

### Dr. Ron Porat

Department of Postharvest Science of Fresh Produce, ARO, The Volcani Center,  
P.O. Box 6, Bet Dagan 50250, Israel  
Tel.: 972-3-9683617, Fax: 972-3-9683622  
E-mail: rporat@volcani.agri.gov.il  
<http://www.agri.gov.il/en/people/702.aspx>

#### 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 position 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-to date Promotion to Scientist level A.

#### 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.
- Porat, R.,** Borochoy, A. and Halevy, A.H. (1994). Pollination-induced senescence in *Phalaenopsis* petals: relationship of ethylene sensitivity to activity of GTP-binding proteins and protein phosphorylation. *Physiol. Plant.* 90: 679-684.
- Porat, R.,** Borochoy, A. and Halevy, A.H. (1994). Pollination-induced changes in ethylene production and sensitivity to ethylene in cut *Dendrobium* orchid flowers. *Scientia Hort.* 58: 215-221.
- Porat, R.,** Borochoy, A., Halevy, A.H. and O'Neill, S.D. (1994). Pollination-induced senescence of *Phalaenopsis* flowers. The wilting process, ethylene production and sensitivity to ethylene. *Plant Growth Regul.* 15: 129-136.
- Porat, R.,** Halevy, A.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.
- Halevy, A.H., **Porat, R.,** Spiegelstein, H., Borochoy, A., Botha, L. and Whitehead, C.S.

- (1996). Involvement of short-chain saturated fatty acids the regulation of pollination-induced ethylene sensitivity of *Phalaenopsis* orchid flowers. *Physiol. Plant.* 97: 469-474.
- 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  $\beta$ -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.
- Porat, R.**, Pavoncello, D., Peretz, J., Ben-Yehoshua, S. and Lurie, S. (2000). Effects of various heat treatments on the induction of cold tolerance and on the postharvest qualities of 'Star Ruby' grapefruit. *Postharvest Biol. Technol.* 18: 159-165.
- Porat, R.**, Pavoncello, D., Peretz, J., Weiss, B., Daus, A., Cohen, L., Ben-Yehoshua, S., Droby, S. and Lurie, S. (2000). Induction of resistance to *Penicillium digitatum* and chilling injury in Star Ruby grapefruit by a short hot water rinse and brushing treatment. *J. Hort. Sci. & Biotechnol.* 75: 428-432.
- 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.
- Porat, R.**, Xuqiao, F., Huberman, M., Goren, R. and Goldschmidt, E.E. (2001). Gibberellic acid slows the postharvest degreening of 'Oroblanco' citrus fruits. *HortScience* 36: 937-940.
- Porat, R.**, Vinokur, V., Holland, D., McCollum, G.T. and Droby, S. (2001). Isolation of a citrus chitinase cDNA and characterization of its expression in response to elicitation of fruit pathogen resistance. *J. Plant Physiol.* 158: 1585-1590.
- Porat, R.**, Vinokur, V., McCollum, G.T. and Droby, S. (2002). Effects of various elicitors on the transcription of a  $\beta$ -1,3-endoglucanase gene in citrus fruit. *J. Phytopathology* 150: 1-6.
- Droby, S., Vinokur, V., Weiss, B., Cohen, L., Daus, A., Goldschmidt, E.E. and **Porat, R.** (2002). Induction of resistance to *Penicillium digitatum* by the yeast biocontrol agent *Candida oleophila*. *Phytopathology* 92: 393-399.

