

## Part II: LIST OF PUBLICATIONS

Marks:

- S      Student or post-doc under my supervision
- \*      Equal contribution

### **1. Articles in Reviewed Journals**

**1. Koltai H.**, Glazer I. and Segal D. (1994).

Phenotypic and genetic characterization of two new mutants of the entomopathogenic nematode *Heterorhabditis bacteriophora*.

*Journal of Nematology* 26: 32-39. IF=0.857; Category: Zoology, Rank 53/112

**2. Koltai H.**, Glazer I. and Segal D. (1994).

Reproduction of the nematode *Heterorhabditis bacteriophora* HP88: Hermaphroditism/Amphimixis.

*Fundamental and Applied Nematology* 18: 55-61.

**3. Dix I., Koltai H.**, Glazer I. and Burnell I.M. (1994).

Sperm competition in mated first generation hermaphrodites female of the HP88 strain of *Heterorhabditis* (Nematoda: Heterorhabditidae) and progeny sex ratio in mated and unmated females.

*Fundamental and Applied Nematology* 17: 17-27.

**4. Koltai H.**, Spiegel Y. and Blaxter M. L. (1997).

Regulated use of an alternative spliced leader exon in the plant parasitic nematode *Meloidogyne javanica*. *Molecular and Biochemical Parasitology* 86: 107-110. IF=2.551; Category: Parasitology, Rank 13/34.

**5. Koltai H.**, Chejanovsky N., Raccah B. and Spiegel Y. (1997).

The first isolated collagen gene of the root-knot nematode *Meloidogyne javanica* is developmentally regulated.

*Gene* 196: 191-199. IF= 2.754; Category: Genetics and Heredity, Rank: 46/120.

**6. Bird D. McK. and Koltai H.** (2000).

Plant parasitic nematodes: Habitats, hormones and horizontally-acquired genes.

*Journal of Plant Growth Regulation* 19: 183-194. IF=2.107; Category: Plant Sciences, Rank 33/146.

**7. Koltai H.** and Bird D. McK. (2000).

Breakthrough Technology: High throughput cellular localization of specific plant mRNAs by liquid-phase *in situ* RT-PCR of tissue sections.

*Plant Physiology* 123: 1203-1212. IF=6.125; Category: Plant Sciences, Rank: 7/146.

**8. Koltai H.** and Bird D. McK. (2000).

Epistatic repression of *PHANTASTICA* and class 1 *KNOTTED* genes is uncoupled in tomato.

*Plant Journal* 22: 455-459. IF= 6.565; Category: Plant Sciences, Rank: 6/146.

**9. Liu J., Koltai H.**, Chejanovsky N. and Spiegel Y. (2001).

Isolation of a novel collagen gene in *Meloidogyne javanica* and studies on its expression pattern. *Journal of Parasitology* 87: 801-807. IF=1.300; Category: Parasitology, Rank: 13/23.

**10. Koltai H.**, Dhandaydham M., Thomas J.F. Opperman C. and Bird D.McK. (2001). Overlapping plant signal transduction pathways induced by a parasitic-nematode and a rhizobial endosymbiont. *Molecular Plant Microbe Interaction* 14: 1168-1177. IF=3.936; Category: Plant Sciences, Rank: 10/146.

**11. Gal T.Z.<sup>s</sup>**, Solomon A., Glazer I. and **Koltai H.** (2001). Alteration in the levels of glycogen and glycogen synthase transcripts during desiccation in the insect-killing, highly desiccation tolerant nematode *Steinernema feltiae* IS-6. *Journal of Parasitology* 87: 725-732. IF=1.300; Category: Parasitology, Rank: 13/23.

**12. Koltai H.** and Bird D. (2002). Validation of the specificity of the histological signal for localization of gene specific transcripts utilizing the in-well, Reverse Transcription-Polymerase Chain Reaction *in situ* method *Plant Molecular Biology Reporter* 20: 391-397. IF=0.625; Category: Plant Sciences, Rank: 120/146.

