

## Wykaz publikacji naukowych pracowników Katedry od 2011 roku

2019

1. **Bączek-Kwinta R**, Antonkiewicz J, Łopata-Stasiak A, Kęпка W. 2019. Smoke compounds aggravate stress inflicted on Brassica seedlings by unfavourable soil conditions. *Photosynthetica*, 57(1): 1-8.
2. **Bączek-Kwinta R**, Juzoń K, **Borek M**, Antonkiewicz J, 2019. Photosynthetic response of cabbage in cadmium-spiked soil. *Photosynthetica* 57: 731-739.
3. **Bączek-Kwinta R**. 2019. Cadmium (Cd): An Emerging Regulatory Metal with Critical Role in Cell Signalling and Plant Morphogenesis. W: Srivastava S, Srivastava AK, Suprasanna P (red.) *Plant-Metal Interactions*. Springer International Publishing Cham, str. 61-77. ISBN 978-3-030-20732-8.
4. Bocianowski J, **Warzecha T**, Nowosad K, Bathelt R. 2019. Genotype by environment interaction using AMMI model and estimation of additive and epistasis gene effects for 1000-kernel weight in spring barley (*Hordeum vulgare* L.). *J Appl Genet* 60(2):127-135.
5. Dąbrowski P, Baczewska-Dąbrowska AH, Kalaji HM, Goltsev V, Paunov M, **Rapacz M**, **Wójcik-Jagła M**, Pawluśkiewicz B, Bąba W, Brestic M, 2019. Exploration of chlorophyll a fluorescence and plant gas exchange parameters as indicators of drought tolerance in perennial ryegrass, *Sensors* 19: 2736.
6. Fiust A, **Rapacz M**, 2019. Downregulation of three novel candidate genes is important for freezing tolerance of field and laboratory cold acclimated barley. *J Plant Physiol*, JPLPH-D-19-00167R1
7. Gruszka, D., Janeczko, A., Dziurka, M., **Pociecha, E**. Fodor, J. 2018, Non-enzymatic antioxidant accumulations in BR-deficient and BR-insensitive barley mutants under control and drought conditions. *Physiologia Plantarum* 163: 155-169.
8. Hura T, **Hura K**, Ostrowska A, Gadzinowska J, Fiust A, 2019. Water stress-induced flag leaf senescence may be accelerated by rehydration. *Journal of Plant Physiology* 236: 109-116.
9. Janeczko A, Dziurka M, **Pociecha E**. Increased leaf tocopherol and  $\beta$ -carotene content is associated with the tolerance of winter wheat cultivars to frost. 2018. *Journal of Agronomy and Crop Science* 204:594-602.
10. **Jurczyk B**, Grzesiak M, **Pociecha E**, Wlazło M, **Rapacz M**, 2019. Diverse stomatal behaviors mediating photosynthetic acclimation to low temperatures in *Hordeum vulgare*. *Front. Plant Sci.* 9, 1963.
11. Kasjaniuk M, **Grabowska-Joachimiaak A**, Joachimiaak AJ. Testing the translocation hypothesis and Haldane's rule in *Rumex hastatulus*. *Protoplasma* 256(1):237-247.
12. Ostrowska A, Tyrka M, Dziurka M, **Hura K**, Hura T 2019, Participation of Wheat and Rye Genome in Drought Induced Senescence in Winter Triticale (*X Triticosecale* Wittm.). *Agronomy-Basel* 9: 195.
13. **Plaźek A**, Słomka A, Kopeć P, Dziurka M, **Hornyák M**, Sychta K, Pastuszak J, Dubert AF, 2019. Effects of High Temperature on Embryological Development and Hormone Profile in Flowers and Leaves of Common Buckwheat (*Fagopyrum esculentum* Moench). *Int J Mol Sci.* 20(7):1705.
14. **Rapacz M**, **Wójcik-Jagła M**, **Fiust A**, Kalaji HM, **Kościelniak J**, 2019. Genome-wide associations of chlorophyll fluorescence OJIP transient parameters connected with soil drought response in barley. *Front. Plant Sci.*, 10, 78.

15. Wajdzik K, Golebiowska GJ, Dyda M, Gawrońska K, **Rapacz M**, Wędzony M, 2019. The QTL mapping of the important breeding traits in winter triticale (*xTriticosecale* Wittm.). *Cereal Res Com* 47(3): 395–408.
16. **Warzecha T**, Skrzypek E, Adamski T, Surma M, Kaczmarek Z, **Sutkowska A**, 2019. Chlorophyll *a* Fluorescence Parameters of Hulled and Hull-less Barley (*Hordeum vulgare* L.) DH Lines Inoculated with *Fusarium culmorum*. *Plant Pathol J.* 35(2):112-124.
17. Żabicki P, Śliwińska E, Mitka J, **Sutkowska A**, Tuleja M, Migdałek G, Żabicka J, Słomka A, Kwiatkowska M, Kuta E, 2019. Does somaclonal variation play advantageous role in conservation practice of endangered species?: comprehensive genetic studies of in vitro propagated plantlets of *Viola stagnina* Kit. (Violaceae). *Plant Cell, Tissue and Organ Culture* 136: 339—352.

## 2018

1. 2018. Dissection of resistance to *Microdochium nivale* in *Lolium multiflorum*/*Festuca arundinacea* introgression forms. *Plant Physiology and Biochemistry* 123: 43-53.
2. Augustyniak A., Perlikowski D., **Rapacz M.**, **Kościelniak J.**, Kosmala A. 2018. Insight into cellular proteome of *Lolium multiflorum*/*Festuca arundinacea* introgression forms to decipher crucial mechanisms of cold acclimation in forage grasses, *Plant Science* 272: 22-31.
3. Bartkowiak AB, Lemanowicz JR, Breza-Boruta B, **Zieliński A**, 2018. Assessment of the effect of uncontrolled landfill sites on the content of available forms of selected macro- and microelements in forest soil. *International Journal of Environmental Research* 12: 901-907.
4. **Bączek-Kwinta R.**, **Borek M.**, **Żmuda K.** 2018. Genotypic differentiation of oxidoreductive response of seedlings and mature plants of spring barley in drought. *Oxidation Communications*, 2018, 41(30): 419-428.
5. Gruszka, D., Janeczko, A., Dziurka, M., **Pociecha, E.** Fodor, J. 2018, Non-enzymatic antioxidant accumulations in BR-deficient and BR-insensitive barley mutants under control and drought conditions. *Physiologia Plantarum*, 163: 155-169.
6. Gudys K., Guzy-Wrobelska J., Janiak A., Dziurka M., Ostrowska A., **Hura K.**, **Jurczyk B.**, **Żmuda K.**, Grzybkowska D., Śróbka J., Urban W., Biesaga-Koscielniak J., Filek M., **Koscielniak J.**, Mikołajczak K., Ogródowicz P., Krystkowiak K., Kuczyńska A., Krajewski P., Szarejko I. 2018. Prioritization of Candidate Genes in QTL Regions for Physiological and Biochemical Traits Underlying Drought Response in Barley (*Hordeum vulgare* L.), *Frontiers in Plant Science* 9:769.
7. **Hura K.**, Hura T., Żur I., **Plażek A.**, **Rapacz M.** 2018. Different response of winter oilseed rape calli and seedlings to *Leptosphaeria maculans*, *Phyton-Annales Rei Botanicae* 57: 59-68.
8. Janeczko A, Dziurka M, **Pociecha E.** 2018. Increased leaf tocopherol and  $\beta$ -carotene content is associated with the tolerance of winter wheat cultivars to frost. 2018. *Journal of Agronomy and Crop Science*; 204:594–602.
9. Janeczko A., J. Biesaga-Kościelniak, M. Dziurka, M. Filek, **K. Hura**, **B. Jurczyk**, M. Kula, J. Oklestkova, O. Novak, E. Rudolphi-Skórska, A. Skoczowski. 2018. Biochemical and Physicochemical Background of Mammalian Androgen Activity in Winter Wheat Exposed to Low Temperature. *Journal of Plant Growth Regulation* 37:199–219.
10. Joachimiak AJ, Hasterok R, Sliwinska E, Musiał K, **Grabowska-Joachimiak A**, 2018. FISH-aimed karyotype analysis in *Aconitum* subgen. *Aconitum* reveals excessive rDNA sites in tetraploid taxa. *Protoplasma* 255(5):1363-1372.
11. Kałużewicz A., **Bączek-Kwinta R.**, Krzesiński W., Spiżewski T., Zaworska A., 2018. Effect of biostimulants on chlorophyll fluorescence parameters of broccoli (*Brassica oleracea* var. *Italica*) under drought stress and rewatering. *Acta Sci. Pol. Hortorum Cultus*, 17: 97–106.