- Porat, R.**, Pavoncello, D., Ben-Hayyim, G. and Lurie, S. (2002). A heat treatment induced the expression of a Na<sup>+</sup>/H<sup>+</sup> antiport gene in citrus fruit. *Plant Science* 162: 957-963.
- Porat, R.**, Pavoncello, D., Lurie, S. and McCollum, G.T. (2002). Identification of a grapefruit cDNA belonging to a unique class of citrus dehydrins and characterization of its expression patterns under temperature stress conditions. *Physiol. Plant.* 115: 598-603.
- Porat, R.**, Daus, A., Weiss, B., Cohen, L. and Droby, S. (2002). Effects of combining hot water, sodium bicarbonate and biocontrol on postharvest decay of citrus fruit. *J. Hortic. Sci. & Biotechnol.* 77: 441-445.
- Porat, R.**, Weiss, B., Cohen, L., Daus, A. and Cohen, E. (2003). Effects of intermittent warming and temperature conditioning on the postharvest quality of 'Oroblanco' citrus fruit following long-term cold storage. *HorTechnology* 13: 70-74.
- Porat, R.**, Vinokur, V., Weiss, B., Cohen, L., Daus, A., Goldschmidt, E.E. and Droby, S. (2003). Induction of resistance to *Penicillium digitatum* in grapefruit by  $\beta$ -aminobutyric acid. *Eur. J. Plant Pathol.* 109: 901-907.
- Porat, R.**, Pasentsis, K., Rozenzvieg, D., Gerasopoulos, D., Falara, V., Samach, A., Lurie, S. and Kanellis, A.K. (2004). Isolation of a dehydrin cDNA from orange and grapefruit citrus fruit that is specifically induced by the combination of heat followed by chilling temperatures. *Physiol. Plant.* 120: 256-264.
- 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.
- Rozenzvieg, D., Elmaci, C., Samach, A., Lurie, S. and **Porat, R.** (2004). Isolation of four heat shock protein cDNAs from grapefruit peel tissue and characterization of their expression in response to heat and chilling temperature stresses. *Physiol. Plant.* 121: 421-428.
- Hasdai, H., Elmaci, C., Goldschmidt, E.E., Droby, S. and **Porat, R.** (2005). Isolation of a thioredoxin H cDNA from grapefruit peel tissue that is induced upon infection by *Penicillium digitatum* and elicitation of pathogen resistance. *Physiol. Mol. Plant Pathol.* 65: 277-283.
- Shi, J.X., **Porat, R.**, Goren, R. and Goldschmidt, E.E. (2005). Physiological responses of 'Murcott' mandarins and 'Star Ruby' grapefruits to anaerobic stress conditions and their relation to fruit taste, quality, and emission of off-flavor volatiles. *Postharvest Biol. Technol* 38: 99-105.
- Porat, R.**, Weiss, B., Cohen, L., Daus, A. and Biton, A. (2005). Effects of polyethylene wax content and composition on taste, quality, and emission of off-flavor volatiles in 'Mor' mandarins. *Postharvest Biol. Technol.* 38: 262-268.
- Guy, C.L., **Porat, R.**, and V. Hurry (2006). Plant cold and abiotic stress gets hot. *Physiol. Plant.* 126 1-4.
- Hasdai, M., Weiss, B., Levi, A., Samach, A. and **Porat, R.** (2006). Differential responses of *Arabidopsis* ecotypes to cold, chilling and freezing temperatures. *Annals Applied Biology* 148: 113-120.
- Sapitnitskaya, M., Maul, P., McCollum, G.T., Guy, C.L., Weiss, B., Samach, A. and **Porat, R.** (2006). Postharvest Heat and Conditioning Treatments Activate Different Molecular Responses and Reduce Chilling Injuries in Grapefruit. *J. Exp. Bot.* 57: 2943-2953.
- Shi, J.X., **Porat, R.**, Riov, J., Goren, R. and Goldschmidt, E.E. (2007). Regulatory aspects of ethanol fermentation in immature and mature citrus fruit. *J. Amer. Soc. Hort. Sci.* 132: 126-133..

