

Candidate supervisor's information summary form

Name and surname, degree, title: Mateusz Labudda, DSc	
Discipline/ disciplines of science	biological sciences
Professional development (degrees and titles) in chronological order	<p>04. 2021: doctor habilitated, field of natural sciences, discipline: biological sciences, Warsaw University of Life Sciences-SGGW</p> <p>07. 2017: doctor of biological sciences in the discipline of biology, specialization: biochemistry, Warsaw University of Life Sciences-SGGW</p> <p>12. 2009: Master of Biology, specialization: environmental protection, Pomeranian University in Słupsk</p>
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> 1. Labudda M[✉], Róžańska E., Muszyńska E., Marecka D., Głowienka M., Roliński P., Prabucka B. 2020. <i>Heterodera schachtii</i> infection affects nitrogen metabolism in <i>Arabidopsis thaliana</i>. Plant Pathology 69(4): 794-803, DOI:10.1111/ppa.13152. 2. Labudda M[✉], Róžańska E., Gietler M., Fidler J., Muszyńska E., Prabucka B., Morkunas I. 2020. Cyst nematode infection elicits alteration in the level of reactive nitrogen species, protein S-nitrosylation and nitration, and nitrosogluthione reductase in <i>Arabidopsis thaliana</i> roots. Antioxidants 9(9): 795, DOI:10.3390/antiox9090795. 3. Labudda M[✉], Róžańska E., Prabucka B., Muszyńska E., Marecka D., Kozak M., Dababat A.A., Sobczak M. 2020. Activity profiling of barley vacuolar processing enzymes provides new insights into the plant and cyst nematode interaction. Molecular Plant Pathology 21(1):38-52, DOI: 10.1111/mpp.12878. 4. Labudda M[✉], Muszyńska E., Gietler M., Róžańska E., Rybarczyk-Płońska A., Fidler J., Prabucka B., Dababat A.A. 2020. Efficient antioxidant defence systems of spring barley in response to stress induced jointly by the cyst nematode parasitism and cadmium exposure. Plant and Soil 456:189-206, DOI:10.1007/s11104-020-04713-y. 5. Labudda M[✉], Tokarz K., Tokarz B., Muszyńska E., Gietler M., Górecka M., Róžańska E., Rybarczyk-Płońska A., Fidler J., Prabucka B., Dababat A.A., Lewandowski M. 2020. Reactive oxygen species metabolism and photosynthetic performance in leaves of <i>Hordeum vulgare</i> plants co-infested with <i>Heterodera filipjevi</i> and <i>Aceria tosichella</i>. Plant Cell Reports 39:1719-1741, DOI:10.1007/s00299-020-02600-5. 6. Gietler M., Fidler J., Labudda M., Nykiel M. 2020 Abscisic acid - enemy or savior in the response of cereals to abiotic and biotic stresses? International

	<p>Journal of Molecular Sciences 21(13): 4607, DOI: 10.3390/ijms21134607.</p> <p>7. Formela-Luboińska M., Chadzinikolau T., Drzewiecka K., Jeleń H., Bocianowski J., Kęsy J., Labudda M., Jeandet P., Morkunas I. 2020 The role of sugars in the regulation of the level of endogenous signaling molecules during defense response of yellow lupine to <i>Fusarium oxysporum</i>. <i>International Journal of Molecular Sciences</i> 21(11): 4133, DOI: 10.3390/ijms21114133.</p> <p>8. Szewińska J, Różańska E, Papierowska E, Labudda M. Proteolytic and Structural Changes in Rye and Triticale Roots under Aluminum Stress. <i>Cells</i>. 2021; 10(11):3046. DOI:10.3390/cells10113046</p> <p>9. Nykiel M, Gietler M, Fidler J, Prabucka B, Rybarczyk-Płońska A, Graska J, Boguszewska-Mańkowska D, Muszyńska E, Morkunas I, Labudda M. Signal Transduction in Cereal Plants Struggling with Environmental Stresses: From Perception to Response. <i>Plants</i>. 2022; 11(8):1009. DOI: 10.3390/plants11081009</p> <p>10. Fidler J, Graska J, Gietler M, Nykiel M, Prabucka B, Rybarczyk-Płońska A, Muszyńska E, Morkunas I, Labudda M. PYR/PYL/RCAR Receptors Play a Vital Role in the Abscisic-Acid-Dependent Responses of Plants to External or Internal Stimuli. <i>Cells</i>. 2022; 11(8):1352. DOI: 10.3390/cells11081352</p>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	None
Project/grants achievements (from the last 10 years)	Manager of the Miniatura-1 grant no.DEC-2017/01 / X / NZ9 / 01183 awarded by the National Science Center.
Topic – research problem – for which the candidate supervisor seeks a doctoral student	Molecular, biochemical, and physiological reactions of spring barley growing under conditions of double environmental stress.
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