

Zoznam publikačnej činnosti – doc. Mgr. Ildikó Matušíková, PhD.

Kategória výstupu	Počet
Vysokoškolská učebnica alebo učebný text, skriptá (AH)	2 (6 AH)
Publikácie kategórie A+	27
Publikácie kategórie A	18
Publikácie kategórie A–	15
Publikácie kategórie B	32
Patenty, Úžitkové vzory	5
Celkovo	97

<http://orcid.org/0000-0001-5570-5065>;

Web of Science ResearcherID <https://publons.com/researcher/AAM-7111-2020/>

Scopus Author ID (Matusikova): 6507137537; Scopus Author ID (Bekesiova): 6506946376

Vysokoškolská učebnica alebo učebný text, skriptá (AH)

1. Matušíková I (2022) Vplyv stresových faktorov na biotu. 1. vyd. Univerzita sv. cyrila a Metoda, FPV, Trnava, 53 s. (ISBN 978-80-572-0232-5) [3AH]
2. Gálová Z, Balážová Ž, Chrenek P, Chňapek M, Libantová J, Matušíková I, Moravčíková J, Salaj J, Drábeková J (2018) Metódy a techniky génových manipulácií. 2. dopl. vyd. Nitra: Slovenská poľnohospodárska univerzita, 199 s. (ISBN 978-80-552-1805-2)
3. Gálová Z, Balážová Ž, Chrenek P, Chňapek M, Libantová J, Matušíková I, Moravčíková J, Salaj J, Drábeková J (2013) Metódy a techniky génových manipulácií. 1. vyd. Nitra: Slovenská poľnohospodárska univerzita, 189 s. (ISBN 978-80-522-1092-6)
4. Gálová Z, Balážová Ž, Libantová J, Matušíková I, Moravčíková J, Salaj J, Hricová A (2011) Praktické cvičenia z molekulárnej biológie. 1. vyd. Nitra: Slovenská poľnohospodárska univerzita, 67 s. ISBN 978-80-552-0657-8.
5. Gálová Z, Balážová Ž, Michalík I, Libantová J, Moravčíková J, Hricová A, Matušíková I (2008) Biotechnológie v rastlinnej produkcii. Nitra: Slovenská poľnohospodárska univerzita, 149 s. (ISBN 978-80-552-0146-7)
6. Gálová Z, Balážová Ž, Michalík I, Libantová J, Moravčíková J, Preťová A, Matušíková I (2006) Biotechnológie v rastlinnej produkcii. 1. vyd. Nitra Slovenská poľnohospodárska univerzita, 148 s. ISBN 80-8069-803-1.
7. Gálová Z, Salaj J, Matušíková I (2005) Molekulárna biológia. Nitra: Slovenská poľnohospodárska univerzita, 165 s. (ISBN 80-8069-484-2) [3AH]
8. Gálová Z, Gregáňová Ž, Libantová J, Matušíková I, Moravčíková J, Salaj J (2005) Praktické cvičenia z molekulárnej biológie. Nitra: Slovenská poľnohospodárska univerzita, 64 s. (ISBN 80-8069-605-5)

Publikácie kategórie A+ (publikácia v časopise Q1, medzinárodný patent)

