

REFERENCES

- ALEMAYA UNIVERSITY STAFF SURVEY, 1997. Progress in mango production around Hararge region. Unpublished Report.
- ALEMAYA UNIVERSITY STAFF SURVEY, 1996. Mango production in Hararge region. Unpublished Report.
- ANON, E., 1984. Paclobutrazol, plant growth regulator for fruit. I.C.I. (plant protection division). Fern Hurst, London.
- ANONYMOUS, 2001. Information for agricultural development in ACP countries. *CTA 96*, December 2001.
- AOAC, 1980. Official methods of analysis of the association of official analytical chemists (13th ed.). *Ass. Offic. Analy. Chem.*, Washington, DC. 366-71.
- ASTUDILLO, E.O. & BONDAD, N.D., 1978. Potassium Nitrate induced flowering of 'Carabao' mango shoots at different stages of maturity. *Philipp. J. Crop Sci.* 3, 147-152.
- BADR, S.A. & HARTMAN, H.T., 1971. Effects of diurnally fluctuating Vs constant temperature on flower induction and sex expression in olive. *Physiol. Pl.* 24, 40-45.
- BARBA, R.C., 1974. Induction of flowering of the mango by chemical spray. *Proc. Crop Sci. Soc. Philipp.* 5(5), 154-160.
- BARROS, P. G., CUNHA, G. A. P. DA, REINHARDT, D. H., FONSECA, N. & BARBOSA, N. M. L., 1998. Effect of potassium nitrate on flowering and fruit set of mango trees (*Mangifera indica* L.) cv. Tommy Atkins in southwest Bahia. *Revista Brasileira de Fruticultura* 20(2), 188-194.

- BASAK, A. & RADEMACHER, W., 2000. Growth regulation of pome and stone fruit trees by use of prohexanedione-Ca. *Acta Hortic.* 514, 41-51.
- BATTEN, D.J. & McCONCHIE, C.A., 1995. Floral induction in growing buds of Lychee (*Litchi chinensis* S.) and Mango (*Mangifera indica* L.). *Aust. J. Pl. Physiol.* 122(5), 783-791.
- BATTEN, D.L., FIRTH, D. & MILLER, A., 1988. Sensation mango research; 1987/88 seasons. *Subtrop. Fr. Grow.* 4, 13-26.
- BERNIER, G., KINET, J.M. & SACHS, R.M., 1981. The Physiology of Flowering. CRC Press, Florida, 78-102.
- BLUM, A., 1988. Plant breeding for stress environments. CRC Press, Florida, 100-103.
- BONDAD, N.D. & LINSANGAN, E., 1979. Flowering in mango induced with potassium nitrate. *HortScience* 14, 527-528.
- BROWNING, G., KUDEN, A. & BLAKE, P., 1992. Paclobutrazol promotion of axillary flower initiation in pear cv. Doyenne du Comice. *J. Hort. Sci.* 67, 121-128.
- BURDON, J.N., MOORE, K.G. & WAINWRIGHT, H., 1991. Mineral distribution in mango fruit susceptible to the physiological disorder soft-nose. *Sci. Hort.* 231, 3-16.
- BURONDKAR, M. M. & GUNJATE, R.T., 1993. Control of vegetative growth and induction of regular and early cropping in “Alphonso” mango with Paclobutrazol. *Acta Hortic.* 341, 206-215.
- CANNELL, M.G.R., 1985. Dry matter partitioning in tree crops. In M.G.R. Cannell & J.E. Jackson (eds). *Attributes of Trees as Crop Plants*. pp. 160-193. Institute of Terrestrial Ecology, UK.

- CHACKO, E.K., 1986. Physiology of vegetative and reproductive growth in mango (*Mangifera indica* L.) trees. Proc. 1st Aust. Mango Res. Workshop, Melbourne, 54-70.
- CHACKO, E.K., 1991. Mango flowering - still an enigma. *Acta Hort.* 291, 12-21.
- CHACKO, E.K., REDDY, Y.T.N. & ANANTHANARAYANAN, T.V., 1982. Studies on the relationship between leaf number and area & fruit development in mango (*Mangifera indica* L.). *J. Hort. Sci.* 57(4), 483-492.
- CHACKO, E.K., SINGH, R.N. & KACHRU, R.B., 1972. Studies on the physiology of flowering and fruit growth in mango (*Mangifera indica* L.). *Ind. J. Hort.* 29(6), 115-125.
- CHADHA, K.L. & PAL, R.N., 1986. *Mangifera indica*. In A.C. Halevy (ed.). Handbook of Flowering. pp.211-230. CRC Press, Florida.
- CHAIKIATTIYOS, S., MENZEL, C.M. & RASMUSSEN, T.S., 1994. Floral induction in tropical fruit trees: effects of temperature and water-supply. *J. Hort. Sci.* 69(3), 397-415.
- CHANG, M. T. & LEON, M. F., 1987. Delay fruit harvest by pinching mango inflorescence. *Proceedings of the symposium on forcing culture of horticultural crops*, held at Taichung: Taichung District Agricultural Improvement Station, special publication, 119-128.
- CHAPMAN, H.D. & PRATT, P.F., 1973. *Methods de analisis para suelos, plantas* Edit. Trillas.
- CHARNVICHIT, S., TONGUMPAI, P., SAGUANSUPYAKORN, C., PHAVAPHUTANON, L. & SUBHADRABANDU, S., 1991. Effect of