**13. Koltai H.** and Volpin H. (2003). Agricultural genomics: an approach to plant protection. *European Journal of Plant Pathology* 109: 101-108. IF=1.217; Category: Plant Sciences, Rank: 63/146

**14. Gal T.Z.<sup>s</sup>**, Glazer I. and **Koltai, H.** (2003). Differential Gene expression during desiccation stress in *Steinernema feltiae* IS6. *Journal of Parasitology* 89: 761-766. IF=1.300; Category: Parasitology, Rank: 13/23

**15. Gal T.Z.<sup>s</sup>**, Glazer I. and **Koltai, H.** (2004). An LEA3 family member is involved in survival of *C. elegans* during exposure to dehydration stress. *FEBS letters* 577: 21-26. IF=3.372; Category: Biochemistry and Molecular Biology, Rank: 91/200.

**16. Bar-Or C.<sup>s</sup>**, Kapulnik Y. and **Koltai H.** (2005). A broad characterization of the transcriptional profile of the tomato response to the plant parasitic root knot nematode. *European Journal of Plant Pathology* 111: 181-192. IF=1.217; Category: Plant Sciences, Rank: 63/146

**17. Gal T.Z.<sup>s</sup>**, Glazer I., Sherman A. and **Koltai H.** (2005). Protein interaction of Nucleosome Assembly Protein-1 and Casein Kinase 2 during desiccation response in the insect-killing nematode *Steinernema feltiae* IS-6. *Journal of Parasitology* 91: 691-693. IF=1.300; Category: Parasitology, Rank: 13/23.

**18. Gal T.Z.<sup>s</sup>**, Glazer I. and **Koltai H.** (2005). Worms in stress: responding to the post genomics era. *Molecular and Biochemical Parasitology* 143:1-5. IF=2.641; Category: Parasitology, Rank: 6/23.

**19. Shani Z., Dekel M., Roiz L., Horowitz M., Kolosovski N., Lapidot S., Alkan S., Koltai H., Tsabary G., Goren R. and Shoseyov O.** (2006).

Expression of endo-1,4-beta-glucanase (cel1) in *Arabidopsis thaliana* is associated with plant growth, xylem development and cell wall thickening.

*Plant Cell Reports* 25: 1067-1074. IF=1.727; Category: Plant Sciences, Rank: 40/146.

**20.** Gal T.Z. <sup>s</sup>, Aussenberg E.R. <sup>s</sup>, Bordman S., Kapulnik Y. and **Koltai H.** (2006).

Expression of a plant expansin is necessary for completion of the root knot nematode life cycle.

*Planta* 4:1-8. IF=2.963; Category: Plant Sciences, Rank: 17/146.

**21.** Bar-Or C. <sup>s</sup>, Bar-Eyal M., Gal T.Z. <sup>s</sup>, Kapulnik Y., Czosnek H. and **Koltai H.** (2006)

Derivation of Species-Specific Hybridization-like Knowledge out of Cross-Species Hybridization Results.

*BMC Genomics* 7: 110. IF=4.029; Category: Genetics and Heredity, Rank: 37/129.

**22.** Bar-Or C. <sup>s</sup>, Czosnek H. and **Koltai H.** (2007)

Cross-species microarray hybridizations: a developing tool for studying diversity.

*Trends in Genetics* 23:200-207. IF=9.950; Category: Genetics and Heredity, Rank: 10/129.

**23.** Bar-Or C. <sup>s</sup>, Novikov E., ReinerA., Czosnek H. and **Koltai H.** (2007)

Utilizing Microarray Spot Characteristics to Improve Cross-Species Hybridization Results

*Genomics* 90:636-645. IF=3.558; Category: Genetics and Heredity, Rank: 45/129.

**24.** Kolotilin I., **Koltai H.**, Tadmor Y., Bar-Or C., Reuveni M., Meir A., Nahon S., Shlomo H., Chen L. and Levin I. (2007).

Transcriptional profiling of high pigment-2dg tomato mutant links early fruit plastid biogenesis with its overproduction of phytonutrients.

*Plant Physiology* 145:389-401. IF=6.110; Category: Plant Sciences, Rank: 8/155.

**25.** Somvanshi V.S., **Koltai H.** and Glazer I. (2008).

Expression of different desiccation-tolerance related genes in various species of entomopathogenic nematodes.

*Molecular and Biochemical Parasitology* 158:65-71. IF=2.951; Category: Parasitology, Rank: 6/25.

