

Marta Gietler, PhD

Department of Biochemistry and Microbiology, Institute of Biology; Warsaw University of Life Sciences-SGGW

from 2015 - Assistant

from 2018 - Assistant Professor

Education:

2017: PhD in Biological Sciences, specialization in biochemistry, at the Faculty of Agriculture and Biology of Warsaw University of Life Sciences - SGGW

2012: Master degree in Biology, specialization in biology of microorganisms, at the Warsaw University of Life Sciences, Faculty of Agriculture and Biology

Additional education:

Postgraduate Pedagogical Teacher Preparation Studies, Faculty of Humanities, Warsaw University of Life Sciences – SGGW

Scholarships:

2015: 1 month scholarship in Biopolymers Analytics Group at University of Potsdam, Germany

Research projects:

2017: Head of the internal SGGW grant No. 505-10-011300-P00155-99

2016: Head of the internal SGGW grant No. 505-10-011300-N002299-99

2015: Head of the internal SGGW grant No. 505-10-011300-M00228-99

2014: Head of the internal SGGW grant No. 505-10-011300-L00307-99

2013: Head of the internal SGGW grant No. 505-10-011300-K00381-99

Scholarships and awards received:

2018: Individual Third Degree Award of the Rector of Warsaw University of Life Sciences - SGGW in Warsaw for scientific achievements in 2017

2017: Honorable mention of doctoral dissertation; Award of the Scientific Committee for oral presentation at the international conference of the Polish Society of Experimental Plant Biology - Communication in plants: from cell to environment

2015: Travel Scholarship funded by the SGGW's Own Scholarship Fund

2012/2013; 2013/2014; 2014/2015: Doctoral scholarship

Publications:

Gietler M., Nykiel M., Orzechowski S., Fettke J., Zagdańska B. 2017 Protein carbonylation linked to wheat seedling tolerance to water deficiency. *Environmental and Experimental Botany* 137C: 84-95 DOI 10.1016/j.envexpbot.2017.02.004

Gietler M., Nykiel M., Orzechowski S., Fettke J., Zagdańska B. 2016 Proteomic analysis of S-nitrosylated and S-glutathionylated proteins in wheat seedlings with different dehydration tolerances. *Plant Physiology and Biochemistry* 108:507-518 DOI: 10.1016/j.plaphy.2016.08.017

Gietler M., Nykiel M., Zagdańska B. 2016 Changes in the reduction state of ascorbate and glutathione, protein oxidation and hydrolysis leading to the development of dehydration intolerance in *Triticum aestivum* L. seedlings. *Plant Growth Regulation* 79: 287–297 DOI: 10.1007/s10725-015-0133-z

Gietler M., Nykiel M., Zagdańska B. 2016 S-glutathionylation and S-nitrosylation of proteins in the acclimatization of plants to abiotic and biotic environmental factors. *Advances in Cell Biology* 43(1): 119-140 (in polish)

Monographs and chapters in monographs:

Gietler M., Nykiel M. 2017 Involvement of Thiol-Based Mechanisms in Plant Growth, Development, and Stress Tolerance. In book: *Glutathione in Plant Growth, Development, and Stress Tolerance*, pp.59-98, Springer. DOI 10.1007/978-3-319-66682-2_3

Fidler J., **Gietler** M., Zdunek-Zastocka E. 2018. ABA metabolism in triticale seedlings subjected to drought. *21st century agriculture - problems and challenges*, ISBN 978-83-945311-9-5, 80-90 (in polish)

Gietler M., Fidler J., Nykiel M. 2018. The role of proteasomal and vacuolar proteolysis in protein degradation under water deficit conditions. *21st century agriculture - problems and challenges*, ISBN 978-83-945311-9-5, 102-110 (in polish)