

Mladen Čučak, PhD

PROFESSIONAL PROFILE

- Aspiring agricultural researcher in the field of plant pathology/epidemiology with global experience of technical and development issues in crop protection
- Motivated achiever with PhD in Plant Pathology focused on field-based agronomy, agrometeorology and quantitative methods
- Track record of developing integrated pest management tools for practical disease control outcomes
- Strong collaborative qualities, leads change to effect positive outcomes
- Proficient problem-solver with the analytical skills to evaluate risks and develop realistic and effective strategies
- Strong logistics and programme organisational skills
- Proven ability to adapt to new subject areas and roles, along with the ability to develop strong professional relationships at all levels
- Influential interpersonal communicator, negotiator, and presenter
- Farmer focused approach through hands-on experience

AREAS OF EXPERTISE

Crop Protection	Statistical analysis	Agricultural development
General plant pathology	Statistical programming	Collaborative research
Integrated Pest Management	R language	Data Science
Epidemiology of Plant Diseases	Trial design	Agrometeorology

EXPERIENCE

Date: February 2016 - May 2020

Employer: Teagasc, Crops Research Centre, Oak Park, Carlow R93 XE12, Republic of Ireland

Position: Doctoral researcher

Main achievement: Development of potato late blight risk prediction models, analytic and field evaluation, and integration in practical integrated management in the Republic of Ireland

Main tasks:

- Design, implementation and analysis of the crop protection *in vivo* and *in vitro* trials (including all relevant agricultural operations from planting to storage);
- Collection, curation and analysis of database with historical and forecasted hourly weather observations and implementation of an automated decision support system to guide pesticide applications;
- Sampling, isolation and molecular characterization of *Phytophthora infestans*;
- Presentation of results of IPM tools to producers and industry; national and international scientific meetings from different fields (agronomy, plant pathology, epidemiology, meteorology);
- Supervision of lab interns (six three- and six-months placements);
- Initiated, led and tutored data analysis and R programming language group at the institute;
- Intensive collaboration with European and international groups.

Date: December 2014 – December 2015

Employer: NIBIO Norwegian Institute of Bioeconomy Research, Plant Protection Division Høgskoleveien 7, 1430 Ås, Norway

Position: Intern (01.12.2014 – 10.06.2015) on project *Introduction of ICT in IPM in Bosnia and Hercegovina's agriculture*; Senior Research Technician (10.06.2015 – 15.12.2015) involved in several projects of Plant Pathology Department

Main tasks:

- Assisting project coordinator in project management;
- Monitoring pest and disease population and modelling risk of harmful organisms in agriculture;
- Work on the development and international promotion of decision support systems in agriculture;
- Facilitating international collaboration Norway – Balkans;
- Development of an automated insect trap.

Teaching:

- 2018 - 2019 GY310B – Tutoring group of 16 students writing Bachelor thesis.
2019 Intro to R workshop for colleagues from the institute (weekly sessions for 2 months).

Internships:

- 01.06.2013 - Plant protection department; Agricultural Institute of Slovenia, Kmetijsko gozdarska
01.07.2013 zbornica Slovenije; Vinarska ulica 14, 2000 Maribor, Slovenia
01.04.2009 - Phytopharmacy store. Trznica A.D. Jedinica: Poljoprivredna apoteka, Banja Luka, Bosnia
15.04.2009 and Herzegovina
01.04.2008 - Apple fruit orchard (200 Ha); Agroimpex, Laktasi, Gradiska, Bosnia and Herzegovina
15.04.2008

Volunteering:

- 2010 Youth engagement project: *Global exchange*. Three-month stays in Egypt and the UK
1998-2012 Youth and development organisations such as Scout club, IAESTE (International Organisation of Agronomy Students) and “Rada” (Society Of Agronomists And Tourism Workers)

EDUCATION

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| 2016 - 2020 | PhD | Plant Pathology/Epidemiology. Maynooth University/Teagasc; Ireland |
| 2012 - 2015 | MSc | Agronomy: Biomolecular Techniques and Plant Protection. Maribor; Slovenia |
| 2006 - 2011 | BSc | Plant Production - Plant Protection. Banja Luka; Bosnia and Herzegovina |

GRANTS, AWARDS AND SCHOLARSHIPS

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| 2021 | Co-PI on the project: Development of mummy berry decision support tool in north-west Washington state (21.000\$) |
| 2019 | Teagasc Walsh Fellowship Travel Award for three-month research stay at UC Davis (5000€) |
| 2016 | Student travel award for participation on EAPR Pathology and Pests section meeting |
| 2016 - 2020 | Doctoral fellowship at Maynooth University and Teagasc |
| 2014 | EEA grant for an internship at Norwegian Institute for Bioeconomy Research (3000€) |
| 2012 - 2014 | Erasmus Mundus scholarship for Master studies |

PROFESSIONAL ACTIVITIES

Synergistic Activities

Early career associate editor *Phytopathology* (APS)
Reviewer for *Plant Disease* (APS) and *Agronomy* (MDPI)

Membership in Professional Associations:

The American Phytopathological Society (APS)
EuroBlight group
Open Plant Pathology

PERSONAL

Driving license: Category B (license from Ireland)

Hobbies: sports, cooking, photography