Zbigniew Zwierzykowski, *Instytut Genetyki Roślin Polskiej Akademii Nauk w Poznaniu. Bibliografia 1961-2020*. IGR PAN Poznań 2021, 222 s. ISBN 978-83-85583-30-1

Aneks
2021-2024 (wrzesień)

Prace w czasopismach naukowych, monografie, rozdziały w monografiach, prace w materiałach konferencyjnych i artykuły popularno-naukowe

(pogrubioną czcionką wyróżniono autorów prac z afiliacją IGR PAN)

2021

1. Alkemade J.A., Messmer M.M., Arncken C., Leska A., Annicchiarico P., Nazzicari N., **Książkiewicz M**., Voegele R.T., Finckh M.R., Hohmann P. (2021). A high-throughput phenotyping tool to identify field-relevant anthracnose resistance in white lupin. Plant Disease 105(6): 1719-1727. DOI: 10.1094/PDIS-07-20-1531-RE
2. **Babula-Skowrońska D**. (2021). Functional divergence of *Brassica napus BnaABI1* paralogs in the structurally conserved *PP2CA* gene subfamily of Brassicaceae. Genomics 113(5): 3185-3197. DOI: 10.1016/j.ygeno.2021.06.031
3. Badr A.N., **Stępień Ł**., Drzewiecka K., Alharthi S.S., Selim K., Abdel-Razek A.G. (2021). Synergistic Impact of Bioactive Byproduct Extract Leads to Anti-*Fusarium* and Anti-Mycotoxin Secretion. Journal of Fungi 8(1): 30. DOI: 10.3390/jof8010030
4. Bellucci E., Aguilar O.M., Alseekh S., Bett K., Brezeanu C., Cook D., De la Rosa L., Delledonne M., Dostatny D.F., Ferreira J.F., Geffroy V., Ghitarrini S., **Kroc M**., Agrawal S.K., Logozzo G., Marino M., Mary-Huard T., McClean P., Meglič V., Messer T., Muel F., Nanni L., Neumann K., Servalli F., Străjeru S., Varshney R.K., Vasconcelos M.W., Zaccardelli M., Zavarzin A., Bitocchi E., Frontoni E., Fernie A.R., Gioia T., Graner A., Guasch L., Prochnow L., Oppermann M., **Susek K**., Tenaillon M., Papa R. (2021). The INCREASE project: Intelligent Collections of food-legume genetic resources for European agrofood systems. The Plant Journal 108: 646-660. DOI: 10.1111/tpj.15472 108
5. **Blicharz S**., Beemster G.T.S., Ragni L., De Diego N., Spíchal L., Hernándiz A.E., Marczak Ł., Olszak M., **Perlikowski D**., **Kosmala A**., **Malinowski R**. (2021). Phloem exudate metabolic content reflects the response to water deficit stress in pea plants (*Pisum sativum* L.). The Plant Journal 106(5): 1338-1355. DOI: 10.1111/tpj.15240
6. **Błaszczyk L**., **Salamon S**., **Mikołajczak K**. (2021). Fungi Inhabiting the Wheat Endosphere. Pathogens 10(10): 1288. DOI: 10.3390/pathogens10101288
7. **Błaszczyk L**., Waśkiewicz A., Gromadzka K., **Mikołajczak K**., **Chełkowski J**. (2021). *Sarocladium* and *Lecanicillium* Associated with Maize Seeds and Their Potential to Form Selected Secondary Metabolites. Biomolecules 11(1): 98. DOI: 10.3390/biom11010098
8. Borsuk G., Sulborska A., Stawiarz E., Olszewski K., Wiącek D., **Ramzi N**., Nawrocka A., **Jędryczka M**. (2021). Capacity of honeybees to remove heavy

metals from nectar and excrete the contaminants from their bodies. Apidologie 52: 1098-1111. DOI: 10.1007/s13592-021-00890-6

9. Brachaczek A., **Kaczmarek J**., **Jędryczka M**. (2021). Warm and Wet Autumns Favour Yield Losses of Oilseed Rape Caused by Phoma Stem Canker. Agronomy 11(6): 1171. DOI: 10.3390/agronomy11061171
10. Brizuela A.M., **Lalak-Kańczugowska J**., **Koczyk G**., **Stępień Ł**., **Kawaliło M**., Palmero D. (2021). Geographical Origin Does Not Modulate Pathogenicity or Response to Climatic Variables of *Fusarium oxysporum* Associated with Vascular Wilt on Asparagus. Journal of Fungi 7(12): 1056: DOI: 10.3390/jof7121056
11. **Czepiel K**., **Krajewski P**., **Wilczura P**., **Bielecka P**., **Święcicki W**., **Kroc M**. (2021). Expression Profiles of Alkaloid-Related Genes across the Organs of Narrow-Leafed Lupin (*Lupinus angustifolius* L.) and in Response to Anthracnose Infection. International Journal of Molecular Sciences 22(5): 2676. DOI: 10.3390/ijms22052676
12. **Ćwiek-Kupczyńska H**., **Krajewski P**. (2021). Polish network of research infrastructure for plant phenotyping. Research Ideas and Outcomes 7: e73858. DOI: 10.3897/rio.7.e73858
13. Durak R., **Jędryczka M**., Czajka B., Dampc J., Wielgusz K., Borowiak-Sobkowiak B. (2021). Mild abiotic stress affects development and stimulates hormesis of hemp aphid *Phorodon cannabis*. Insects 12(5): 420. DOI: 10.3390/insects12050420
14. **Fidler J**., **Żyła N**., **Babula-Skowrońska D**. (2021). Impact of the *Brassica oleracea* Genome on Breeding and Crop Improvement. W: The *Brassica oleracea* Genome. Compendium of Plant Genomes (red. Liu S., Snowdon R., Kole C.), s. 107-133. Springer, Cham. DOI: 10.1007/978-3-030-31005-9_10
15. Filipiak K., Klein D., **Mokrzycka M**. (2021). Separable covariance structure identification for doubly multivariate data. W: Multivariate, Multilinear and Mixed Linear Models (red. Filipiak K., Markiewicz A., von Rosen D.), s. 113-130. Springer, Cham. DOI: 10.1007/978-3-030-75494-5_5
16. **Franaszek S**., **Salmanowicz B.P**. (2021). Composition of low-molecular-weight glutenin subunits in common wheat (*Triticum aestivum* L.) and their effects on the rheological properties of dough. Open Life Sciences 16(1): 641-652. DOI: 10.1515/biol-2021-0059
17. **Gawłowska M**., Knopkiewicz M., **Święcicki W**., Boros L., Wawer A. (2021). Quantitative trait loci for stem strength properties and lodging in two pea biparental mapping populations (*Pisum sativum* L.). Crop Science 61: 1682-1697. DOI: 10.1002/csc2.20395
18. Glombik M., Copetti D., Bartoš J., Stočes S., **Zwierzykowski Z**., Ruttink T., Wendel J.F., Duchoslav M., Doležel J., Studer B., Kopecký D. (2021). Reciprocal allopolyploid grasses (*Festuca* × *Lolium*) display stable patterns of genome dominance. The Plant Journal 107: 1166-1182. DOI: 0.1111/tpj.15375
19. Góral T., **Wiśniewska H.**, Ochodzki P., **Twardawska A.**, Walentyn-Góral D. (2021). Resistance to fusarium head blight, kernel damage, and concentration of *Fusarium* mycotoxins in grain of winter triticale (× *Triticosecale* Wittmack) lines. Agronomy 11(1): 16. DOI: 10.3390/agronomy11010016
20. Hufnagel B., Soriano A., Taylor J., Divol F., **Kroc M**., Sanders H., Yeheyis L., Nelson M., Péret B. (2021). Pangenome of white lupin provides insights into the