**26.** **Koltai H.** and Weingarten-Baror C. <sup>s</sup> (2008).

Specificity of DNA microarray hybridization: characterization, effectors and approaches for data correction.

*Nucleic Acids Research* 36:2395-2405. IF=6.878; Category: Biochemistry and Molecular Biology, Rank: 33/276.

**27.** Levin M., Resnick N., Rosianskey Y., Kolotilin I., Wininger S., Lemcoff H., Cohen S., Galili G., **Koltai H.** and Kapulnik Y. (2009).

Transcriptional profiling of *Arabidopsis thaliana* plants' response to low relative humidity suggests a shoot-root communication.

*Plant Science* 177: 450-459. IF=1.974; Category: Plant Sciences, Rank: 180/276.

**28.** Dermatsev V., Weingarten-Baror C. <sup>s</sup>, Resnick N., Gadkar V., Wininger S., Kolotilin I.,

Mayzlish-Gati E., Zilberman A., **Koltai H.** and Kapulnik Y. (2010).

Microarray analysis and functional tests suggest expansins' involvement in the early stages of AM fungus *Glomus intraradices* symbiosis on tomato (*Solanum lycopersicum*).

*Molecular Plant Pathology* 11:121 - 135. IF=3.084; Category: Plant Sciences, Rank: 20/155.

- 29.** Koltai H., Dor E., Hershenhorn J., Joel D.M., Weininger S., Lekalla S., Shealtiel H., Bhattacharya C., Eliahu E.<sup>s</sup>, Resnick N., Barg R., Kapulnik Y. (2010). Strigolactones' Effect on Root Growth and Root-Hair Elongation may be Mediated by Auxin-Efflux Carriers. *Journal of Plant Growth Regulation* 29:129-136. IF=2.859; Category: Plant Sciences, Rank: 36/190.
- 30.** Dor E., Alperin B., Wininger S., Ben-Dor B., Somvanshi V.S., Koltai H., Kapulnik Y. and Hershenhorn J. (2010). Characterization of a novel tomato mutant resistant to *Orobanche* and *Phelipanche* spp. weedy parasites. *Euphytica* 171: 371-380. IF=1.554; Category: Horticulture, Rank: 7/32.
- 31.** Meir D. <sup>s</sup>, Pivonia S., Levita R., Dori I., Ganot L., Meir S., Salim S., Resnick N., Wininger S., Shlomo E. and Koltai H. (2010). Application of Mycorrhizae to Ornamental Horticultural Crops: Lisianthus (*Eustoma grandiflorum*) as a Test Case. *Spanish Journal of Agriculture Research* 8: 85-810. IF=0.615; Category: Agronomy and Crop Science, Rank: 67/183.
- 32.** Bar-Akiva A., Ovadia R., Rogachev I., Bar-Or C. <sup>s</sup>, Bar E., Freiman Z. <sup>s</sup>, Nissim-Levi A., Gollop N., Lewinsohn E., Aharoni A., Weiss D., Koltai H. and Oren-Shamir M. (2010). Metabolic networking in *Brunfelsia calycina* petals after flower opening. *Journal of Experimental Botany* 61:1393-1403. IF= 5.364; Category: Plant Sciences, Rank: 11/190.
- 33.** Koltai H., LekKala S.P., Bhattacharya C., Mayzlish-Gati E., Resnick N., Wininger S., Dor E., Yoneyama K., Yoneyama K., Hershenhorn J., Joel D.M. and Kapulnik Y. (2010). A Tomato Strigolactone-Impaired Mutant Displays Aberrant Shoot Morphology and Plant Interactions . *Journal of Experimental Botany* 61:1739-1749. IF= 5.364; Category: Plant Sciences, Rank: 11/190.
- 34.** Mayzlish-Gati E., LekKala S.P., Resnick N., Wininger S., Bhattacharya C., Lemcoff J.H., Kapulnik Y. and Koltai H. (2010). Strigolactones are positive regulators of light-harvesting genes in tomato. *Journal of Experimental Botany* 61:3129-3136. IF=5.364; Category: Plant Sciences, Rank: 11/190.
- 35.** Koltai H. (2011) Mycorrhiza in floriculture: difficulties and opportunities. *Symbiosis special issue* 52:55-63. IF=1.214; Category: Microbiology, Rank: 91/114.
- 36.** Dor E., Yoneyama K., Wininger S., Kapulnik Y., Yoneyama K., Koltai H., Xiaonan X. and Hershenhorn J. (2011). Strigolactone Deficiency Confers Resistance in Tomato Line SL-ORT1to the Parasitic Weeds *Phelipanche* spp. and *Orobanche* spp. *Phytopathology* 101:213-222. IF=2.799; Category: Plant Sciences, Rank: 42/190
- 37.** Kapulnik Y., Delaux P-M., Resnick N., Mayzlish-Gati E., Wininger S., Bhattacharya C., Séjalon-Delmas N., Combier J-P., Bécard G., Belausov E., Beeckman T., Dor E., Hershenhorn J. and Koltai H. (2011). Strigolactones affect lateral root formation and root hair elongation in *Arabidopsis*. *Planta* 233:209–216. IF=3.000; Category: Plant Sciences, Rank: 32/190.