12. Laurain-Mattar D, **Ptak A**, 2018. Amaryllidaceae Alkaloid Accumulation by Plant In Vitro Systems. W: Pavlov A, Bley T (red.) Bioprocessing of Plant In Vitro Systems. Springer International Publishing, str. 203-223.
13. Libik-Konieczny M, Capecka E, Kąkol E, Dziurka M, **Grabowska-Joachimia A**, Śliwińska E, Pistelli L, 2018. Growth, development and steviol glycosides content in the relation to the photosynthetic activity of several *Stevia rebaudiana* Bertoni strains cultivated under temperate climate conditions. *Scientia Horticulturae* 234: 10-18.
14. Marzec-Schmidt K., **Hura K.**, **Plażek A.** 2018. Changes in antioxidants activity in grasses from complex Lolium-Festuca as a response to *Microdochium nivale* infection. *Physiological and Molecular Plant Pathology* 104, 40–47.
15. Østrem L., **Rapacz M.**, Larsen A., Marum P., Rognli O. 2018. Chlorophyll a Fluorescence and Freezing Tests as Selection Methods for Growth Cessation and Increased Winter Survival in ×Festulolium, *Frontiers in Plant Science*, 9: 1-13.
16. **Plażek A.**, Dubert F., Kopeć P., Dziurka M., Kalandyk A., **Pastuszak J.**, Wolko B. 2018. Seed hydropriming and smoke water significantly improve low-temperature germination of *Lupinus angustifolius* L. *International Journal of Molecular Sciences* 19: 992.
17. **Plażek A.**, Dubert F., Kopeć P., Dziurka M., Kalandyk A., **Pastuszak J.**, Waligórski P., Wolko B. 2018. Long-term effects of cold on growth, development and yield of narrow-leaf lupine may be alleviated by seed hydropriming or butenolide. *International Journal of Molecular Sciences* 19, 2416.
18. **Plażek A.**, **Pociecha E.**, Augustyniak A., Masajada K., Dziurka M., Majka J., Perlikowski D., Pawłowicz I., Kosmala A.
19. **Rapacz M.**, **B. Jurczyk**, **T. Krępski**, **A. Plażek**, 2018. C-repeat binding transcription factors from *Miscanthus × giganteus* and their expression at a low temperature, *Industrial Crops and Products* 113:283–287.
20. **Simlat M**, **Ptak A**, **Kula A**, Orzeł A, 2018. Assessment of genetic variability among raspberry accessions using molecular markers. *Acta Scientiarum Polonorum-Hortorum Cultus* 17: 61-72.
21. **Simlat M**, **Ptak A**, Skrzypek E, Warchoł M, Morańska E, Piórkowska E. 2018. Melatonin significantly influences seed germination and seedling growth of *Stevia rebaudiana* Bertoni. *Peer J*. 6:e5009.
22. Skrzypek E, **Warzecha T**, Noga A, Warchoł M, Czyczyło-Mysza I, Dziurka K, Marcińska I, Kapłoniak K, **Sutkowska A**, Nita Z, Werwińska K, Idziak-Helmcke D, Rojek M, Hosiawa-Barańska M. 2018. Complex characterization of oat (*Avena sativa* L.) lines obtained by wide crossing with maize (*Zea mays* L.) *Peer J* 6:e5107.
23. **Wójcik-Jagła M**, **Fiust A**, **Kościelniak J**, **Rapacz M** (2018) Association mapping of drought tolerance-related traits in barley to complement a traditional biparental QTL mapping study. *Theoretical and Applied Genetics* 131: 167-181.

## 2017

1. Antonkiewicz J., Jasiewicz Cz., Koncewicz-Baran M., **Bączek-Kwinta R.** 2017. Determination of lithium bioretention by maize under hydroponic conditions. *Archives of Environmental Protection* 43: 94-104.
2. **Bączek-Kwinta R.** 2017. Swailing affects seed germination of plants of European bio-and agrigenosis in a different way. *Open Life Sci.* 2017; 12: 62-75.
3. **Bączek-Kwinta R.**, 2017. Nitric Oxide and Reactive Oxygen Species Interactions in Plant Tolerance and Adaptation to Stress Factors. In: Vats S. (Ed), *Biotic and Abiotic Stress Tolerance in Plants*, Springer Nature Singapore Pte Ltd. str. 239-256.
4. **Bączek-Kwinta R.**, Waligórski P., Kalandyk A., Borek M. 2017. Oxidoreductive and hormonal processes in germinating lupin seeds. *Oxidation Communications* 40 (3): 1095–1105.

