

Education and Training

- 1975-1978 B.Sc. in Agriculture at the Hebrew University of Jerusalem, Faculty of Agriculture, Rehovot, Israel.
- 1978-1980 M.Sc. Botany and Plant Pathology at the Hebrew University of Jerusalem. Title of thesis: Nitrogen fixation in *grass-Azospirillum* association. Supervision by: Prof. Y. Okon and Prof. J. Kigel
- 1980-1984 Ph.D. Microbiology at the Hebrew University of Jerusalem Faculty of Agriculture, Department of Plant Pathology and Microbiology. Title of thesis: Studies on the association between *Azospirillum* spp. bacteria and wheat plants. Supervision by: Prof. Y. Henis and Prof. Y. Okon
- 1984-1986 Postdoctoral position at the University of California, Davis, Department of Agronomy and Range Science. Research subject: *Rhizobium*-legume symbiosis. Supervision by: Prof. D.A. Phillips.
- 1991-1992 Sabbatical leave at the Center for Agricultural Molecular Biology, Rutgers University, New Jersey, USA, with Prof. I. Raskin. Research subject: Alternative oxidase in plants' mitochondria
- 1995-1996 Sabbatical leave at Phytotech, Inc. Monmouth J. New Jersey, USA, with Dr. B. Ensley. Research subject: Phytoremediation of heavy metal from contaminated soils.

Positions Held and Academic Status

- 1980-1983 Research Associate and Teaching Assistant, Dept. of Microbiology, The Hebrew Univ., Faculty of Agriculture.
- 1984 Instructor in Microbiology, Dept. of Microbiology, The Hebrew Univ., Faculty of Agriculture, Israel.
- 1986-1987 Crop Physiologist, Davis, Department of Agronomy and Range Science, University of California.
- 1987-date Research Scientist at the ARO, the Volcani Center, Institute of Field and Garden Crops.
- 1987 Promoted to Senior Scientist level B (equivalent to Senior Lecturer).
- 1991 Promoted to Senior Scientist level A (equivalent to Assoc. Prof.).
- 1997 Promoted to Senior Scientist level A + (equivalent to full Prof.).
- 1998-2001 Department head, Department of Agronomy and Natural Resources, Institute of Field and Garden Crops, ARO, The Volcani Center.
- 2001-2004 Director, Institute of Field and Garden Crops, ARO, The Volcani Center.
- 2005- 2007 Director, Institute of Plant Sciences, ARO, The Volcani Center.

Recent publications (last 5 years)

83. Miller G, Stein H, Honig A, **Kapulnik Y**, Zilberstein A (2005) Responsive modes of *Medicago sativa* proline dehydrogenase genes during salt stress and recovery dictate free proline accumulation. *Planta*, 222: 70-79
84. Bar-Or C., **Kapulnik Y**. and H. Koltai (2005) A broad characterization of the transcriptional profile of the compatible tomato response to the plant parasitic root knot nematode *Meloidogyne javanica*. *Journal of Plant Pathology*. 111:181-192
85. Gal T.Z., Aussenberg E.R., Bordman S., **Kapulnik Y**. and H. Koltai (2006) Expression of a plant expansin is necessary for completion of the root knot nematode life cycle. *Planta* 4:1-8
86. Bar-Or C., Bar-Eyal M., Gal T.Z., **Kapulnik Y**., Czosnek H. and H. Koltai (2006) Derivation of Species-Specific Hybridization-like Knowledge out of Cross-Species Hybridization Results. *BMC Genomics* 7: 110.

