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University Education

1987-1990 B.Sc. in Agriculture at The Hebrew University of Jerusalem.
1990-1992 M.Sc. in Agriculture at The Hebrew University of Jerusalem.
1992-1995 Ph.D. in Agriculture at The Hebrew University of Jerusalem.
1995-1997 Postdoctoral researcher at the University of California at Davis.
2005-2006 Sabbatical leave at the University of Florida at Gainesville.

Positions held

1997-2000 Research scientist in the Department of Postharvest Science of Fresh Produce, ARO, The Volcani Center.
2000-2007 Promotion to Senior Scientist.
2007-2013 Promotion to Scientist level A.
2012 Promotion to Scientist level A+.
2013-2016 Head of Dept. of Postharvest Science of Fresh Produce

Reviewed Publications

- Porat, R.**, Reuveni, Y., Borochoy, A. and Halevy, A.H. (1993). Petunia flower longevity: the role of sensitivity to ethylene. *Physiol. Plant.* 89: 291-294.
- Porat, R.**, Borochoy, A. and Halevy, A.H. (1993). Enhancement of *petunia* and *Dendrobium* flower senescence by jasmonic acid methyl ester is via the promotion of ethylene production. *Plant Growth Regul.* 13: 297-301.
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- Porat, R.**, Halevy, H., Serek, M. and Borochoy, A. (1995). An increase in ethylene sensitivity following pollination is the initial event triggering an increase in ethylene production and enhanced senescence of *Phalaenopsis* orchid flowers. *Physiol. Plant.* 93: 778-784.
- Porat, R.**, Shlomo, E., Serek, M., Sisler, A.C. and Borochoy, A. (1995). 1-Methylcyclopropene inhibits ethylene action in cut phlox flowers. *Postharvest Biol. Technol.* 6: 313-319.
- Porat, R.**, Reiss, N., Atzorn, R., Halevy, A.H. and Borochoy, A. (1995). Examination of the

- possible involvement of lipoxygenase and jasmonates in pollination-induced senescence of *Phalaenopsis* and *Dendrobium* orchid flowers. *Physiol Plant*. 94: 205-210.
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- Lu, P., **Porat, R.**, Nadeau, J. and O'Neill, S.D. (1996). Identification of a meristem L1 layer-specific gene in Arabidopsis that is expressed during embryonic pattern formation and defines a new class of homeobox genes. *Plant Cell* 8: 2155-2168.
- Porat, R.**, Lu, P. and O'Neill, S.D. (1998). *Arabidopsis SKP1*, a homologue of a cell cycle regulator gene, is predominantly expressed in meristematic cells. *Planta*. 204: 345-351.
- Porat, R.**, Nadeau, J.A., Kirby J., Sutter, E.G. and O'Neill, S.D. (1998). Characterization of the primary pollen signal in the postpollination syndrome of *Phalaenopsis* flowers. *Plant Growth Regul.* 24: 109-117.
- Zheng, C.C., **Porat, R.**, Lu, P. and O'Neill, S.D. (1998). PNZIP is a novel mesophyll-specific cDNA that is regulated by phytochrome and a circadian rhythm and encodes a protein with a leucine zipper motif. *Plant Physiol.* 116: 27-35.
- Porat, R.**, Weiss, B., Cohen, L., Daus, A., Goren, R. and Droby, S. (1999). Effects of ethylene and 1-methylcyclopropene on the postharvest qualities of Shamouti oranges. *Postharvest Biol. Technol.* 15: 155-163.
- Droby, S., **Porat, R.**, Cohen, L., Weiss, B., Shapiro, B., Philosoph-Hadas, S. and Meir, S. (1999). Suppression of green mold decay in grapefruits by postharvest application of jasmonates. *J. Amer. Soc. Hort. Sci.* 124: 184-188.
- Porat, R.**, Lers, A., Dori, S., Cohen, L., Weiss, B., Daus, A., Wilson, C.S. and Droby, S. (1999). Induction of chitinase and β -1,3-endoglucanase proteins by UV irradiation and wounding in grapefruit peel tissue. *Phytoparasitica* 27: 233-238.
- Porat, R.**, Daus, A., Weiss, B., Cohen, L., Fallik, E. and Droby, S. (2000). Reduction of postharvest decay in organic citrus fruit by a short hot water brushing treatment. *Postharvest Biol. Technol.* 18: 151-157.
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- Pavoncello, D., Lurie, S., Droby, S. and **Porat, R.** (2000). A hot water treatment induces resistance to *Penicillium digitatum* and promotes the accumulation of heat shock and pathogenesis-related proteins in grapefruit flavedo. *Physiol. Plant*. 111: 17-22.
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- Porat, R.**, Weiss, B., Cohen, L., Daus, A. and Aharoni, N. (2004). Reduction of postharvest rind disorders in citrus fruit by modified atmosphere packaging. *Postharvest Biol. Technol* 33: 35-43.
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- Porat, R.**, Tietel, Z., Zipori, I., Dag, A. (2011). Aroma volatile compositions of high- and low-aromatic guava varieties. *J. Sci. Food Agric.* 91: 2794-2798.
- Tietel, Z., **Porat, R.***, Weiss, K., Ulrich, D. (2011). Identification of aroma-active compounds in fresh and stored 'Mor' mandarins. *Int. J. Food Sci Technol.* 46: 2225-2231.
- Mayuoni, L., **Porat, R.** (2011). Postharvest treatments for degreening of 'Villa franca' lemons. *HortTechnology* 21: 624-627.
- Tietel, Z., Lewinsohn, E., Fallik, E., **Porat, R.** (2011). Elucidating the roles of ethanol fermentation metabolism in causing off-flavors in mandarins. *J. Agric. Food Chem.* 59: 11779-11785.
- Tietel, Z., Lewinsohn, E., Fallik, E., **Porat, R.** (2012). Importance of storage temperatures in maintaining flavor and quality of mandarins. *Postharvest Biol. Technol.* 64: 175-182.
- Chaudhary, P., Jayaprakasha, J.K., **Porat, R.**, Patil, B.S. (2012). Degreening and postharvest storage influences 'Star Ruby' grapefruit (*Citrus paradisi* Macf.) bioactive compounds. *Food Chemistry* 135: 1667-1675.
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- Mayuoni, L., Daus, A., **Porat, R.** (2013). Changes in sensory quality and aroma volatile composition during prolonged storage of 'Wonderful' pomegranate fruit. *Int. J. Food Sci Technol.* 48: 1569-1578.
- Mayuoni-Kirshinbaum, L., Bar-Ya'akov, I., Hatib, K., Holland, D., **Porat, R.** (2013). Genetic diversity and sensory preference in pomegranate fruits. *Fruits* 68: 517-524.
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- Mayuoni-Kirshinbaum, L., **Porat, R.** (2014). The flavor of pomegranate fruit: a review. *J. Sci. Food Agric.* 94: 21-27.
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Book chapters