diversity of the species. Plant Biotechnology Journal 19: 2532-2543. DOI: 10.1111/pbi.13678
21. **Koczyk G**., Pawłowska J., Muszewska A. (2021). Terpenoid Biosynthesis Dominates among Secondary Metabolite Clusters in *Mucoromycotina* Genomes. Journal of Fungi 7(4): 285. DOI: 10.3390/jof7040285
22. **Kroc M**., **Tomaszewska M**., **Czepiel K**., Bitocchi E., Oppermann M., Neumann K., Guasch L., Bellucci E., Alseekh S., Graner A., Fernie A.R., Papa R., **Susek K**. (2021). Towards Development, Maintenance, and Standardized Phenotypic Characterization of Single-Seed-Descent Genetic Resources for Lupins. Current Protocols in Plant Biology 1(7): e191. DOI: 10.1002/cpz1.191
23. **Książkiewicz M**., **Rychel-Bielska S**., **Plewiński P**., **Nuc M**., **Irzykowski W**., **Jędryczka M**., **Krajewski P**. (2021). The Resistance of Narrow-Leafed Lupin to *Diaporthe toxica* Is Based on the Rapid Activation of Defense Response Genes. International Journal of Molecular Sciences 22(2): 574. DOI: 10.3390/ijms22020574
24. Kulesza K., Biedunkiewicz A., Nowacka K., Dynowska M., **Urbaniak M**., **Stępień Ł**. (2021). Dishwashers as an Extreme Environment of Potentially Pathogenic Yeast Species. Pathogens 10(4): 446. DOI: 10.3390/pathogens10040446
25. Kwiatek M., **Belter J**., **Ulaszewski W**., Skowrońska R., Nowelska A., **Wiśniewska H**. (2021). Molecular identification of triticale introgression lines carrying leaf rust resistance genes transferred from *Aegilops kotschyi* Boiss. and *Ae. tauschii* Coss. Journal of Applied Genetics 62(3): 431-439. DOI: 10.1007/s13353-021-00635-2
26. Lorenc W., **Kruszka D**., **Kachlicki P**., Kozłowska J., Barałkiewicz D. (2021). Zastosowanie zaawansowanych technik sprzężonych LC ICP DRC MS i UPLC ESI MS MS w analizie specjacyjnej arsenu w algach. Analityka XXII(3): 22-28.
27. Manawasinghe I.S., Phillips A.J.L., Xu J., Balasuriya A., Hyde K.D., **Stępień Ł**., Harishchandra D.L., Karunarathna A., Yan J., Weerasinghe J., Mei L., Dong Z., Cheewangkoon R. (2021). Defining a species in fungal plant pathology: beyond the species level. Fungal Diversity 109(2): 267-282. DOI: 10.1007/s13225-021-00481-x
28. Manohara H.M. Nayak S.S., **Franklin G**., Nataraj S.K., **Mondal D**. (2021). Progress in marine derived renewable functional materials and biochar for sustainable water purification. Green Chemistry 23: 8305. DOI: 10.1039/D1GC03054J
29. Marzec-Schmidt K., Börjesson T., Suproniene S., **Jędryczka M**., Janavičienė S., Góral T., Karlsson I., Kochiieru Y., Ochodzki P., Mankevičienė A., Piikki K. (2021). Modelling the Effects of Weather Conditions on Cereal Grain Contamination with Deoxynivalenol in the Baltic Sea Region. Toxins 13(11): 737. DOI: 10.3390/toxins13110737
30. Mieldzioc A., **Mokrzycka M**., Sawikowska A. (2021). Identification of Block-Structured Covariance Matrix on an Example of Metabolomic Data. Separations 8(11): 205. DOI: 10.3390/separations8110205
31. Mishra A., Shaik H.A., **Sinha R.K**., Shah B.R. (2021). Andrographolide: A Herbal-Chemosynthetic Approach for Enhancing Immunity, Combating Viral Infections, and Its Implication on Human Health. Molecules 26(22): 7036. DOI: 10.3390/molecules26227036

32. Mohammed M.A., Attia H.N., El-Gengaihi S.E., Maklad Y.A., Ahmed K.A., **Kachlicki P**. (2021). Comprehensive metabolomic, lipidomic and pathological profiles of baobab (*Adansonia digitata*) fruit pulp extracts in diabetic rats. Journal of Pharmaceutical and Biomedical Analysis 201: 114139. DOI: 10.1016/j.jpba.2021.114139
33. **Neji M**., Tlahig S., Hessini K., Taamalli W., Abdelly Ch., Kouas S. (2021). Variation of forage quality traits in Tunisian populations of *Brachypodium hybridum* in response to phosphorus deficiency. Crop Science 61(6): 4038-4054. DOI: 10.1002/csc2.20613
34. Ochodzki P., **Twardawska A**., **Wiśniewska H**., Góral T. (2021). Resistance to Fusarium Head Blight, Kernel Damage, and Concentrations of Fusarium Mycotoxins in the Grain of Winter Wheat Lines. Agronomy 11(9): 1690. DOI: 10.3390/agronomy11091690
35. **Ogrodowicz P**., **Mikołajczak M**., **Kuczyńska A**., **Kaczmarek Z**., **Ćwiek-Kupczyńska H**., **Surma M**., **Adamski T**., **Święcicki W.K**., Barzyk P., **Trzeciak R**., **Kempa M**. (2021). *In vitro* culture of white lupin embryos as a stage for SSD technique. Polish Journal of Agronomy 44: 9-14. DOI: 10.26114/pja.iung.432.2021.44.02
36. **Perincherry L**., **Stępień Ł**., Vasudevan S.E. (2021). Cross-Tolerance and Autoimmunity as Missing Links in Abiotic and Biotic Stress Responses in Plants: A Perspective toward Secondary Metabolic Engineering. Journal of Molecular Sciences 22(21): 11945. DOI: 10.3390/ijms222111945
37. **Perincherry L**., **Urbaniak M**., **Pawłowicz I**., Kotowska K., Waśkiewicz A., **Stępień Ł**. (2021). Dynamics of *Fusarium* Mycotoxins and Lytic Enzymes during Pea Plants' Infection. International Journal of Molecular Sciences 22(18): 9888. DOI: 10.3390/ijms22189888
38. **Perincherry L**., **Witaszak N**., **Urbaniak M**., Waśkiewicz A., **Stępień Ł**. (2021). Effects of Secondary Metabolites from Pea on *Fusarium* Growth and Mycotoxin Biosynthesis. Journal of Fungi 7(12): 1004. DOI: 10.3390/jof7121004
39. **Perlikowski D**., **Pawłowicz I**., **Lechowicz K**., **Augustyniak A**., Skirycz A., **Kosmala A**. (2021). Alterations in leaf lipidome under water deficit and rewatering in *Lolium multiflorum/Festuca arundinacea* introgression forms distinct in drought tolerance. W: Exploiting genetic diversity of forages to fulfil their economic and environmental roles (red. Hurtmann S., Bachmann-Pfabe S., Byrne S., Feuerstein U., Julier B. i in.), s. 150-152. Palacký University Olomouc. DOI: 10.5507/vup.21.24459677.35
40. **Rychel-Bielska S**., **Surma A**., **Bielski W**., Kozak B., Galek R., **Książkiewicz M**. (2021). Quantitative Control of Early Flowering in White Lupin (*Lupinus albus* L.). International Journal of Molecular Sciences 22(8): 3856. DOI: 10.3390/ijms22083856
41. Sahay S., Robledo-Arratia L., **Głowacka K**., Gupta M. (2021). Root *NRT*, *NiR*, *AMT*, *GS*, *GOGAT* and *GDH* expression levels reveal NO and ABA mediated drought tolerance in *Brassica juncea* L. Scientific Reports 11: 7992. DOI: 10.1038/s41598-021-86401-0
42. **Salamon S**., **Żok J**., Gromadzka K., **Błaszczyk L**. (2021). Expression patterns of miR398, miR167, and miR159 in the interaction between bread wheat (*Triticum aestivum* l.) and pathogenic *Fusarium culmorum* and beneficial *Trichoderma* fungi. Pathogens 10(11): 1461. DOI: 10.3390/pathogens10111461