- Paclobutrazol on canopy size control and flowering of mango, cv. 'Nam Dok Mai Twai No.4', after hard pruning. *Acta Hortic.* 291, 60-66.
- CHEN, W. S., 1987. Endogenous growth substances in relation to shoot growth and flower bud development of mango. *J. Am. Soc. Hort. Sci.* 112(2), 360-363.
- COETZER, L. A., OOSTHUYSE, S. A., WISHART, D. L. & ROBBERTSE, P. J., 1995. Influence of pruning on the flower sex ratio in some mango cultivars. *S. Afr. Mango Grow. Ass. Yr. book* 15, 27-30.
- CRANE, J.H. & CAMPBELL, C.W., 1991. The Mango. Florida Cooperative Extension Service, IFAS, University of Florida, Fact Sheet FC-2.
- CULL, B.W., 1987. A whole plant approach to productivity research for mango. In R.T. Preseley & G. Tucker (eds). *Mangoes - A Review*. pp.19-28. Commonwealth Science Council, London.
- CULL, B.W., 1991. Mango crop management. *Acta Hortic.* 291, 154-173.
- DALZIEL, J. & LAWRENCE, D.K., 1984. Biochemical and biological effects of kaurene oxidase inhibitors, such as paclobutrazol. In R. Menhenett & D.K. Lawrence (eds). *Biochemical aspects of synthetic and naturally occurring plant growth regulators*. pp.43-57. Wantage: British Plant Growth Regulator Group.
- DAVENPORT, T.L., 1987. Opportunities for tropical fruit crop growth regulation. *Proc. 14th Ann. Meeting Pl. Growth Reg. Soc. Am.* 406-409.
- DAVENPORT, T.L., 1993. Floral manipulation in mangos. In L.E. Chia & D.O. Evans (eds). *Proceedings of the Conference on Mango in Hawaii*. pp.54-60. Cooperative Extension Service, University of Hawaii, Honolulu.

- DAVENPORT, T.L., 2000. Processes influencing floral initiation and bloom: The role of phytohormones in a conceptual flowering model. *HortTechnology* 10, 733-739.
- DAVENPORT, T.L. & NUNEZ-ELISEA, R., 1990. Ethylene and other endogenous factors possibly involved in mango flowering. *Acta Hortic.* 275, 441-448.
- DAVENPORT, T.L. & NUNEZ-ELISEA, R., 1992. Is endogenous ethylene involved in mango floral induction? *Acta Hortic.* 291, 85-87.
- DAVENPORT, T.L. & NUNEZ-ELISEA, R., 1997. Reproductive physiology. In R.E. Litz (ed.). *The Mango - Botany, Production and Uses*. pp.69-146. CAB International, Oxon, England.
- DAVIE, S.J. & STASSEN, P.J.C., 1997a. Mango Model: Starch distribution in different tissues of 'Sensation' mango trees of varying ages. *Acta Hortic.* 455, 143-150.
- DAVIE, S.J. & STASSEN, P.J.C., 1997b. The effect of fruit thinning and tree pruning on tree starch reserves and fruit retention of 'Sensation' mango trees. *Acta Hortic.* 455, 160-166.
- DAVIE, S.J. & VAN DER WALT, M.C., 1994. Is biennial bearing of avocados inevitable? *S. Afr. Mango Grow. Ass. Yr. book* 14, 80-82.
- DAVIE, S.J., STASSEN, P.J.C. & GROOVE, H.G., 1999. Starch reserves in the mango tree. May 1999. *Acta Hortic.* 509, 335- 346.
- DAVIE, S. J., VAN DER WALT, M. & STASSEN, P. J. C., 1995. The energy demand of fruit production and its effect on fruit size in 'Sensation'. *S. Afr. Mango Grow. Ass. Yr. book* 15, 18-20.

- DAVIS, T.D. & CURRY, E.A., 1991. Chemical regulation of vegetative growth. *Crit. Rev. Pl. Sci.* 10, 151-188.
- DE JONG, T.M., 1986. Fruit effects on photosynthesis in *Prunus persica*. *Physiol. Pl.* 66, 149-153.
- DE JONG, T.M., DOYLE, J.F. & DAY, K.R., 1987. Seasonal patterns of reproductive and vegetative sink activity in early and late maturing peach (*Prunus persica*) cultivars. *Physiol. Pl.* 71, 83-88.
- DEBNATH, S. & KUNDU, S., 2001. Effect of bioregulators and nutrients on growth and differentiation of mango (*Mangifera indica* L.) shoots. *Environment and Ecology* 19(4), 829-832.
- EI-HINNAWY, E.J., 1956. Some aspects of mineral nutrition and flowering. *Med. Landbouwhogeschool*, 65, 9-21.
- EMBREE, C.G. & WILLIAM, E. C., 1987. Effect of diaminozide, chloromequat and paclobutrazol on growth and fruiting of 'Clapp's Favorite' pears. *HortScience* 22(1), 55-56.
- EREZ, A., 1986. Growth control with paclobutrazol of peaches grown in the meadow orchard System. *Acta Hort.* 160, 217-224.
- ESAU, K., 1977. Anatomy of seed plants. John Wiley & Sons, Santa Barbara.
- EWING, E.E., 1987. The role of hormones in potato (*Solanum tuberosum* L.) tuberisation. In P.J. Davies (ed.). Plant hormones and their role in plant growth and development. pp.515-538. Martinus Nijhoff Publishers, Dordrecht.
- FAOSTAT, 2003. Annual production of crops. *FAO Statistics Series*. (FAO web site).