87. Bar-Or C., Bar-Akiva A., **Kapulnik Y.**, Czosnek H., Oren-Shamir M. and H. Koltai (2006) Cross-species hybridizations to spotted microarrays as a tool for functional genomics of horticultural plants. *Acta. Hort.* 763: 25-30.
88. Alkan N., Gadkar V., Yarden O. and **Kapulnik Y.** (2006) Analysis of quantitative interactions between two species of arbuscular mycorrhizal fungi (AMF), *Glomus mosseae* and *G. intraradices* by real-time PCR. *Applied & Environmental Microbiology.* 72: 4192-4199.
89. Xu G.-h., Chague V., Melamed-Bessudo C., **Kapulnik Y.**, Jain A., Raghothama K. G., Levy A. A., Silber A. (2007). Functional characterization of LePT4: a phosphate transporter in tomato with mycorrhiza-enhanced expression. *Journal of Experimental Botany* 58: 2491- 2499
90. Levin M, Lemcoff JH, Cohen S, and **Kapulnik Y** (2007) Low air humidity increases leaf-specific hydraulic conductance of *Arabidopsis thaliana* (L.) Heynh (Brassicaceae). *Journal of experimental botany* 58: 3711-3718
91. Rillig MC., Ramsey PW., Gannon JE., Mummey DL. Gadkar V. and **Kapulnik Y.** (2008). Suitability of mycorrhiza-defective mutant/wild type plant pairs (*Solanum lycopersicum* L. cv Micro-Tom) to address questions in mycorrhizal soil ecology. *Plant Soil*, 308: 267–275
92. Aloni, B., Karni, L., Deventurero, G., Levin, Z., Cohen, R., Katzir, N., Lotan-Pompan, M., Edelstein, M., Aktas, H., Turhan, E., Joel, D.M., Horev, C. and **Kapulnik, Y.** (2008). Physiological and biochemical changes at the rootstock-scion interface in graft combinations between and *Cucurbita* rootstocks and melon scion. *J. of Hort. Sci. & Biotechnol.* 83: 777-783
93. Lei Ge, Shubin Sun , Aiqun Chen, **Kapulnik Y.** and Guohua Xu (2008). Tomato sugar transporter genes associated with mycorrhiza and phosphate *J. Plant Growth Regulation* 55: 115-123
94. Dag, A., Yermiyahu, U., Ben-Gal, A., Zipori, I. and **Kapulnik, Y.** (2009). Nursery and post-transplant field response of olive trees to arbuscular mycorrhizal fungi in an arid region. *Crop & Pasture Science* 60: 427-433
95. P. Bonfante, A. Deagostino, **Kapulnik Y.**, P. Larini, E. G. Occhiato, C. Prandi, P. Venturello, Chaitali Bhattacharya (2009) A New Class of Conjugated Strigolactone Analogues with Fluorescent Properties: Synthesis and Biological Activity. *Organic & Biomolecular Chemistry*, 7: 3413-3420
96. Ö. Üstüner, S. Winingen, V. Gadkar, H. Badani, M. Raviv, N. Dudai, S. Medina and **Kapulnik Y.** (2009). Evaluation of different compost amendments with AM fungal inoculum for optimal growth of chives (*Allium schoenoprasum* L.). *Compost science & utilization* 17: 257-265
97. Hershenhorn, J., Eizenberg, H., Dor, E., **Kapulnik, Y.** and Goldwasser, Y. (2009). Broomrape management in tomato. *Weed Research* 49: 34-47
98. Dermatsev, V., Weingarten-Baror, C., Resnick, N., Gadkar, V., Winingen, S., Kolotilin, I. Mayzlish-Gati, E., Zilberstein, 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
99. Levin, M., Resnick, N., Rosianskey, Y., Kolotilin, I., Winingen, S., Lemcoff, H., Cohen, S., Galili, G., **Kapulnik, Y.** and Koltai, H. (2009). Transcriptional profiling of *Arabidopsis thaliana* plants' response to low relative humidity suggests a shoot-root communication. *Plant Science*: 177: 450-459

- 100 Koltai H., Dor E., Hershenhorn J., Joel D.M., Weininger S., Lekalla S., Shealtiel H., Bahattacharya C., Eliahu E., Resnick N., Barg R. and **Kapulnik Y.** (2009). Strigolactones' Effect on Root Growth and Root-Hair Elongation may be Mediated by Auxin-Efflux Carriers. *Journal of Plant Growth Regulation*, In press. DOI: 10.1007/s00344-009-9122-7.
101. Dor E., Alperin B., Wininger S., Ben-Dor B., Somvanshi V.S., Koltai H., **Kapulnik Y.** and Hershenhorn J. (2009). Characterization of a novel tomato mutant resistant to *Orobanchae* and *Phelipanche* spp. weedy parasites. *Euphytica*, 171: 371--380
102. Segev, A**, Badani, H., **Kapulnik, Y.**, Shomer, I., Oren-Shamir, M. and Galili S. (2010). Determination of polyphenols, flavonoids and antioxidant capacity in colored chickpea (*Cicer arietinum* L.). *Journal of Food Science*. In press.
- 103 Koltai H., LekKala S.P., Bahattacharya 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*. Accepted.
104. Ginzberg I., Tubi, A. Buchshtab O., Wininger S., Ben-Dor B., Fogelman E. and **Kapulnik Y.** (2010). Soil type and wetness affect tint of peanut (*Arachis hypogaea* L.) pod shell. *Peanut Science*. In press
105. Mayzlish-Gati, E., LekKala, SP., Resnick N, Wininger S., Bhattacharya C., Lemcoff JH., **Kapulnik Y.** and H. Koltai (2010). Strigolactones are positive regulators of light harvesting genes in tomato *Journal of Experimental Botany*. Accepted.