43. Sawikowska A., Piasecka A., **Kachlicki P**., **Krajewski P**. (2021). Separation of Chromatographic Co-eluted Compounds by Clustering and by Functional Data Analysis. Metabolites 11(4): 214. DOI: 10.3390/metabo11040214
44. **Selvakesavan R.K**., **Franklin G**. (2021). Robust *in vitro* culture tools suitable for sustainable bioprospecting of the genus *Hypericum*. Industrial Crops and Products 170: 113715. DOI: 10.1016/j.indcrop.2021.113715
45. **Selvakesavan R.K**., **Franklin G**. (2021). Prospective Application of Nanoparticles Green Synthesized Using Medicinal Plant Extracts as Novel Nanomedicines. Nanotechnology, Science and Applications 14: 179-195. DOI: 10.2147/NSA.S333467
46. **Stefanowicz K**., Szymańska-Chargot M., **Truman W**., **Walerowski P**., Olszak M., **Augustyniak A**., **Kosmala A**., Zdunek A., **Malinowski R**. (2021). *Plasmodiophora brassicae*-Triggered Cell Enlargement and Loss of Cellular Integrity in Root Systems Are Mediated by Pectin Demethylation. Frontiers in Plant Science 12: 711838. DOI: 10.3389/fpls.2021.711838
47. **Stępień Ł**., **Lalak-Kańczugowska J**. (2021). Signaling pathways involved in virulence and stress response of plant pathogenic *Fusarium* species. Fungal Biology Reviews 35: 27-39. DOI: 10.1016/j.fbr.2020.12.001
48. **Święcicki W.K**., **Surma M**. (2021). The big five in the world of plants – the species that have changed the course of history. Polish Journal of Agronomy 47: 68-77. DOI: 10.26114/pja.iung.456.2021.47
49. **Talar U**., **Kiełbowicz-Matuk A**. (2021). Beyond Arabidopsis: BBX Regulators in Crop Plants. International Journal of Molecular Sciences 22(6): 2906. DOI: 10.3390/ijms22062906
50. Thiem B., **Kruszka D**., Turowska N., Śliwińska E., Berge V., Kikowska M. (2021). *Linnaea borealis* L. var. *borealis* – In Vitro Cultures and Phytochemical Screening as a Dual Strategy for Its Ex Situ Conservation and a Source of Bioactive Compounds of the Rare Species. Molecules 26(22): 6823. DOI: 10.3390/molecules26226823
51. Tyrka M., Bakera B., Szeliga M., Święcicka M., **Krajewski P**., **Mokrzycka M**., Rakoczy-Trojanowska M. (2021). Identification of *Rf* Genes in Hexaploid Wheat (*Triticum aestivum* L.) by RNA-Seq and Paralog Analyses. International Journal of Molecular Sciences 22(17): 9146. DOI: 10.3390/ijms22179146
52. Tyrka M., **Mokrzycka M.**, Bakera B., Tyrka D., Szeliga M., Stojałowski S., Matysik P., Rokicki M., Rakoczy-Trojanowska M., **Krajewski P**. (2021). Evaluation of genetic structure in European wheat cultivars and advanced breeding lines using high-density genotyping-by-sequencing approach. BMC Genomics 22: 81. DOI: 10.1186/s12864-020-07351-x
53. Winkelmuller T.M., Entila F., Anver S., Piasecka A., Song B.X., Dahms E., Sakakibara H., Gan X.C., Kulak K., Sawikowska A., **Krajewski P**., Tsiantis M., Garrido-Oter R., Fukushima K., Schulze-Lefert P., Laurent S., Bednarek P., Tsuda K. (2021). Gene expression evolution in pattern-triggered immunity within *Arabidopsis thaliana* and across Brassicaceae species. Plant Cell 33(6): 1863-1887. DOI: 10.1093/plcell/koab073
54. Yang F., Fernández Jiménez N., **Majka J**., Pradillo M., Pecinka A. (2021). Structural Maintenance of Chromosomes 5/6 Complex Is Necessary for Tetraploid Genome Stability in *Arabidopsis thaliana*. Frontiers in Plant Science 12: 748252. DOI: 10.3389/fpls.2021.74825

55. Zimny J., Sowa S., Otręba P., Kozdój J., Zimny A., **Kaczmarek J**., Oleszczuk S., Czaplicki A., **Jędryczka M**. (2021). Pollen Flow of Winter Triticale (×*Triticosecale* Wittmack) Investigated with Transgenic Line Expressing *β-Glucuronidase* Gene. Agronomy 11(3): 431. DOI: 10.3390/agronomy11030431
56. **Zwierzykowski Z**., Kopecký D. (2021). A brief history and (nearly) complete bibliography of *Festulolium*. W: *Festulolium* – from the Nature to Modern Breeding (red. Kopecký D., Kosmala A.), s. 241-279. Palacký University, Olomouc. ISBN 978-80-244-5912-7
57. **Żyła N**., **Fidler J**., **Babula-Skowrońska D**. (2021). Economic and Academic Importance of *Brassica oleracea*. W: The *Brassica oleracea* Genome. Compendium of Plant Genome (red. Liu S., Snowdon R., Kole C.), s. 1-6. Springer, Cham. DOI: 10.1007/978-3-030-31005-9_1

2022

58. Bryła M., Stępniewska S., Modrzewska M., Waśkiewicz A., Podolska G., Ksieniewicz-Woźniak E., Yoshinari T., **Stępień Ł**., **Urbaniak M**., Roszko M., Gwiazdowski R., Kanabus J., Pierzgalski A. (2022). Dynamics of Deoxynivalenol and Nivalenol Glucosylation in Wheat Cultivars Infected with *Fusarium culmorum* in Field Conditions – A 3 Year Study (2018-2020). Journal of Agricultural and Food Chemistry 70(14): 4291-4302. DOI: 10.1021/acs.jafc.2c00314
59. Bukowska-Olech E., Sowińska-Seidler A., Larysz D., Gawliński P., **Koczyk G**., Popiel D., Gurba-Bryśkiewicz L., Materna-Kiryluk A., Adamek Z., Szczepankiewicz A., Dominiak P., Glista F., Matuszewska K., Jamsheer A. (2022). Results from Genetic Studies in Patients Affected with Craniosynostosis: Clinical and Molecular Aspects. Frontiers in Molecular Biosciences 9: 865494. DOI: 10.3389/fmolb.2022.865494
60. Czembor E., **Kaczmarek Z**., Pilarczyk W., Mańkowski D., Czembor J.H. (2022). Simulating Spring Barley Yield under Moderate Input Management System in Poland. Agriculture 12(8): 1091. DOI: 10.3390/agriculture12081091
61. **Czyż K.B**., Taylor C.M., **Kawaliło M**., **Koczyk G**. (2022). Gain or Loss? Evidence for Legume Predisposition to Symbiotic Interactions with Rhizobia via Loss of Pathogen- Resistance-Related Gene Families. International Journal of Molecular Sciences 23(24): 16003. DOI: 10.3390/ijms232416003
62. Frąc M., Hannula E.S., Bełka M., Salles J.F., **Jędryczka M**. (2022). Soil mycobiome in sustainable agriculture. Frontiers in Microbiology 13: 1033824. DOI: 10.3389/fmicb.2022.1033824
63. Frąc M., **Kaczmarek J**., **Jędryczka M**. (2022). Metabolic Capacity Differentiates *Plenodomus lingam* from *P. biglobosus* Subclade 'brassicae', the Causal Agents of Phoma Leaf Spotting and Stem Canker of Oilseed Rape (*Brassica napus*) in Agricultural Ecosystems. Pathogens 11(1): 50. DOI: 10.3390/pathogens11010050
64. **Gawłowska M**., Lahuta L., Boros L., **Sawikowska A**., **Kumar P**., Knopkiewicz M., **Kaczmarek Z**., **Święcicki W**. (2022). Validation of Molecular Markers Significant for Flowering Time, Plant Lodging, Stem Geometry Properties, and Raffinose Family Oligosaccharides in Pea (*Pisum sativum* L.). Agriculture 12(8): 1125. DOI: 10.3390/agriculture12081125