- FIERRO, C.A. & ULLOA, M., 1991. A developmental reference stage for flower induction response to Potassium Nitrate. *Acta Hort.* 291, 71-77.
- FIVAS, J., 1997. Mango quality guidelines for research pack houses and quality control systems (compiled). Merensky Technological Services, South Africa, 34-42.
- FIVAS, J. & GROVE, H., 1998. Pruning of mango trees. In E.A. de Villiers (ed.). *The Cultivation of Mangoes*. pp. 72-75. Institute for Tropical and Subtropical Crops, Nelspruit.
- FIVAS, J. & STASSEN, P.J.C., 1995. The effect of tree manipulation and fruit thinning on the tree yield and fruit size and quality in 'Sensation' mango. *S. Afr. Mango Grow. Ass. Yr. book* 15, 39-43.
- FIVAS, J. & STASSEN, P. J. C., 1996. The effect of time of pruning and fruit thinning on yield and fruit quality of 'Sensation' mangoes *S. Afr. Mango Grow. Ass. Yr. book* 16, 49-54.
- FIVAS, J., STASSEN, P. J. C. & GROVE, H. G., 1997. Pruning and training strategies for Tommy Atkins and Sensation mango trees in higher density hedgerow systems. *S. Afr. Mango Grow. Ass. Yr. book* 17, 37-40.
- FLETCHER, R., GILLEY, A., SANKHLA, N. & DAVIS, T., 2000. Triazoles as plant growth regulators and stress protectants. *Hort. Rev.* 24, 55-137.
- GALAN-SAUCO, V., 1993. The situation of Mango culture in the world. *Acta Hort.* 341, 31-41.
- GALAN-SAUCO, V., 1996. Mango world production. *Acta Hort.* 455, 15-22.
- GAO, J., HOFSTRA, G. & FLETCHER, R.A., 1987. Anatomical changes induced by triazoles in wheat seedlings. *Can. J. Bot.* 66, 1178-1185.

- GAZIT, S., 1975. Increasing the bearing capacity of mango by removal of early season inflorescences. *Scientific activity*, Minister of Agriculture, Israel, 71-74.
- GENSTAT for Windows, 2000. Release 4.2. Fifth Edition. VSN International, Oxford.
- GOGUEY, T., 1993. Study of the effects of three flower-inducing substances on 'Kent' and 'Zill' mango. *Acta Hortic.*341, 216-224.
- GROSS, E.R., 1996. Pruning mango to increase yield. *Acta Hortic.* 455, 538-542.
- HALLE, F., OLDEMAN, R.A.A. & TOMLINSON, P.B., 1978. Tropical Trees and Forests, an Architectural Analysis. Springer-Verlag, New York.
- HEIM, G., LANDSBERG, J.J., WATSON, R.L. & BRAIN, P., 1979. The ecophysiology of apple trees: dry matter production and partitioning by young Golden Delicious trees in France and England. *J. App. Ecol.* 16, 179-194.
- HODA, M. N., SANJAY, S. & JAYANT, S., 2001. Effect of cultar on flowering, fruiting and fruit quality of mango cv. Langra. *Ind. J. Hort.* 58, 224-227.
- HODGE, J.E. & HOFREITER, B.T., 1962. Determination of reducing sugars and carbohydrates. In R.L Whistles & M.L. Wolform (eds). *Methods in Carbohydrate Chemistry*. pp.380-394. Academic press, New York.
- HORSCROFT, J.C. & SHARPLES, R.O., 1987. The effect of modern production systems on apple quality. *Rep. East Mailing Res. St.* 1986, 111-113.
- ISSARAKRAISILA, M. & CONSIDINE, J.A., 1994. Effect of temperature on pollen viability in mango cultivar 'Kensington'. *Ann. Bot.* 73(3), 231-240.