1. Adamec L, Matusikova I, Pavlovic A (2021) Recent ecophysiological, biochemical and evolutionary insights into plant carnivory. *Annals of Botany* 128 (3):241-259. doi: 10.1093/aob/mcab071; IF (2020)=4,357; Q1
2. Zielińska K, Dubas E, Gerši Z, Krzewska M, Janas A, Nowicka A, Matušiková I, Žur I, Sakuda S, Moravčíková J (2021) β -1,3-Glucanases and chitinases participate in the stress-related defence mechanisms that are possibly connected with modulation of arabinogalactan proteins (AGP) required for the androgenesis initiation in rye (*Secale cereale* L.). *Plant Science* 302: 110700. doi 0.1016/j.plantsci.2020.110700; IF(2020)=4.729; Q1
3. Blehová A, Murín M, Nemeček P, Gajdoš P, Čertík M, Kraic J., Matušiková I (2021) Alterations in allocation and composition of lipid classes in *Euonymus* fruits and seeds. *Protoplasma* 258: 169–178(2021). doi: 10.1007/s00709-020-01562-5; IF(2020)=3.356, Q1
4. Tvrďá E, Michalko J, Árvay J, Vukovic NL, Ivanišová E, Ďuračka M, Matušiková I, Kačáni-ová M (2020) Characterization of the omija (*Schisandra chinensis*) extract and its effects on the bovine sperm vitality and oxidative profile during *in vitro* storage. *Evidence-Based Complementary and Alternative Medicine* 2020: 7123780. doi: 10.1155/2020/7123780; IF(2020)=2.629, Q1
5. Yotsova E, Dobrikova A, Stefanov M, Misheva S, Bardáčová M, Matušiková I, Žideková L, Blehová A, Apostolova E (2020) Effects of cadmium on two wheat cultivars depending on different nitrogen supply. *Plant Physiology and Biochemistry* 155:789-799. doi:10.1016/j.plaphy.2020.06.042; IF(2020)=4.270, Q1
6. Blehova A, Skorikova M, Samajova O, Kastier P, Matusikova I (2018) Maize miniendosperm proliferation *in vitro* is characterized by tracheary element formation. *Plant Cell Tissue and Organ Culture* 135 (3):455-462. doi:10.1007/s11240-018-1478-6; IF(2018)=2.504, Q1
7. Jopcik M, Moravcikova J, Matusikova I, Bauer M, Rajnivec M, Libantova J (2017) Structural and functional characterisation of a class I endochitinase of the carnivorous sundew (*Drosera rotundifolia* L.). *Planta* 245 (2):313-327. doi:10.1007/s00425-016-2608-1; IF(2017)=3.566, Q1
8. Maglovski M, Gregorova Z, Rybansky L, Meszaros P, Moravcikova J, Hauptvogel P, Adamec L, Matusikova I (2017) Nutrition supply affects the activity of pathogenesis-related beta-1,3-glucanases and chitinases in wheat. *Plant Growth Regulation* 81 (3):443-453. doi:10.1007/s10725-016-0222-7; IF(2017)=2.592, Q1
9. Michalko J, Renner T, Meszaros P, Socha P, Moravcikova J, Blehova A, Libantova J, Poloniova Z, Matusikova I (2017) Molecular characterization and evolution of carnivorous sundew (*Drosera rotundifolia* L.) class V beta-1,3-glucanase. *Planta* 245 (1):77-91. doi:10.1007/s00425-016-2592-5; IF(2017)=3.566, Q1
10. Blehova A, Svubova R, Lukacova Z, Moravcikova J, Matusikova I (2015) Transformation of sundew: pitfalls and promises. *Plant Cell Tissue and Organ Culture* 120 (2):681-687. doi:10.1007/s11240-014-0635-9; IF(2015)=2.434, Q1
11. Gregorova Z, Kovacik J, Klejdus B, Maglovski M, Kuna R, Hauptvogel P, Matusikova I (2015) Drought-Induced Responses of Physiology, Metabolites, and PR Proteins in *Triticum aestivum*. *Journal of Agricultural and Food Chemistry* 63 (37):8125-8133. doi:10.1021/acs.jafc.5b02951; IF(2015)=3.209, Q1
12. Poloniova Z, Jopcik M, Matusikova I, Libantova J, Moravcikova J (2015) The pollen- and embryo-specific *Arabidopsis* DLL promoter bears good potential for application in

- marker-free Cre/loxP self-excision strategy. *Plant Cell Reports* 34 (3):469-481. doi:10.1007/s00299-014-1726-0; IF(2015)=3.242, Q1
13. Dubas E, Moravcikova J, Libantova J, Matusikova I, Benkova E, Zur I, Krzewska M (2014) The influence of heat stress on auxin distribution in transgenic *B. napus* microspores and microspore-derived embryos. *Protoplasma* 251 (5):1077-1087. doi:10.1007/s00709-014-0616-1; IF(2014)=3.133, Q1
 14. Jopcik M, Moravcikova J, Matusikova I, Libantova J (2014b) Spacer length-dependent protection of specific activity of pollen and/or embryo promoters from influence of CaMV 35S promoter/enhancer in transgenic plants. *Plant Cell Tissue and Organ Culture* 118 (3):507-518. doi:10.1007/s11240-014-0503-7; IF(2014)=2.706, Q1
 15. Meszaros P, Rybansky L, Spiess N, Socha P, Kuna R, Libantova J, Moravcikova J, Pirsellova B, Hauptvogel P, Matusikova I (2014) Plant chitinase responses to different metal-type stresses reveal specificity. *Plant Cell Reports* 33 (11):1789-1799. doi:10.1007/s00299-014-1657-9; IF(2014)=3.839, Q1
 16. Jopcik M, Bauer M, Moravcikova J, Boszoradova E, Matusikova I, Libantova J (2013) Plant tissue-specific promoters can drive gene expression in *Escherichia coli*. *Plant Cell Tissue and Organ Culture* 113 (3):387-396. doi:10.1007/s11240-012-0278-7; IF(2013)=3.037, Q1
 17. Michalko J, Socha P, Meszaros P, Blehova A, Libantova J, Moravcikova J, Matusikova I (2013) Glucan-rich diet is digested and taken up by the carnivorous sundew (*Drosera rotundifolia* L.): implication for a novel role of plant beta-1,3-glucanases. *Planta* 238 (4):715-725. doi:10.1007/s00425-013-1925-x; IF(2013)=3.888, Q1
 18. Spiess N, Oufir M, Matusikova I, Stierschneider M, Kopecky D, Homolka A, Burg K, Fluch S, Hausman JF, Wilhelm E (2012) Ecophysiological and transcriptomic responses of oak (*Quercus robur*) to long-term drought exposure and rewatering. *Environmental and Experimental Botany* 77:117-126. doi:10.1016/j.envexpbot.2011.11.010; IF(2012)=3.197, Q1
 19. Boszoradova E, Libantova J, Matusikova I, Poloniova Z, Jopcik M, Berenyi M, Moravcikova J (2011) Agrobacterium-mediated genetic transformation of economically important oilseed rape cultivars. *Plant Cell Tissue and Organ Culture* 107 (2):317-323. doi:10.1007/s11240-011-9982-y; IF(2011)=3.164, Q1
 20. Salaj T, Matusikova I, Fraterova L, Pirsellova B, Salaj J (2011) Regrowth of embryogenic tissues of *Pinus nigra* following cryopreservation. *Plant Cell Tissue and Organ Culture* 106 (1):55-61. doi:10.1007/s11240-010-9893-3; IF(2011)=3.164, Q1
 21. Milcevicova R, Gosch C, Halbwirth H, Stich K, Hanke MV, Peil A, Flachowsky H, Rozhon W, Jonak C, Oufir M, Hausman JF, Matusikova I, Fluch S, Wilhelm E (2010) *Erwinia amylovora*-induced defense mechanisms of two apple species that differ in susceptibility to fire blight. *Plant Science* 179 (1-2):60-67. doi:10.1016/j.plantsci.2010.04.013; IF(2010)=2.911, Q1
 22. Sziderics AH, Oufir M, Trognitz F, Kopecky D, Matusikova I, Hausman JF, Wilhelm E (2010) Organ-specific defence strategies of pepper (*Capsicum annuum* L.) during early phase of water deficit. *Plant Cell Reports* 29 (3):295-305. doi:10.1007/s00299-010-0822-z; IF(2010)=2.652, Q1
 23. Sunderlikova V, Salaj J, Kopecky D, Salaj T, Wilhelm E, Matusikova I (2009a) Dehydrin genes and their expression in recalcitrant oak (*Quercus robur*) embryos. *Plant Cell Reports* 28 (7):1011-1021. doi:10.1007/s00299-009-0710-6; IF(2009)=2.710, Q1