65. Hall R.D., D'Auria J.C., Ferreira A.C.S., Gibon Y., **Kruszka D**., Mishra P., van de Zedde R. (2022). High-throughput plant phenotyping: a role for metabolomics? Trends in Plant Science 27: 549-563. DOI: 10.1016/j.tplants.2022.02.001
66. Kamath S.V., Mruthunjayappa M.H., **Mondal D**., Kotrappanavar N.S. (2022). Nanocomposite-based high- performance adsorptive water filters: recent advances, limitations, nanotoxicity and environmental implications. Environmental Science: Nano 9: 7. DOI: 10.1039/d2en00155a
67. Kamrani Y.Y., Shomali A., Aliniaeifard S., Lastochkina O., Moosavi-Nezhad M., Hajinajaf N., **Talar U**. (2022). Regulatory Role of Circadian Clocks on ABA Production and Signaling, Stomatal Responses, and Water-Use Efficiency under Water-Deficit Conditions. Cells 11(7): 1154. DOI: 10.3390/cells11071154
68. **Kiełbowicz-Matuk A**., **Grądzka K**., **Biegańska M**., **Talar U**., **Czarnecka J**., **Rorat T**. (2022). The StBBX24 protein affects thefloral induction and mediates salt tolerance in *Solanum tuberosum*. Frontiers in Plant Science 13: 965098. DOI: 10.3389/fpls.2022.965098
69. Kopecký D., Scholten O., **Majka J**., Burger-Meijer K., Duchoslav M., Bartoš J. (2022). Genome Dominance in *Allium* Hybrids (*A. cepa* × *A. roylei*). Frontiers in Plant Science 13: 854127. DOI: 10.3389/fpls.2022.854127
70. Korchanová Z., Švec M., Janáková E., Lampar A., **Majka M**., Holušová K., Bonchev G., Juračka J., Cápal P., Valárik M. (2022). Identification, High-Density Mapping, and Characterization of New Major Powdery Mildew Resistance Loci From the Emmer Wheat Landrace GZ1. Frontiers in Plant Science 13: 897697. DOI: 10.3389/fpls.2022.897697
71. **Kroc M**., **Tomaszewska M**., **Czepiel K**., **Neji M**., **Susek K**. (2022). A new dimension of lupin genetic resources conservation and management: perspective from the INCREASE project. Legume Perspectives 22: 23-25.
72. **Kruszka D**., **Selvakesavan R.K**., **Kachlicki P**., **Franklin G**. (2022). Untargeted analysis reveals the elicitation of important secondary metabolites upon treatment with various metal and metal oxide nanoparticles in *Hypericum perforatum* L. cell suspension culture. Industrial Crops and Products 178: 114561. DOI: 10.1016/j.indcrop.2022.114561
73. **Książkiewicz M**., **Rychel-Bielska S**., **Plewiński P**., **Bielski W**., **Nuc M**., Kozak B., **Krajewski P**., **Jędryczka M**. (2022). A successful defense of the narrow-leafed lupin against anthracnose involves quick and orchestrated reprogramming of oxidation-reduction, photosynthesis and pathogenesis-related genes. Scientific Reports 12(1): 8164. DOI: 10.1038/s41598-022-12257-7
74. **Mikołajczak K**., **Kuczyńska A**., **Ogrodowicz P**., **Kiełbowicz-Matuk A**., **Ćwiek-Kupczyńska H**., Daszkowska-Golec A., Szarejko I., **Surma M**., **Krajewski P**. (2022). High-throughput sequencing data revealed genotype-specific changes evoked by heat stress in crown tissue of barley *sdw1* near-isogenic lines. BMC Genomics 23(1): 177. DOI: 10.1186/s12864-022-08410-1
75. Modrzewska M., **Błaszczyk L**., **Stępień Ł**., **Urbaniak M**., Waśkiewicz A., Yoshinari T., Bryła M. (2022). *Trichoderma* versus *Fusarium* – inhibition of pathogen growth and mycotoxins synthesis. Molecules 27(23): 8146. DOI: 10.3390/molecules27238146
76. Mohammed M.A., Hamed M.A., El-Gengaihi S.E., Enein A.M.A., **Kachlicki P**., Hassan E.M. (2022). Profiling of secondary metabolites and DNA typing of

three different *Annona* cultivars grown in Egypt. Metabolomics 18(7): 49. DOI: 10.1007/s11306-022-01911-w

77. **Mokrzycka M**., Stojałowski S., Tyrka M., Matysik P., Żmijewska B., Marcinkowski R., Woźna-Pawlak U., Martofel R., Rokicki M., Rakoczy-Trojanowska M., **Krajewski P**. (2022). Genome-Wide Association Analysis for Hybrid Breeding in Wheat. International Journal of Molecular Sciences 23(23): 15321. DOI: 10.3390/ijms232315321
78. Mruthunjayappa M.H., Kotrappanavar N.S., **Mondal D**. (2022). New prospects on solvothermal carbonisation assisted by organic solvents, ionic liquids and eutectic mixtures – A critical review. Progress in Materials Science 126: 100932. DOI: 10.1016/j.pmatsci.2022.100932
79. Mruthunjayappa M.H., Kotrappanavar N.S., **Mondal D**. (2022). Bioinspired engin eering protein nanofibrils-based multilayered self-cleaning membranes for universal water purification. Journal of Hazardous Materials 424: 127561. DOI: 10.1016/j.jhazmat.2021.127561
80. **Ortega-Berlanga B**., **Pniewski T**. (2022). Plant-Based Vaccines in Combat against Coronavirus Diseases. Vaccines 10(2): 138. DOI: 10.3390/vaccines10020138
81. **Perlikowski D**., **Lechowicz K**., **Pawłowicz I**., Arasimowicz-Jelonek M., **Kosmala A**. (2022). Scavenging of nitric oxide up-regulates photosynthesis under drought in *Festuca arundinacea* and *F. glaucescens* but reduces their drought tolerance. Scientific Reports 12(1): 6500. DOI: 10.1038/s41598-022-10299-5
82. **Perlikowski D**., **Lechowicz K**., Skirycz A., Michaelis A., **Pawłowicz I**., **Kosmala** A. (2022). The Role of Triacylglycerol in the Protection of Cells against Lipotoxicity under Drought in *Lolium multiflorum/Festuca arundinacea* Introgression Forms. Plant and Cell Physiology 63(3): 353-368. DOI: 10.1093/pcp/pcac003
83. Piasecka A., Sawikowska A., **Witaszak N**., Waśkiewicz A., Kańczurzewska M., **Kaczmarek J**., Lalak-Kańczugowska J. (2022). Metabolomic Aspects of Conservative and Resistance-Related Elements of Response to *Fusarium culmorum* in the Grass Family. Cells 11(20): 3213. DOI: 10.3390/cells11203213
84. **Plewiński P**., **Rychel-Bielska S**., Kozak B., Maureira-Butler I.J., Iqbal M.M., Nelson M.N., **Książkiewicz M**. (2022). *FLOWERING LOCUS T* indel variants confer vernalization-independent and photoperiod-insensitive flowering of yellow lupin (*Lupinus luteus* L.). Horticulture Research 9: uhac180. DOI: 10.1093/hr/uhac180
85. **Pradeep M**., **Franklin G**. (2022). Understanding the hypericin biosynthesis via reversible inhibition of dark gland development in *Hypericum perforatum* L. Industrial Crops and Products 182: 114876. DOI: 10.1016/j.indcrop.2022.114876
86. **Pradeep M**., **Kruszka D**., **Kachlicki P**., **Mondal D**., **Franklin G**. (2022). Uncovering the Phytochemical Basis and the Mechanism of Plant Extract-Mediated Eco-Friendly Synthesis of Silver Nanoparticles Using Ultra-Performance Liquid Chromatography Coupled with a Photodiode Array and High-Resolution Mass Spectrometry. ACS Sustainable Chemistry & Engineering 10(1): 562-571. DOI: 10.1021/acssuschemeng.1c06960
87. Puttaswamy R., Mondal C., **Mondal D**., Ghosh D. (2022). An account on the deep eutectic solvents-based electrolytes for rechargeable batteries and