- ISSARAKRAISILA, M., CONSIDINE, J. A. & TURNER, D. W., 1991. Pattern of vegetative and reproductive growth of mango trees in a warm temperature region of Western Australia. *Acta Hortic.* 291, 188-197.
- JACKSON, D.I. & SWEET, G.B., 1972. Flower initiation in temperate woody plants. *Hortic. Abst.* 42, 9-24.
- JACKSON, J.E., 1989. The manipulation of fruiting. In C.J. Wright (ed.). The manipulation of fruiting. pp.3-12. Butterworths & Co., England.
- JACOBSON, J.V. & CHANDLER, P.M., 1987. Gibberellin and abscisic acid in germinating cereals. In P.J. Davies (ed.). Plant hormones and their role in plant growth and development. pp.164-193. Martinus Nijhoff Publishers, Dordrecht.
- JANSE VAN VUUREN, B.P.H., STASSEN, P.J.C. & DAVIE, S.J., 1997. Sink demand for starch reserves in avocado trees. *S. Afr. Avocado Grow. Ass. Yr. book* 20, 1-4.
- JOUBERT, J.P., ROBBERTSE, P.J., COETZER, L.A. & WISHART, D.L., 1993. Inflorescence characteristics and flower sex ratio studies of container-grown mango trees. *S. Afr. Mango Grow. Ass. Yr. book* 13, 27-33.
- KARKALAS, S.J., 1985. An improved enzymatic method for the determination of native and modified starch. *J. Sci. Food and Agr.* 36, 1019-1027.
- KNIGHT, J.N., 1980. Fruit thinning of the apple cultivar Cox's orange pippin. *J. Hort. Sci.* 55, 267-273.
- KNIGHT, J.N. & JACKSON, J.E., 1980. Apple thinning. *Rep. East Mailing Res. St.* 1979, 227-230.
- KOZLOWSKI, T.T., 1992. Carbohydrate sources and sinks in woody plants. *Bot. Rev.* 58(2), 107-122.

- KULKARNI, V.J., 1986. Graft-induced off-season flowering and fruiting in the mango (*Mangifera indica* L.). *J. Hort. Sci.* 61, 141-145.
- KULKARNI, V.J., 1988. Chemical control of tree vigour and the promotion of flowering and fruiting in mango (*Mangifera indica* L.) using Paclobutrazol. *J. Hort. Sci.* 63, 557-566.
- KURIAN, R.M. & IYER, C.P.A., 1992. Stem anatomical characteristics in relation to tree vigour in mango (*Mangifera indica* L.). *Sci. Hort.* 50, 245-253.
- KURIAN, R.M. & IYER, C.P.A., 1993. Chemical regulation of tree size in mango (*Mangifera indica* L.) cv. 'Alphonso'. I. Effects of growth retardants on vegetative growth and tree vigour. *J. Hort. Sci.* 68, 349-354.
- LAKSHMINARAYANA, A. S., 1980. Mango. In S. Nagy & P. E Shaw (eds). *Tropical and Subtropical Fruits-Composition, Properties and Uses.* pp.185-201. AVI Publishing Inc, Westport.
- LANG, A., CHAILAKHYAN, M.K. & FROLOVA, I.A., 1977. Promotion and inhibition of flower formation in a day neutral plant in grafts with a short-day and a long-day plant. *Proc. National Acad. Sci.* 74, 2412-2416.
- LEAL, F., SERGENT, E. & ANEZ, M., 2000. Effect of some plant growth regulators on leaves content of macronutrients in mango 'Haden'. *Acta Hort.* 509, 631-634.
- LEVER, B.G., SHEARING, S.J. & BATCH, J.J., 1982. Paclobutrazol- a new broad spectrum growth retardant. *British Crop Prot. Conf.* 1(1), 3-10.
- LIN, S. & CHEN, Z., 1981. Preliminary observations on flower bud differentiation of *Mangifera indica* L. *Acta Hort.* 8, 9-14.

- MAAS, E.F., 1989. Potassium nitrate foliar spray induces bloom in mango orchard. *Hort. Rev.* 4, 4-5.
- MACHADO, E. M. & SAO JOSE, A. R., 2000. Effect of different intervals of potassium nitrate spraying on flowering and production of mango trees (*Mangifera indica* L.) cv. Tommy Atkins. *Acta Hort.* 509, 581-585.
- MAJUMDER, P. K. & MUKHERJEE, S.K., 1961. Studies on the variability of sex expression in mango (*Mangifera indica* L.). *Ind. J. Hort.* 8, 12-19.
- MAJUMDER, P. K., SHARMA, D.K., SINGH, M.P. & SINGH, R.N., 1976. Improve productivity of malformed mango trees. *Ind. Hort.* 20, 7-8.
- MCKENZIE, C.B., 1995. The effect of calcium and potassium foliar and fruit sprays on Sensation mango leaf nutrient concentrations and fruit quality. *S. Afr. Mango Grow. Ass. Yr. book* 15, 44-47.
- McVEIGH, S., 1994. Thin and prune of large fruit. *Farmers Weekly*, July 1994.
- MEDONCA, V., ARAUJO NETO, S. E. DE., RAMOS, J. D., PIO, R. & SOUZA, P. A. DE., 2002. Production and quality of Tommy Atkins mango fruits after application of paclobutrazol. *Rev. Cienc. Agr.* 38, 39-149.
- MONSELISE, S.P. & GOLDSCHMIDT, E.E., 1982. Alternate bearing in fruit trees. *Hort. Rev.* 4, 128-173.
- MOSS, G.L., 1969. Influence of temperature and photoperiod on flower induction and inflorescence development in sweet orange (*Citrus sinensis* L.osbeck). *J. Hort. Sci.* 44, 311-340.
- MSTATC, 1989. A microcomputer program for design, management and analysis of agronomic research experiments. Michigan State University, east Lansing, MI, USA.
- MUKHERJEE, S.K., 1950. Mango: its allopolyploid nature. *Nature*, 166, 196.