24. Sunderlikova V, Salaj J, Matusikova I, Wilhelm E (2009b) Isolation and characterization of an embryo-specific Em-like gene of pedunculate oak (*Quercus robur* L.) and its temporal and spatial expression patterns during somatic and zygotic embryo development. *Trees-Structure and Function* 23 (1):135-144. doi:10.1007/s00468-008-0262-3; IF(2009)=1.878, Q1
25. Fluch S, Olmo CC, Tauber S, Stierschneider M, Kopecky D, Reichenauer TG, Matusikova I (2008) Transcriptomic changes in wind-exposed poplar leaves are dependent on developmental stage. *Planta* 228 (5):757-764. doi:10.1007/s00425-008-0777-2; IF(2017)=3.566, Q1
26. Matusikova I, Salaj J, Moravcikova J, Mlynarova L, Nap JP, Libantova J (2005) Tentacles of in vitro-grown round-leaf sundew (*Drosera rotundifolia* L.) show induction of chitinase activity upon mimicking the presence of prey. *Planta* 222 (6):1020-1027. doi:10.1007/s00425-005-0047-5; IF(2005)=3.301, Q1
27. Bekesiova I, Nap JP, Mlynarova L (1999) Isolation of high quality DNA and RNA from leaves of the carnivorous plant *Drosera rotundifolia*. *Plant Molecular Biology Reporter* 17 (3):269-277. doi:10.1023/a:1007627509824; IF(1999)=0.859, Q1

Publikácie kategórie A (publikácia v časopise Q2, monografia v zahraničnom vydavateľstve)