- 38.** Boubourakas I.N., Voloudakis A., Fasseas K., **Koltai H.** and Kyriakopoulou P.E. (2011) Cellular location of *Peach latent mosaic viroid*, peach calico variant, in peach sections by liquid phase in situ reverse transcription – polymerase chain reaction.  
*Plant Pathology* 60: 468-473. IF=2.125; Category: Plant Sciences, Rank: 57/190.
- 39.** Kapulnik Y., Resnick N., Mayzlish-Gati E., Kaplan Y., Weininger S., Hershenhorn J. and **Koltai H.** (2011) Strigolactones interact with ethylene and auxin in regulating root-hair elongation in *Arabidopsis*.  
*Journal of Experimental Botany* 62: 2915-2924. IF=5.364; Category: Plant Sciences, Rank: 11/190.
- 40.** Kolotilin I., **Koltai H.**, Bar-Or C. <sup>s</sup>, Nahon S., Chen L., Shlomo H., Levin I. and Reuveni M. (2011) Expressing Yeast SAMdc Gene Confers Broad Changes in Gene Expression and Alters Fatty Acid Composition in Tomato Fruit.  
*Physiologia Plantarum* 142: 211-223. IF=3.112; Category: Plant Sciences, Rank: 28/190.
- 41. Koltai H.** (2011) Strigolactones are regulators of root development.  
*New Phytologist* 190: 545-549. IF=6.645; Category: Plant Sciences, Rank: 6/190.
- 42. Koltai H.**, Cohen M., Chisin O., Mayzlish-Gati E., Bécard G., Puech-Pagès V., Ben Dor B., Resnick N., Wininger S. and Kapulnik Y. (2011) Light is a positive regulator of strigolactone levels in tomato roots.  
*Journal of Plant Physiology* 168:1993–1996. IF=2.791; Category: Plant Sciences, Rank: 43/190.
- 43. Dor E., Joel D.M., Kapulnik Y., Koltai H. and Hershenhorn J.** (2011) The synthetic strigolactone GR24 influences the growth pattern of phytopathogenic fungi  
*Planta* 234:419-427. IF=3.000; Category: Plant Sciences, Rank: 32/190.
- 44.** Pollock C.B., **Koltai H.**, Kapulnik Y., Prandi C. and Yarden R.I. (2012) Strigolactones: A Novel Class of Phytohormones that Inhibit the Growth and Survival of Cancer Cells and Cancer Stem-Like Enriched Mammosphere Cells.  
*Breast Cancer Research and Treatment*, 134:1041-1055. IF=4.431; Category: Oncology, Rank: 37/196.
- 45.** Mayzlish Gati E., De Cuyper C., Goormachtig S., Beeckman T., Vuylsteke M., Brewer P.B., Beveridge C.A., Yermiyahu U., Kaplan Y., Enzer Y., Wininger S., Resnick N., Cohen M., Kapulnik Y. and **Koltai H.** (2012) Strigolactones Are Involved in Root Response to Low Phosphate Conditions in *Arabidopsis*.  
*Plant Physiology*, 160: 1329-1341. IF=6.535; Category: Plant Sciences, Rank: 7/190.
- 46. Koltai H.** (2013) Strigolactones activate different hormonal pathways for regulation of root development in response to phosphate growth conditions.  
*Annals of Botany*, 112:409-15. IF=4.030; Category: Plant Sciences, Rank: 19/190.
- 47.** Cohen M., Prandi C., Occhiato E.G., Tabasso S., Wininger S., Resnick N., Steineberger Y., **Koltai H.** and Kapulnik Y. (2013) Structure-Function Relations of Strigolactone Analogues: Activity as Plant Hormones and Plant Interactions.  
*Molecular Plant* 6: 141-152. IF=5.546; Category: Plant Sciences, Rank: 9/190.