- MUKHERJEE, S.K., 1953. The mango- its botany, cultivation, uses, and future improvement, especially as observed in India. *Econ. Bot.* 7, 130.
- MULLINS, P. D. F., 1986. Effect of varying climatic regimes on flower behaviour and pollination in 'Sensation' and 'Haden' mango trees. *S. Afr. Mango Grow. Ass. Yr. book* 6, 3-42.
- MULLINS, P.D.F., 1987. The effect of varying climatic regimes on floral development and behaviour in mango (*Mangifera indica* L.) cvs 'Haden' and Sensation. M.Sc. theses. University of Natal, Natal, South Africa.
- NAKATA, S. & WATANBE, Y., 1966. Effects of photoperiod on flower induction and night temperature on the flowering of *Litchi chinesis*. *Bot. Gaz.* 127, 46-152.
- NII, N., WATANBE, T., YAMAGUCHI, K. & NISHIMURA, M., 1995. Changes of anatomical features, photosynthesis and ribulose biphosphate carboxylase-oxygenase content of mango leaves. *Ann. Bot.* 76, 649-656.
- NUNEZ-ELISEA, R., 1985. Flowering and fruit set of a monoembryonic and polyembryonic mango as influenced by potassium nitrate sprays and shoot decapitation. *Proc. Fl. Hort. Soc.* 98, 179-183.
- NUNEZ-ELISEA, R. & CALDEIRA, M.L., 1988. Induction of flowering in mango (*Mangifera indica* L.) with ammonium nitrate sprays. *HortScience* 23(5), 833.
- NUNEZ-ELISEA, R. & DAVENPORT, T.L., 1991a. Flowering of 'Keitt' mango in response to deblossoming and Gibberellic acid. *Proc. Fl. Hort. Soc.* 104(5), 41-43.

- NUNEZ-ELISEA, R. & DAVENPORT, T.L., 1991b. Effect of duration of low temperature treatment on flowering of containerised 'Tommy Atkins' mango. *Proc. 18th Ann. Meeting Pl. Growth Reg. Soc. Am.* 39-41.
- NUNEZ-ELISEA, R. & DAVENPORT, T.L., 1992. Requirement for mature leaves during floral induction and floral transition in developing shoots of mango. *Acta Hortic.* 296, 33-37.
- NUNEZ-ELISEA, R. & DAVENPORT, T. L., 1995. Effect of leaf age, duration of cool temperature treatment, and photoperiod on bud dormancy release and floral initiation in mango. *Sci. Hort.* 62(1-2), 63-73.
- NUNEZ-ELISEA, R., DAVENPORT, T.L. & CALDEIRA, M.L., 1991. An experimental system to study mango using containerised trees propagated by air-layering. *Proc. Fl. Hort. Soc.* 104, 39-41.
- NUNEZ-ELISEA, R., DAVENPORT, T.L. & CALDEIRA, M.L., 1992. Influence of temperature and triazoles on floral and vegetative shoot development of mango. *Proc. 19th Ann. Meeting Pl. Growth Reg. Soc. Am.* 117-122.
- NUNEZ-ELISEA, R., DAVENPORT, T.L. & CALDEIRA, M.L., 1993. Bud initiation and morphogenesis in 'Tommy Atkins' mango as affected by temperature and triazole growth retardants. *Acta Hortic.* 341, 192-198.
- NUNEZ-ELISEA, R., DAVENPORT, T.L. & CALDEIRA, M.L., 1996. Control of bud morphogenesis in mango (*Mangifera indica* L.) by girdling, defoliation and temperature modification. *J. Hort. Sci.* 71(1), 25-40.
- OLIVEIRA, C.M. & PRIESTLEY, C.A., 1988. Carbohydrate reserves in deciduous fruit trees. *Hort. Rev.* 10, 403-430.
- OOSTHUYSE, S.A., 1991. Stages of development of the mango panicle. *S. Afr. Mango Grow. Ass. Yr. book* 11, 59-61.

- OOSTHUYSE, S.A., 1992. Ideas on pruning of mango trees. *S. Afr. Mango Grow. Ass. Yr. book* 12, 1-7.
- OOSTHUYSE, S.A., 1993a. Tree spacing trends and options for yield improvement in mango. *S. Afr. Mango Grow. Ass. Yr. book* 13, 34-39.
- OOSTHUYSE, S.A., 1993b. Research on Mango aimed at increasing orchard production & export fruit quality. *S. Afr. Mango Grow. Ass. Yr. book* 13, 40-44.
- OOSTHUYSE, S.A., 1993c. Mango tree spacing trends and options for yield improvement with special reference to South Africa. *J. S. Afr. Soc. Hort.* 213, 361-380.
- OOSTHUYSE, S. A., 1994. Pruning of sensation mango trees to maintain their size and effect uniform and later flowering. *S. Afr. Mango Grow. Ass. Yr. book* 14, 1-5.
- OOSTHUYSE, S. A., 1995. Pruning of mango trees: an update. *S. Afr. Mango Grow. Ass. Yr. book* 15, 1-8.
- OOSTHUYSE, S.A., 1996. Effect of KNO₃ spray to flowering mango trees on fruit retention, fruit size, tree yield, and fruit quality. *S. Afr. Mango Grow. Ass. Yr. book* 16, 27-31.
- OOSTHUYSE, S. A., 1997. Tree size maintenance pruning of mango trees after harvest: Is cropping negatively affected or not? *S. Afr. Mango Grow. Ass. Yr. book* 17, 33-36.
- OOSTHUYSE, S.A. & JACOBS, G., 1995. Effect of time and severity of fruit thinning on fruit retention, fruit size, tree yield and tree revenue in 'Sensation' mango. *S. Afr. Mango Grow. Ass. Yr. book* 15, 34-37.