- Porat, R.** and Guy, C.L. (2007). Arabidopsis as a model system to study chilling tolerance mechanisms in plants. *Plant Stress* 1: 85-92.
- Kaplan, F., Kopka, J., Sung, D., Zhao, W., Popp, M., **Porat, R.** and Guy, C. (2007). Transcript and metabolite profiling during cold acclimation of Arabidopsis reveals an intricate relationship of cold-regulated gene expression with modifications in metabolite content. *Plant J.* 50: 967-981.
- Shi, J.X., Goldschmidt, E.E., Goren, R. and **Porat, R.** (2007). Molecular, biochemical and anatomical factors governing ethanol fermentation metabolism and accumulation of off-flavors in mandarins and grapefruit. *Postharvest Biol. Technol.* 46: 242-251.
- Maul, P., McCollum, G.T., Popp, M., Guy, C.L. and **Porat, R.** (2008). Transcriptome profiling of grapefruit flavedo following exposure to low temperature and conditioning treatments uncovers principal molecular components involved in chilling tolerance and susceptibility. *Plant, Cell & Environ.* 31: 752-768.
- Shi, J.X., Chen, S., Gollop, N., Goren, R., Goldschmidt, E.E. and **Porat, R.** (2008). Effects of anaerobic stress on the proteome of citrus fruit. *Plant Science* 175: 478-486.
- Porat, R.** (2008). Degreening of citrus fruit. *Tree Forestry Sci. Biotechnol.* 2: 71-76.
- Sharabi-Schwager, M., Lers, A., Samach, A. and **Porta, R.** (2009). Relationship between plant stress tolerance, senescence and life span. *Stewart Postharvest Reviews* 5 (2): 1-6.
- Porat, R.,** Weiss, B., Zipori I. and Dag, A. (2009). Postharvest Longevity and Responsiveness of Guava Varieties with Distinctive Climacteric Behaviors to 1-Methylcyclopropene. *HortTechnology* 19: 580-585.
- Sharabi-Schwager, M., Samach, A., **Porat, R.** (2010). Overexpression of the *CBF2* transcriptional activator in *Arabidopsis* suppresses the responsiveness of leaf tissue to the stress hormone ethylene. *Plant Biology* (in press).
- Sharabi-Schwager, M., Lers, A., Samach, A., Guy, C.L., **Porat, R.** (2010). Overexpression of the *CBF2* transcriptional activator in *Arabidopsis* delays leaf senescence and extends plant longevity. *J. Exp. Bot.* 61: 261-273.
- Sharabi-Schwager, M., Samach, A., **Porat, R.** (2010). Overexpression of the *CBF2* transcriptional activator in *Arabidopsis* counteracts hormone activation of leaf senescence. *Plant Signaling & Behavior* (in press).
- Tietel, Z., Bar, E., Lewinsohn, E., Feldmesser, E., Fallik, E., **Porat, R.** (2010). Effects of wax coatings and postharvest storage on sensory quality and aroma volatiles composition of 'Mor' mandarins. *J. Sci. Food Agric.* (in press).
- Tietel, Z., Weiss, B., Lewinsohn, E., Fallik, E., Porat, R. (2010). Improving taste and peel color of early-season Satsuma mandarins by combining high-temperature conditioning and degreening treatments. *Postharvest Biol. Technol.* (in press).

#### Book chapters

- Porat, R.** (2004). Reduction of chilling injury disorders in citrus fruit. In: *Crop Management and Postharvest Handling of Horticultural Products, Vol. IV: Diseases and Disorders of Fruits and Vegetables*, (R. Dris and R., Niskanen, eds.), Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, India, pp. 225-236.
- Ben-Yehoshua, S. and **Porat, R.** (2005). Heat treatments to reduce decay. In: *Environmentally Friendly Technologies for Agricultural Produce Quality*, (S. Ben-Yehoshua, ed.). CRC Press, Boca Raton, FL, USA, pp. 11-42.