5. Gołębiowska-Pikania G, Kopeć P, Surówka E, Krzewska M, Dubas E, Nowicka A, **Rapacz M, Wójcik-Jagła M**, Malaga S, Żur I. 2017. Changes in protein abundance and activity involved in freezing tolerance acquisition in winter barley (*Hordeum vulgare* L.). *Journal of Proteomics* 169: 58-72.
6. Grzesiak M., **K. Hura, B. Jurczyk**, T. Hura, G. Rut, P. Szczyrek, S. Grzesiak, 2017. Physiological markers of stress susceptibility in maize and triticale under different soil compactions and/or soil water contents. *Journal of Plant Interactions* 12:1, 355–372.
7. **Hura K.**, Ostrowska A., Dziurka K., Hura T. 2017. Photosynthetic apparatus activity in relation to high and low contents of cell wall-bound phenolics in triticale under drought stress. *Photosynthetica* 55(4), 698-704.
8. Hura T, Dziurka M., **Hura K.**, Ostrowska A., Dziurka K., Gadzinowska J. 2017. Wheat and rye genome confer specific phytohormone profile features and interplay under water stress in two phenotypes of triticale. *Plant Physiology and Biochemistry* 118, 494-509.
9. Hura T, Tyrka M, **Hura K**, Ostrowska A, Dziurka K. 2017. QTLs for cell wall-bound phenolics in relation to the photosynthetic apparatus activity and leaf water status under drought stress at different growth stages of triticale. *Molecular Genetics and Genomics* 292, 415-433.
10. Hura T., Szewczyk-Taranek B., **Hura K.**, Nowak K., Pawłowska B. 2017. Physiological responses of *Rosa rubiginosa* to saline environment. *Water Air Soil Pollut* 228: 81.
11. *Journal of Agricultural Science and Technology B* 7: 406–414.
12. Krzakowa M., **Sutkowska A.** 2017. Genetic Structure of Tetraploid Italian and Westerwolds Ryegrasses (*Lolium* spp.) as Revealed by Enzyme and ISSR Polymorphism.
13. Noga A., Warchoń M., Czyczyło-Mysza I., Marcińska I., Dziurka K., **Warzecha T.**, Skrzypek E. 2017. Chlorophyll *a* fluorescence parameters in the evaluation of oat DH lines yield components. *Cereal Research Communications* 45(4), 665–674
14. **Plażek A.**, Tatrzańska M., Maciejewski M., Dziurka M., Dubert F. 2017. Effects of zearalenone and 24-epibrassinolide on the salt tolerance of selected monocotyledonous crop plants. *Journal of Applied Botany and Food Quality* 90: 280-287.
15. **Pociecha E.**, M. Dziurka, P. Waligórski, T. Krępski, A. Janeczko. 2017. 24-Epibrassinolide pre-treatment modifies cold-induced photosynthetic acclimation mechanisms and phytohormone response of perennial ryegrass in cultivar-dependent manner. *J Plant Growth Regul* 36: 618-628.
16. **Ptak A., Morańska E.,** Saliba S., **Zieliński A., Simlat M.,** Laurain-Mattar D. 2017. Elicitation of galanthamine and lycorine biosynthesis by *Leucojum aestivum* L. and *L. aestivum* ‘Gravety Giant’ plants cultured in bioreactor RITA<sup>®</sup>. *Plant Cell Tissue and Organ Culture* 128, 335–345.
17. **Rapacz M., Jurczyk B.,** Sasal M. 2017. Deacclimation may be crucial for winter survival of cereals under warming climate. *Plant Science* 256:5–15.
18. Sidhu G., **Warzecha T.,** Pawłowski W. 2017. Evolution of meiotic recombination genes in maize and teosinte. *BMC Genomics*, 18:106, s.:1–17, DOI:10.1186/s12864-017-3486z
19. **Simlat M.,** Nowak M., Brutkowski, K., Hydzik, M., **Zieliński A., Moś M.** 2017. Expression of the aldehyde oxidase 3, ent-copalyl diphosphate synthase, and VIVIPAROUS 1 genes in wheat cultivars differing in their susceptibility to pre-harvest sprouting. *Spanish Journal of Agricultural Research*, 15(1), e0701.
20. Słomka A., Michno K., Dubert F., Dziurka M., Kopeć P., **Plażek A.** 2017. Embryological background of low seed set in distylous common buckwheat (*Fagopyrum esculentum* Moench) with biased morph ratios, and biostimulant-induced improvement of it. *Crop & Pasture Science* 68: 680-690.
21. **Sutkowska A.,** Boroń P., **Warzecha T.,** Dębowski J., Mitka J. 2017. Hybridization and introgression among three Aconitum (Ranunculaceae) species of different ploidy levels in the Tatra Mts (Western Carpathians), *Plant Species Biology*, 32, 292–303.

22. **Sutkowska A., Warzecha T., Mitka J.** 2017. Genetic variation of *Aconitum* sect. *Aconitum* (Ranunculaceae) at a macrogeographical scale in the Carpathians. *Polish Journal of Ecology*, 65, 57–68.
23. Zieliński A., Moś M., Wójtowicz T. 2017. In vivo evaluation of vigor in naked and husked oat cultivars under drought stress conditions. *Chilean Journal of Agricultural Research*, 77(2), 110–117.

## 2016

1. **Borek M., Bączek-Kwinta R., Rapacz M.** 2016. Photosynthetic activity of variegated leaves of *Coleus x hybridus* hort. cultivars characterised by chlorophyll fluorescence techniques. *Photosynthetica*, 54(3), 331-339.
2. Dalmansdottir S., **Rapacz M.**, Jorgensen M., Ostrem L., Larsen A., Rovden R., Rognli O. 2016. Temperature before cold acclimation affects cold tolerance and photoacclimation in timothy (*Phleum pratense* L.), perennial ryegrass (*Lolium perenne* L.) and red clover (*Trifolium pratense* L.), *Journal of Agronomy and Crop Science* 202: 320-330.
3. Gruszka D., Janeczko A., Dziurka M., **Pociecha E.**, Oklestkova J., Szarejko I. 2016. Barley brassinosteroid mutants provide an insight into phytohormonal homeostasis in plant reaction to drought stress. *Frontiers in Plant Science* 7: 1824.
4. Hura T, Dziurka M, Hura K, Ostrowska A, Dziurka K. 2016. Different allocation of carbohydrates and phenolics in dehydrated leaves of triticale. *Journal of Plant Physiology* 202: 1-9.
5. Janeczko A., Gruszka D., **Pociecha E.**, Dziurka M., Filek M., **Jurczyk B.**, Kalaji H. M., Kocurek M., Waligórski P. 2016. Physiological and biochemical characterisation of watered and drought-stressed barley mutants in the *HvDWARF* gene encoding C6-oxidase involved in brassinosteroid biosynthesis. *Plant Physiology and Biochemistry* 99:126-141.
6. **Jurczyk B., Pocięcha E.**, Grzesiak M., Kalita K., **Rapacz M.** 2016. Enhanced expression of Rubisco activase splicing variants differentially affects Rubisco activity during low-temperature treatment in *Lolium perenne*. *Journal of Plant Physiology* 198:49-55.
7. **Jurczyk B., Pocięcha E.**, Janowiak F., Kabała D., **Rapacz M.** 2016. Variations in waterlogging-triggered stomatal behaviour contribute to changes in the process of cold acclimation in *Lolium perenne* and *Festuca pratensis*. *Plant Physiology and Biochemistry*, 109:280–292.
8. **Jurczyk B., Pocięcha E., Kościelniak J., Rapacz M.** 2016. Different photosynthetic acclimation mechanisms are activated under waterlogging in two contrasting *Lolium perenne* genotypes. *Functional Plant Biology*, 43: 931–938.
9. **Jurczyk B., Rapacz M., Pocięcha E., Kościelniak J.** 2016. Changes in carbohydrates triggered by low temperature waterlogging modify photosynthetic acclimation to cold in *Festuca pratensis*. *Environmental and Experimental Botany*, 122:60–67.
10. Mizia P., Cygan M., Denysenko M., Kwolek D., Chramiec-Głębik A., **GrabowskaJoachimiaak A., Joachimiak AJ.** 2016. Development of a RAPD-based male-specific molecular marker in Japanese hop (*Humulus japonicus* Siebold & Zucc.). *Acta Biologica Cracoviensia Series Botanica*, 58/2, 21–27.
11. Noga A., Skrzypek E., Noga A., Warchoł M., Czyczyło-Mysza I., Dziurka K., Marcińska I., Juzoń K., **Warzecha T., Sutkowska A., Nita Z., Werwińska K.** 2016. Conversion of oat (*Avena sativa* L.) haploid embryo into plants in relation to embryo developmental stage and regeneration media. *In Vitro Cellular and Developmental Biology*, 52, 590–597.
12. Orzeł A., **Simlat M.**, Danek J. 2016. Directions in raspberry and blackberry breeding program conducted in NIWA Berry Breeding Ltd., Brzezna, Poland. *Acta Horticulturae*, 1133, 29–34.

