

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

Name and surname, degree, title : Barbara Borawska-Jarmułowicz dr hab. inż.	
Discipline/ disciplines of science	Agriculture and horticulture
Professional development (degrees and titles) in chronological order	PhD degree in 1994 Postdoctoral degree in 2019.
Most important publications/patens over the last 3 years (maximum 10)	<p>Borawska-Jarmułowicz B., Mastalerczuk G., Maliszyńska E., Borucki W. 2020. Morphological diversity of seeds of Polish Festulolium cultivars depending on weather conditions. <i>Biologia Plantarum</i>, 64, 814-820.</p> <p>Borawska-Jarmułowicz B., Mastalerczuk G., Dąbrowski P. Kalaji H.M., Wyrażek K.2020. Improving tolerance in seedlings of some Polish varieties of <i>Dactylis glomerata</i> to water deficit by application of simulated drought during seed germination. <i>Photosynthetica</i> 58 (SI): 540-548. DOI: 10.32615/ps.2020.007</p> <p>Mastalerczuk G., Borawska-Jarmułowicz B., Kalaji H. M. 2019. How Kentucky bluegrass tolerate stress caused by sodium chloride used for road de-icing? <i>Environmental Science and Pollution Research</i>. <i>Environmental Science and Pollution Research</i>, 26, 913-922. DOI: 10.21162/PAKJAS/17.5232</p> <p>Borawska-Jarmułowicz B. 2018. Relationships between different morphological traits of panicles and seeds of <i>Dactylis glomerata</i> L. varieties under seed utilization. <i>Agricultural and Food Science</i>, 27, 179-189. DOI: org/10.23986/afsci.69096</p> <p>Borawska-Jarmułowicz B., Mastalerczuk G., Gozdowski D., Maluszyńska E., Szydłowska A. 2017. The sensitivity of <i>Lolium perenne</i> and <i>Poa pratensis</i> to salinity and drought during the seed germination and under different photoperiod conditions. <i>Zemdirbyste-Agriculture</i>, 104 (1), 71–78. DOI: 10.13080/z-a.2017.104.010</p> <p>Dąbrowski P., Kalaji M.H., Baczevska A.H., Pawluśkiewicz B., Mastalerczuk G., Borawska-Jarmułowicz B., Paunov M., Goltsev V., 2017. Delayed chlorophyll a fluorescence, MR 820, and gas exchange changes in perennial ryegrass under salt stress. <i>Journal of Luminescence</i>, 183, 322-333. DOI.org/10.1016/j.jlumin.2016.11.031</p> <p>Mastalerczuk G., Borawska-Jarmułowicz B., Kalaji H.M., Dąbrowski P., Gozdowski D. 2017. Some physiological parameters, biomass distribution and carbon allocation in roots of forage grasses growing under different nitrogen dosages. <i>Chiang Mai Journal of Science</i> 44(4), 1295-1303.</p> <p>Mastalerczuk G., Borawska-Jarmułowicz B., Kalaji H. M., Dąbrowski P., Paderewski J. 2017. Gas exchange parameters and morphological features of festulolium (<i>Festulolium braunii</i> K. Richert A. Camus) in response to nitrogen dosage. <i>Photosynthetica</i> 55(1), 20-30. DOI:10.1007/s11099-016-0665-0</p> <p>Borawska-Jarmułowicz B., Mastalerczuk G., Kalaji H. M., Carpentier R., Pietkiewicz S., Allakhverdiev S. I. 2014. Photosynthetic efficiency and survival of <i>Dactylis glomerata</i> and <i>Lolium perenne</i></p>

	<p>following low temperature stress. Russian Journal of Plant Physiology, 61(3), 281-288.</p> <p>Borawska-Jarmulowicz B., Mastalerczuk G., Pietkiewicz S., Kalaji M.H. 2014. Low temperature and hardening effects on photosynthetic apparatus efficiency and survival of forage grass varieties. Plant Soil and Environment, 60 (4), 177-183.</p>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	<p>Promoter in the Ph.D. Żaneta Tuchowska (Doctoral School of Warsaw University of Life Sciences) - from 28/01/2021. Doctoral dissertation "Ecophysiological reaction of selected plant species as a criterion for their selection when designing green external walls".</p> <p>Bartosz Spychalski - doctoral dissertation "Assessment of winter oilseed rape reaction to selected groups of growth stimulants by means of growth analysis" implemented at the Institute of Technology and Life Sciences in Falenty (Resolution No. 786/2018 of the ITP Scientific Council in Falenty of 20.09.2018) - the nature of scientific care - auxiliary promoter.</p>
Project/grants achievements (from the last 10 years)	<p>The Horizon 2020 SUPER-G project (Developing Sustainable Permanent Grassland Farming Systems and Policies) founded by the European Community's Horizon 2020 Programme under Grant Agreement no. 774124, 2018 – 2023, contractor .</p> <p>The natural and feed value of plant communities grazed by Polish horses in the Biebrza National Park, KBN No. 501-01-01-25-0027, 2009–2012, contractor.</p>
Topic – research problem – for which the candidate supervisor seeks a doctoral student	<p>1. The leading topic in my research is the physiological and morphological reaction of fodder and lawn grass varieties to abiotic stress - low temperatures, drought, salinity.</p> <p>The research proposed in the work is aimed at assessing the tolerance to low temperatures of selected species and varieties of grasses and legume plants in pure and mixture sowing. Research - in controlled (phytotron) and field conditions using specialized equipment for measuring the physiological state of plants.</p> <p>2. Assessment of seed yielding of grass varieties in the conditions of organic cultivation. Research in a certified ecological field (Miedniewice) and under controlled conditions (phytotron, greenhouse).</p> <p>I suggest Dr. Grażyna Mastalerczuk as the auxiliary supervisor (Department of Agronomy, Institute of Agriculture).</p>
<p><u>Contact details:</u></p> <p>Faulty/Institute</p> <p>E-mail address</p> <p>Tel.</p>	<p>Institute of Agriculture</p> <p>Department of Agronomy</p> <p>barbara_borawska_jarmulowicz@sggw.edu.pl</p> <p>22 59 327 08</p>