses: A study on Pannonian basin wheat cultivars facing drought, cold and heat. *Genetika* 55(3) 951-961. DOI 10.2298/GENSR2303951M.
22. Šučur R, Mladenov V*, Banjac B, Trkulja D, Mikić S, Šumaruna M, Börner A (2024): Phenotypic marker study of worldwide wheat germplasm. *Italian Journal of Agronomy*. 19 (1) 100002 DOI 10.4081/ija.2023.2194.
23. Ćuk N, Cvejić S, Mladenov V, Jocković M, Krstić M, Babec B, Jocić S, Dedić B (2024): A comprehensive assessment of sunflower genetic diversity against *Macrophomina phaseolina*. *Journal of Agricultural Sciences JAS*.
24. Agho C, Avni A, Bacu A, Bakery A, Balazadeh S, Baloch F, Bazakos C, Čereković N, Chaturvedi P, Chauhan H, De Smet I, Dresselhaus T, Ferreira L, Fila J, Fortes A, Fotopoulos V, Francesca S, Garcia-Perez P, Gong W, Graci S, Granell A, Gulyas A, Hidvegi N, Honys D, Jankovska-Bortkevič E, Jonak C, Jurkoniene S, Kaiserli E, Kanwar M, Kavas M, Koceska N, Koceski S, Kollist H, Lakhneko O, Lieberman-Lazarovich M, Lukic N, Luyckx A, Mendes M, Miras-Moreno B, Mirmazloum I, Mladenov V, Mozafarian M, Mueller-Roeber B, Muhlemann J, Munaiz E, Niedbala G, Nieto C, Niinemets U, Papa S, Pedreno M, Piekutowska M, Provelengiou S, Quinet M, Radanović A, Resentini F, Rieu I, Rigano M, Robert H, Rojas L, Šamec D, Santos AP, Schrupfova P, Shalha B, Simm S, Spanić V, Stahl Y, Šučur R, Vlachonassios K, Vraggalas S, Vriezen W, Wojciechowski T, Fragkostefanakis S (2025): Integrative approaches to enhance reproductive resilience of crops for climate-proof agriculture. *Plant Stress* <https://doi.org/10.1016/j.stress.2024.100704>. 15(100704).
25. Drašković B, Mitrović B, Mladenov V, Mitrović I, Janković M, Zorić M, Đurić N (2025): Genotype by environment dynamics in maize: unrevealing the impact of plant density on yield productivity through inclusion of environmental variables. *Turkish Journal of Agriculture and Forestry*.
26. Tanasković M, Mladenov V, Bekavac G, Purar B, Mirosavljević M, Živančev M, Brbaklić Lj, Mikić S, Stankov Petreš A, Đurić A, Dundžerski D. (2025): Analysing growth dynamics: non-linear models

- of maize kernel dry matter accumulation. *Cereal Research Communication* <https://doi.org/10.1007/s42976-025-00663-2>.
27. Šućur R, Ali A, Mortazavi P, Jocković B, Mladenov V, Nadeem MA, Baloch FS (2025): Molecular screening of stripe rust and powdery mildew resistance genes using the validated gene specific SSR markers. *Physiological and molecular plant pathology* <https://doi.org/10.1016/j.pmpp.2025.102743>.
 28. Šućur R, Ali A, Mortazavi P, Altaf M, Tatar M, Nadeem M, Jocković B, Mladenov V, Fragkostefanakis A, Chung YS, Baloch F (2025). Exploring genetic diversity and population structure in Serbian and some European bread wheat cultivars through iPBS-Retrotransposon markers. *Turkish Journal of Agriculture and Forestry*. 49(4). TJAF-2024-01292R1
 29. Abdelrady W, Mostafa K; Elshawy E, Mladenov V; Bacu A; Zeng F, Kavas M (2025): NHX Transporters: Molecular Mechanisms and Applications for Enhancing Crop Resilience to Soil Salinity in Changing Environments. *Plant Physiology and Biochemistry*
 30. Mladenov V, Vujić S, Krstović S, Čabilovski R, Banjac B, Šućur R, Čurčić M, Geher T, Radišić M, Iličić B, Halupka G, Jancso M, Gelybo G, Varga J, Vityi A, Nadeem MA, Baloch FS (2025): Challenges in building Pannonian climate resilience across agriculture: something old, something new, something borrowed, something blue? *Open Research Europe* 5:342. <https://doi.org/10.12688/openreseurope.21666.2>
 31. Blagojević B, Brunel-Muguet S, Šućur R, Mladenov V, Balaž I, Vollmann J, Fotopoulos V, Mader K (2026): The role of spermidine in plants and humans: a pathway from climate change adaptation to health benefits. *NPJ Science of Food*. <https://doi.org/10.1038/s41538-025-00695-2>
 32. Šućur R, Ali A, Mladenov V*, Jocković B, Ying Gou J, Nadeem MA, Bakhsh R, Javed J, Aktas H, Ma J, DO MC, Baloch FS (2026): Molecular screening of Septoria tritici blotch resistance genes in European bread wheat cultivars using validated gene-specific SSR markers. *Phytopatology Research* 8:26. <https://doi.org/10.1186/s42483-026-00411-2>