1. Galusova T, Rybansky L, Meszaros P, Spiess N, Pirsellova B, Kuna R, Libantova J, Moravcikova J, Hauptvogel P, Matusikova I (2015) Variable responses of soybean chitinases to arsenic and cadmium stress at the whole plant level. *Plant Growth Regulation* 76 (2):147-155. doi:10.1007/s10725-014-9984-y; IF(2015)=2.258, Q2
2. Boszorádová E, Libantová J, Matušiková I, Moravčíková J (2014) Application of Arabidopsis tissue-specific CRUC promoter in the Cre/loxP self-excision strategy for generation of marker-free oilseed rape: potential advantages and drawbacks. *Acta Physiologiae Plantarum*. doi:10.1007/s11738-014-1518-8; IF(2014)=2.035, Q2
3. Ranušová P, Matušiková I, Nemeček P (2021) Optimization of plant extract purification procedure for rapid screening analysis of sixteen phenolics by liquid chromatography. *Separations*, 8 (2), 13: 1-12. doi: 10.3390/separations8020013; IF (2020)=2,777, Q2
4. Boszoradova E, Matusikova I, Libantova J, Zimova M, Moravcikova J (2019) Cre-mediated marker gene removal for production of biosafe commercial oilseed rape. *Acta Physiologiae Plantarum* 41 (6):8. doi:10.1007/s11738-019-2865-2; IF(2019)= 1.383, Q2
5. Maglovski M, Gersi Z, Rybansky L, Bardacova M, Moravcikova J, Bujdos M, Dobrikova A, Apostolova E, Kraic J, Blehova A, Matusikova I (2019) Effects of nutrition on wheat photosynthetic pigment responses to arsenic stress. *Polish Journal of Environmental Studies* 28 (3):1821-1829. doi:10.15244/pjoes/89584; IF(2019)= 1.383; Q2
6. Martincova M, Kastier P, Krasnylenko YA, Gajdos P, Certik M, Matusikova I, Blehova A (2019) Species-specific differences in architecture and chemical composition of dodder seeds. *Flora* 256:61-68. doi:10.1016/j.flora.2019.04.010; IF(2019)=1.591, Q2
7. Dobroviczka T, Pirsellova B, Meszaros P, Blehova A, Libantova J, Moravcikova J, Matusikova I (2013) Effects of cadmium and arsenic ions on content of photosynthetic pigments in the leaves of *Glycine max* (L.) Merrill. *Pakistan Journal of Botany* 45 (1):105-110; IF(2013)=1.446, Q2

8. Kopecky D, Matusikova I, Sziderics AH, Trognitz F, Spiess N, Stierschneider M, Fluch S (2013) In silico search for drought-responsive genes in plants on the basis of scientific data: case study on poplar roots. *Acta Physiologiae Plantarum* 35 (6):1955-1966. doi:10.1007/s11738-013-1234-9; IF(2013)=1.935, Q2
9. Meszaros P, Rybansky L, Hauptvogel P, Kuna R, Libantova J, Moravcikova J, Pirselova B, Tirpakova A, Matusikova I (2013) Cultivar-specific kinetics of chitinase induction in soybean roots during exposure to arsenic. *Molecular Biology Reports* 40 (3):2127-2138. doi:10.1007/s11033-012-2271-y; IF(2013)=2.254, Q2
10. Pirselova B, Matusikova I (2013) Callose: the plant cell wall polysaccharide with multiple biological functions. *Acta Physiologiae Plantarum* 35 (3):635-644. doi:10.1007/s11738-012-1103-y; IF(2013)=1.935, Q2
11. Konotop Y, Meszaros P, Spiess N, Mistrikova V, Pirselova B, Libantova J, Moravcikova J, Taran N, Hauptvogel P, Matusikova I (2012) Defense responses of soybean roots during exposure to cadmium, excess of nitrogen supply and combinations of these stressors. *Molecular Biology Reports* 39 (12):10077-10087. doi:10.1007/s11033-012-1881-8; IF(2012)=2.412, Q2
12. Salaj T, Matusikova I, Swennen R, Panis B, Salaj J (2012) Long-term maintenance of *Pinus nigra* embryogenic cultures through cryopreservation. *Acta Physiologiae Plantarum* 34 (1):227-233. doi:10.1007/s11738-011-0821-x; IF(2012)=1.627, Q2
13. Pirselova B, Kuna R, Libantova J, Moravcikova J, Matusikova I (2011) Biochemical and physiological comparison of heavy metal-triggered defense responses in the monocot maize and dicot soybean roots. *Molecular Biology Reports* 38 (5):3437-3446. doi:10.1007/s11033-010-0453-z; IF(2011)=2.688, Q2
14. Salaj T, Matusikova I, Panis B, Swennen R, Salaj J (2010) Cryopreservation of *Pinus nigra* and hybrid *Abies* embryogenic tissues. *Cryoletters* 31 (2):182-182; IF(2010)=1.248, Q2
15. Salaj T, Matusikova I, Panis B, Swennen R, Salaj J (2010) Recovery and characterisation of hybrid firs (*Abies alba* x *A. cephalonica*, *Abies alba* x *A. numidica*) embryogenic tissues after cryopreservation. *Cryoletters* 31 (3):206-217; IF(2010)=1.248, Q2
16. Libantova J, Kamarainen T, Moravcikova J, Matusikova I, Salaj J (2009) Detection of chitinolytic enzymes with different substrate specificity in tissues of intact sundew (*Drosera rotundifolia* L.). *Molecular Biology Reports* 36 (5):851-856. doi:10.1007/s11033-008-9254-z; IF(2009)=1.338, Q2
17. Bekesiova B, Hraska S, Libantova J, Moravcikova J, Matusikova I (2008) Heavy-metal stress induced accumulation of chitinase isoforms in plants. *Molecular Biology Reports* 35 (4):579-588. doi:10.1007/s11033-007-9127-x; IF(2008)=1.375, Q2
18. Moravcikova J, Matusikova I, Libantova J, Bauer M, Mlynarova L (2004) Expression of a cucumber class III chitinase and *Nicotiana plumbaginifolia* class I glucanase genes in transgenic potato plants. *Plant Cell Tissue and Organ Culture* 79 (2):161-168. doi:10.1007/s11240-004-0656-x; IF(2004)=1.060, Q2