13. Perlikowski D., Kierszniowska S., Sawikowska A., Krajewski P., **Rapacz M.**, Eckhardt Ä., Kosmala A. 2016: Remodeling of Leaf Cellular Glycerolipid Composition under Drought and Re-hydration Conditions in Grasses from the Lolium-Festuca Complex, *Frontiers in Plant Science*, 7:1027.
14. **Pociecha E.**, Dziurka M., Oklestkova J., Janeczko A. 2016. Brassinosteroids increase winter survival of winter rye (*Secale cereale* L.) by affecting photosynthetic capacity and carbohydrate metabolism during cold acclimation. *Plant Growth Regulation* 80:127-135.
15. **Pociecha E.**, **Rapacz M.**, Dziurka M., Kolasińska I. 2016. Mechanisms involved in the regulation of photosynthetic efficiency and carbohydrate partitioning in response to low- and high-temperature flooding triggered in winter rye (*Secale cereale*) lines with distinct pink snow mold resistances. *Plant Physiology and Biochemistry*, 104: 45-53.
16. Sahar S., **Ptak A.**, Boisbrun M., Spina R., Dupire F., Laurain-Mattar D. 2016. Stimulating effect of both 4'-O-methylnorbelladine feeding and temporary immersion conditions on galanthamine and lycorine production by *Leucojum aestivum* L. bulblets. *Engineering in Life Sciences*, 16, 731–739.
17. Sękara A., **Bączek-Kwinta R.**, Gawęda M., Kalisz A., Pokluda R., Jezdinsky A. 2016. Sequential abiotic stress applied to juvenile eggplant modifies the seedlings parameters, plant ontogeny and field. *Hort. Sci* 43: 149-157.
18. **Simlat M.**, Ślęzak P., **Moś M.**, Warchoł M., Skrzypek E., **Ptak A.** 2016. The effect of light quality on seed germination, seedling growth and selected biochemical properties of *Stevia rebaudiana* Bertoni. *Scientia Horticulturae*, 211, 295–304.
19. Surówka E., Dziurka M., Kocurek M., Goraj S., **Rapacz M.**, Miszalski Z. 2016. Effects of exogenously applied hydrogen peroxide on antioxidant and osmoprotectant profiles and the C3-CAM shift in the halophyte *Mesembryanthemum crystallinum* L., *Journal of Plant Physiology*, 200: 102-110.
20. Sutkowska A. 2016. *Aconitum* L. (Ranunculaceae) łamie zasady. *Roczniki Bieszczadzkie*. 24, 17–27.
21. **Śniegowska-Świerk K.**, Dubas E., **Rapacz M.** 2016. Actin microfilaments are involved in the regulation of HVA1 transcript accumulation in drought-treated barley leaves. *Journal of Plant Physiology*, 193: 22-25.

## 2015

1. **Bączek-Kwinta R.**: 2015. Korzenie-szczotki, liście na baczność, echolokacja — jak szczegóły budowy zewnętrznej pozwalają roślinom na dostosowanie się do środowiska. *Kosmos* 64: 485-499.
2. Bocian A., Zwierzykowski Z., **Rapacz M.**, Koczyk G., Ciesiołka D., Kosmala A. 2015. Metabolite profiling during cold acclimation of *Lolium perenne* genotypes distinct in the level of frost tolerance, *Journal of Applied Genetics*, 56: 439-449.
3. **Fiust A.**, **Rapacz M.**, **Wójcik-Jagła M.**, Tyrka M. 2015. Conversion of DArT markers into Short Sequence Repeated (SSR) and Sequence Tagged Site (STS) markers that can be used as an effective selection tool for drought tolerance within Polish spring barleys. *Journal of Applied Genetics* 56: 299-309.
4. Górczyca A., **Pociecha E.**, Kasprowicz M.J., Niemiec M. 2015. Effect of nanosilver in wheat seedlings and *Fusarium culmorum* culture systems. *European Journal of Plant Pathology* 142: 251-261.
5. **Góral H.**, Stojalowski S., **Warzecha T.**, Larsen J. 2015. The development of hybrid triticale. W: François Eudes (red.). *Triticale*. Springer International Publishing, Springer Cham Heidelberg New York Dordrecht London, 33-66.

6. **Grabowska-Joachimia** A., **Kula A.**, Gernand-Kliefoth D., Joachimiak A.J. 2015. Karyotype structure and chromosome fragility in the grass *Phleum echinatum* Host. *Protoplasma*, 252, 1, 301-306.
7. **Grabowska-Joachimia** A., **Kula A.**, Książczyk T., Chojnicka J., Śliwińska E., Joachimiak A. J. 2015. Chromosome landmarks and autosome-sex chromosome translocations in *Rumex hastatulus*, a plant with XX/X<sub>1</sub>Y<sub>1</sub>Y<sub>2</sub> sex chromosome system. *Chromosome Research*, 23, 2, 187-197.
8. Grzesiak M.T., Szczyrek P., Rut G., Ostrowska A., **Hura K.**, Rzepka A., Hura T., Grzesiak S. 2015. Interspecific differences in tolerance to soil compaction, drought and waterlogging stresses among maize and Triticale genotypes. *J Agron Crop Sci* 201: 330-343.
9. **Hura K.**, Hura T., Dziurka K., Dziurka M. 2015. Carbohydrate, phenolic and antioxidant level in relation to chlorophyll a content in oilseed winter rape (*Brassica napus* L.) inoculated with *Leptosphaeria maculans*. *Eur J Plant Pathol*. 141: 291-303.
10. **Hura K.**, Hura T., **Rapacz M.**, **Plażek A.** 2015. Effects of low-temperature hardening on the biochemical response of winter oilseed rape seedlings inoculated with the spores of *Leptosphaeria maculans*. *Biologia* 70: 1011-1018.
11. **Hura K.**, Hura T., **Rapacz M.**, **Plażek A.**, Filek M. 2015. The effect of cold on the response of *Brassica napus* callus tissue to the secondary metabolites of *Leptosphaeria maculans*. *Acta Physiologiae Plantarum*. 37: 13.
12. Hura T, **Hura K.**, Ostrowska A, Dziurka K. 2015. Rapid plant rehydration initiates permanent and adverse changes in the photosynthetic apparatus of triticale. *Plant and Soil* 397 (1-2): 127-145.
13. Hura T., Dziurka M., **Hura K.**, Ostrowska A., Dziurka K., 2015. Free and cell wall-bound polyamines under long-term water stress applied at different growth stages of ×*Triticosecale* Wittm. *PLoS ONE* 10(8): e0135002.
14. Janeczko A., Oklestkova J., Novak O., Śniegowska-Świerk K., Snaczke Z., **Pociecha E.** 2015. Disturbances in production of progesterone and their implications in plant studies. *Steroids* 96:153-163.
15. **Jurczyk B.**, **Hura K.**, Trzemecka A., **Rapacz M.** 2015. Evidence for alternative splicing mechanisms in meadow fescue (*Festuca pratensis*) and perennial ryegrass (*Lolium perenne*) Rubisco activase gene, w: *Journal of Plant Physiology* 176: 61-64.
16. **Jurczyk B.**, **Rapacz M.**, **Krepski T.** 2015. Photosynthetic apparatus responses to short-term low-temperature flooding may contribute to freezing tolerance changes in forage grasses, w: *Journal of Agronomy and Crop Science*, 201: 49-56.
17. **Jurczyk B.**, **Rapacz M.**, **Krepski T.** 2015. Photosynthetic apparatus responses to short-term low-temperature flooding may contribute to freezing tolerance changes in forage grasses. *Journal of Agronomy and Crop Science*, 201:49–56.
18. Kruk J., Śliwińska E., **Grabowska-Joachimia** A., Kromer K., Szymańska R. 2015. *Woodsia pulchella* in the Western Carpathians: a relict species at the northern limit of its distribution. *Annales Botanici Fennici*, 52, 1-2, 193-201.
19. Kuchta-Gładysz M., **Grabowska-Joachimia** A., Szeleszczuk O., Szczerbal I., Kociucka B., Niedbała P. 2015. Karyotyping of *Chinchilla lanigera* Mol. (Rodentia, Chinchillidae). *Caryologia*, 68, 2, 138-146.
20. Østrem L., **Rapacz M.**, Larsen A., Dalmannsdottir S., Jorgensen M. 2015. Influences of growth cessation and photoacclimation on winter survival of non-native *Lolium–Festuca* grasses in high-latitude regions, *Environmental and Experimental Botany*, 111: 21-31.
21. **Plażek A.**, Dubert F., Kopeć P., **Krepski T.**, Kacorzyk P., Micek P., Kurowska M., Szarejko I. 2015. In vitro propagated *Miscanthus x giganteus* plants can be a source of diversity in terms of their chemical composition. *Biomass & Bioenergy* 75: 142-149.

