

DEIRDRE M HOLCROFT:
LIST OF PUBLICATIONS AND INVITED PRESENTATIONS
2012

BOOK CHAPTER:

Holcroft, D.M., Lin, H. and Ketsa, S. 2005. Harvesting and storage. In: Menzell, C., Mitra, S.K. and Waite, G. (eds). Litchi and longan. Botany, production and uses. CABI, Wallingford. Pp 273-295.

PEER REVIEWED PUBLICATIONS:

- Minas, I.S., Crisosto, G.M., Holcroft, D., Vasilakakis, M., Crisosto, C.H. 2013. Postharvest handling of plums (*Prunus salicina* Lindl.) at 10°C to save energy and preserve fruit quality using an innovative application system of 1-MCP. *Postharvest Biology and Technology* 76, 1-9.
- Villalobos Acuna, M.G., Biasi, W.V., Mitcham, E.J. & Holcroft, D.M. 2011. Fruit temperature and ethylene modulate 1-MCP response of 'Bartlett' pears. *Postharvest Biology and Technology* 60, 17-23.
- Manganaris, G.A., Crisosto, C.H., Bremer, V. & Holcroft, D. 2008. Novel 1-methylcyclopropene immersion formulation extends shelf life of advanced maturity 'Joanna Red' plums (*Prunus salicina* Lindell). *Postharvest Biology and Technology* 47,429-433.
- Murray, X.J., Holcroft, D.M., Cook, N.C., Wand, S.J.E. 2005. Postharvest quality of 'Laetitia' and 'Songold' (*Prunus salicina* Lindell) plums as affected by preharvest shading treatments. *Postharvest Biology and Technology* 37, 81-92.
- Steyn, W.J., Holcroft, D.M., Wand, S.J.E., Holcroft, D.M. & Jacobs, G. 2004. Regulation of pear color development in relation to activity of flavonoid enzymes. *Journal of the American Society of Horticultural Science* 129, 6-12.
- Steyn, W.J., Holcroft, D.M., Wand, S.J.E., Holcroft, D.M. & Jacobs, G. 2004. Anthocyanin degradation in detached pome fruit with reference to preharvest red color loss and pigmentation patterns of blushed and fully red pears. *Journal of the American Society of Horticultural Science* 129, 13-19.
- Steyn, W.J., Wand, S.J.E., Holcroft, D.M. & Jacobs, G. 2002. Anthocyanins in vegetative tissues: A unified function in photoprotection. *New Phytologist* 155, 349-361.
- Stephens, I.A., Jacobs, G. and Holcroft, D.M. 2001. Glucose prevents leaf blackening of 'Sylvia' proteas. *Postharvest Biology and Technology* 23(3), 237-240.
- du Toit, P.G., Jacobs, G. Huysamer, M. and Holcroft, D.M. 2001. Exogenously applied ethylene reduces the cold requirement for ripening pears cv. Forelle. *South African Journal of Plant and Soil* 18(4), 147-153.
- Marais, E., Jacobs G. and Holcroft, D.M. 2001. Colour response of 'Cripps' Pink' apples to postharvest irradiation is influenced by maturity and temperature. *Scientia Horticulturae* 90(1-2), 31-41.
- Marais, E., Jacobs G. and Holcroft, D.M. 2001. Postharvest irradiation enhances anthocyanin synthesis in apples but not in pears. *HortScience* 36(4), 738-740.
- Stephens, I.A., Holcroft, D.M. and Jacobs, G. 2001. Low temperatures and girdling extend vase life of 'Sylvia' proteas. *Acta Horticulturae* 545, 205-214.
- Gil, M.I., Tomas-Barberan, F.A., Hess-Pierce, B., Holcroft, D.M. and Kader, A.A. 2000. Antioxidant activity of pomegranate juice and its relationship with phenolic composition and processing. *Journal of Agricultural and Food Chemistry* 48, 4581-4589.
- Holcroft, D.M. and Kader, A.A. 1999. Carbon dioxide-induced changes in color and anthocyanin synthesis in stored strawberry fruit. *HortScience* 34(7), 1244-1248.

