

Lista publikacji projektu POLAPGEN-BD

2018

1. Janiak A, Kwasniewski M, Sowa M, Gajek K, Żmuda K, Kościelniak J and Szarejko I (2018). No Time to Waste: Transcriptome Study Reveals that Drought Tolerance in Barley May Be Attributed to Stressed-Like Expression Patterns that Exist before the Occurrence of Stress. [Front. Plant Sci. 09 January 2018](#)

2017

1. Piasecka A., Sawikowska A., Kuczyńska A., Ogrodowicz P., Mikołajczak K., Krystkowiak K., Gudyś K., Guzy-Wróbelska J., Krajewski P., Kachlicki P. (2017). Drought related secondary metabolites of barley (*Hordeum vulgare* L.) leaves and their mQTLs. [The Plant Journal 89\(5\): 898-913.](#)
2. Fedorowicz-Strońska O., Koczyk G., Kaczmarek M., Krajewski P., Sadowski J. (2017). Genome-wide identification, characterisation and expression profiles of calcium-dependent protein kinase genes in barley (*Hordeum vulgare* L.). [Journal of Applied Genetics 58: 11-22. DOI: 10.1007/s13353-016-0357-2.](#)
3. Mikołajczak K., Kuczyńska A., Krajewski P., Sawikowska A., Surma M., Ogrodowicz P., Adamski T., Krystkowiak K., Górny A.G., Kempa M., Szarejko I., Guzy-Wróbelska J., Gudyś K. (2017). Quantitative trait loci for plant height in Maresi × CamB barley population and their associations with yield-related traits under different water regimes. [Journal of Applied Genetics 58: 23-35. DOI: 10.1007/s13353-016-0358-1.](#)
4. Ogrodowicz P., Adamski T., Mikołajczak K., Kuczyńska A., Surma M., Krajewski P., Sawikowska A., Górny A.G., Gudyś K., Szarejko I., Guzy-Wróbelska J., Krystkowiak K. (2017). QTLs for earliness and yield-forming traits in the Lubuski × CamB barley RIL population under various water regimes. [Journal of Applied Genetics 58: 49-65. DOI: 10.1007/s13353-016-0363-4.](#)
5. Bandurska, H., Niedziela, J., Pietrowska-Borek, M., Nuc, K., Chadzinikolau, T., & Radzikowska, D. (2017). Regulation of proline biosynthesis and resistance to drought stress in two barley (*Hordeum vulgare* L.) genotypes of different origin. [Plant Physiology and Biochemistry, 118: 427-437.](#)
6. Daszkowska-Golec A, Skubacz A, Marzec M, Słota M, Kurowska M, Gajecka M, Gajewska P, Płociniczak T, Sitko K, Pacak A, Szweykowska-Kulinska Z, Szarejko I. (2017). Mutation in HvCBP20 (Cap Binding Protein 20) Adapts Barley to Drought Stress at Phenotypic and Transcriptomic Levels. [Front Plant Sci. 8: 942.](#)
7. Swarcewicz B., Sawikowska A., Marczak Ł., Łuczak M., Ciesiołka D., Krystkowiak K., Kuczyńska A., Piślewska-Bednarek M., Krajewski P., Stobiecki M. (2017). [Acta Physiologiae Plantarum . 39: 158.](#)

2016

1. Ostrowski W., Swarcewicz B., Nolka M., Stobiecki M. (2016). Differentiation of phenylpropanoid acids cyclobutane and dehydrodimers isomers in barley leaf cell walls with LC/MS/MS system. [International Journal of Mass Spectrometry 407: 77-85.](#)

2. Daszkowska-Golec A. (2016). [The Role of Abscisic Acid in Drought Stress: How ABA Helps Plants to Cope with Drought Stress](#). In: Drought Stress Tolerance in Plants, Vol 2, ed. M. A. Hossain, S. H. Wani, S. Bhattachajee, D. J. Burritt, L. S. P. Tran (Springer International Publishing), 123-151.
3. Skubacz A, Daszkowska-Golec A and Szarejko I (2016). The role and regulation of ABI5 (ABA-insensitive 5) in plant development, abiotic stress responses and phytohormone crosstalk. [Front. Plant Sci. 7: 1884](#).
4. Kiełbowicz-Matuk A., Banachowicz E., Turska-Tarska A., Rey P., Rorat T. (2016). Expression and characterization of a barley phosphatidylinositol transfer protein structurally homologous to the yeast Sec14p protein. [Plant Science 246: 98-110](#).
5. Chmielewska K., Rodziewicz P., Swarczewicz B., Sawikowska A., Krajewski P., Marczak Ł., Ciesiołka D., Kuczyńska A., Mikołajczak K., Ogrodowicz P., Krystkowiak K., Surma M., Adamski T., Bednarek P., Stobiecki M. (2016). Analysis of drought-induced proteomic and metabolomic changes in barley (*Hordeum vulgare* L.) leaves and roots unravels some aspects of biochemical mechanisms involved in drought tolerance. [Frontiers in Plant Science 7:1108](#).
6. Mikołajczak K., Ogrodowicz P., Gudyś K., Krystkowiak K., Sawikowska A., Frohmberg W., Górny A., Kędziora A., Jankowiak J., Józefczyk D., Karg G., Andrusiak J., Krajewski P., Szarejko I., Surma M., Adamski T., Guzy-Wróbelska J., Kuczyńska A. (2016). Quantitative trait loci for yield and yield-related traits in spring barley populations derived from crosses between European and Syrian cultivars. [PlosOne 11 \(5\): e0155938](#).
7. Pacak A., Kruszka K., Swida-Barteczka A., Nuc P., Karłowski W., Jarmolowski A., Szweykowska-Kulinska Z. (2016). Developmental changes in barley microRNA expression profiles coupled with miRNA target analysis. [Acta Biochim Pol. 63 \(4\): 799-809](#).
8. Swida-Barteczka A., Kruszka K, Grabowska A., Pacak A., Jarmolowski A., Kurowska M., Szarejko I., Szweykowska-Kulinska Z. (2016). Barley primary microRNA expression pattern is affected by soil water availability. [Acta Biochim Pol. 63 \(4\): 817-824](#).
9. Cieśla A, Mituła F, Misztal L, Fedorowicz-Strońska O, Janicka S, Tajdel-Zielińska M, Marczak M, Janicki M, Ludwików A, Sadowski J (2016). A Role for Barley Calcium-Dependent Protein Kinase CPK2a in the Response to Drought. [Frontiers in Plant Science 25: 7:1550](#).