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Articles in Hebrew

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Guidance of students

- Dafna Rozentzveig**, M. Sc., Title of thesis: "Isolation and characterization of genes involved in citrus fruit responses to temperature stresses", 2003. Co-supervisor, in guidance with Dr. A. Samach.
- Miri Ben-Yefet**, M. Sc., Title of thesis: "Isolation and characterization of genes involved in the induction of citrus fruit tolerance to the green mold pathogen *Penicillium digitatum*", 2003. Co-supervisor, in guidance with Dr. S. Droby and Prof. E. Goldschmidt.
- Marisa E. Garcia**, M.Sc. Title of thesis: "Effects of new organic waxes on the quality of oranges and grapefruits", 2004.
- Margarita Spitnitskaya**, M.Sc., Title of thesis: "Isolation and characterization of genes involved in the induction of chilling tolerance in grapefruit", 2005. Co-supervisor, in guidance with Dr. A. Samach.
- Shi Jianxin**, Ph.D., Title of thesis: "Physiological and molecular responses of citrus fruit to anaerobic stress", 2007. Co-supervisor, in guidance with Prof. E. Goldschmidt.
- Dana Kadosh-Zoldan**, M. Sc., Title of thesis: "Identification of novel genes essential for survival of Arabidopsis plants at cold and chilling temperatures", 2009. Co-supervisor, in guidance with Dr. A. Samach.
- Lina Mayuoni**, M. Sc., Title of thesis: "Physiological and molecular responses of citrus fruit to ethylene degreening, 2011.
- Michal Sharabi**, Ph.D., Title of thesis: "Involvement of the *CBF1* transcription factor in retardation of leaf senescence and extension of longevity of Arabidopsis plants", 2011. Co-supervisor, in guidance with Dr. A. Samach.
- Zipora Tietel**, Ph.D., Title of thesis: "Molecular and biochemical mechanisms involved in governing sensory quality and aroma volatile composition in mandarins", 2012. Co-supervisor, in guidance with Dr. E. Levinson and Prof. E. Fallik.
- Gili Benjamin**, M. Sc., Title of thesis: "Physiological and molecular responses of citrus fruit to ethylene degreening, 2013.

Hadar Arnon, M. Sc., Title of thesis: "Development of polysaccharide-based edible coatings for Citrus fruit", 2013. Co-supervisor, in guidance with Dr. Elena Poverenov.

Lina Mayuoni-Kirshinbaum, Ph.D., Title of thesis: "Regulation of pomegranate flavor", 2015.

Livnat Goldenberg, Ph.D., Title of thesis: "Characterization of variance in fruit quality parameters among mandarin varieties and studying the factors involved in their regulation", (in progress).

Li Li, Postdoc fellow, Research title: Effects of the ethylene-action inhibitor 1-methylcyclopropene on postharvest quality of non-climacteric fruit.

Yael Kashas, Ph.D., Title of thesis: "Physiological and molecular aspects involved in chilling tolerance/susceptibility in pomegranate fruits ", (in progress).

Editorial Responsibilities

2015 to date – Associate Editor of *Journal of the Science of Food and Agriculture*.

2016 to date Editorial board member of *Postharvest Biology & Technology*.