- Porat, R.** and Davidson, M. (2006). Citrus production trends around the world, Part 4: Israel. In: *Fresh Citrus Fruits*, (W.F. Wardowski, W.M Miller, D.J. Hall, W. Grierson, eds.), Florida Science Source Inc., Longboat Key, FL, USA, pp. 153-158.
- Porat, R.** and Fallik, E. (2008). Off flavour production under fermentative conditions. In: *Fruit and vegetable flavor: recent advances and future prospects*. (B. Bruckner, S.G. Wyllie, eds.), Woodhead Publishing Ltd., Cambridge, UK, pp. 150-164.

#### Articles in Hebrew

- Porat, R.** and Borochoy, A. (1991). Eremurus: effects of temperature and day length on growth, flowering and corm formation. *Hassadeh* 71: 1376-1377.
- Porat, R.**, Shlomo, E. and Halevy, A.H. (1993). Celosia: effects of temperature and day length on growth and flowering. *Dapey Meyda* 3: 69-70.
- Porat, R.**, Borochoy, A. and Halevy, A.H. (1994). Pollination-induced senescence of orchid flowers as a model system for studying flowers senescence. *Dapey Meyda* 9: 77-79.
- Porat, R.**, Shlomo, E. and Halevy, A.H. (1994). Celosia: treatments for improving the amount of flower stems and their quality. *Dapey Meyda* 3: 59-61.
- Greenberg, J., Kaplan, Y., Fainzack, M., Egozi, Y., Harel, A., Droby, S., **Porat, R.** and Daus, A. (2001). Experiments to reduce the incidence of Nuxan (superficial rind pitting) on 'Shamouti' orange by growth regulators combined with potassium nitrate.. *Alon Hanotea* 55: 157-163.
- Porat, R.**, Xuqiao, F., Huberman, M., Goren, R. and Goldschmidt, E.E. (2001). Retaining the green color in 'Oroblanco' fruit: effects of storage temperatures, gibberellic acid ethylene and 1-MCP. *Alon Hanotea* 55: 105-109.
- Porat, R.**, Daus A., Weiss B., Cohen L., Pavoncello D., Fallik E. and Droby S. (2001). Using hot water brushing to clean, disinfect and improve the postharvest storage performance of citrus fruit. *Alon Hanotea* 55: 273-277.
- Greenberg, J., Kaplan, Y., Fainzack, M., Egozi, Y., Harel, A., and **Porat, R.** (2002). Increasing fruit size and reducing the incidence of 'Nuxan' in 'Shamouti' orange by growth regulators combined with potassium nitrate. *Alon Hanotea* 56: 88-90.
- Greenberg, J., Kaplan, Y., Fainzack, M., Egozi, Y., Hassan, M., Hochberg, A. and **Porat, R.** (2002). Spraying with the growth regulators 2,4-D, 2,4-DP and 3,5,6-TPA in combination with 'Bonus' increases fruit size and reduces peel disorders in Shamouti. *Et Hadar* 48: 25-27.
- Porat, R.**, Weiss B., Cohen L., Daus A. and Cohen, E. (2002). Prolonging the marketing period of 'Oroblanco' fruit by long-term cold storage combined with conditioning or intermittent warming treatments. *Alon Hanotea* 56: 377-381.
- Porat, R.**, Weiss, B., Cohen, L., Daus, A., Samenco, A., Gizis, A., Neria, A., Ben-Arie, R., Rotman, N. and Asor, Z. (2003). Examination of the postharvest storage characteristics of the easy peeler 'Or'. *Alon Hanotea* 57: 376-380.
- Weiss, B., Cohen, L., Levi, A., Daus, A. and **Porat, R.** (2004). Testing the storage capacity of Mor mandarins: main problems and treatment recommendations. *Alon Hanotea* 58: 328-332.
- Daus A., Weiss B., Cohen L., Biton, A. and **Porat, R.** (2005). Effects of wax