supercapacitors. Sustainable Materials and Technologies 33: e00477. DOI: 10.1016/j.susmat.2022.300477

88. Rocchetti L., Gioia T., Logozzo G., Brezeanu C., Pereira G.L, De la Rosa L.D., Marzario S., Pieri A., Fernie A.R., Alseekh S., **Susek K**., Cook D.R., Varshney R.K., Agrawal S.K., Hamwieh A., Bitocchi E., Papa R. (2022). Towards the development, maintenance and standardized phenotypic characterization of single-seed-descent genetic resources for chickpea. Current Protocols 2(2): e371. DOI: 10.1002/cpz1.371
89. Shet S.M., Bharadwaj P., Bisht M., Pereira M.M., Thayallath S.K., **Lokesh V**., **Franklin G**., Kotrappanavar N.S., **Mondal D**. (2022). Presenting B-DNA as macromolecular crowding agent to improve efficacy of cytochrome *c* under various stresses. International Journal of Biological Macromolecules 215: 184-191. DOI: 10.1016/j.ijbiomac.2022.06.093
90. **Singh D**., **Blicharz S**., **Stefanowicz K**., Ragni L., Michalak K., Bagniewska-Zadworna A., **Malinowski R**. (2022). Combining Clearing and Fluorescence Microscopy for Visualising Changes in Gene Expression and Physiological Responses to *Plasmodiophora brassicae*. Journal of Visualized Experiments 186: e64297. DOI: 10.3791/64297
91. Szała L., **Kaczmarek Z**., Matuszczak M., Cegielska-Taras T. (2022). Genetic Variability in a Population of Oilseed Rape DH Lines Developed from F-1 Hybrids of a Cross between Black- and Yellow-Seeded DH Lines. II. Seed Quality. Agriculture 12(3): 340. DOI: 10.3390/agriculture12030340
92. Szwarc J., Niemann J., **Kaczmarek J**., Bocianowski J., Weigt D. (2022). Genetic Relationship of Brassicaceae Hybrids with Various Resistance to Blackleg Is Disclosed by the Use of Molecular Markers. Current Issues in Molecular Biology 44(9): 4290-4302. DOI: 10.3390/cimb44090295
93. Szwarc J., Niemann J., **Kaczmarek J**., **Majka J**., Bocianowski J. (2022). Novel *Brassica* hybrids with different resistance to *Leptosphaeria maculans* reveal unbalanced rDNA signal patterns. Open Life Sciences 17: 1. DOI: 10.1515/biol-2022-0032
94. Uwineza P.A., **Urbaniak M**., Bryła M., **Stępień Ł**., Modrzewska M., Waśkiewicz A. (2022). In Vitro Effects of Lemon Balm Extracts in Reducing the Growth and Mycotoxins Biosynthesis of *Fusarium culmorum* and *F. proliferatum*. Toxins 14(5): 355. DOI: 10.3390/toxins14050355
95. Waśkiewicz A., Muzolf-Panek M., **Stępień Ł**., Czembor E., Uwineza P.A., Górnaś P., Bryła M. (2022). Variation in Tocochromanols Level and Mycotoxins Content in Sweet Maize Cultivars after Inoculation with *Fusarium verticillioides* and *F. proliferatum*. Foods 11(18): 2781. DOI: 10.3390/foods1118278
96. Zamani-Noor N., Wallenhammar A-Ch., **Kaczmarek J**., Patar U.R., Zouhar M., Manasova M., **Jędryczka M**. (2022). Pathotype Characterization of *Plasmodiophora brassicae*, the Cause of Clubroot in Central Europe and Sweden (2016-2020). Pathogens 11(12): 1440. DOI: 10.3390/pathogens11121440

2023

97. Bharadwaj P., Sarkar D.K., **Bisht M**., Shet S.M., Kotrappanavar N.S., **Lokesh V**., **Franklin G**., Brezovsky J., **Mondal D**. (2023). Nano-structured hydrotrope-

caged cytochrome *c* with boosted stability in harsh environments: a molecular insight. Green Chemistry 25: 6666. DOI: 10.1039/d3gc01704d

98. **Bisht M**., Thayallath S.K., Bharadwaj P., **Franklin G**., **Mondal D**. (2023). Biomass-derived functional materials as carriers for enzymes: towards sustainable and robust biocatalysts. Green Chemistry 25: 4591. DOI: 10.1039/d2gc04792f
99. **Błaszczyk L**., **Ćwiek-Kupczyńska H**., Hoppe Gromadzka K., **Basińska-Barczak A**., **Stępień Ł**., **Kaczmarek J**., Lenc L. (2023). Containment of *Fusarium culmorum* and Its Mycotoxins in Various Biological Systems by Antagonistic *Trichoderma* and *Clonostachys* Strains. Journal of Fungi 9(3): 289. DOI: 10.3390/jof9030289
100. Boller B., Schneider M.K., Zhao C., Bartoš J., **Majka J**., Kopecký D. (2023). *Festuca apennina* × *F. pratensis* triploid hybrids exceed their parents in adaptation to broad-environmental conditions. Alpine Botany 133(1): 43-55. DOI: 10.1007/s00035-022- 00290-1
101. Bryła M., Damaziak K., Twarużek M., Waśkiewicz A., **Stępień Ł**., Roszko M., Pierzgalski A., Soszczyńska E., Łukasiewicz-Mierzejewska M., Chmiel M., Wójcik W. (2023). Toxico-pathological effects of ochratoxin A and its diastereoisomer under in ovo conditions and in vitro evaluation of the toxicity of these toxins against the embryo *Gallus gallus* fibroblast cell line. Poultry Science 102(2): 102413. DOI: 10.1016/j.psj.2022.102413
102. Bulut M., Wendenburg R., Bitocchi E., Bellucci E., **Kroc M**., Gioia T., **Susek K**., Papa R., Fernie A.R., Alseekh S. (2023). A comprehensive metabolomics and lipidomics atlas for the legumes common bean, chickpea, lentil and lupin. The Plant Journal 116: 1152-1171. DOI: 10.1111/tpj.16329
103. **Czepiel K**., **Kroc M**., **Burdzińska A**., **Krajewski P**., Barzyk P., **Święcicki W**. (2023). Evaluation of alkaloids in yellow lupin (*Lupinus luteus* L.): New insight to genetic resources diversity and future breeding perspectives. Scientia Horticulturae 321: 112279. DOI: 10.1016/j.scienta.2023.112279
104. Frąc M., **Jędryczka M**., Hannula E.S. (2023). Editorial: Soil fungal biodiversity for plant and soil health, volume II. Frontiers in Microbiology 14: 1170312. DOI: 10.3389/fmicb.2023.1170312
105. Gajewska J., Floryszak-Wieczorek J., **Kosmala A**., **Perlikowski D**., Żywicki M., Sobieszczuk-Nowicka E., Judelson H.S., Arasimowicz-Jelonek M. (2023). Insight into metabolic sensors of nitrosative stress protection in *Phytophthora infestans*. Frontiers in Plant Science 14: 1148222. DOI: 10.3389/fpls.2023.1148222
106. **Głowacka K**., Kromdijk J., Salesse-Smith C.E., Smith C., Driever S.M., Long S.P. (2023). Is chloroplast size optimal for photosynthetic efficiency? New Phytologist 239(6): 2197-2211. DOI: 10.1111/nph.19091
107. Havis N.D., **Kaczmarek J**., **Jędryczka M**., Hess M., Fang Z. (2023). Spore dispersal patterns of the ascomycete fungus *Ramularia collo-cygni* and their influence on disease epidemics. Aerobiologia 39: 105-118. DOI: 10.1007/s10453-022-09778-z
108. Hoppe K., **Chełkowski J**., **Błaszczyk L**., Bocianowski J. (2023). Observation of changes in *Fusarium* mycotoxin profiles in maize grain over the last decade in Poland. Food Control 158(6): 110248. DOI: 10.1016/j.foodcont.2023.110248
109. Jaskiewicz K., Maleszka-Kurpiel M., Matuszewska E., Kabza M., Rydzanicz M., **Malinowski R**., Ploski R., Matysiak J., Gajecka M. (2023). The Impaired

