

Candidate supervisor's information summary form
maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title: Marzena Sujkowska-Rybikowska, D.Sc.	
Discipline/ disciplines of science	Agriculture and horticulture
Professional development (degrees and titles) in chronological order	2001 – master degree 2006 – PhD in agricultural science in the field of agronomy 06.05.2021 - doctor with habilitation in the field of agriculture, in the discipline agriculture and horticulture
Most important publications/patents over the last 3 years (maximum 10)	<p>1. Sujkowska-Rybikowska M, Kasowska D., Gediga K, Banasiewicz J., Stępkowski T, 2020. <i>Lotus corniculatus</i> - rhizobia symbiosis under Ni, Co and Cr stress on ultramafic soil. <i>Plant and Soil</i> 451: 459-484.</p> <p>2. Sujkowska-Rybikowska M, Banasiewicz J, Rekosz-Burlaga H, Stępkowski T, 2020. <i>Anthyllis vulneraria</i> and <i>Lotus corniculatus</i> on calamine heaps form nodules with <i>Bradyrhizobium liaoningense</i>-related strains harboring novel in Europe symbiotic nifD haplotypes. <i>Applied Soil Ecology</i> 151:103539.</p> <p>3. Sujkowska-Rybikowska M, Muszyńska E, Labudda M, 2020. Structural adaptation and physiological mechanisms in the leaves of <i>Anthyllis vulneraria</i> L. from metallocolous and non-metallocolous populations. <i>Plants</i> 9:662.</p> <p>4. Czarnocka W, Rusaczonek A, Willems P, Sujkowska-Rybikowska M, Van Breusegem F, Karpinski S, 2020. Novel role of JAC1 in influencing photosynthesis, stomatal conductance and photooxidative stress signalling pathway in <i>Arabidopsis thaliana</i>. <i>Frontiers in Plant Science</i>. 11:1124</p> <p>5. Bederska-Błaszczyk M, Sujkowska-Rybikowska M, Borucki W, 2021. <i>Sinorhizobium medicae</i> 419 vs <i>S. meliloti</i> 1021: differences in root nodules induced by these two strains on the <i>Medicago truncatula</i> host. <i>Acta Physiologia Plantarum</i> 43: 7.</p> <p>6. Rusaczonek A, Czarnocka W, Willems P, Sujkowska-Rybikowska M, Van Breusegem F, Karpiński S, 2021. Phototropin 1 and 2 influence photosynthesis, UV-C induced photooxidative stress responses and cell death. <i>Cells</i> 10:200.</p> <p>7. Nosek M, Gawrońska K, Rozpądek P, Sujkowska-Rybikowska M, Miszalski Z, Kornaś A, 2021. At the edges of photosynthetic metabolic plasticity—on the rapidity and extent of changes accompanying salinity stress-induced CAM photosynthesis withdrawal. <i>Intern J Mol Sci</i>, ISSN:1422-0067,</p>

	<p>Vol:22, 8426, doi:10.3390/ijms22168426.</p> <p>8. Witoń D, Sujkowska-Rybikowska M, Dąbrowska-Bronk J, Czarnocka W, Bernacki M, Szechyńska-Hebda M, Karpiński S, 2021. Mitogen-activated protein Kinase4 impacts leaf development, temperature, and stomatal movement in hybrid aspen. <i>Plant Physiol.</i> 186(4):2190-2204. doi: 10.1093/plphys/kiab186.</p> <p>9. Sujkowska-Rybikowska M, Rusaczonek A., Kochańska-Jezierska A, 2022. Exploring apoplast reorganization in the nodules of <i>Lotus corniculatus</i> L. growing on old Zn-Pb calamine wastes. <i>J Plant Physiol.</i> 268, 153561. doi.org/10.1016/j.jplph.2021.153561.</p> <p>10. Oleńska E, Małek W, Sujkowska-Rybikowska M, Szopa S, Włostowski T, Aleksandrowicz O, Swiecicka I, Wójcik M, Thijs S, Vangronsveld J, 2022. An alliance of <i>Trifolium repens</i> - <i>Rhizobium leguminosarum</i> bv. <i>trifolii</i> mycorrhizal fungi from an old Zn-Pb-Cd rich waste heap as a promising tripartite system for phytostabilization of metal polluted soils. <i>Front Microbiol.</i> 13:853407. doi: 10.3389/fmicb.2022.853407.</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)	<p>Principal Investigator Grant NCN (MINIATURA 3, DEC-2019/03/X/NZ9/00019 - 2019-2020)</p> <p>Co-worker Grant NCN (Sonata Bis 3, UMO-2013/10/E/NZ3/00748- 2014-2020)</p>
Topic – research problem – for which the candidate supervisor seeks a doctoral student	Interdisciplinary research on the adaptation of legume plants spontaneously colonizing metalliferous heaps, to growth in an environment containing extremely high concentrations of toxic metals.
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