- Holcroft, D.M. and Kader, A.A. 1999. Controlled atmosphere-induced changes in pH and organic acid metabolism may affect color of stored strawberry fruit. *Postharvest Biology and Technology* 17, 19-32.
- Holcroft, D.M., Gil, M.I. and Kader, A.A. 1998. Effect of carbon dioxide on anthocyanins, phenylalanine ammonia lyase and glucosyltransferase in the arils of stored pomegranates. *Journal of the American Society of Horticultural Science* 123(1), 136-140.
- Gil, M.I., Holcroft, D.M. and Kader, A.A. 1997. Changes in strawberry anthocyanins and polyphenols in response to carbon dioxide treatments. *Journal of Agricultural and Food Chemistry* 45(5), 1662-1667.
- Holcroft, D.M. and Mitcham, E.J. 1996. Postharvest physiology of litchi: A review. *Postharvest Biology and Technology* 9, 265-281.
- Holcroft, D.M., Smith, I.E. and Dicks, H.M. 1995. Effect of management practices, environmental conditions and hormone herbicide residues on lettuce production in Natal, South Africa. *Journal of the Southern African Society for Horticultural Sciences* 5(1), 47-49.
- Holcroft, D.M. and Smith, I.E. 1995. Soil fumigation for lettuce production. *South African Journal of Plant and Soil* 12 (1), 7-10.
- Holcroft, D.M. and Allan, P. 1994. Storage of kiwifruit pollen. *Journal of the Southern African Society for Horticultural Sciences* 4 (2), 21-23.
- Holcroft, D.M. and Allan, P. 1994. Applied research note. Artificial pollination of kiwifruit. *Journal of the Southern African Society for Horticultural Sciences* 4 (2), 24-26.

OTHER PUBLICATIONS INCLUDING CONFERENCE PROCEEDINGS:

- Macnish A.J., Mitcham, E.J. & Holcroft, D.M. 2012. Endogenous and exogenous ethylene modulates the response of 'Bartlett' pears to methylcyclopropene. *Acta Horticulturae*, 945:309-316.
- Crouch, E.M., Holcroft, D.M. & Huysamer, M. 2005. Mealiness of 'Forelle' pears – quo vadis? *Acta Horticulturae* 671, 369-376.
- Maré, L., Huysamer, M., Dodd, M.C., Truter, A.B., Kemp, A.T. & Holcroft, D.M. 2005. Extension of the storage life of plums (*Prunus salicina*) using controlled atmosphere shipping. *Acta Horticulturae* 682, 1689-1696.
- Steyn, W.J., Wand, S.J.E., Holcroft, D.M., & Jacobs, G. 2005. Red colour development and loss in pears. *Acta Horticulturae* 671, 79-85.
- Wand, S.J.E., Steyn, W.J., Holcroft, D.M., Mduli, M.J., van den Dool, K., & Jacobs, G. 2005. Use of evaporative cooling to improve 'Rosemarie' and 'Forelle' pear fruit blush color and quality. *Acta Horticulturae* 671, 103-111.
- Kruger, L., Cook, N.C. and Holcroft, D.M. 2003. Quality of Japanese plums as influenced by time of harvest and rate of ethylene production. *Acta Horticulturae* 600, 453-456.
- Martin, E.M., Crouch, I.J. & Holcroft, D.M. 2003. Ripening and mealiness of Forelle pears. *Acta Horticulturae* 600, 449-452.
- Stephens, I.A., Holcroft, D.M. and Jacobs, G. 2003. Storage and vase life extension of 'Sylvia' protea flowers. *Acta Horticulturae* 600, 123-126.
- Stephens, I.A., Holcroft, D.M. & Jacobs, G. 2003. Postharvest treatments to extend vase life of selected Proteaceae cut flowers. *Acta Horticulturae* 602, 155-159.
- L Maré, AB Truter, MC Dodd, M Huysamer & DM Holcroft, 2002. The use of CA storage, CO₂ shock treatments and/or 1-MCP treatments on 'Fuerte' and 'Hass' avocados. *South African Avocado Growers' Association Yearbook* 25, 40-49.
- Holcroft, D.M., Kruger, L. and Cook, N.C. 2002. Climacteric and suppressed climacteric ripening patterns in plums, implications for postharvest handling. *SA Fruit Journal* Jun/Jul p.14-17.