Publikácie kategórie A- (publikácia v časopise Q3 alebo Q4, národný patent)

1. Socha P, Bernstein N, Rybansky L, Meszaros P, Galusova T, Spiess N, Libantova J, Moravcikova J, Matusikova I (2015) Cd accumulation potential as a marker for heavy metal

- tolerance in soybean. *Israel Journal of Plant Sciences* 62 (3):160-166. doi:10.1080/07929978.2015.1042307; IF(2014)=0.383, Q3
2. Maglovski M, Rybanský L, Bujdoš M, Adamec L, Bardáčová M, Blehová A, Matušíková I (2021) Nitrogenous nutrition affects uptake of arsenic and defense enzyme responses in wheat. *Polish Journal of Environmental Studies* 30(3):2213-2231. doi: 10.15244/pjoes/127912; IF (2020)=1,699, Q3
 3. Galusova T, Pirselova B, Rybansky L, Krasnylenko Y, Meszaros P, Blehova A, Bardacova M, Moravcikova J, Matusikova I (2020) Plasticity of soybean stomatal responses to arsenic and cadmium at the whole plant level. *Polish Journal of Environmental Studies* 29 (5):3569-3580. doi:10.15244/pjoes/116444; IF (2020) = 1,699, Q3
 4. Konotop Y, Kovalenko M, Matusikova I, Batsmanova L, Taran N (2017) Proline application triggers temporal redox imbalance, but alleviates cadmium stress in wheat seedlings. *Pakistan Journal of Botany* 49 (6):2145-2151; IF(2017)=0.865, Q3
 5. Jopcik M, Matusikova I, Moravcikova J, Libantova J (2014a) Expression pattern of *Arabidopsis thaliana* pollen- and embryo-specific promoter in transgenic tobacco plants. *Acta Biologica Cracoviensia Series Botanica* 56 (1):73-79. doi:10.2478/abcsb-2014-0009; IF(2014)=0.810, Q3
 6. Oslovicova V, Simmonds JR, Snape JW, Galova Z, Balazova Z, Matusikova I (2014) Molecular marker-based characterization of a set of wheat genotypes adapted to Central Europe. *Cereal Research Communications* 42 (2):189-198. doi:10.1556/crc.42.2014.2.2; IF(2014)=0,735, Q3
 7. Fraterova L, Salaj T, Matusikova I, Salaj J (2013) The role of chitinases and glucanases in somatic embryogenesis of black pine and hybrid firs. *Central European Journal of Biology* 8 (12):1172-1182. doi:10.2478/s11535-013-0234-5; IF(2013)=0.633, Q3
 8. Pirselova B, Mistrikova V, Libantova J, Moravcikova J, Matusikova I (2012) Study on metal-triggered callose deposition in roots of maize and soybean. *Biologia* 67 (4):698-705. doi:10.2478/s11756-012-0051-8; IF(2012)=0.652, Q3
 9. Moravcikova J, Libantova J, Heldak J, Salaj J, Bauer M, Matusikova I, Galova Z, Mlynarova L (2007) Stress-induced expression of cucumber chitinase and *Nicotiana plumbaginifolia* beta-1,3-glucanase genes in transgenic potato plants. *Acta Physiologiae Plantarum* 29 (2):133-141. doi:10.1007/s11738-006-0017-y; IF(2007)=0.456, Q3
 10. Vaculkova E, Moravcikova J, Matusikova I, Bauer M, Libantova J (2007) A modified low copy number binary vector pUN for *Agrobacterium*-mediated plant transformation. *Biologia Plantarum* 51 (3):538-540. doi:10.1007/s10535-007-0116-7; IF(2007)=0.411, Q3
 11. Matusikova I, Libantova J, Moravcikova J, Mlynarova L, Nap JP (2004) The insectivorous sundew (*Drosera rotundifolia*, L.) might be a novel source of PR genes for biotechnology. *Biologia* 59 (6):719-725; IF(2003)=0.333, Q4
 12. Zur I, Gołebiewska G, Dubas E, Golemiec E, Matušíková I, Libantová J, Moravčíková J (2013) β -1,3-glucanase and chitinase activities in winter triticales during cold hardening and subsequent infection by *Microdochium nivale*. *Biologia* 68:241-248 IF(2013)=0.882, Q3
 13. Piršelová B, Mistríková V, Libantová J, Moravčíková J, Matušíková I (2012) Study on metal-triggered callose deposition in roots of maize and soybean. *Biologia* 67:698-705 IF(2012)=0.652, Q3
 14. Matušíková I, Libantová J, Moravčíková J, Mlynárová L, Nap JP (2004) The insectivorous

sundew (*Drosera rotundifolia* L.) might be a novel source of PR genes for biotechnology. *Biologia* 59:719-725 IF(2003)=0.333, Q4