Wound Healing Process Is a Major Factor in Remodeling of the Corneal Epithelium in Adult and Adolescent Patients With Keratoconus. Investigative Ophthalmology and Visual Science 64(2): 22. DOI: 10.1167/iovs.64.2.22

110. **Jędryczka M**., Żuraw B., Zagórski P., Rodzik J., Mędrek K., Pidek I.A., Haratym W., **Kaczmarek J**., Sadyś M. (2023). The origin of pine pollen grains captured from air at Calypsobyen, Svalbard. Polish Polar Research 44(3): 313-338. DOI: 10.24425/ppr.2022.143312
111. Kaczmarek D.K., Pacholak A., Burlaga N., Wojcieszak M., Materna K., **Kruszka D**., Dąbrowski P., **Sobańska K**., Kaczorek E. (2023). Dicationic Ionic Liquids with an Indole-3-butyrate Anion – Plant Growth Stimulation and Ecotoxicological Evaluations. ACS Sustainable Chemistry & Engineering 11(36): 13282-13297. DOI: 10.1021/acssuschemeng.3c02286
112. Kwiatek M.T., Noweiska A., Bobrowska R., **Czapiewska A**., Aygün M., Munyamahoro F.D., Mikołajczyk S., Tomkowiak A., Kurasiak-Popowska D., Pośledník P. (2023). Novel Tetraploid *Triticale* (Einkorn Wheat × Rye) – A Source of Stem Rust Resistance. Plants 12(2): 278. DOI: 10.3390/plants12020278
113. Lalak-Kańczugowska J., **Witaszak N**., Waśkiewicz A., Bocianowski J., **Stępień Ł**. (2023). Plant Metabolites Affect *Fusarium proliferatum* Metabolism and In Vitro Fumonisin Biosynthesis. International Journal of Molecular Sciences 24(3): 3002. DOI: 10.3390/ijms24033002
114. Mahelka V., Kopecký D., **Majka J**., Krak K. (2023). Uniparental expression of ribosomal RNA in × *Festulolium* grasses: a link between the genome and nucleolar dominance. Frontiers in Plant Science 14: 1276252. DOI: 10.3389/fpls.2023.1276252
115. **Majka J**., Glombik M., Doležalová A., Knerová J., Ferreira M.T.M., **Zwierzykowski Z**., Duchoslav M., Studer B., Doležel J., Bartoš J., Kopecký D. (2023). Both male and female meiosis contribute to non-Mendelian inheritance of parental chromosomes in interspecific plant hybrids (*Lolium* × *Festuca*). New Phytologist 238: 624-636. DOI: 10.1111/nph.18753
116. **Majka M**., Janaková E., Jakobson I., Järve K., Cápal P., Korchanová Z., Lampar A., Juracká J., Valárik M. (2023). The chromatin determinants and *Ph1* gene effect at wheat sites with contrasting recombination frequency. Journal of Advanced Research 53: 75-85. DOI: 10.1016/j.jare.2023.01.002
117. Mancinotti D., **Czepiel K**., Taylor J.L., Galehshahi H.G., Møller L.A., Jensen M.K., Motawia M.S., Hufnagel B., Soriano A., Yeheyis L., Kjaerulff L., Péret B., Staerk D., Wendt T., Nelson M.N., **Kroc M**., Geu-Flores F. (2023). The causal mutation leading to sweetness in modern white lupin cultivars. Science Advances 9(31): eadg8866. DOI: 10.1126/sciadv.adg8866
118. **Mikołajczak K**., **Kuczyńska A**., **Krajewski P**., **Kempa M**., **Nuc M**. (2023). Transcriptome profiling disclosed the effect of single and combined drought and heat stress on reprogramming of genes expression in barley flag leaf. Frontiers in Plant Science 13: 1096685. DOI: 10.3389/fpls.2022.1096685
119. **Mikołajczak K**., **Kuczyńska A**., **Krajewski P**., **Kempa M**., **Witaszak N**. (2023). Global Proteome Profiling Revealed the Adaptive Reprogramming of Barley Flag Leaf to Drought and Elevated Temperature. Cells 12(13): 1685. DOI: 10.3390/cells12131685
120. Nartea A., Kuhalskaya A., Fanesi B., Orhotohwo O.L., **Susek K**., Rocchetti L., Di Vittori V., Bitocchi E., Pacetti D., Papa R. (2023). Legume by products as

ingredients for food applications: Preparation, nutrition, bioactivity, and techno-functional properties. Comprehensive Reviews in Food Science and Food Safety 22(3): 1953-1985. DOI: 10.1111/1541-4337.13137