- Marais, E., Jacobs, G. and Holcroft, D.M. 2001. Light and temperature affect postharvest colour development in 'Cripps' Pink' apples. *Acta Horticulturae* 553, 91-93.
- Marais, E., Jacobs, G. and Holcroft, D.M. 2001. Postharvest irradiation affects colour development in bi-coloured pome fruit. *Acta Horticulturae* 553, 569-570.
- du Toit, P.G., Huysamer, M., Jacobs, G. and Holcroft, D.M. 2001. Exogenous ethylene shortens the prerequisite cold storage period for normal ripening of 'Forelle' pears. *Acta Horticulturae* 553, 181-183.
- Holcroft, D.M. and Kruger, L. 2001. Modification of ethylene-induced ripening of 'Hass' avocados by an ethylene absorbing filter. *South African Avocado Growers Association (SAAGA) Yearbook* 2001, 45, 47-48.
- Holcroft, D.M. 2001. Potential use of 1-MCP (AgroFresh) to maintain storage quality of fruit. 1. What is 1-MCP? *Proceedings of the Cape Pomological Association Symposium*. Pp.122-126.
- Kruger, L., Cook, N.C. and Holcroft, D.M. 2001. Quality and storage disorders of Japanese plums as influenced by harvest date. *Proceedings of the Cape Pomological Association Symposium*. Pp. 284-293.
- Martin, E., Crouch, I. and Holcroft, D.M. 2001. Ripening and mealiness of Forelle pears. *Proceedings of the Cape Pomological Association Symposium*. Pp. 180-188.
- Holcroft, D.M. 2000. Proven and promising techniques for maintaining postharvest quality. *The Farmer*, September 2000. Appendix. Pp. 4-5.
- Steyn, W.J., Holcroft, D.M., Wand, S.J.E., Cook, N.C. and Jacobs, G. 2000. Dating Rosemarie, how to make her blush? *Proceedings of the Cape Pomological Association Symposium*. Pp.55-62.
- Holcroft, D.M. 1999. Colour development versus sunburn. *Proceedings of the Cape Pomological Association Symposium*. Pp. 39-46.
- Gil, M.I., Holcroft, D.M. and Kader, A.A. 1997. Changes in pomegranate anthocyanins, phenylalanine ammonia lyase and glucosyltransferase in response to carbon dioxide treatments. *Proceedings 7th International Controlled Atmosphere Research Conference*. Vol. 3, 245-249.
- Holcroft, D.M., Gil, M.I. and Kader, A.A. 1997. Effect of carbon dioxide on anthocyanin biosynthesis during storage of fresh strawberry. *Proceedings 7th International Controlled Atmosphere Research Conference*. Vol. 3, 36 (Abstract only).
- Allan, P., Linsley-Noakes, G.C., Holcroft, D.M., Brunette, S.A., Burnett, M.J.I. and Cathcart-Kay, A. 1997. Kiwifruit research in a subtropical area. *Acta Horticulturae* 444(1), 37-42.
- Ansermino, S.D., Holcroft, D.M. and Levin, J. 1995. A comparison of peat and pine bark as medium for bedding plant pack production. *Acta Horticulturae* 401, 151-160.
- Holcroft, D.M. and Laing, M.D. 1995. Evaluation of pine bark as a substrate for anthurium production in South Africa. *Acta Horticulturae* 401, 177-184.
- Ansermino, S.D. and Holcroft, D.M. 1993. Bedding plant research results. *The S.A. Nurseryman* 13(1), 21-24.
- Holcroft, D.M. and Smith, I.E. 1991. Effect of soil fumigation on weed control, nematode levels and lettuce yield. *Proceedings of 23rd National Agricultural Plastic Congress*. Pp. 107-112.
- Holcroft, D.M., Smith, I.E. and Dicks, H.M. 1991. Effect of soil fumigation, plastic mulch, crop residues and phosphate and nitrogen levels on lettuce production in Natal, South Africa. *Proceedings of 23rd National Agricultural Plastic Congress*. Pp. 113-119
- Smith, I.E., Gibson, J. and Holcroft, D.M. 1991. Influence of plastic mulch, floating row covers and soil fumigation on lettuce production. *Proceedings of 23rd National Agricultural Plastic Congress*. Pp. 235-240.

INVITED PRESENTATIONS:

Holcroft, D.M. 2012. Post-harvest innovation: Extending shelf-life and improving quality of fresh produce. PMA Fresh Connections, 22 August, Pretoria, South Africa.

Holcroft, D.M. 2008. Problem Solving: Partnering for Progress on Research & Beyond. Symposium: Charting New Directions in Postharvest Biology & Technology, 21 June, Davis CA.

Holcroft, D.M. 2006. Town and Gown: Industry and Academia in Fresh-cut. Gordon Research Conference - Postharvest Physiology. 9-14 July, New London CT.

Holcroft, D.M. 2002. What is fresh? KLM Fresh Import Forum, 2 Oct, Amsterdam, The Netherlands.

Holcroft, D.M. 2002. Handling of Fresh Produce: The Challenges of Mixed Loads. Fresh Produce Conference, 31 July-1 Aug, Somerset West, South Africa.

Holcroft, D.M. 2001. Ensuring good quality produce – how can postharvest handling assist? Fresh Produce Conference, 22-23 Aug. Midrand, South Africa.

In addition to these presentations, where I was an invited speaker, I have presented at numerous scientific conferences, industry events and training courses.

PATENTS: 4 patents.