- OOSTHUYSE, S. A. & JACOBS, G., 1996. Flowering synchronisation of 'Sensation' mango trees by winter pruning. *Acta Hortic.* 455(1), 422-430.
- OOSTHUYSE, S.A. & JACOBS, G., 1997. Effect of soil applied Paclobutrazol on fruit retention, fruit size, tree yield and tree revenue in 'Sensation' and 'Tommy Atkins' mango. *S. Afr. Mango Grow. Ass. Yr. book* 17, 57-62.
- OWENS, C.L. & STOVER, E., 1999. Vegetative growth and flowering of young apple trees in response to prohexadione-calcium. *HortScience* 34(7), 1194-1196.
- PAL, R.N. & CHADHA, K.L., 1982. Deblossoming mangoes with cyclohexamide. *J. Hort. Sci.* 57, 331-332.
- PANDEY, R.M., 1988. Physiology of flowering in mango. *Acta Hortic.* 231, 361-380.
- PÉREZ-BARRAZA, M. H., SALAZAR-GARCÍA, S. & VAZQUEZ-VALDIVIA, V., 2000. Delayed inflorescence bud initiation, a clue for the lack of response of the 'Tommy Atkins' mango to promoters of flowering. *Acta Hortic.* 509, 567-572.
- PHATAK, R.A. & PANDEY, R.M., 1978. Changes in the chemical composition of mango leaves cv. Dashehari at different stages of flowering and fruit growth. *Ind. J. Hort.* 35(4), 309-313.
- PHAVAPHUTANON, L., KRISANAPOOK, K., PICCHAKUM, A. & JUTAMANEE, K., 2000. Changes of total non-structural carbohydrates within shoots of 'Nam Dok Mai' mango after paclobutrazol application. *Acta Hortic.* 509, 559-565.
- PICKARD, J.A., COPAS, E. & WILLIAMS, R.R., 1982. Growth regulators in cider orchards. *Rep. Long Ashton Res. Station for 1982*, 28-29.

- PLOETZ, R.C., BENSCHER, D., VAZQUEZ, A., NAGEL, C. & SCHAFFER, B., 1996. A re-examination of mango decline in Florida. *Pl. disease* 80, 664-667.
- PRIESTLEY, C.A., 1963. The carbohydrate recourses of young apple trees under four levels of illumination. *Ann. Bot.* 27, 435-446.
- PROTACIO, C. M., 2000. A model for potassium nitrate-induced flowering in mango. *Acta Hortic.* 509, 545-552.
- PURSEGLOVE, J.W., 1968. Tropical Crops-Dicotyledons. John Wiley & Sons Inc, New York.
- QUINLAN, J.A., 1980. New chemical approaches to the control of fruit trees form and size. *Acta Hortic.* 120, 95-106.
- QUINLAN, J.A. & RICHARDSON, P.J., 1984. Effect of paclobutrazol on apple shoot growth. *Acta Hortic.* 146, 106-111.
- RADEMACHER, W., 1989. New plant retardants, biochemical background and possibilities for practical application. *Acta Hortic.* 239, 477-481.
- RADEMACHER, W., 1991. Biochemical effects of plant growth retardants. In H.W. Gausman (ed.). *Plant Growth Regulators*. pp.169-200. Marcel Dekker, New York.
- RAM, S., 1993. Factors affecting mango tree architecture. *Acta Hortic.* 341, 177-191.
- RAM, S. & SIROHI, S.C., 1991. Feasibility of high-density orcharding in ‘Dashehari’ mango. *Acta Hortic.* 291, 207-211.
- RAM, S., SIROHI, S.C. & RATHORE, V.S., 1983. Naturally occurring cytokinins in mango (*Mangifera indica* L.) fruit. *Aust. J. Pl. Physiol.* 10, 65-71.

- RANDHAWA, G.S. & DAMODARAN, V.K., 1961. Studies on floral biology and sex ratio in mango (*Mangifera indica L.*) cultivars, 'Chausa', 'Dasheri' and 'Krishanbhog' and flowering habit, flowering season, panicle development and sex ratio. *Ind. J. Hort.* 18, 36-45.
- RAVISHANKAR, H., RAO, M.M. & BOJAPPA, K.M., 1979. Fruit-bud differentiation in mango 'Alphonso' and 'Totapuri' under mild tropical rainy conditions. *Sci. Hort.* 10, 95-99.
- REECE, P. C., FURR, J. R. & COOPER, W. C., 1946. The inhibiting effect of terminal bud on flower formation in the axillary buds of the 'Haden' mango. *Am. J. Bot.* 33, 209-210.
- RICHARDSON, A. & DAWSON, T., 1994. Kiwifruit crop loading: achieving the preferred market profile. *The orchardist*, July 1994.
- ROBBERTSE, P.J. & MANYAGA, C., 1998. Determination of cool temperature requirements for flowering in various mango cultivars. *S. Afr. Mango Grow. Ass. Yr. book* 18, 18-19.
- ROBBERTSE, P. J., VOL TEICHMAN, I. & VAN RENSBURG, H.J., 1986. A re-evaluation of the structure of the mango ovule in comparison with those of a few other *Anacardiaceae* species. *S. Afr. J. Bot.* 52, 17-24.
- ROJAS, E. & LEAL, F., 1993. Control de la floracion y brotacion vegetative en mango (*Mangifera indica L.*) con varios productos quimicos. *Proc. Inter. Soc. Trop. Hort.* 37, 42-47.
- ROJAS, E. & LEAL, F., 1996. Effects of pruning and Potassium nitrate spray on floral and vegetative bud break of mango cv. Haden. *Acta Hortic.* 455, 522-529.