2015

10. Piasecka A., Sawikowska A., Krajewski P., Kachlicki P. (2015) Combined mass spectrometric and chromatographic methods for in-depth analysis of phenolic secondary metabolites in barley leaves. [Journal of Mass Spectrometry 50: 513-532](#).
11. Zielezinski A, Dolata J, Alaba S, Kruszka K, Pacak A, Swida-Barteczka A, Knop K, Stepien A, Bielewicz D, Pietrykowska H, Sierocka I, Sobkowiak L, Lakomiak A, Jarmolowski A, Szweykowska-Kulinska Z, Karłowski WM. (2015) mirEX 2.0 - an integrated environment for expression profiling of plant microRNAs. [BMC Plant Biology 16: 15-144](#).

2014

12. P. Krajewski, M. Surma (eds.). (2014) [Methodology of system approach to study drought tolerance in barley](#). Institute of Plant Genetics PAS, Dissertations and Monographs. Institute of Plant Genetics PAS, Poznań.
13. Filek M., Łabanowska M., Kościelniak J., Biesaga-Kościelniak J., Kurdziel M., Szarejko I., Hartikainen H., (2014) Characterization of Barley Leaf Tolerance to Drought Stress by Chlorophyll Fluorescence and Electron Paramagnetic Resonance Studies. [J.Agr.Crop Sci. 201: 228-240](#).
14. Rodziewicz P., Swarczewicz B., Chmielewska K., Wojakowska A., Stobiecki M. (2014) Influence of abiotic stresses on plant proteome and metabolome changes. [Acta Physiologiae Plantarum, 36: 1-19](#).
15. Kruszka K., Pacak A., Swida-Barteczka A., Stefaniak AK., Kaja E., Sierocka I., Karlowski W., Jarmolowski A., Szweykowska-Kulinska Z. (2014) Developmentally regulated expression and complex processing of barley pri-microRNAs. [BMC Genomics 14: 34](#).
16. Kruszka K., Pacak A., Swida-Barteczka A., Nuc P., Alaba S., Wroblewska Z., Karlowski W., Jarmolowski A., Szweykowska-Kulinska Z. (2014) Transcriptionally and post-transcriptionally regulated microRNAs in heat stress response in barley. [Journal of Experimental Botany, 65\(20\): 6123–6135](#).
17. De Mezer M., Turska-Taraska A., Kaczmarek Z., Glowacka K., Swarczewicz B., Rorat T. (2014) Differential physiological and molecular response of barley genotypes to water deficit. [Plant Physiology and Biochemistry. 80: 234-248](#).

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18. Daszkowska-Golec A., Szarejko I. (2013) Open or close the gate – stomata action under the control of phytohormones in drought stress conditions. [Frontiers in Plant Science 4: 138](#).
19. Daszkowska-Golec A., Szarejko I. (2013) [The Molecular Basis of ABA-Mediated Plant Response to Drought](#). In: Vahdati K. and Leslie C. (eds), Abiotic Stress - Plant Responses and Applications in Agriculture. Rijeka, Shanghai, InTech, pp. 104-133.
20. M. Lukowska , G. Jozefaciuk, (2013) Unknown Mechanism of Plants Response to Drought: Low Soil Moisture and Osmotic Stresses Induce Severe Decrease in CEC and Increase in Acidity of Barley Roots. [Journal of Agricultural Science 5 \(10\)](#).
21. Bandurska H., Niedziela J., Chadzinikolau T. (2013) Separate and combined responses to water deficit and UV-B radiation. [Plant Science 213: 98-105](#).

2012

22. Kruszka K., Pieczynski M., Windels D., Dawid Bielewicz D., Jarmolowski A., Szweykowska-Kulinska Z., Vazquez F. (2012) [Role of microRNAs and other sRNAs of plants in their changing environments](#). *Journal of Plant Physiology* 169: 1664-1672.
23. Sobkowiak L., Bielewicz D., Malecka E.M., Jakobsen I., Albrechtsen M., Szweykowska-Kulinska Z., Pacak A. (2012). The role of the P1BS element containing promoter-driven genes in Pi transport and homeostasis in plants. [Frontiers in Plant Science 3: 58](#).

24. Stalmach K., Borek M., Śniegowska K. (2012) Fizjologiczne aspekty odpowiedzi roślin jęczmienia jarego (*Hordeum vulgare* L.) na stres suszy. [Episteme 14, 395-408.](#)
25. Śniegowska K., Stalmach K. (2012). The comparison of HVA1 and SRG6 genes expression profiles in seedling and flowering stage in a spring barley (*Hordeum vulgare*) cultivars during drought treatment. [Episteme 14: 417-421.](#)