121. Nowak A., Kutyła M., **Kaczmarek J**., Jaroszuk-Ściseł J., **Jędryczka M**. (2023). Differences in the Production of Extracellular Polymeric Substances (EPS) and Other Metabolites of Plenodomus (*Leptosphaeria*) Infecting Winter Oilseed Rape (*Brassica napus* L.). Metabolites 13(6): 759. DOI: 10.3390/metabo13060759
122. **Ochoa J.C**., **Mukhopadhyay S**., Bieluszewski T., **Jędryczka M**., **Malinowski R**., **Truman W**. (2023). Natural variation in Arabidopsis responses *to Plasmodiophora brassicae* reveals an essential role for *Resistance to Plasmodiophora brasssicae 1 (RPB1)*. The Plant Journal 116(5): 1421-1440. DOI: 10.1111/tpj.16438
123. **Ogrodowicz P**., **Kuczyńska A**., **Krajewski P**., **Kempa M**. (2023). The effects of heading time on yield performance and *HvGAMYB* expression in spring barley subjected to drought. Journal of Applied Genetics 64(2): 289-302. DOI: 10.1007/s13353-023-00755-x
124. **Ogrodowicz P**., **Mikołajczak K**., **Kempa M**., **Mokrzycka M**., **Krajewski P**., **Kuczyńska A**. (2023). Genome-wide association study of agronomical and root-related traits in spring barley collection grown under field conditions. Frontiers in Plant Science 14: 1077631. DOI: 10.3389/fpls.2023.1077631
125. **Ogrodowicz P**., Wojciechowicz M.K., **Kuczyńska A**., **Krajewski P**., **Kempa, M**. (2023). The Effects of Growth Modification on Pollen Development in Spring Barley (*Hordeum vulgare* L.) Genotypes with Contrasting Drought Tolerance. Cells 12(12): 1656. DOI: 10.3390/cells12121656
126. **Ortega-Berlanga B**., **Pniewski T**. (2023). Plant Molecular Pharming: Opportunities, Challenges, and Future Perspectives. In: Kole C., Chaurasia A., Hefferon K.L., Panigrahi J. (eds), Tools & Techniques of Plant Molecular Farming. Concepts and Strategies in Plant Sciences. Springer, Singapore. DOI: 10.1007/978-981-99-4859-8_2
127. Papalini S., Di Vittori V., Pieri A., Allegrezza M., Frascarelli G., Nanni L., Bitocchi E., Bellucci E., Gioia T., Pereira L.G., **Susek K**., Tenaillon M., Neumann K., Papa R. (2023). Challenges and Opportunities behind the Use of Herbaria in Paleogenomics Studies. Plants 12(19): 3452. DOI: 10.3390/plants12193452
128. **Perlikowski D**., Skirycz A., Marczak Ł., **Lechowicz K**., **Augustyniak A**., Michäelis A., **Kosmala A**. (2023). Metabolism of crown tissue is crucial for drought tolerance and recovery after stress cessation in *Lolium/Festuca* forage grasses. Journal of Experimental Botany 74(1): 396-414. DOI: 10.1093/jxb/erac398
129. **Pniewski T**., Kęsik-Brodacka M. (2023). Biofarmaceutyki wytwarzane metodami inżynierii genetycznej. W: Bal J. (red.) Genetyka medyczna i molekularna, rozdz. 18, s. 573-621. PWN Warszawa, wydanie 2. ISBN 978-83-01-23089-0; DOI: 10.53271/2023.089
130. Rodrigues de Queiroz A., Hines C., Brown J., Sahay S., Vijayan J., Stone J.M., Bickford N., Wuellner M., **Głowacka K**., Buan N.R., Roston R.L. (2023). The effects of exogenously applied antioxidants on plant growth and resilience. Phytochemistry Reviews 22: 407-447. DOI: 10.1007/s11101-023-09862-3

131. Sahay S., Grzybowski M., Schnable J.C., **Głowacka K**. (2023). Genetic control of photoprotection and photosystem II operating efficiency in plants. New Phytologist 239(3): 1068-1082. DOI: 10.1111/nph.18980
132. **Salamon S**., **Mikołajczak K**., **Błaszczyk L**. (2023). Constellation of the endophytic mycobiome in spring and winter wheat cultivars grown under various conditions. Scientific Reports 13: 6089. DOI 10.1038/s41598-023-33195-y [Author Correction: Scientific Reports 13:8277. DOI: 10.1038/s41598-023-35261-x]
133. **Selvakesavan R.K**., **Kruszka D**., **Shakya P**., **Mondal D**., **Franklin G**. (2023). Impact of Nanomaterials on Plant Secondary Metabolism. In: Nanomaterial Interactions with Plant Cellular Mechanisms and Macromolecules and Agricultural Implications, Springer, Cham, pp. 133-170. DOI: 10.1007/978-3-031-20878-2_6
134. **Sobańska K**., Jedryszek P., Kern C., **Basińska-Barczak A**., **Pniewski T**., Long S.P. (2023). An efficient indirect plant regeneration from shoot apical meristem (SAM) derived embryogenic callus of *Miscanthus* × *giganteus*. Biocatalysis and Agricultural Biotechnology 47: 102576: DOI: 10.1016/j.bcab.2022.102576
135. Spychała J., Tomkowiak A., Noweiska A., Bobrowska R., Bocianowski J., **Książkiewicz M**., Sobiech A., Kwiatek M.T. (2023). Expression profiling of the slow rusting resistance genes *Lr34/Yr18* and *Lr67/Yr46* in common wheat (*Triticum aestivum* L.) and associated miRNAs patterns. Genes 14(7): 1376: DOI: 10.3390/genes14071376
136. **Stępień Ł**. (2023). Plant-Pathogenic *Fusarium* Species. Journal of Fungi 9(1): 13. DOI: 10.3390/jof9010013
137. Szwarc J., Niemann J., Bocianowski J., **Kaczmarek J**., Doğu M.Z., Nowicka, A. (2023). Improving the Selection Efficiency of Breeding Material within Interspecific Brassicaceae Hybrids with Genomic Prediction and Phenotyping. Agriculture 13(5): 962. DOI: 10.3390/agriculture13050962
138. Thayallath S.K., Shet S.M., **Bisht M**., Bharadwaj P., Pereira M.M., **Franklin G**., Nataraj S.K., **Mondal D**. (2023). Designing protein nano-construct in ionic liquid: a boost in efficacy of cytochrome *c* under stresses. Chemical Communications 59: 5894-5897. DOI: 10.1039/d3cc00644a
139. Tronina T., Łużny M., Dymarska M., **Urbaniak M**., Kozłowska E., Piegza M., **Stępień Ł**., Janeczko T. (2023). Glycosylation of Quercetin by Selected Entomopathogenic Filamentous Fungi and Prediction of Its Products' Bioactivity. International Journal of Molecular Sciences 24(14): 11857. DOI: 10.3390/ijms241411857
140. Tyrka M., **Krajewski P**., Bednarek P.T., Rączka K., Drzazga T., Matysik P., Martofel R., Woźna-Pawlak U., Jasińska D., Niewińska M., Ługowska B., Ratajczak D., Sikora T., Witkowski E., Dorczyk A., Tyrka D. (2023). Genome-wide association mapping in elite winter wheat breeding for yield improvement. Journal of Applied Genetics 64: 377-391. DOI: 10.1007/s13353-023-00758-8 [Correction: Journal of Applied Genetics 64: 599. DOI: 10.1007/s13353-023-00760-0]
141. Uwineza P.A., **Urbaniak M**., **Stępień Ł**., Gramza-Michałowska A., Waśkiewicz A. (2023). *Lamium album* flower extracts: a novel approach for controlling *Fusarium* growth and mycotoxin biosynthesis. Toxins 15(11): 651. DOI: 10.3390/toxins15110651

142. Wawrocka A., Socha M., Walczak-Sztulpa J., **Koczyk G.**, Skorczyk-Werner A., Krawczyński M.R. (2023). Molecular Re-Diagnosis with Whole-Exome Sequencing Increases the Diagnostic Yield in Patients with Non-Syndromic Retinitis Pigmentosa. Diagnostics 13: 730. DOI: 10.3390/diagnostics13040730
143. You Y., **Koczyk G.**, **Nuc M.**, Morbitzer R., Holmes D.R., von Roepenack-Lahaye E., Hou S., Giudicatti A., Gris C., Manavella P.A., Noël L.D., **Krajewski P.**, Lahaye T. (2023). The eINTACT system dissects bacterial exploitation of plant osmosignalling to enhance virulence. Nature Plants 9(1): 128-141. DOI: 10.1038/s41477-022-01302-y
144. **Żyła N.**, **Babula-Skowrońska D**. (2023). Evolutionary Consequences of Functional and Regulatory Divergence of HD-Zip I Transcription Factors as a Source of Diversity in Protein Interaction Networks in Plants. Journal of Molecular Evolution 91(5): 581-597. DOI: 10.1007/s00239-023-10121-4