22. **Pociecha E.**, Dziurka M. 2015. *Trichoderma* stimulates photosynthesis during cold acclimation but decreases soluble carbohydrates content and pink snow mould (*M. nivale*) resistance of winter rye. *Environmental and Experimental Botany* 109: 193-200.
23. **Rapacz M.**, Sasal M., **Wójcik-Jagła M.** 2015. Direct and indirect measurements of freezing tolerance: advantages and limitations. *Acta Physiologiae Plantarum* 37: 157.
24. **Rapacz M.**, Sasal M., Kalaji H., **Kościelniak J.** 2015. Is the OJIP test a reliable indicator of winter hardiness and freezing tolerance of common wheat and triticale under variable winter environments, *Plos One*, 10: 7.
25. **Rapacz M.**, Sasal M., **Wójcik-Jagła M.** 2015. Direct and indirect measurements of freezing tolerance: advantages and limitations, *Acta Physiologiae Plantarum* 37: 1-16.
26. Rutowicz K., Puzio M., Halibart-Puzio J., Lirski M., Kotliński M., Kroteń M., **Śniegowska K.**, **Kościelniak J.**, **Żmuda K.**, **Rapacz M.** i in. 2015. A specialized histone H1 variant is required for adaptive responses to complex abiotic stress and related DNA methylation in *Arabidopsis*, *Plant Physiology* 169: 2080-2101.
27. Saliba S., **Ptak A.**, Laurain-Mattar D. 2015. 4'-*O*-methylnorbelladine feeding enhances galanthamine and lycorine production by *Leucojum aestivum* L. shoot cultures. *Engineering in Life Sciences*, 15, 640-645.
28. Sękara A., Kalisz A., **Bączek-Kwinta R.**, Gawęda M., Pohl A., Grabowska A., 2015. The effect of abiotic stresses applied in the juvenile phase of eggplant ontogeny on chemical composition of seedlings and fruits. *Agrochimica* 61(1), 26-39.
29. **Sutkowska A.**, Pasierbiński A., Bąba W., **Warzecha T.**, Mitka J. 2015. Additivity of ISSR markers in natural hybrids of related forest species *Bromus benekenii* and *B. ramosus* (Poaceae). *Acta Biologica Cracoviensia Series Botanica*, 57, 1, 82-94.
30. Ślesak H., Góralski G., Kwolek D., Dziedzic K., **Grabowska-Joachimia A.** 2015. Male adventitious roots of *Rumex thyrsiflorus* Fingerh. as a source of genetically stable micropropagated plantlets. *Plant Cell Tissue and Organ Culture*, 123, 193–203.
31. **Śniegowska-Świerk K.**, Dubas E., **Rapacz M.** 2015. Drought-induced changes in the actin cytoskeleton of barley (*Hordeum vulgare* L.) leaves, *Acta Physiologiae Plantarum* 37: 1-13.
32. Tyrka M., **Rapacz M.**, Fiust A., Wójcik-Jagła M. 2015. Quantitative trait loci mapping of freezing tolerance and photosynthetic acclimation to cold in winter two- and six-rowed barley, *Plant Breeding* 134, 271-282.
33. **Warzecha T.**, Skrzypek E., **Sutkowska A.** 2015. Effect of *Fusarium culmorum* infection on the selected physiological and biochemical parameters of barley (*Hordeum vulgare* L.) DH lines. *Physiological and Molecular Plant Pathology*, 89, 62–69.

## 2014

1. **Bączek-Kwinta R.** 2014. The assay of oxygen free radicals and the enzymes decomposing them in barley leaves subjected to drought. Methodology of system approach to study drought tolerance in barley. Krajewski Paweł, Surma Maria (red.), *Dissertations and Monographs*, vol. 19, 2014, Institute of Plant Genetics PAS, ISBN 978-83-64246-24-1, str. 115-123.
2. **Golemić E.**, Tokarz K., Wielanek M., Niewiadomska E. 2014. A dissection of the effects of ethylene, H<sub>2</sub>O<sub>2</sub> and high irradiance on antioxidants and several genes associated with stress and senescence in tobacco leaves. *Journal of Plant Physiology*, 171, 269-275.
3. Góralski G., Judasz A., Gacek P., **Grabowska-Joachimia A.**, Joachimiak A.J. 2014. Polyploidy, alien species and invasiveness in Polish angiosperms. *Plant Systematics and Evolution*, 300,225-238.
4. Grzesiak M.T., Ostrowska A., **Hura K.**, Rut G., Janowiak F., Rzepka A., Hura T., Grzesiak S. 2014. Interspecific differences in root architecture among maize and triticale genotypes grown under drought, waterlogging and soil compaction. *Acta Physiol. Plant.* 36, 3249-3261.

5. **Hura K.**, Hura T., **Bączek-Kwinta R.**, Grzesiak M., **Plażek A.** 2014. Induction of defense mechanisms in seedlings of oilseed winter rape inoculated with *Phoma lingam* (*Leptosphaeria maculans*). *Phytoparasitica* 42: 145-154.
6. **Hura K.**, Hura T., Dziurka K., Dziurka M. 2014. Biochemical defense mechanisms induced in winter oilseed rape seedlings with different susceptibility to infection with *Leptosphaeria maculans*. *Physiological and Molecular Plant Pathology* 87, 42-50.
7. **Hura K.**, Hura T., Grzesiak M. 2014. Function of the photosynthetic apparatus of oilseed winter rape under elicitation by *Phoma lingam* phytotoxins in relation to carotenoid and phenolic levels. *Acta Physiol. Plant* 36, 295-305.
8. **Hura K.**, Hura T., Grzesiak M., **Rapacz M.** 2014. Early detection of *Phoma lingam* infection in oilseed winter rape before visible symptoms appear. *Acta Biologica Cracoviensia Series Botanica*, 56: 59-65.
9. **Hura K.**, **Jurczyk B.**, Ostrowska A., **Rapacz M.**, **Śniegowska-Świerk K.**, **Wójcik-Jagła M.**, **Żmuda K.**, **Biesaga-Kościelniak J.**, **Kościelniak J.**: Physiological indicators of drought tolerance in barley, w: Methodology of system approach to study drought tolerance in barley / Krajewski Paweł, Surma Maria (red.), *Dissertations and Monographs*, vol. 19, 2014, Institute of Plant Genetics PAS, ISBN 978-83-64246-24-1, str. 125-132.
10. **Jurczyk B.**, **Pociecha E.**, Janeczko A., Paczyński R., **Rapacz M.** 2014. Assessment of candidate reference genes for the expression studies with brassinosteroids in *Lolium perenne* and *Triticum aestivum*, *Journal of Plant Physiology* 171: 1541-1544.
11. Kruk J., **Grabowska-Joachimia A.**, Szymańska R. 2014. *Galium suecicum* (Rubiaceae), a new and relict species in the flora of Poland. *Annales Botanici Fennici*, 51, 273-278.
12. Nahar N., Rahman A., **Moś M.**, **Warzecha T.**, Ghosh S., Hossain K., Nawani N. N., Mandal A. 2014. In silico and in vivo studies of molecular structures and mechanisms of AtPCS1 protein involved in binding arsenite and/or cadmium in plant cells. *Journal of Molecular Modeling*, 20, 2104, 1-16.
13. Perlikowski D., Kosmala A., **Rapacz M.**, **Kościelniak J.**, Pawłowicz I., Zwierzykowski Z. 2014. Influence of short-term drought conditions and subsequent re-watering on the physiology and proteome of *Lolium multiflorum*/*Festuca arundinacea* introgression forms, with contrasting levels of tolerance to long-term drought, *Plant Biology* 16: 385-394.
14. Petrovičová L., Balážová Ž., Gálová Z., Magdalena W., **Rapacz M.** 2014. RAPD Analysis of the Genetic Polymorphism in the Collection of Rye Cultivars, w: *International Journal of Biological, Biomolecular, Agricultural, Food and Biotechnological Engineering*, Scienceweb Publishing, 8: 619-623.
15. Płachno B., Musiał K., Świętek P., Tuleja M., Marciniuk J., **Grabowska-Joachimia A.** 2014. Synergids and filiform apparatus in the sexual and apomictic dandelions from section Palustria (*Taraxacum*, Asteraceae). *Protoplasma*, 251, 211-217.
16. **Plażek A.**, Dubert F., **Kościelniak J.**, Tatrzańska M., Maciejewski M., Gondek K., Żurek G. 2014. Tolerance of *Miscanthus x giganteus* to salinity depends on initial weight of rhizomes as well as high accumulation of potassium and proline in leaves. *Industrial Crops and Products* 52: 278-285.
17. **Pociecha E.**, Janeczko Z., Janeczko A. 2014. Resveratrol stimulates phenolic metabolism and PSII efficiency in wheat infected with powdery mildew. *Journal of Plant Interactions* 9:494-503.
18. Ptak A. 2014. *Leucojum aestivum* L. in vitro bulbs induction and acclimatization. *Central European Journal of Biology*, 9 (11), 1011-1021.
19. **Rapacz M.**, Ergon Å., Höglind M., Jørgensen M., **Jurczyk B.**, **Østrem L.**, Rognli O.A., Tronsmo A.M. 2014. Overwintering of herbaceous plants in a changing climate-still more questions than answers. *Plant Science*, 225:34-44.