- 48.** Brewer P.B., **Koltai H.** and Beveridge C.A. (2013)  
Diverse roles of strigolactones in plant development  
*Molecular Plant*, 6:18-28. IF=5.546; Category: Plant Sciences, Rank: 9/190.
- 49.** Portillo M., Cabrera J., Lindsey K., Topping J., Fe Andrés M., Emiliozzi M., Oliveros J.C., García-Casado G., Solano R., **Koltai H.**, Resnick N., Fenoll C. and Escobar C. (2013)  
Distinct and conserved transcriptomic changes during nematode induced giant cell development in tomato compared to arabidopsis: a functional role for gene repression.  
*New Phytologist*, 197: 1276-1290. IF=6.645; Category: Plant Sciences, Rank: 6/190.
- 50.** Koren D. <sup>s</sup>, Resnick N., Mayzlish-Gati E., Belausov E., Weininger S., Kapulnik Y. and **Koltai H.** (2013)  
Strigolactone signaling in the endodermis is sufficient to restore root responses and involves SHY2 activity.  
*New Phytologist*, 198: 866-874. IF=6.645; Category: Plant Sciences, Rank: 6/190.
- 51.** Enzer Y., Khalaila I., Mayzlish Gati E., Kapulnik Y. and **Koltai H.** (2013)  
The strigolactone analog GR24 stability and biological activity under abiotic conditions and the effect of a derivative of cellulose on its stability.  
*Plant molecular Biology and Biotechnology*, 4:1 (New journal, no published impact factor)
- 52. Koltai H.** and Kapulnik Y. (2013)  
Unveiling Signaling Events in Root Responses to Strigolactone.  
*Molecular Plant*, 6: 589-591. IF=6.605; Category: Plant Sciences, Rank: 8/196.
- 53.** Moshayov A. <sup>s</sup>, **Koltai H.** and Glazer I. (2013)  
Molecular characterization of the recovery process in the entomopathogenic nematode *Heterorhabditis bacteriophora*.  
*International Journal for Parasitology*, 43: 843-852. IF=3.404; Category: Parasitology, Rank 7/36.
- 54.** Pandya-Kumar, N., Shema, R., Kumar, M., Mayzlish-Gati, E., Levy, D., Zemach, H., Belausov, E., Wininger, S., Abu-Abied, M., Kapulnik, Y. and **Koltai, H.** (2014)  
Strigolactone analog GR24 triggers changes in PIN2 polarity, vesicle trafficking and actin-filament architecture.  
*New Phytologist*, 202: 1184–1196. IF=6.373; Category: Plant Sciences, Rank: 9/196.
- 55.** Pollock, C.B., McDonough, S., Wang, V.S., Lee, H., Ringer, L., Li X., Prandi C., Lee, R.J., Feldman A., **Koltai H.**, Kapulnik Y., Rodriguez O., Schlegel R., Albanese C. and Yarden R.I. (2014)  
Strigolactone analogues induce apoptosis through activation of p38 and the stress response pathway in cancer cell lines and in conditionally reprogramed primary prostate cancer cells.  
*Oncotarget*, 5: 1683–1698. IF=6.627; Category: Oncology, Rank 17/202.
- 56. Koltai, H.** (2014)  
Review: Implications of non-specific strigolactone signaling in the rhizosphere.  
*Plant Science*, 225: 9–14. IF=4.114; Category: Plant Sciences, Rank: 18/196.
- 57. Koltai, H.** (2014)

Receptors, repressors, PINs: a playground for strigolactone signaling.  
*Trends in Plant Science*, 19: 727-733. IF=13.749; Category: Plant Sciences, Rank: 2/196.