15. Moravčíková J, Libantová J, Matušíková I, Libiaková G, Nap JP, Mlynárová L (2003) Genetic transformation of Slovak cultivar of potato (*Solanum tuberosum* L.): efficiency and the behaviour of the transgene. *Biologia* 58:1075-1080 IF(2003)=0.333, Q4

Publikácie kategórie B (ostatné publikácie vo WoS alebo SCOPUS)

1. Bauer M, Libantová J, Mlynárová L, Békésiová I, Moravčíková J (1998) Transgenic tobacco plants constitutively expressing class III chitinase from cucumber. *Biologia* 53:749-758; IF(1997)= 0.283
2. Libantová J, Bauer M, Mlynárová L, Békésiová I, Moravčíková J (1998) Transgenic tobacco and potato plants expressing basic, vacuolar β -1,3-glucanase from *Nicotiana plumbaginifolia*. *Biologia* 53:739-748; IF(1997)= 0.283
1. Pavlovičová M, Gerši Z, Bardáčová M, Ranušová P, Horník M, Matušíková I (2020) Variable accumulation of cadmium in flax (*Linum usitatissimum* L.) *Nova Biotechnologica et Chimica*, 19:70-79. DOI: 10.36547/nbc.v19i1.579
2. Asrorov AM, Matušíková I, Ziyavitdinov JF, Gregorová Z, Majerčíková V, Mamadrakhimov AA (2020) Changes in soluble protein profile in cotton leaves indicate rubisco damage after treatment with sumi-alpha insecticide. *Agriculture* 66, 40-44. DOI: 10.2478/agri-2020-0004
3. Šutá D, Matušíková I, Blehová A (2019) Targeting transgene to seed resulted in high rate of morphological abnormalities of *Camelina* transformants. *Nova Biotechnologica et Chimica*, 18: 94-101. DOI: 10.2478/nbec-2019-0012
4. Trögl J, Matušíková I (2021) Conference applied natural sciences 2019. *International Journal of Environmental Science and Technology*, DOI: 10.1007/s13762-020-03120-1
5. Boszoradova E, Zimova M, Gregorova Z, Bardacova M, Matusikova I, Moravcikova J (2019) Construction of plant transformation vector containing expression cassette of *Arabidopsis* gene At1g54410. *Journal of Microbiology Biotechnology and Food Sciences* 8 (5):1209-1211. doi:10.15414/jmbfs.2019.8.5.1209-1211 (WOS)
6. Asrorov AM, Matusikova I, Galova Z, Gregorova Z, Meszaros P, Dahmova S, Salikhov S (2017) The family of chitinases in cotton *G. raimondii*. *Journal of Microbiology Biotechnology and Food Sciences* 6 (6):1284-1289. doi:10.15414/jmbfs.2017.6.6.1284-1289 (WOS)
7. Mihalik D, Gubisova M, Kraic J, Hudcovicova M, Havrlentova M, Moravcikova J, Glasa M, Matusikova I (2017) Introduction of a synthetic *Thermococcus*-derived alpha-amylase gene into barley genome for increased enzyme thermostability in grains. *Electronic Journal of Biotechnology* 30:1-5. doi:10.1016/j.ejbt.2017.08.002 (WOS)
8. Zimova M, Boszoradova E, Gregorova Z, Matusikova I, Moravcikova J (2017) Preparation of plant vector construct containing dehydrin gene At2g21490. *Journal of Microbiology Biotechnology and Food Sciences* 6 (6):1261-1263. doi:10.15414/jmbfs.2017.6.6.1261-1263 (WOS)
9. Asrorov A, Matusikova I, Dalimova S, Galova Z, Sultanova E, Veshkurova O, Salikhov S (2016) Agrochemicals affect the antioxidative defense potential of cotton plants. *Journal of Microbiology Biotechnology and Food Sciences* 5 (6):505-508. doi:10.15414/jmbfs.2016.5.6.505-508 (WOS)