20. **Sutkowska A.**, Pasierbiński A., **Warzecha T.**, Mitka J. 2014. Multiple cryptic refugia of forest grass *Bromus benekenii* in Europe as revealed by ISSR fingerprinting and species distribution modelling. *Plant Systematics and Evolution*, 300(6), 1437–1452.
21. Szklarczyk M, Szymanski M, **Wójcik-Jagła M**, Simon PW, Weihe A, Boerner T 2014. Mitochondrial atp9 genes from petaloid male-sterile and male-fertile carrots differ in their status of heteroplasmy, recombination involvement, posttranscriptional processing as well as accumulation of RNA and protein product. *Theoretical and Applied Genetics* 127: 1689-1701.
22. **Śniegowska-Świerk K., Jurczyk B., Rapacz M.:** Methods for the measurement of drought-induced changes in the expression of selected barley genes, w: *Methodology of system approach to study drought tolerance in barley* / Krajewski Paweł, Surma Maria (red.), *Dissertations and Monographs*, vol. 19, 2014, Institute of Plant Genetics PAS, ISBN 978-8364246-24-1, str. 133-139.
23. **Warzecha T., Sutkowska A.**, Góral H. 2014. Male sterility of triticale lines generated through recombination of triticale and rye maintainers. *Spanish Journal of Agricultural Research*, 12(4), 1124-1130.
24. Wójtowicz T., Zieliński A., Moś M. 2014. The effect of degree of panicle maturity on seed yield and yield components in meadow fescue (*Festuca pratensis* Huds.). *Zeszyty Problemowe Postępów Nauk Rolniczych*, 579, 111-120.
25. Zieliński A., Ptak A., Wójtowicz T., Moś M. 2014. Susceptibility of naked oat cultivar seeds to mechanical damage. *Central European Journal of Biology*, 9(3), 331-340.
26. Zieliński A., Simlat M., Wójtowicz T., Moś M. 2014. Susceptibility of naked oat cultivars to seed sprouting. *Central European Journal of Biology*, 9(8), 823-832.
27. Żur I., Dubas E., Krzewska M., Janowiak F., **Hura K., Pocięcha E., Bączek-Kwinta R., Płażek A.** 2014. Antioxidant activity and ROS tolerance in triticale (xTriticosecale Wittm.) anthers affect the efficiency of microspore embryogenesis. *Plant Cell, Tissue and Organ Culture* 119: 79-94.

### 2013

1. **Borek M., Bączek-Kwinta R., Rapacz M.** 2013. Chlorophyll fluorescence imaging of cadmium-treated white cabbage plants, w: *Proceedings of the 16th International Conference on Heavy Metals in the Environment / Pirrone Nicola (red.)*, E3S Web of Conferences, vol. 1, 39004, EDP Sciences, str. 1-4.
2. Dalmannsdottir S., **Rapacz M.**, Jorgensen M., Østrem L., Larsen A., Rognli O.: Effects of pre-acclimation temperature on cold tolerance and photoinhibition in forage species, w: *The Role of Grasslands in a Green Future. Threats and Perspectives in Less Favoured Areas. Proceedings of the 17th Symposium of the European Grassland Federation Akureyri, Iceland 23-26 June 2013 / Helgadóttir Áslaug, Hopkins Alan (red.)*, *Grassland Science in Europe*, vol. 18, 2013, European Grassland Federation, ISBN 978-9979-881-20-9, ss. 288-290.
3. Góral H. 2013. Męska płodność pszenżyta ozimego w zależności od rodzaju cytoplazmy i formy ojcowskiej. *Biul. IHAR*, 269, 15-20.
4. Grzesiak MT, Waligórski P, Janowiak F, Marcińska I, **Hura K**, Szczyrek P, Głab T. 2013. The relations between drought susceptibility index based on grain yield (DSIGY) and key physiological seedling traits in maize and triticale genotypes. *Acta Physiologiae Plantarum*. 35, 549-565.
5. Hura T., **K Hura**, A Ostrowska, M Grzesiak, K Dziurka. 2013. The cell-wall bound phenolics as a biochemical indicator of soil drought resistance in winter triticale. *Plant, Soil and Environment*, 5:189-195.
6. Janeczko A., Oklešťková J., Siwek A., Dziurka M., **Pocięcha E.**, Kocurek M., Novák O. 2013. Endogenous progesterone and its cellular binding sites in wheat exposed to drought stress. *Journal of Steroid Biochemistry and Molecular Biology* 138:384-394.

