Prof. dr hab. Małgorzata Jędryczka

Institute of Plant Genetics Polish Academy of Sciences, Poznań

ACADEMIC AND RESEARCH CAREER

EDUCATION: University of Life Sciences, Faculty of Agriculture, Poznań, genetics and plant breeding 1979-1984

SCIENTIFIC DEGREES: Dr. 1995 agricultural sciences, Dr. hab.2007 agricultural sciences, plant pathology; Prof. 2013

POSITIONS: head Resistance Genetics Lab, IPG PAS 1999-2012; head Pathogen Genetics and Plant Resistance Dept., IPG PAS 2013-2015; deputy Director for Scientific Affairs 2016-2019; head Molecular Plant Pathology Team, 2020; head Pathogen Genetics and Plant Resistance Dept. 2021- till now; corresponding member of PAS from 2022, member of Council of Scientific Societies at the Presidium of PAS 2019-2023; member of the Board of Curators, Department II PAS, 2020-2023;

RESEARCH INTERESTS: Etiology and epidemiology of plant diseases caused by fungi and protists. Methods of early detection of pathogens in crops, air, water and soil to support the strategies of their control. Mycological and molecular characterization of pathogens for understanding the structure and tracking changes in their populations.

MAJOR RESEARCH PROJECTS

1997-2000 - head of the Polish team in research project funded by European Union FAIR3-CT96-1669 (ERBIC20-CT97-0003, project acronym: IMASCORE): Integrated strategies for the management of stem canker in Europe.
2003-2006 – head of Work Package 7 in EU funded project CoE: Centre of Excellence in Plant Agrobiology and Molecular Genetics (5 FP, symbol: QLRT-2001-00379; PAGEN).
2002-2006 – head of the Polish team of EU funded research project: Stem canker of oilseed rape: molecular tools and mathematical modeling to deploy durable resistance (5FP), symbol: QLRT-2001-01813, acronym: SECURE.
2007-2009 – DelPHE global project: Protection of brassicas in China by preventing invasion of *Leptosphaeria maculans*; coordination: CRI CAAS, China; participants: China, Canada, Poland, United Kingdom.
2009-2012 - Chinese-Polish project (AAAS-PAS), Studies of molecular relationships between *Sclerotinia sclerotiorum* isolates from China and Poland using mini- and microsatellite markers.
2009-2012 – head of the project funded by the National Research Centre: Spores of *Alternaria* and *Cladosporium* in the air of different regions in Poland and molecular detection of their allergens.
2013-2019 – coordinator EU project (7FP ERA Chair) Creation of Department of Integrative Plant Biology (BioTalent);
2013-2020 – head of the project funded by the Ministry of Agriculture and Rural Development (MA&RD): The use of conventional and molecular tools of plant pathology to search for sources of resistance to clubroot and to characterize the current population of its causal pathogen in Poland.
2017-2019 – head of the Polish team in the Baltic Project 'DSS Fusarium' funded by Swedish Institute: collaborators: Sweden, Poland, Estonia, Lithuania, Decision Support System to predict fusariose and mycotoxins in cereal grains.
2018-2020 – head of the project funded by the Institute of Natural Fibers and Medicinal Plants: Genetic improvement, selection and research on the possibilities of cultivating oil and fiber hemp on light and poor soils with low pH.
2021-2024 – head of Rural Development Programme (PROW) funded by ARiMR, sector Cooperation: Innovative phytosanitary and fertilizing use of new generation oilseed radish varieties in integrated plant cultivation.
2021-2025 – head of MA&RD project Identification of genes related to pea resistance to Ascochyta blight and its influence on photosynthetic efficiency of plants.
2021-2026 – head of MA&RD project Resistance of oilseed rape plants to diseases caused by fungi and protists.

RESEARCH VISITS

Internship (1996 and 2001), Institut National de la Recherche Agronomique INRA-Versailles, France
Post-Doctoral Fellowship (1996), Friedrich Schiller Universität, Jena, Germany
Research Internship (1991-1992), University of East Anglia and Rothamsted Research, UK

PUBLICATIONS

Brachaczek A, Kaczmarek J, **Jędryczka M** (2021) Warm and wet autumns favour yield losses of oilseed rape caused by phoma stem canker. Agronomy. 11(6): 1171.

Czubatka-Bieńkowska A, Kaczmarek J, Marzec-Schmidt K, Nieróbca A, Czajka A, **Jędryczka M** (2020) Country-wide qPCR based assessment of *Plasmodiophora brassicae* spread in agricultural soils in Poland and recommendations for the cultivation of Brassicaceae crops. Pathogens. 9: 1070.

Frąc M, Kaczmarek J, **Jędryczka M** (2022) Metabolic capacity differentiates *Plenodomus lingam* from *P. biglobosus* subclade 'brassicae', the causal agents of phoma leaf spotting and stem canker of oilseed rape (*Brassica napus*) in agricultural ecosystems. Pathogens. 11 (1): 50.

Suproniene S, Kadziene G, Irzykowski W, Sneideris D, Ivanauskas A, Sakalauskas S, Serbiak P, Svegzda P, Auskalniene O, **Jędryczka M** (2019) Weed species within cereal crop rotations can serve as alternative hosts for *Fusarium graminearum* causing Fusarium head blight of wheat. Fungal Ecology 37: 30-37.

Zimny J., Sowa S., Otręba P., Kozdój J., Zimny A., Kaczmarek J., Oleszczuk S., Czaplicki A., **Jędryczka M.** (2021). Pollen flow of winter triticale (x *Triticosecale* Wittmack) investigated with transgenic line expressing *β-glucuronidase* gene. Agronomy 11 (3): 431.