10. Tvrda E, Michalko J, Matusikova I, Lukac N (2016) In vitro effects of the *Chlamydomonas reinhardtii* extract on bovine spermatozoa. *Journal of Microbiology Biotechnology and Food Sciences* 6 (3):972-975. doi:10.15414/jmbfs.2016/17.6.3.972-975 (WOS)
11. Asrorov A, Matusikova I, Ishimov U, Ziyavitdinov J, Veshkurova O, Salikhov S (2015) Comparative analysis of free amino acids and nitrogen in cotton leaves treated with different classes' insecticides. *Agric Res* 4 (3):277-282. doi:10.1007/s40003-015-0172-8 (WOS)
12. Durechova D, Matusikova I, Moravcikova J, Jopcik M, Libantova J (2015) Sequence analysis of sundew chitinase gene. *Journal of Microbiology Biotechnology and Food Sciences* 4:4-6. doi:10.15414/jmbfs.2015.4.special2.4-6 (WOS)
13. Jopcik M, Matusikova I, Moravcikova J, Durechova D, Libantova J (2015) The expression profile of *Arabidopsis thaliana* beta-1,3-glucanase promoter in tobacco. *Molecular Biology* 49 (4):543-549. doi:10.1134/s0026893315040068 (WOS)
14. Maglovski M, Gregorova Z, Meszaros P, Matusikova I, Libantova J, Moravcikova J, Hauptvogel P (2015) Negative effect of metalloid stress on wheat. *Journal of Microbiology Biotechnology and Food Sciences* 4:76-78. doi:10.15414/jmbfs.2015.4.special2.76-78 (WOS)
15. Durechova D, Matusikova I, Moravcikova J, Jopcik M, Libantova J (2014) In silico analysis of chitinase promoter isolated from *Drosera rotundifolia* L. *Journal of Microbiology Biotechnology and Food Sciences* 3:71-73 (WOS)
16. Poloniova Z, Meszaros P, Maglowski M, Libantova J, Matusikova I, Moravcikova J (2014) The activity of arabidopsis *dll* promoter in transgenic tobacco plants under water stress conditions. *Journal of Microbiology Biotechnology and Food Sciences* 3:151-154 (WOS)
17. Durechova D, Matusikova I, Moravcikova J, Jopcik M, Libantova J (2013) Isolation and characterization of chitinase gene from the untraditional plant species. *Journal of Microbiology Biotechnology and Food Sciences* 2:9 (WOS)
18. Gryshko VM, Syshchykov DV, Artiushenko TA, Matusikova I (2013) Assessment of cadmium and nickel tolerance of maize cultivars based on root and shoot growth. *Mod Phytol* 4:75-77 (WOS)
19. Poloniova Z, Dubnický P, Galova Z, Libantova J, Matusikova I, Moravcikova J (2013) Plant transformation vectors and their stability in *Agrobacterium tumefaciens*. *Journal of Microbiology Biotechnology and Food Sciences* 2:1559-1568 (WOS)
20. Michalko J, Matusikova I (2012) Study on the role of glucanases in digestion of carnivorous plant *Drosera rotundifolia* L. *Journal of Microbiology Biotechnology and Food Sciences* 1:671-678 (WOS)
21. Poloniova Z, Jopcik M, Matusikova I, Libantova J, Moravcikova J (2012) Preparation of plant transformation vector containing "self-excision" cre/loxP system. *Journal of Microbiology Biotechnology and Food Sciences* 1 (4):563-572 (WOS)
22. Pavlovičová M, Gerši Z, Bardáčová M, Ranušová P, Horník M, Matušiková I (2020) Variable accumulation of cadmium in flax (*Linum usitatissimum* L.). *Nova Biotechnologica et Chimica* 19 (1): 70-79. doi.org/10.36547/nbc.v19i1.579 (SCOPUS)
23. Asrorov AM, Matušiková I, Ziyavitdinov JF, Gregorová Z, Majerčíková V, Mama-drakhimov AA (2020) Changes in soluble protein profile in cotton leaves indicate rubisco damage after treatment with sumi-alpha insecticide. *Agriculture* 66 (1):40-44. doi:10.2478/agri-2020-0004 (SCOPUS)