7. **Jurczyk B., Krępski T., Kosmala A., Rapacz M.** 2013. Different mechanisms trigger an increase in freezing tolerance in *Festuca pratensis* exposed to flooding stress. *Environmental and Experimental Botany*, 93:45–54.
8. **Jurczyk B., Rapacz M., Krępski T.** 2013. Short-term growth of meadow fescue with atmospheric CO<sub>2</sub> enrichment decreases freezing tolerance, modifies photosynthetic apparatus performance and changes the expression of some genes during cold acclimation. *Acta Physiologiae Plantarum*, 35:1543–1554.
9. Kosmala A., Bocian A., **Rapacz M., Jurczyk B.**, Marczak Ł., Zwierzykowski Z.: Similarities and differences in leaf proteome response to cold acclimation between *Festuca pratensis* and *Lolium perenne*. Breeding strategies for sustainable forage and turf grass improvement / Barth Susanne, Milbourne Dan (red.), 2013, Springer, ISBN 978-94007-4554-4, ss. 189-194, DOI:10.1007/978-94-007-4555-1\_23.
10. Kozera B., **Rapacz M.** 2013. Reference genes in real-time PCR. *Journal of Applied Genetics* 54: 391-406.
11. **Kula A., Grabowska-Joachimia A., Kasjaniuk M.**, Legutko J., Marciniuk P., Musiał K. 2013. Chromosome numbers in 10 *Taraxacum* species from Poland. *Acta Biologica Cracoviensia Ser. Botanica*, 55/2, 153-157.
12. Østrem L., **Rapacz M.**, Larsen A., Dalmannsdottir S., Jorgensen M.: How do non-adaptive grasses control growth cessation during autumn in high latitude regions?, w: The Role of Grasslands in a Green Future. Threats and Perspectives in Less Favoured Areas. Proceedings of the 17th Symposium of the European Grassland Federation Akureyri, Iceland 2326 June 2013 / Helgadóttir Áslaug, Hopkins Alan (red.), Grassland Science in Europe, vol. 18, 2013, European Grassland Federation, ISBN 978-9979-881-20-9, str. 361-363
13. **Plażek A.**, Tatrzańska M., Maciejewski M., **Kościelniak J.**, Gondek K., Bojarczuk J., Dubert F. 2013. Investigation of the salt tolerance of new Polish bread and durum wheat cultivars. *Acta Physiologiae Plantarum* 35: 2513-2523.
14. **Pociecha E.** 2013. Different physiological reactions at vegetative and generative stage of development of field bean plants exposed to flooding and followed recovery. *Journal of Agronomy and Crop Science*. 199: 195-199.
15. **Pociecha E.**, Janowiak F., Dubas E., Żur I., Tokarz K., Kolasińska I., **Plażek A.** 2013. Progress of snow mould infection in crowns of winter rye (*Secale cereale* L.) is related to photosynthetic activity during cold acclimation. *Plant Physiology and Biochemistry* 70: 360-367.
16. **Pociecha E., Plażek A.**, Janowiak F., Dubert F., Kolasińska I., Irla M. 2013. Factors contributing to enhanced pink snow mould resistance of winter rye (*Secale cereale* L.) - Pivotal role of crowns. *Physiological and Molecular Plant Pathology* 81: 54-63.
17. **Ptak A.**, El Tahchy A., Skrzypek E., **Wójtowicz T.**, Laurain-Mattar D. 2013. Influence of auxins on somatic embryogenesis and alkaloid accumulation in *Leucojum aestivum* callus. *Central European Journal of Biology*, 8 (6), 591-599.
18. **Ptak A., Simlat M.**, Kwiecień M., Laurain-Mattar D. 2013. *Leucojum aestivum* plants propagated in *in vitro* bioreactor culture and on solid media containing cytokinins. *Engineering in Life Sciences*, 13 (3), 261–270.
19. **Simlat M.**, Szklarczyk M., Stobiecki M. 2013. Accumulation of selected phenolics and expression of PAL genes in carrots deferring in their susceptibility to carrot fly (*Psila rosae* F.). *Euphytica*, 190, 253-266.
20. Sutkowska A, Boroń P, Mitka J. 2013. Natural hybrid zone of the *Aconitum* species in the Western Carpathians: Linnaean taxonomy and ISSR fingerprinting. *Acta Biologica Cracoviensia, Series Botanica*, 55(1), 114-126.
21. Sutkowska A. 2013. Stokłosa spłaszczona *Bromus carinatus* (Hook. & Arn.) (*Poaceae*) gatunkiem potencjalnie inwazyjnym w Karpatach. *Roczniki Bieszczadzkie*, 21, 64-73.

22. Sutkowska A. 2013. Zmienność i pochodzenie populacji *Epipactis palustris* (Orchidaceae) i *Bromus carinatus* (Poaceae) na siedliskach synantropijnych w świetle badań molekularnych. Monografia. Uniwersytet Rolniczy im. Hugona Kołłątaja w Krakowie, str. 103.
23. **Sutkowska A.** 2013. Zmienność i pochodzenie populacji *Epipactis palustris* (Orchidaceae) i *Bromus carinatus* (Poaceae) na siedliskach synantropijnych w świetle badań molekularnych. Monografia. Uniwersytet Rolniczy im. *Hugona Kołłątaja* w Krakowie: str. 103.
24. **Sutkowska A.**, Pasierbiński A. **Warzecha T.**, Mandal A., Mitka J. 2013. Refugial pattern of *Bromus erectus* in Central Europe based on ISSR fingerprinting. *Acta Biologica Cracoviensia, Series Botanica*, 55(2), 107-119.
25. Ślesak H., Góralski G., **Pawłowska H.**, **Skucińska B.**, Popielarska- Konieczna M., Joachimiak A. J. 2013. The effect of genotype on a barley scutella culture. *Histological aspects. Central European Journal of Biology*, 8(1), 30-37.
26. **Wójcik-Jagła M.**, **Rapacz M.**, Tyrka M., **Kościelniak J.**, Crissy K., **Żmuda K.** 2013. Comparative QTL analysis of early short-time drought tolerance in Polish fodder and malting spring barleys, *Theoretical and Applied Genetics*, 126: 3021-3034.
27. Żur I., Dubas E., Słomka A., Dubert F., Kuta E., **Plażek A.** 2013. Failure of androgenesis in *Miscanthus x giganteus* in vitro culture of cytologically unbalanced microspores. *Plant reproduction* 26: 297-307.
28. Żur I., Gołębiowska G., Dubas E., **Golemięc E.**, Matušiková I., Libantová J., Moravčiková J. 2013.  $\beta$ -1,3-glucanase and chitinase activities in winter triticales during cold hardening and subsequent infection by *Microdochium nivale*. *Biologia*, 68(2), 241-248.

## 2012

1. **Bączek-Kwinta R.**, Sala A. 2012. What the antioxidant activity of sprouts depends on? *Oxidation Communications* 4(35): 990-1000.
2. Bocianowski J., **Warzecha T.**, 2012. Wielocechowa charakterystyka odmian pszenicy (*Triticum* L.) i pszenżyta ( $\times$ *Triticosecale* Wittm. ex A. Camus) inokulowanych *Fusarium culmorum*. *Nauka Przynr. Technol.* 6, 1, #14,1-11
3. Chramiec-Głąbik A., **Grabowska-Joachimiak A.**, Śliwiska E., Legutko J., **Kula A.** 2012. Cytogenetic analysis of *Miscanthus*  $\times$  *giganteus* and its parent forms. *Caryologia: International Journal of Cytology, Cytosystematics and Cytogenetics*, 65(3), 234-242.
4. **Grabowska-Joachimiak A.**, Kwolek D., **Kula A.**, Marciniuk P. 2012. Fluorescent banding pattern and species-specific DNA marker in *Rumex thyrsiflorus* Fingerh. *Cytogenetic and Genome Research*, 137, 70-77
5. Hura T, **Hura K.**, Dziurka K, Ostrowska A, **Bączek-Kwinta R.**, Grzesiak MT. 2012. An increase in the content of cellwall bound phenolics correlates with the productivity of triticales under soil drought. *Journal of Plant Physiology*, 169: 1728-1736.
6. **Jurczyk B.**, **Rapacz M.**, Budzisz K., Barcik W., Sasal M. 2012. The effects of cold, light and time of day during lowtemperature shift on the expression of *CBF6*, *FpCor14b* and *LOS2* in *Festuca pratensis*. *Plant Science*, 183: 143–148.
7. Krzewska M., Czyczyło-Mysza I., Dubas E., Gołębiowska-Pikania G., **Golemięc E.**, Stojalowski S., Chrupiek M., Żur I. 2012. Quantitative trait loci associated with androgenic responsiveness in triticales ( $\times$ *Triticosecale* Wittm.) anther culture. *Plant Cell Rep*, 31, 20992108.
8. Kusznierewicz B., **Bączek-Kwinta R.**, Bartoszek A., Piekarska A., Huk A., Manikowska A., Antonkiewicz J., Konieczka, P. 2012. The dose-dependent influence of zinc and cadmium contamination of soil on their uptake and glucosinolate content in white cabbage (*Brassica oleracea* var. *capitata* f. *alba*). *Environmental Toxicology and Chemistry* 31(11): 2482-2489.

