

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

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| Name and surname, degree, title: <b>Marzena Sujkowska-Rybkowska, D.Sc.</b> |   |
| Discipline/ disciplines of science   | Biological Sciences   |
| Professional development (degrees and titles) in chronological order       | 2001 – master degree<br>2006 – PhD in agricultural science<br>06.05.2021 - doctor with habilitation in the field of agriculture, in the discipline agriculture and horticulture   |
| Most important publications/patens over the last 3 years (maximum 10)      | <ol style="list-style-type: none"> <li>1. <b>Sujkowska-Rybkowska M</b>, 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> <b>451</b>: 459-484.</li> <li>2. <b>Sujkowska-Rybkowska M</b>, 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> <b>151</b>:103539.</li> <li>3. <b>Sujkowska-Rybkowska M</b>, Muszyńska E, Labudda M, 2020. Structural adaptation and physiological mechanisms in the leaves of <i>Anthyllis vulneraria</i> L. from metalicolous and non-metallicolous populations. <i>Plants</i> 9:662.</li> <li>4. Czarnocka W, Rusaczonek A, Willems P, <b>Sujkowska-Rybkowska M</b>, 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</li> <li>5. Rusaczonek A, Czarnocka W, Willems P, <b>Sujkowska-Rybkowska M</b>, 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.</li> <li>6. Nosek M, Gawrońska K, Rozpądek P, <b>Sujkowska-Rybkowska M</b>, 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, Vol:22, 8426, doi:10.3390/ijms22168426.</li> <li>7. Witoń D, <b>Sujkowska-Rybkowska M</b>, 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.</li> <li>8. <b>Sujkowska-Rybkowska M</b>, Rusaczonek A., Kochańska-Jezińska A, 2022. Exploring apoplast reorganization in the nodules of <i>Lotus corniculatus</i> L. growing on old Zn–Pb calamine</li> </ol> |

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|  | <p>wastes. <i>J Plant Physiol.</i> 268, 153561. doi.org/10.1016/j.jplph.2021.153561.</p> <p>9. Oleńska E, Małek W, <b>Sujkowska-Rybkowska M</b>, 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> <p>10. <b>Sujkowska-Rybkowska, M.</b>; Rusaczonok, A.; Kasowska, D.; Gediga, K.; Banasiewicz, J.; Stępkowski, T.; Bernacki, M.J. Potential of rhizobia nodulating <i>Anthyllis vulneraria</i> L. from ultramafic soil as plant growth promoting bacteria alleviating nickel stress in <i>Arabidopsis thaliana</i> L. <i>Int. J. Mol. Sci.</i> 2022, 23, 11538. doi.org/10.3390/ijms231911538</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><b>Principal Investigator</b><br/>Grant NCN (MINIATURA 3, DEC-2019/03/X/NZ9/00019 - 2019-2020)</p> <p><b>Co-worker</b><br/>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.   |
| <p><u>Contact details:</u></p> <p>Faulty/Institute</p> <p>E-mail address</p> <p>Tel.</p>                                       | <p>Institute of Biology, Department of Botany</p> <p>marzena_sujkowska@sggw.edu.pl;</p> <p>marzenasujkowska2@gmail.com</p> <p>(22) 59 32 659</p>  |