- content and composition on the taste and quality of Nova mandarins. *Alon Hanotea* 59: 40-43.
- Porat, R.**, Weiss, B., Fuchs, Y., Neria, A., Gizis, A., Tzviling, A., Gamersny, D, Sharaby-Nov, A. and Ben-Arie, R. (2005). Long-term storage of 'Wonderful' pomegranate fruit by modified and controlled atmosphere technologies. *Alon Hanotea* 59: 396-399.
- Porat, R.**, Weiss, B., Fuchs, Y., Zandman, A., Sachnai, A., Word, G. and Kosto, I. (2006). Long-term storage of 'Wonderful' pomegranate fruit using modified atmosphere bags: development of new application technologies. *Alon Hanotea* 60: 339-343.
- Porat, R.**, Weiss, B., Fuchs, Y., Zandman and Kosto, I. (2007). Storage of pomegranate fruit in large modified atmosphere bags in harvest bins. *Alon Hanotea* 61: 714-717.
- Ben-Arie, R., Neria, A., Gizis, A., Tzviling, A., Sharaby-Nov, A., **Porat, R.**, Weiss, B., Fuchs, Y., Shoer, T. and Surkin, G. (2007). Control of decay in 'Wonderful' pomegranates during storage in air or in modified or controlled atmospheres. *Alon Hanotea* 61: 934-936.
- Dag, A., Tzipori, I., Goren, M., Tomer, E. and **Porat, R.** (2008). Development and breeding of odorless guava cultivars as a new export commodity. *Alon Hanotea* 62: 76-79.
- Porat, R.** (2008). Degreening of citrus fruit: an updated review. *Alon Hanotea* 62: 320-325.
- Porat, R.**, Weiss, Daus, A., Kosto, I. (2008). Keeping quality of 'Wonderful' pomegranate fruit during export by using modified atmosphere bags or wax coatings. *Alon Hanotea* 62: 401-404.
- Shlomi, T., **Porat, R.**, Zipori, I., Dag, A. (2009). Export markets for guava fruit in West Europe. *Export Markets* 2-3: 6-9.
- Dag, A., Tzipori, I., Goren, M., Tomer, E., **Porat, R.**, Yunes, M., and Shlomi T. (2009). Development of guava fruit as an export commodity from Israel. *Alon Hanotea* 63: 826-828.
- Porat, R.** (2009). Waxing of citrus fruit: a review. *Alon Hanotea* 63: 882-886.
- Porat, R.**, Weiss, B., Tzipori, I., and Dag, A. (2009). Sea craft export of new guava varieties to the European market. *Alon Hanotea* 63: 879:880.
- Tietel, Z., **Porat, R.** (2010). Taste and aroma of citrus fruits. *Et Hadar* 71: 20-22.
- Porat, R.**, Carmi, N., Zadka, A., Erner, Y., Goren, R., Glodschmidt, E., Knonitz, S. (2010). Summary of the 2<sup>nd</sup> international citrus biotechnology conference held in Sicily, Italy. *Et Hadar* 71:26-29.

#### Articles of symposia proceedings

- Porat, R.**, Borochoy, A. and Halevy, A.H. (1995). Is jasmonic acid involved in the endogenous regulation of orchid flower senescence? *Acta Hortic.* 405: 314-319.
- Borochoy, A., Speigelstein, H. and **Porat, R.** (1995). Membrane changes during flower senescence. *Acta Hortic.* 405: 240-245.
- Porat, R.**, Borochoy, A. and Halevy, A.H. (1995). Factors affecting ethylene sensitivity in *Phalaenopsis* orchid flowers. *Acta Hortic.* 420: 39-41.
- Lurie, S., **Porat, R.**, Pavoncello, D., Peretz, J., Weiss, B., Cohen, L., Ben-Yehoshua, S., Fallik, A. and S. Droby (1999). Induction of red grapefruit resistance to *Penicillium digitatum* and chilling injury by a short hot water brushing treatment. *Proceedings of the Australian Centre for International Agricultural Research (ACIAR)* 110: 612-615.
- Porat, R.**, Jacob-Wilk, D., Weiss, B., Cohen, A., Holland, D. and Droby, S. (2000). Identification of chitinase and  $\beta$ -1,3-endoglucanase cDNAs from citrus fruit.