2024

145. Bharadwaj P., Shet S.M., **Bisht M.**, Sarkar D.K., **Franklin G.**, Kotrappanavar N.S., **Mondal D**. (2024). Suitability of Adenosine Derivatives in Improving the Activity and Stability of Cytochrome c under Stress: Insights into the Effect of Phosphate Groups. The Journal of Physical Chemistry B 128(1): 86-95. DOI: 10.1021/acs.jpcb.3c05996
146. Cook S., **Jędryczka M**. (2024). Integrated pest control in oilseed crops-new advances from the rapeseed research community. Pest Management Science 80(5): 2217-2219. DOI: 10.1002/ps.8078
147. Filipiak K., Klein D., **Mokrzycka M**. (2024). Discrepancy between structured matrices in the power analysis of a separability test. Computational Statistics & Data Analysis 192: 107907. DOI: 10.1016/j.csda.2023.107907
148. Hermosaningtyas A.A., **Kruszka D.**, **Juszczyk K.**, Rewers M., Budzianowska A., Yanti Y., Kikowska M. (2024). Morphological, cytogenetic, and phytochemical estimation of *Lychnis flos-cuculi* L. cell cultures: can cell biomass be a source of bioactive compounds? Plant Cell, Tissue and Organ Culture 159(4): … DOI: 10.1007/s11240-024-02859-6
149. Jakovljević D., **Kruszka D.**, Waligórski P., Warchoł M., Skrzypek E. (2024). Untargeted metabolomic in basil cell cultures – a case study of *Ocimum basilicum* L. var. *minimum* Alef. Physiologia Plantarum 176(1): e14203. DOI: 10.1111/ppl.14203
150. **Kaczmarek J.**, West J., King K.M., Canning G.G.F., Latunde-Dada A.O., Huang Y., Fitt B.D.L., **Jędryczka M**. (2024). Efficient qPCR estimation and discrimination of airborne inoculum of *Leptosphaeria maculans* and *L. biglobosa*, the causal organisms of phoma leaf spotting and stem canker of oilseed rape. Pest Management Science 80(5): 2453-2460. DOI: 10.1002/ps.7800
151. **Kempa M.**, **Mikołajczak K.**, **Ogrodowicz P.**, **Pniewski T.**, **Krajewski P.**, **Kuczyńska A**. (2024). The impact of multiple abiotic stresses on *ns-LTP2.8* gene transcript and ns-LTP2.8 protein accumulation in germinating barley (*Hordeum vulgare* L.) embryos. PLoS ONE 19(3): e0299400. DOI: 10.1371/journal.pone.0299400
152. **Khodaeiaminjan M.**, **Gomes C.**, Pagano A., **Kruszka D.**, Sulima P., Przyborowski J.A.. **Krajewski P.**, **Paiva J.A.P**. (2024). Impacts of *in vitro* zebularine

treatment on genome-wide DNA methylation and transcriptomic profiles in *Salix purpurea* L. Physiologia Plantarum 176(3): e14403. DOI: 10.1111/ppl.14403
153. Kumar P., Alok A., Kaur K., Gawlowska G., Tiwari S., Singh H., **Święcicki W. K**., Awasthi P. (2024). Genome-Wide Identification of WRKY Transcription Factors in Pea (*Pisum sativum* L.) and their Response to Sulfur and Water Stress. Plant Molecular Biology Reporter … DOI: 10.1007/s11105-024-01498-7
154. **Malinowski R**., **Singh D**., **Kasprzewska A**., **Blicharz S**., **Basińska-Barczak A**. (2024). Vascular tissue – boon or bane? How pathogens usurp long-distance transport in plants and the defence mechanisms deployed to counteract them. New Phytologist 243(6): 2075-2092. DOI: 10.1111/nph.20030
155. Marciniak K., Przedniczek K., Kęsy J., **Święcicki W**., Kopcewicz J. (2024). The development of yellow lupin anthers depends on the relationship between jasmonic acid and indole-3-acetic acid. Physiologia Plantarum ….. DOI: 10.1111/ppl.14385
156. Matuszkiewicz M., Grądzielewska A., Święcicka M., Ozturk A., **Mokrzycka M**., Igbari A.D., Song J., Kilian A., Rakoczy-Trojanowska M. (2024). Identification of quantitative trait loci associated with leaf rust resistance in rye by precision mapping. BMC Plant Biology 24: 291. DOI: 10.1186/s12870-024-04960-6
157. Mikołajczyk-Bator K., Błaszczyk A., Czyżniejewski M., **Kachlicki P**., Stochmal A. (2024). Metabolite profiling of triterpene saponins from different red beetroot cultivars using ultra-high performance liquid chromatography high-resolution mass spectrometry. Journal of Food Composition and Analysis 130(1): 106141. DOI: 10.1016/j.jfca.2024.106141
158. Mleczek M., Siwulski M., Budka A., Niedzielski P., Mleczek P., Kuczyńska-Kippen N., Budzyńska S., Karolewski Z., Kalač P., **Jędryczka M**. (2024). Can the concentration of elements in wild-growing mushrooms be deduced from the taxonomic rank? Environmental Research 252(4): 119079. DOI: 10.1016/j.envres.2024.119079
159. Mohammed M.A., Elzefzafy N., El-Khadragy M.F., Alzahrani A., Yehia H.M., **Kachlicki P**. (2024). Comprehensive Tools of Alkaloid/Volatile Compounds–Metabolomics and DNA Profiles: Bioassay-Role-Guided Differentiation Process of Six *Annona* sp. Grown in Egypt as Anticancer Therapy. Pharmaceuticals 17(1): 103. DOI: 10.3390/ph17010103
160. **Rychel-Bielska S**., **Bielski W**., Surma A., Annicchiarico P., **Belter J**., Kozak B., Galek R., Harzic N., **Książkiewicz M**. (2024). A GWAS study highlights significant associations between a series of indels in a *FLOWERING LOCUS T* gene promoter and flowering time in white lupin (*Lupinus albus* L.). BMC Plant Biology 24(1): 722. DOI: 10.1186/s12870-024-05438-1
161. **Rychel-Bielska S**., **Książkiewicz M**., Kurasiak-Popowska D., Tomkowiak A., **Bielski W**., Weigt D., Niemann J., Surma A., Kozak B., Nawracała J. (2024). Molecular selection of soybean towards adaptation to Central European agroclimatic conditions. Journal of Applied Genetics ….. . DOI: 10.1007/s13353-024-00889-6
162. Shahbazi M., **Majka J**., Kubíková D., **Zwierzykowski Z**., Glombik M., Wendel J.F., Sharbrough J., Hartmann S., Szecówka M., Doležel J., Bartoš J., Kopecký D., Kneřová J. (2024). Cytonuclear interplay in auto- and allopolyploids: a multifaceted perspective from the *Festuca-Lolium* complex. The Plant Journal 118: 1102-1118. DOI: 10.1111/tpj.16659

163. Spasibionek S., Mikołajczyk K., Matuszczak M., **Kaczmarek J**., **Ramzi N**., **Jędryczka M**. (2024). HO-CR and HOLL-CR: new forms of winter oilseed rape (*Brassica napus* L.) with altered fatty acid composition and resistance to selected pathotypes of *Plasmodiophora brassicae* (clubroot). Journal of Applied Genetics 65: 439-452. DOI: 0.1007/s13353-024-00867-y
164. Wojciechowska D., **Salamon S**., Wróblewska-Seniuk K. (2024). It's time to shed some light on the importance of fungi in neonatal intensive care units: what do we know about the neonatal mycobiome? Frontiers in Microbiology 15: 1355418. DOI: 10.3389/fmicb.2024.1355418
165. Zamani-Noor N., **Jędryczka M**. (2024). Pathotyping Systems and Pathotypes of *Plasmodiophora brassicae* – Navigating toward the Optimal Classification Pathogens 13(4): 314. DOI: 10.3390/pathogens13040313
166. **Żyła N**., Cieśla A., Szała L., **Babula-Skowrońska D**. (2024). Functional and regulatory diversity of homeobox-leucine zipper transcription factors *BnaHB6* under dehydration and salt stress in *Brassica napus* L. Plant Molecular Biology 114(3): 59. DOI: 10.1007/s11103-024-01465-6
167.