

Summary Specification of Scientific Accomplishments of a Thesis Supervisor Candidate
 maximum 2 pages - it should be a synthesis of the most important elements of accomplishments

Name and surname, degree, scientific title: dr hab. Mirela Tulik, prof. WULS	
Scientific discipline/s	Forest sciences
Professional development (scientific degrees and titles) chronologically	PhD – 1999; Habilitation - 2013
Most important publications/patents from the last 3 years (max. 10)	<ol style="list-style-type: none"> 1. Tulik M., Wojtan R., Jura-Morawiec J. Theoretical considerations regarding the functional anatomical traits of primary and secondary xylem in dragon tree trunk using the example of <i>Dracaena draco</i>. <i>Planta</i>, 2022, vol. 256, nr 3, s.1-9; DOI:10.1007/s00425-022-03966-4 2. Bieniasz A., Tulik M. The longest living xylem cells locked in lignified cell walls - the case of xylem parenchyma in European Ash (<i>FRAXINUS EXCELSIOR</i> L.) stems. <i>Acta Biologica Cracoviensia Series Botanica</i>, 2022, vol. 64, nr 2, s.65-74; DOI:10.24425/abcsb.2022.143383 3. Buraczyk W., Tulik M., Konecka A. [i in.] Does leaf mass per area (LMA) discriminate natural pine populations of different origins? <i>European Journal of Forest Research</i>, 2022, vol. 141, s.1177-1187; DOI:10.1007/s10342-022-01500-5 4. Piętka J., Adamczuk A., Zarzycka E., Tulik M., Studnicki M., Oszako T., Aleksandrowicz-Trzcińska M. The application of copper and silver nanoparticles in the protection of <i>Fagus sylvatica</i> wood against decomposition by <i>Fomes fomentarius</i>. <i>Forests</i>, 2022, vol. 13, nr 10, s.1-13; DOI:10.3390/f13101724 5. Jura-Morawiec J., Monroy P., Marrero A., Tulik M. 2021. Aerial root structure and its significance for function in <i>Dracaena draco</i>. <i>Journal of Plant Growth Regulation</i> 40(2): 486-493; DOI: 10.1007/s00344-020-10142-z 6. Nowakowska J.A., Stocki M, Stocka N., Slusarski S., Tkaczyk M., Caetano J.M., Tulik M., Hsiang T., Oszako T. 2020. Interactions between <i>Phytophthora cactorum</i>, <i>Armillaria gallica</i> and <i>Betula pendula</i> Roth. seedlings subjected to defoliation. <i>Forests</i>, 11, 1107; DOI:10.3390/f11101107 7. Kozakiewicz P., Jankowska A., Mamiński M., Marciszewska K., Czurzycki W., Tulik M. 2020. The wood of Scots pine (<i>Pinus sylvestris</i> L.) from post-agricultural lands has suitable properties for the timber industry. <i>Forests</i>, 11(10), 1033; DOI: 10.3390/f11101033 8. Świecimska M., Tulik M., Šerá B., Golińska P., Tomeková J., Medvecká V Bujdáková H., Oszako T., Zahoranová A., Šerý M. 2020. Non-thermal plasma can be used in disinfection of Scots pine (<i>Pinus sylvestris</i> L.) seeds infected with <i>Fusarium oxysporum</i>. <i>Forests</i>, 11, 837; DOI: 10.3390/f11080837 9. Tulik M., Grochowina A., Jura-Morawiec J., Bijak Sz. 2020. Groundwater level fluctuations affect mortality of Black alder (<i>Alnus glutinosa</i> Gaertn.). <i>Forests</i> 11, 134; DOI:10.3390/f11020134

	<p>10. Tulik M., Jura-Morawiec J., Bieniasz A., Marciszewska K. 2019. How long do wood parenchyma cells live in stem of Scot pine (<i>Pinus sylvestris</i> L.)? Studies on cell nuclei status along the radial and longitudinal stem axes. <i>Forests</i> 10, 977; DOI:10.3390/f10110977</p>
<p>Experience in work with PhD students (defended dissertations, initiated dissertation procedures), chronologically</p>	<p>Initiated dissertation procedures – 17. 09. 2019</p>
<p>Project/grant accomplishments (from the last 10 years)</p>	<ol style="list-style-type: none"> 1. Project financed by: the State Treasury - General Directorate of State Forests based in Warsaw, 2013. Project number: EO-2717-13 / 13, topic: "Multifactorial analysis of the technical quality of silvery birch wood (<i>Betula pendula</i> Roth.) In Poland", Task - work on the preparation of birch wood. 2. GRANT N N309 108 640, National Science Center in Krakow, 2012 - 2014 Investigator - Mirela Tulik Subject: Changes in the structure and properties of Scots pine (<i>Pinus sylvestris</i> L.) wood on post-agricultural land as a response to environmental stress 3. GRANT N N309 077438 of the Ministry of Science and Higher Education (MNiSW), 2009 – 2012 Principal investigator - Mirela Tulik Topic: Structural and functional modifications of secondary wood of trunks of dying ash trees (<i>Fraxinus excelsior</i> L.).
<p>Theme scope - research problem - for the solving of which the PhD student is sought</p>	<ol style="list-style-type: none"> 1. Wood morphogenesis, including formation of heartwood in forest trees. 2. Dieback of forest trees. 3. Functional traits of woody plants. 4. Developmental anatomy of vascular plants.
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