- 58.** Kapulnik Y. and **Koltai H.** (2014)  
Strigolactone involvement in root development, response to abiotic stress and interactions with the biotic soil environment.  
*Plant Physiology*, 166: 560-569. IF=7.394; Category: Plant Sciences, Rank: 6/196.
- 59.** Kumar M., Pandya-Kumar N., Dam A., Haor H., Mayzlish-Gati E., Belausov E., Wininger S., Abu-Abied M., McErlean C.S.P., Bromhead L.J., Prandi C., Kapulnik Y. and **Koltai H.** (2015).  
*Arabidopsis* response to low-phosphate conditions includes active changes in actin filaments and PIN2 polarization and is dependent on strigolactone signaling.  
*Journal of Experimental Botany*, 66: 1499-1510. IF= 5.794; Category: Plant Sciences, Rank: 11/196.

- 60.** Glazer I., Santhi SV., Salamea L., Nakache Y., **Koltai H.**, Soroker, V. (2015).  
Attraction of entomopathogenic nematodes *Steinernema carpocapsae* and *Heterorhabditis bacteriophora* to the red palm weevil (*Rhynchophorus ferrugineus*).  
*Biological Control*, 83: 75–81. IF=1.873; Category: Entomology, Rank: 15/90.

- 61. Koltai H.** (2015).  
Cellular events of strigolactone signaling and their crosstalk with auxin in roots.  
*Journal of Experimental Botany*, 66: 4855-4861. IF= 5.794; Category: Plant Sciences, Rank: 11/196.

- 62.** Gruber E.R., Tsechansky L., Mayzlish-Gati E., Shema R., **Koltai H.** (2015).  
Humic substances extract from biochar reduces *Arabidopsis* root hair density and length under P-sufficient and P-starvation conditions.  
*Plant and Soil*, 1-10. IF=2.952

- 63.** Mayzlish-Gati E., Laufer D., Shaknof J., Sananes A., Bier A., Ben-Harosh S., Belausov E., Grivas C.F., Johnson M.D., Yarden R.I., Artuso E., Levi O., Genin O., Prandi C., Khalaila I., Pines M., Kapulnik Y. and **Koltai H.** (2015)  
Strigolactone analogues act as new anti-cancer agents in inhibition of breast cancer in xenograft model.  
*Cancer Biology and Therapy*, 1-7. IF=3.072

- 64.** Yaari M., Doron-Faigenboim A., **Koltai H.**, Salame L. and Glazer I. (2015)  
Transcriptome analysis of stress tolerance in entomopathogenic nematodes of the genus *Steinernema*  
*The International Journal for Parasitology* 46: 83–95.

- 65.** Fridlender M., Lace B., Wininger S., Dam A., Kumari P., Belausov E., Tsemach H., Kapulnik Y., Prandi C. and **Koltai H.** (2015)  
Influx and Efflux of Strigolactones are Actively Regulated and involve the Cell Trafficking System.  
*Molecular Plant* 8: 1809-1812. IF=6.337

- 66.** Fridlender M., Kapulnik Y. and **Koltai H.** (2015)  
Plant derived substances with anti-cancer activity: from folklore to practice  
*Frontier in Plant Science- Crop Science and Horticulture* 6: 799.