*Acta Hort.* 535: 133-137.

- Porat R.**, Weiss, B., Cohen, L., Vinokur, V., Pavoncello, D., Daus, A. and S. Droby (2000). Induction of Grapefruit Resistance to *Penicillium digitatum* by Chemical, Physical and Biological Elicitors. *Proceedings of the International Society of Citriculture* p. 1146-1148.
- Porat, R.**, Avidan, N. and D. Holland (2000). Microprojectile bombardment of DNA into citrus leaf and fruit tissues. *Proceedings of the International Society of Citriculture*, p. 108-109.
- Ben-Yehoshua, S., D'hallewin, G., Schirra, M., **Porat, R.** and V. Rodov (2000). Biotic and abiotic induction of resistance against pathogens in citrus fruit. *Proceedings of the International Society of Citriculture* p. 1107-1112.
- Halevy, A.H., Torre, S., Borochoy, A., **Porat, R.**, Philosoph-Hadas, S., Meir, S. and H Friedman (2001). Calcium in regulation of postharvest life of flowers. *Acta Hort.* 543: 345-351.
- Porat, R.**, Rozenzveig, D., Hasdai, M., Spitnitskaya, R., Samach, A. and S. Lurie (2004). Induction of chilling tolerance in grapefruit: physiological and molecular aspects. *Acta Hort.* 682: 475-479.
- Shi, J.X., **Porat, R.**, Goldschmidt, E.E., Chen, S.B., Gollop, N., Ravid U. and R. Goren (2007). Ethylene and volatile accumulation in citrus fruit. In: *Advances in Plant Ethylene Research*, A. Ramina et al., (Eds.). *Proceedings of the 7<sup>th</sup> International Symposium on the Plant Hormone Ethylene*. p. 181-187.
- Shi, J.X., Aharon, Z., Goren, R., Goldschmidt, E.E. and **R. Porat** (2005). Short-term exposures to reduced O<sub>2</sub> and elevated CO<sub>2</sub> atmospheres differently affects the respiratory characteristics of mandarins and grapefruits. *Acta Hort.* (In press).
- Porat R.**, Weiss, B., Kosto, I., Sandman, A., Shachnai, A. and G. Ward (2008). Keeping quality of pomegranate fruit during prolonged storage and transport by MAP: new development and commercial applications. *Acta Hort.* 804: 115-120.
- Aharoni, N., Rodov, V., Fallik, E., **Porat R.**, Pesis, E. and S. Lurie (2008). Controlling humidity improves efficacy of modified atmosphere packaging of fruits and vegetables. *Acta Hort.* 804: 121-128.
- Porat R.**, Weiss, B., Kosto, I., Sandman, A., Shachnai, A., Ward, T. Agar. (2009). Modified atmosphere / modified humidity packaging for preserving pomegranate fruit during prolong storage and transport. *Acta Hort.* 818: 299-304.
- Tietel, Z., Bar, E., Lewinsohn, E., Fallik, E., **Porat, R.** (2009). Sensory and aroma profiling of fresh and stored 'Or' mandarins. *Acta Hort.* (in press).
- Shi, J.X., Goldschmidt, E.E., Goren, R., **R. Porat**. (2009). Molecular responses of citrus fruit to anaerobic stress. *Acta Hort.* (in press).

#### 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.
- 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.
- 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”, research in progress. 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”, research in progress. Co-supervisor, in guidance with Dr. E. Levinson and Prof. E. Fallik.
- Lina Mayuoni**, M. Sc., Title of thesis: “Physiological and molecular responses of citrus fruit to ethylene degreening.”