

### Card of the potential supervisor

Name and surname, degree, academic title <b>Dr hab. inż. Piotr Latocha, professor SGGW</b>	
Scientific discipline / disciplines	Agriculture and horticulture (100%)
Professional development (academic degrees and titles) chronologically	<p><b>1999</b> - PhD in agricultural sciences in the field of horticulture (Faculty of Horticulture, Warsaw University of Life Sciences)</p> <p><b>2011</b> – postdoctoral degree (dr hab.) agricultural sciences in the field of horticulture (Faculty of Horticulture and Landscape Architecture, Warsaw University of Life Sciences)</p>
The most important publications / patents / from the last 3 years (maximum 10))	<ol style="list-style-type: none"> <li>1. Latocha P., Debersaques F., Iago H. 2021. <i>Actinidia arguta</i> (Kiwiberry): Botany, Production, Genetics, Nutritional Value, and Postharvest Handling. Horticultural Reviews 48, 37-151, wyd. John Wiley &amp; Sons, Inc. Doi: 10.1002/9781119750802.ch2</li> <li>2. Stasiak A., Latocha P., Bieniasz M. 2021. Effect of Genetically Diverse Pollen on Pollination, Pollen Tube Overgrow, Fruit Set and Morphology of Kiwiberry (<i>Actinidia arguta</i>). Agronomy (Basel) 11(9), 1814. Doi: 10.3390/agronomy11091814</li> <li>3. Abdullah M., Sliwinska E., Góralski G., Latocha P., Tuleja M., Widyna P., Popielarska-Konieczna M. 2021. Effect of medium composition, genotype and age of explant on the regeneration of hexaploid plants from endosperm culture of tetraploid kiwiberry (<i>Actinidia arguta</i>). Plant Cell, Tissue and Organ Culture 147: 569-582. Doi: 10.1007/s11240-021-02149-5</li> <li>4. Silva A.M., Costa P., Delerue-Matos C., Latocha P., Rodrigues F. 2021. Extraordinary composition of <i>Actinidia arguta</i> by-products as promising skin ingredient: A new challenge for cosmetic industry. Trends in Food Science &amp; Technology 116: 842-853. Doi: 10.1016/j.tifs.2021.08.031</li> <li>5. Błaszczak W., Latocha P., Jeż M., Wiczowski W. 2021. The impact of high-pressure processing on the polyphenol profile and anti-glycaemic, anti-hypertensive and anti-cholinergic activities of extracts obtained from kiwiberry (<i>Actinidia arguta</i>) fruits. Food Chemistry 343, 128421. Doi: 10.1016/j.foodchem.2020.128421</li> <li>6. Kostyra E., Król K., Knysak D., Piotrowska A., Żakowska-Biemans S., Latocha P. 2021. Characteristics of volatile compounds and sensory properties of mixed organic juices based on kiwiberry fruits. Applied Sciences (Basel) 11: 529. Doi: 10.3390/app11020529</li> <li>7. Stasiak A., Latocha P. 2020. Comparative Analysis of Volatile Compounds in Flowers of Different <i>Actinidia</i> Species. Plants 9: 1675. Doi: 10.3390/plants9121675</li> <li>8. Bialik M., Wiktor A., Rybak K., Witrowa-Rajchert D., Latocha P., Gondek E. 2020. The Impact of Vacuum and Convective Drying Parameters on Kinetics, Total Phenolic Content, Carotenoid Content and Antioxidant Capacity of Kiwiberry</li> </ol>

	<p>(<i>Actinidia arguta</i>). Applied Sciences (Basel) 10, 6914. Doi: 10.3390/app10196914</p> <p>9. Stefaniak J., Przybył J., Latocha P., Łata B. 2020. Bioactive compounds, total antioxidant activity and yield of kiwiberry fruit under different nitrogen regimes in field conditions. Journal of the Science of Food and Agriculture 100: 3832-3840. Doi: 10.1002/jsfa.10420</p> <p>10. Swoczyna T., Latocha P. 2020. Monitoring seasonal changes of photosynthetic apparatus damage in mature street trees affected by heavy traffic. Photosynthetica 58 (SI): 573-584. Doi: 10.32615/ps.2020.006</p>
<p>Experience in working with PhD students (defended PhDs, open courses), chronologically</p>	<ul style="list-style-type: none"> <li>• Supervisor: Agnieszka Stasiak: „The influence of genetic variation on flowering, setting, and quality of kiwiberry fruits (<i>Actinidia arguta</i>)” PhD thesis opened in September 2017.</li> <li>• Supervisor: Monika Bednarczyk-Doniec: „Development of an original method of valorization of plant cover for the purposes of designing in landscape architecture”. PhD thesis opened in September 2019.</li> </ul>
<p>Project / grant achievements (from the last 10 years)</p>	<ul style="list-style-type: none"> <li>• Project manager: ARiMR 2021-2022 grant: PROW, action no. 16 "Cooperation" Contract number 00011.DDD.6509.00015.2019.07 - "Development of an optimal post-harvest technology for minikiwi fruit (<i>Actinidia arguta</i>) and a prototype of a non-invasive fruit sorting module (MODOM)". Co-financing PLN1,692,602.</li> <li>• Project manager: NCBiR grant 2015-2019: PBS program. Contract no. PBS3/A8/35/2015 - "Development of a technology for commercial cultivation of Kiwiberry (mini kiwi) in the conditions of central Poland". Co-financing value PLN767,399.</li> <li>• Project manager: minigrant for pre-implementation works under the Innovation Incubator + project, 2017-2018: Title: "The final appearance of the MiniKiwi fruit product". Project number (funding source): 513-01-040900-P00064-04. Co-financing value: PLN59,000.</li> <li>• Contractor: minigrant for pre-implementation works under the Innovation Incubator + project, 2017-2018: Title: "Minikiwi fruit (<i>Actinidia arguta</i>) feed additive for chickens for slaughter". Project number (funding source): 513-01--070300-P00064-04. Co-financing value: PLN75,000.</li> <li>• Contractor: minigrant for pre-implementation works under the Innovation Incubator + project, 2017-2018: Title: "Dried mini kiwi as an innovative snack". Project number (funding source): 513-01-092600-P00064-04. Co-financing value: PLN50,000.</li> <li>• Contractor: NCN grant 2013-2015: OPUS program. Contract No. UMO-2012/05/B/NZ9/03327 - "The influence of bioactive components of mini kiwi fruit (<i>Actinidia arguta</i>) on the transcriptomic and miRNA profile and lipid metabolism in the</li> </ul>

	tissues of rats with induced hypercholesterolaemia ". Co-financing value PLN392,600.
Thematic scope - a research problem - to be solved by a PhD student	<ol style="list-style-type: none"> <li>1. <i>Actinidia arguta</i> – factors influencing the quality of fruit in commercial cultivation;</li> <li>2. Selection of valuable clones of <i>Actinidia</i> suitable for commercial cultivation;</li> <li>3. Factors influencing the degree of regrowing and further growth of newly planted street trees in the example of Warsaw;</li> <li>4. Influence of the type of surface coverage on the growth and condition of city trees</li> </ol>
Basic expectations towards a candidate for a PhD student	<ul style="list-style-type: none"> <li>• Knowledge of horticulture or orchard practice;</li> <li>• Basic knowledge of botany;</li> <li>• Knowledge of issues related to urban trees</li> </ul>
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