- 67.** Prandi C., Artuso E., Ghibaudi E., Lace B., Marabello D., Vinciguerra D., Lombardi C., **Koltai H.**, Kapulnik Y., Novero M., Occhiato E., Scarpi D., Parisotto S., Deagostino A., Venturello P., Mayzlish-Gati, E., Bier A. (2015) Stereochemical Assignment of Strigolactone analogues confirms their selective biological activity. *Journal of Natural Products*, 78: 2624–2633. IF=3.798
- 68.** Turgeman T., Leubinski O., Roth-Bejerano N., Kagan-Zur V., Kapulnik Y., **Koltai H.**, Zaady E., Ben-Shabat S., Guy O., Lewinsohn E., Sitrit Y. (2015) The role of pre-symbiotic auxin signaling in ectendomycorrhiza formation between the desert truffle *Terfezia boudieri* and *Helianthemum sessiliflorum* Mycorrhiza. *Mycorrhiza*, 1-11. IF=3.459
- 69.** Kapulnik Y., **Koltai H.** (2016) Fine-tuning by strigolactones of root response to low phosphate. *Journal of Integrative Plant Biology*, 58: 203–212. IF=3.335
- 70.** Croglio, M.P., Haake, J.M., Ryan, C.P., Wang, V.S., Lapier, J., Schlarbaum, J.P., Dayani, Y., Artuso, E., Prandi, C., **Koltai, H.** and Agama, K., (2016) Analogs of the novel phytohormone, strigolactone, trigger apoptosis and synergize with PARP inhibitors by inducing DNA damage and inhibiting DNA repair. *Oncotarget*, 7: 13984-14001. IF=6.627
- 71.** Madmon O., Mazuz M., Kumari P., Dam A., Ion A., Mayzlish-Gati E., Belausov E., Wininger S., Abu-Abied M., McErlean C.S.P., Bromhead L.J., Perl-Treves R., Prandi C., Kapulnik Y., and **Koltai H.** (2016) Expression of MAX2 under SCARECROW promoter enhances the strigolactone/MAX2 dependent response of Arabidopsis roots to low-phosphate conditions. *Planta*, 243: 1419–1427. IF=3.263
- 2. Books and Invited Reviews**
- 1.** Oka Y., **Koltai H.**, Bar-Eyal M., Mor M., Sharon E., Chet I. and Spiegel Y. (2000). New strategies for the control of plant-parasitic nematodes. *Pest Management Science* 56: 983-988.
- 2. **Koltai H.** and Kapulnik Y. (2010).**  
Strigolactones as mediators of plant growth responses to environmental conditions. *Plant Signaling and Behavior* 6:37-41.
- 3.** Kapulnik Y. and **Koltai H.** (2010).  
Editor of a book "*Arbuscular Mycorrhizas: Physiology and Function*" 2<sup>nd</sup> Edition (Springer, The Netherlands).
- 4. **Koltai H.** (2011).**  
Editor of *SYMBIOSIS* special issue on “*Mycorrhiza application under arid and semi-arid conditions*”, Volume 52, Issue 2.

**5. Koltai H.**(2011).

Strigolactones' ability to regulate root development may be executed by induction of the ethylene pathway.

*Plant Signaling and Behavior* 6: 1004-1005.

**6. Koltai H.** and Beveridge C. (2013).

Guest Editor of *Molecular Plant* special issue: “*New Signaling in Plants*”.

**7. Kumar M., Pandya-Kumar N., Kapulnik Y. and Koltai H.**(2015)

Strigolactone signaling in root development and phosphate starvation

*Plant Signaling and Behavior. In press.*

### **3. Book Chapters**

**1.** Cohn, E., **Koltai, H.**, Sharon, E. and Spiegel, Y. (1996).

Root-nematode interaction: Recognition and Pathogenicity.

In: *Plant Roots The Hidden Half*. Second Edition (Y. Waisel, A. Eshel, U. Kafkafi, eds.). Pp. 783-796, Marcel Dekker, INC., New York, NY.

**2. Koltai, H.**, Sharon, E. and Spiegel, Y. (2002).

Root-nematode interaction: Recognition and Pathogenicity.

In: *Plant Roots The Hidden Half*. Third Edition (eds., Y. Waisel, A. Eshel, U. Kafkafi,). Pp. 933-947, Marcel Dekker, INC., New York, NY.

**3.** Volpin H. and **Koltai H.** (2004).

Postgenomic Challenges in Plant Bioinformatics.

In: *The New Avenues in Bioinformatics* (eds., J. Seebach and E.Rubin). Pp. 135-143. Kluwer Academic Publishers, Dordrecht.

**4. Koltai H., Meir D.<sup>s</sup>, Resnik N., Shlomo E., Wininger S. and Ben-Dor B.** (2008)

Application of Mycorrhiza to Ornamental Horticulture Crops. In: *Mycorrhiza Works* (eds. Y. Kapulnik and F. Feldman). Pp. 39-45. DFG Selbstverlag, Braunschweig, Germany.

**5. Koltai H.** and Bar-Or C<sup>s</sup>.(2008).

Specificity of Oligonucleotide Microarray Hybridization: Effectors and Their Effects. In:

*Oligonucleotide Array Sequence Analysis* (ed, F. Columbus). Pp. 15-24. NOVA Science Publishers, hauppauge, New York.

**6. Koltai H.** (2009).

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