- ROPER, T.R., KELLER, J.D., LOESCHER, W.H. & ROM, C.R., 1988. Photosynthesis and carbohydrate partitioning in sweet cherry : fruiting effects. *Physiol. Pl.* 72, 42-47.
- ROWLEY, A.J., 1990. The effect of Cultar applied as soil drench on 'Zill' mango trees. *Acta Hortic.* 275, 211-215.
- SALAZAR-GRACIA, S. & VAZQUEZ-VALDIVIA, V., 1997. Physiological persistence of paclobutrazol on the 'Tommy Atkins' mango (*Mangifera indica* L.) under rainfed conditions. *J. Hort. Sci.* 72, 339-345.
- SAO JOSE, A.R. & REBOUCAS, T.N.H., 2000. Use of paclobutrazol in mango orchard in southeast region, Bahia state Brazil. *Acta Hortic.* 509(2), 713-715.
- SAS INSTITUTE, 1988. SAS/STAT User's Guide, Release 6.03. SAS Institute, Cary, NC.
- SCHAFFER, B., WHILEY, A.W. & CRANE, J.H., 1994. Mango. In B. Schaffer & P.C. Andersen (eds). Handbook of Environmental Physiology of Fruit Crops, Vol. II, Subtropical and Tropical Crops. pp.165-197. CRC Press, Florida.
- SCHOLEFIELD, P .B. & OAG, D.R., 1984. Flowering and fruit set of six cultivars of mango. *Proc. 1st Aust. Mango Res. Workshop*, Melbourne, 96-103.
- SCHOLEFIELD, P.B., OAG, D.R. & SEDGLEY, M., 1986. The relationship between vegetative and reproductive development in the mango in northern Australia. *Aust. J. Agric. Res.* 37(4), 425-433.
- SEDGLEY, M. & GRIFFIN, A.R. 1989. Sexual reproduction of tree crops. *Academic press*. Sydney.

- SEN, P.K., 1962. Flowering and bearing habit with special reference to the mango (*Mangifera indica* L.). *Ind. J. Pl. Physiol.* 5, 264-271.
- SERGENT, E., FERRARI, D. & LEAL, F., 1996. Effects of potassium nitrate and paclobutrazol on flowering induction and yield of mango (*Mangifera indica* L.) cv. Haden. *Acta Hort.* 455, 180-187.
- SERGENT, E., LEAL, F. & ANEZ, M., 2000. Potassium thiosulphate, urea and potassium nitrate applications on vegetative and floral growth in mango 'Haden'. *Acta Hort.* 509, 653-659.
- SHAWKY, I., ZIDAN, Z. & DASHAN, D.I., 1977. Sex distribution, fruit set and fruiting of Zebda mango inflorescences. *Ann. Agri. Sci.* 20, 159.
- SHU, Z.H., 1992. Chemical Pruning and induction of Panicles in mango (*Mangifera indica* L.). *Acta Hort.* 341, 199-203.
- SHU, Z.H., 1993. Axillary panicle induction in mango (*Mangifera indica*, L.). *J. Agri. Res. In China* 32, 32-38.
- SHU, Z.H. & SHEEN, T.F., 1987. Floral induction in axillary buds of mango (*Mangifera indica* L.) as affected by temperature. *Sci. Hort.* 31, 81-87.
- SHU, Z.H., SHEEN, T.F. & LEE, K.C., 1989. Current researches on the unfruitfulness of mango in Taiwan. *Acta Hort.* 231, 68-72.
- SINGH, A. & DHILLON, B.S., 1990. Floral malformation, yield, and fruit quality of (*Mangifera indica* L.) in relation to ethylene. *J. Hort. Sci.* 65(2), 215 - 220.
- SINGH, D.K. & RAM, S., 2000. Level of paclobutrazol residues in shoot and fruit of mango. *Ind. J. pl. physiol.* 5, 186-188.
- SINGH, L.B., 1960. The Mango: Botany, Cultivation and Utilisation. Leonard Hill, London.