24. Šutá D, Matušíková I, Blehová A (2019) Targeting transgene to seed resulted in high rate of morphological abnormalities of *Camelina* transformants. *Nova Biotechnologica et Chimica* 18 (2):94-101. doi:10.2478/nbec-2019-0012 (SCOPUS)
25. Bardáčová M, Konotop Y, Gregorová Z, Horník M, Moravčíková J, Kraic J, Matušíková I (2017) Variable dynamics of cadmium uptake and allocation in four soybean cultivars. *Nova Biotechnologica et Chimica* 16 (2):99-104. doi:10.1515/nbec-2017-0014 (SCOPUS)
26. Klas J, Lesný J, Horník M, Matusikova I, Adamcova V Isoconcentration principle - An effective tool of (radio) analysis in environmental protection. In: IOP Conference Series: Earth and Environmental Science, 2017. doi:10.1088/1755-1315/92/1/012027(SCOPUS)
27. Moravčíková J, Matušíková I, Nemeček P, Blehová A, Balážová Ž, Gálová Z, Mészáros P, Kraic J (2017a) Perception of biotech trees by Slovak university students - A comparative survey. *Nova Biotechnologica et Chimica* 16 (1):12-19. doi:10.1515/nbec-2017-0002 (SCOPUS)
28. Moravčíková J, Ujvariová N, Žur I, Gálová Z, Gregorová Z, Zimová M, Boszorádová E, Matušíková I (2017b) Chitinase activities in wheat and its relative species. *Agriculture* 63 (1):14-22. doi:10.1515/agri-2017-0002 (SCOPUS)
29. Partelová D, Kuglerová K, Konotop Y, Horník M, Lesný J, Gubišová M, Gubiš J, Kováč P, Matušíková I (2017) Imaging of photoassimilates transport in plant tissues by positron emission tomography. *Nova Biotechnologica et Chimica* 16 (1):32-41. doi:10.1515/nbec-2017-0005 (SCOPUS)
30. Bardáčová M, Maglovski M, Gregorová Z, Konotop Y, Horník M, Moravčíková J, Kraic J, Mihálik D, Matušíková I (2016) The activity of cell-wall modifying β -1,3-glucanases in soybean grown in presence of heavy metals. *Nova Biotechnologica et Chimica* 15 (2):114-121. doi:10.1515/nbec-2016-0012 (SCOPUS)
31. Moravčíková J, Margetínyová D, Gálová Z, Zur I, Gregorová Z, Zimová M, Boszorádová E, Matušíková I (2016) Beta-1,3-glucanase activities in wheat and relative species. *Nova Biotechnologica et Chimica* 15 (2):122-132. doi:10.1515/nbec-2016-0013 (SCOPUS)
32. Sojková J, Žur I, Gregorová Z, Zimová M, Matušíková I, Mihálik D, Kraic J, Moravčíková J (2016) *In vitro* regeneration potential of seven commercial soybean cultivars (*Glycine max* L.) for use in biotechnology. *Nova Biotechnologica et Chimica* 15 (1):1-11. doi:10.1515/nbec-2016-0001 (SCOPUS)

Úžitkové vzory:

1. PN Badurka, druh Pšenica dvojrznová (*Triticum dicoccon* Schrank) / Pavol Hauptvogel, Iveta Madunická, Alžbeta Žofajová, Miroslav Švec, Marián Brestič, Marek Živčák, Ildikó Matušíková, Edita Gregová, Jana Moravčíková. - Bratislava : [s.n.], 2019. - 1 s. (5%)
2. PN Durgalova, druh Pšenica dvojrznová (*Triticum dicoccon* Schrank) / Pavol Hauptvogel, Iveta Madunická, Ľuboš Nastišin, Alžbeta Žofajová, Miroslav Švec, Marek Živčák, Marián Brestič, Ildikó Matušíková, Jana Moravčíková. - Bratislava : [s.n.], 2018. - 1 s. (5%)
3. PN Mislina, druh Pšenica špaldová (*Triticum spelta* L.) / Pavol Hauptvogel, Iveta Madunická, Peter Hozlár, Vladimír Meglič, Alžbeta Žofajová, René Hauptvogel, Miroslav Švec, Marián Brestič, Ildikó Matušíková, Edita Gregová, Marek Živčák.

- Bratislava : [s.n.], 2019. - 1 s. (5%)

4. PN Zirnitra, druh Pšenica dvojrznová (*Triticum dicoccon* Schrank) / Pavol Hauptvogel, Iveta Madunická, Peter Hozlár, Edita Gregová, Alžbeta Žofajová, Miroslav Švec, Marián Brestič, Ildikó Matušíková. - Bratislava : [s.n.], 2018. - 1 s. (5%)

Kapitoly vo vedeckých monografiách vydané v zahraničných vydavateľstvách

1. Matušíková I, Renner T, Pavlovič A (2018) Biochemistry of prey digestion and nutrient absorption. In: Ellison A, Adamec L (eds) Carnivorous Plants: Physiology, Ecology, and Evolution. Oxford University Press, pp. 207-220
2. Slováková L, Matušíková I, Salaj J, Hudák J (2016) Effect of low temperatures on the structure of plant cells: Structural, biochemical, and molecular aspects. In: Handbook of Plant and Crop Stress, Third Edition. pp 535-564
3. Piršelová B, Matušíková I (2011) Plant defense against heavy metals: the involvement of pathogenesis - related (PR) proteins. In: Awaad AS, Kaushik G, Govil JN (eds) Recent Progress in Medicinal Plant: Mechanism and Action of Phytoconstituents. Studium Press LLC, pp 179-205
4. Slováková L, Matušíková I, Salaj J, Hudák J (2011) Effect of low temperatures on the structure of plant cells: structural, biochemical, and molecular aspects. In: Handbook of Plant and Crop Stress. - Boca Raton: CRC Press, Taylor & Francis Group, ISBN 978--4398-1396-6, pp 535-564
5. Torp AM, Békésiová I, Holme IB, Hansen AL, Andersen SB (2004) Genetics related to doubled haploid induction in vitro. In: Mujib A, Cho MJ, Predieri S, Banerjee S (eds) In vitro application in crop improvement, Science Publishers INC, Enfield, USA, pp 35-52

Čestne prehlasujem, že uvedené údaje sú pravdivé a aktuálne.

V Trnave dňa 28. februára 2022

doc. Mgr. Ildikó Matušíková, PhD.