9. Nahar N., Rahman A., **Moś M.**, **Warzecha T.**, Algerin M., Ghosh S., Johnson-Brousseau S. 2012. *In silico* and *in vivo* studies of an *Arabidopsis thaliana* gene *ACR2*, putatively involved in arsenic accumulation in plants. *Journal of Molecular Modeling*, 18, 4249-4162.
10. **Rapacz M.**, Stępień A., Skorupa K. 2012. Internal standards for quantitative RT-PCR studies of gene expression under drought treatment in barley (*Hordeum vulgare* L.): the effects of developmental stage and leaf age. *Acta Physiologiae Plantarum* 34: 1723-1733.
11. Sękara A., **Bączek-Kwinta R.**, Kalisz A., Cebula S. 2012. Tolerance of eggplant (*Solanum melongena* L.) seedlings to stress factors. *Acta Agrobotanica* 2012, 65 (2): 83–92.
12. Słomka A., Kuta E., **Plażek A.**, Dubert F., Žur I., Dubas E., Kopeć P., Żurek G. 2012. Sterility of *Miscanthus x giganteus* results from hybrid incompatibility. *Acta Biologica Cracoviensia Series Botanica* 54: 113-120.
13. **Sutkowska A.** 2012. Verification of the systematic position of California brome (*Bromus carinatus* Hook and Arn, Poaceae) cv. 'Broma', on the basis of analysis of ISSR markers. *Acta Agrobotanica*, 65 (3), 35-42.
14. **Warzecha T.**, **Zieliński A.**, Skrzypek E., **Wójtowicz T.**, **Moś M.** 2012. Effects of mechanical damage on vigour and physiological indices of naked and husked oat cultivars (*Avena sativa* L.) after inoculation with *Fusarium culmorum*. *Phytoparasitica* 40: 29–36.
15. **Wójcik-Jagła M.**, **Rapacz M.**, Barcik W, Janowiak F, 2012. Differential regulation of barley (*Hordeum distichon*) *HVA1* and *SRG6* transcript accumulation during the induction of soil and leaf water deficit. *Acta Physiologiae Plantarum* 34: 2069-2078.

## 2011

1. **Bączek-Kwinta R.**, Bartoszek A., Kusznierevich B., Antonkiewicz J. 2011. Physiological response of plants and cadmium accumulation in heads of two cultivars of white cabbage. *Journal of Elementology* 16: 355-364.
2. **Bączek-Kwinta R.**, Kozieł A., Seidler-Łożykowska K. 2011. Are the fluorescence parameters of German chamomile leaves the first indicators of the anthodia yield in drought conditions? *Photosynthetica* 49(1): 87-97.
3. Bocian A., Kosmala A., **Rapacz M.**, **Jurczyk B.**, Marczak Ł., Zwierzykowski Z. 2011. Differences in leaf proteome response to cold acclimation between *Lolium perenne* plants with distinct levels of frost tolerance. *Journal of Plant Physiology*, 168:1271–1279.
4. Boroń P., Zalewska-Gałosz J., Nowak A., **Sutkowska A.**, Zemanem B., Mitka J. 2011. ISSR analysis points to relict character of *Aconitum bucovinense* Zapał. (Ranunculaceae) at the range margin. *Acta Soc. Bot. Pol.* 80 (4), 315-326.
5. El Tahchy A., Bordage S., **Ptak A.**, Dupire F., Barre E., Guillot C., Henry M., Chapleur Y., Laurain-Mattar D. 2011. Effects of sucrose and plant growth regulators on acetylcholinesterase inhibitory activity of alkaloids accumulated in shoot cultures of Amaryllidaceae. *Plant Cell Tiss Organ Cult.* 106, 381-390.
6. El Tahchy A., **Ptak A.**, Boisbrun M., Barre E., Guillot C., Dupire F., Chretien F., Henry M., Chapleur Y., Laurain-Mattar D. 2011. Kinetic study of the rearrangement of deuterium –labeled 4'-O-methylnorbelleadine in *Leucojum aestivum* shoot cultures by mass spectrometry. Influence of precursor feeding on Amaryllidaceae alkaloid accumulation. *Journal of Natural Products.* 74 (11), 2356-2361.
7. Gołębiowska G., Wędzony M., **Plażek A.** 2011. The responses of pro- and antioxidative systems to cold-hardening and pathogenesis differ in Triticale (x Triticosecale Wittm.) seedlings susceptible or resistant to pink snow mould (*Microdochium nivale* Fr., Samuels & Hallett). *Journal of Phytopathology* 159: 19-27.

8. **Grabowska-Joachimia** A., Mosiołek M., Lech A., Góralski G. 2011. C-Banding/DAPI and in situ Hybridization Reflect Karyotype Structure and Sex Chromosome Differentiation in *Humulus japonicus* Siebold & Zucc. *Cytogenet Genome Res* 132, 203-2011.
9. Ilnicki T., Joachimia A., **Sutkowska A.**, Mitka J. 2011. Cytotypes distribution of *Aconitum variegatum* L. in Central Europe. [W:] Zemanek B. (red.). *Geobotanist and taxonomist*. Instytut Botaniki UJ, 169-192.
10. Janeczko A., Oklestkova J., **Pociecha E.**, Kościelniak J., Mirek M. 2011. Physiological effects and transport of 24epibrassinolide in heat-stressed barley. *Acta Physiologiae Plantarum* 33:1249-1259.
11. Piekarska A., Szczygłowska M., Bodnar M., Konieczka P., Namieśnik J., Kusznierevicz B., Kołodziejcki D., Pilipczuk T., Bartoszek A., **Bączek-Kwinta R.** 2013. The innovative exploitation of *Brassica* vegetables in the health quality food production chain. *Acta Horticulturae* 2013, 1005: 71-85.
12. **Plażek A.**, Dubert A., **Pociecha E.**, Janowiak F., Kolasińska I., **Maciejewski M.** 2011. Resistance of winter rye (*Secale cereale* L.) to *Microdochium nivale* depends on soluble carbohydrate content but not on abscisic acid level. *Journal of Phytopathology* 159: 751-758.
13. **Plażek A.**, Dubert F., Janowiak F., **Krepski T.**, Tatrzańska M. 2011. Plant age and in vitro or in vivo propagation considerably affect cold tolerance of *Miscanthus x giganteus*. *European Journal of Agronomy* 34: 163-171.
14. Słomka A., **Sutkowska A.**, Szczepaniak M., Malec P., Mitka J., Kuta E. 2011. Increased genetic diversity of *Viola tricolor* L. (Violaceae) in metal-polluted environments. *Chemosphere* 83, 435-442.
15. **Warzecha T.**, Adamski T., Kaczmarek Z., Surma M., Chełkowski J., Wiśniewska H., Krystkowiak K., Kuczyńska A. 2011. Genotype-by-environment interaction of barley DH lines infected with *Fusarium culmorum* (W.G.Sm.) Sacc. *Field Crops Res.* 120, 21-30.
16. **Warzecha T.**, Lundh D., Mandal A. 2011. Effect of *Fusarium culmorum* infection on survivability of a T-DNA tagged mutant of *Arabidopsis thaliana* harboring a mutation in the peptide transporter gene At5g46050. *Biotechnologia* 92 (1), 77-84.
17. Wójtowicz T., Moś M. 2011. Wpływ stopnia dojrzałości wiech na wartość siewną nasion *Festuca pratensis*. *Łąkarstwo w Polsce*, 14: 147-160.
18. Żur I.A., Dubas E., **Pociecha E.**, Dubert F., Kolasińska I., **Plażek A.** 2011. Cytological analysis of infection process and the first defence responses induced in winter rye (*Secale cereale* L.) seedlings inoculated with *Microdochium nivale*. *Physiological and Molecular Plant Pathology* 76: 189-196.