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Academic Degree:	dr hab. inż. (DSc.)
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UPWr Base of Knowledge - link:	https://bazawiedzy.upwr.edu.pl/info.seam?id=UPWr22ece9e18ed04a4885927cf07e3f7240
Researchgate:	www.researchgate.net/profile/Przemyslaw-Babelewski
Personal website / Working group website:	not have
Participation in projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	<p>"Hydrobox 2.0 - innovative technology to support water conservation and plant vegetation", contract no: POIR.04.01.01-00-0061/16 Head of Task 9. "Validation of growth and health effects of trees and shrubs applied in urban establishment areas". Realisation: 2017-2020</p> <p>POIR grant. 01.01.01-00-0302/17 2018-2019 Development of an innovative VTOL-type aerial system for monitoring agricultural, forest and landscape areas" from the Operational Programme Intelligent Development of the National Centre for Research and Development (NCBiR), Measure 1.1.1. "Industrial research and development works performed by enterprises" so called Fast Track - Task Manager. Realisation: 2018-2019</p> <p>Grant - Operation entitled 'Innovative grape wine production and bottling technology and production organisation method as factors for increasing the quality of locally produced wine products' (contract No. 00002.DDD.6509.00027.2018.01), implemented under Measure M16 'Cooperation' of the Rural Development Programme 2014-2020. Operation co-financed by the European Agricultural Fund for Rural Development – contractor.</p>
PhD topic:	Impact of climate change in the environment of a large urban agglomeration of Wrocław on selected native and invasive tree species
Research discipline in Doctoral School:	Agriculture and Horticulture
Short description of the research problem to be solved in the PhD (minimum 1000 characters):	<p>The environment and climate of large urban agglomerations is shaped largely by anthropogenic factors, which are highly intensified in cities. The increase in mean annual temperature has made a significant contribution to the intensification of the urban heat island, which is a common phenomenon in large cities. Trees, as the largest plant organisms, make an important contribution to mitigating these changes and are a vital component of urban biodiversity. They have tremendous adaptive capacity despite being heavily influenced by progressive climate change. The aim of this study will be to evaluate selected native tree species such as English oak, English ash and silver birch, as well as invasive species such as glandular ash and Pennsylvania ash for adaptation in a large urban area. It will examine how the spread of invasive taxa progresses with increasing mean annual temperature and how native species have adapted phenological phases to changes in mean annual temperature. The basis will be to refer to the optimum climatic conditions for the species under study, the so-called climatic optima, and compare them with the climatic area of a large urban agglomeration to determine how the taxa under study may be threatened in the future in cities, or how they have adapted to climate change. Consideration will also be given to whether the data of the actual geographic range of the tree taxa under study are within the climatic optimum of a large urban agglomeration.</p>
Professional skills for PhD candidate (e.g. master program, specializations, softwares, language, analytical techniques, minimum 500 characters):	<ol style="list-style-type: none"> 1. Completed Master's degree with specialisation in horticulture; graduate of landscape architecture or biology; 2. Good knowledge of English to enable communication and use of English-language literature; 3. Knowledge of basic software, e.g. Mendeley, Python, Statistica; 4. Interest in scientific work and creativity, commitment; 5. Ability to work both independently and in a team, communication skills; 6. Experience of working in a laboratory; 7. Ability in statistical analysis and interpretation of research results.

a) Project title:		0
b) Agreement number:		0
c) Number of months in the project to support PhD student (in months; starting from 1st of October 2024):		0
Project website:		