V BOOKS

1. Zencirci N, Baloch FS, Gou JY, Mladenov V, Fragkostefanakis S, Da Silva Lopes M, Habyarimana E, Ulukan H, Evlice AK (2025): Empowering Wheat Cultivation with GIS, Digital Approaches and Artificial Intelligence. Book ISBN: 9783031999536. Springer Nature. ISBN 978-3-031-99953-6
2. Mladenov V (2025) Plant Breeding - Book. University of Novi Sad, Faculty of Agriculture. ISBN 9788675206330
3. Mladenov V (2021) Plant Breeding - Handbook. University of Novi Sad, Faculty of Agriculture. ISBN 978-8675205227
4. Mladenov V, Banjac B, Šućur R (2023) Ecological and agronomical challenges in wheat production in Vojvodina. ISBN 9788675205951

VI MSC and PHD thesis supervised

MSC

1. *Phenotypic variability of sunflower inbred lines*
2. *Germination of different seed fractions of sunflower inbred lines (Helianthus annuus L.)*
3. *Quality and use value of camelina (Camelina sativa L.)*
4. *Grain yield of multi-row barley from different selection cycles*
5. *Agromorphological characterization and variability of wheat genotypes*
6. *Variability and interdependence of yield components of European wheat varieties*
7. *Phenotypic variability of agromorphological traits and yield of seed wheat*

PhD

1. *Variability of agronomic traits of protein pea under different agro-ecological conditions in Europe*
2. *Inheritance of sunflower resistance to charcoal rot caused by *Macrophomina phaseolina* (Tassi) Goid*
3. *Variability of phenotypic traits, yield and seed quality of sunflower inbred lines*
4. *Development and application of precise models for maturity prediction based on dry matter accumulation dynamics and grain moisture content*

VI Press release & YT videos

1. <https://www.dnevnik.rs/ekonomija/poljoprivreda/konkretna-saradna-nauke-i-privrede-u-ataru-martonosa-domaci-persun-dusu-dao>
2. <https://www.dnevnik.rs/biznis/poljoprivreda/iz-knjige-nauceno-polju-posejano-osnovan-alumni-klub-diplomaca-departmana-za-ratarstvo-povrtarstvo-2026-02-20>
3. <https://www.dnevnik.rs/biznis/poljoprivreda/proslo-vreme-dominacije-domacih-semenskih-kuca-na-nasim-njivama-uglavnom-seme-stranih-kompanija-2026-03-20>
4. <https://upravo.rs/story/172311/domae-seme-u-senci-stranog-poljoprivrednici-u-nedoumici-pred-prolenu-setvu>
5. <https://tinyurl.com/mw4h8dwm>
6. <https://bif.rs/2026/03/nasi-poljoprivrednici-za-setvu-sve-vise-koriste-uvozna-semena/>
7. <https://www.ekapija.com/news/5487271/u-susret-setvi-zitarica-na-srpskim-njivama-sve-manje-domaceg-semena>
8. <https://bizportal.rs/biz-info/srbija/101056687/prolecna-setva-na-pragu---poljoprivrednici-u-nedoumici-oko-semena-.html>
9. <https://www.novosti.rs/ekonomija/poljoprivreda/1588587/prolecna-setva-samo-sto-nije-pocela-kakvo-seme-koristiti-ratari>
10. <https://www.biznismagazin.rs/uncategorized/domaci-proizvodaci-semena-drze-20-odsto-trzista-kukuruza-strani-brendovi-dominiraju-setvom>
11. <https://www.youtube.com/watch?v=Db6MUvvU9kM>
12. <https://www.youtube.com/watch?v=TZ4r1efRLOI>
13. <https://www.youtube.com/watch?v=rurn5AZJgic&t=2s>
14. <https://www.youtube.com/watch?v=mFdvk0KDqTU&t=5s>
15. https://www.youtube.com/watch?v=RY_m2ap_tNQ&t=359s
16. <https://www.youtube.com/watch?v=JwfYnyToQeE&t=61s>
17. <https://www.youtube.com/watch?v=qN24YFNSnQc>
18. <https://media.rtv.rs/rom/lachi-rjat-vojvodino/47032>
19. <https://www.youtube.com/watch?v=1qXBM6PZcdU>
20. <https://www.dnevnik.rs/biznis/poljoprivreda/poljoprivredni-fakultet-novom-sadu-projektu-evropske-komisije-klima-panonija-istarazivaci-iz-10-zemalja-traze-nacine-da-ublaze-susu-2026-04-14>
21. <https://boljazemlja.com/projekat-klima-panonija-na-poljoprivrednom-fakultetu/>
22. <https://www.agrofin.rs/vesti/poljoprivredni-fakultet-u-novom-sadu-u-projektu-eu-klima-panonija/>
23. <https://agroservis.rs/projekat-klima-panonija-naucnici-iz-novog-sada-predvode-evropsku-borbu-protiv-suse/>
24. <https://www.dobrojutro.co.rs/kako-povecati-otpornost-poljoprivrednog-sektora-na-klimatske-promene/>
25. <https://www.agrofin.rs/vesti/mladenov-u-strukturi-setve-udeo-domaceg-semena-samo-20-20-procenta/>