- SINGH, R.N., 1987. Mango. In M.R. Sethurag & A.S. Raghavendra (eds). Tree crop physiology. pp.287-318. Elsevier, Amsterdam.
- SINGH, R.N., MAJUMDAR, P.K. & SHARMA, D.K., 1965. Studies on the bearing behaviour of some South Indian varieties of mango (*Mangifera indica* L.) under north Indian conditions. *Trop. Agric.* 42(1), 171-174.
- SINGH, R.N., MAJUMDER, P. K., SHARMA, D.K., SINHA, G.C. & BOSE, P. C., 1974. Effect of de-blossoming on the productivity of mango. *Sci. Hort.* 2, 399-403.
- SINGH, Z., 2000. Effects of (2RS, 3RS) paclobutrazol on tree vigour, flowering, fruit set and yield in mango. *Acta Hort.* 525, 459-462.
- SINGH, Z. & DHILLON, B.S., 1992. Effect of paclobutrazol on floral malformation, yield and quality of mango (*Mangifera indica* L.). *Acta Hort.* 296, 51-53.
- SMITH, B.L., 1994. Optimal leaf nitrogen norms for young and old mango trees (cv. Sensation). *J. S. Afr. Soc. Hort. Sci.* 14, 45-48.
- SMITH, D., PAULSON, G.M. & RAGUSE, C.A., 1964. Extraction of total available carbohydrates from grass and legume tissues. *Pl. physiol.* 39, 960-962.
- SNEDECOR, G.W. & COCHRAN, W.G., 1980. Statistical methods (7th Ed.). The Iowa State University Press, Ames, Iowa.
- SNELGAR, W.P. & THORP, T.G., 1988. Leaf area, final fruit weight and productivity in kiwifruit. *Sci. Hort.* 36, 241-249.
- SOMOGYI, M., 1945. A new reagent for the determination of sugars. *J. Biol. Chem.* 160, 61-68.
- STASSEN, P.J.C., 1980. Reserves in deciduous fruit trees and implication to the deciduous fruit grower. *Decid. Fr. Grow.* 30, 467-472.

- STASSEN, P.J.C. & JANSE VAN VUUREN, B.P.H., 1997a. Seasonal uptake and utilisation of nitrogen by 'Sensation' mango trees. *Acta Hort.* 455(1), 351-358.
- STASSEN, P.J.C. & JANSE VAN VUUREN, B.P.H., 1997b. Storage, redistribution and utilisation of starch in young bearing 'Sensation' Mango trees. *Acta Hort.* 455, 151-166.
- STASSEN, P. J. C., GROVE, H. G. & DAVIE, S. J., 1999. Tree shaping strategies for higher density mango orchards. *J. App. Hort.* 1(1), 1-4.
- STASSEN, P.J.C., BERGH, O., BESTER, C.W.J. & DU PREEZ, M.M., 1982. Reserves in full bearing peach trees. Carbohydrate reserves and their implication to orchard practices. *Decid. Fr. Grow.* 32, 424-430.
- STEFFENS, G.L., BYUN, J.K. & WANG, S.Y., 1985. Controlling plant growth via the gibberellin biosynthesis system I, growth parameter alteration in apple seedlings. *Physiol. Pl.* 63, 163-168.
- STERRETT, J.P., 1985. Paclobutrazol: a promising growth inhibitor for injection into woody plants. *J. Am. Soc. Hort. Sci.* 110, 4-8.
- STOVER, E. W., 1999. Relationship between intensity of flowering and cropping in fruits and nuts. *ASHS 99 Workshop no. 6*, Florida.
- SUBHADRABANDHU, S., IAMSUB, K. & KATAOKA, I., 1999. Effect of paclobutrazol application on growth of mango trees and detection of residues in leaves and soil. *Jap. J. Trop. Agr.* 43, 249-253.
- SUKONTHASING, S., WONGRAKPANICH, M. & VERHEIJ, E.W.M., 1991. *Mangifera indica* L. In E.W. M. Verheij & R.E. Coronel (eds). Plant resources of south east Asia. 2. Edible Fruits and Nuts. pp.221-251. Pudoc-DLO, Wageningen, The Netherlands.

- SURYANARAYANA, V., 1987. Seasonal changes in sugars, starch, nitrogen and C:N ratio in relation to flowering in mango. *Plant Biochem. J.* 5, 108-117.
- SWIETLIK, D. & MILLER, S.S., 1985. The effect of paclobutrazol on mineral nutrition of apple seedlings. *J. Pl. Nutr.* 8, 396-398.
- TOMER, E., 1984. Inhibition of flowering in mango by Gibberellic acid. *Sci. Hort.* 24, 299-303.
- TONGUMPAI, P., JUTAMANEE, K. & SUBHADRABANDHU, S., 1991. Effect of paclobutrazol on flowering of mango cv. 'Khiew Sawoey'. *Acta Hort.* 291, 67-79.
- TONGUMPAI, P., CHANTAKULCHAN, K., SUBHADRABANDHU, S. & OGATA, R., 1996. Foliar application of paclobutrazol on flowering of mango. *Acta Hort.* 455, 175-179.
- TREWAVAS, A.J., 1983. Nitrate as a plant hormone. In M.B. Jackson (ed.). Interaction between nitrogen and growth regulators in the control of plant development, Monograph. pp.97-110. British Plant Growth Regulator Group, Wantage.
- TROMP, J., 1980. Flower bud formation and shoot growth in apple as affected by temperature. *Sci. Hort.* 5, 331-338.
- TROMP, J., 1983. Flower bud formation in apple as affected by air and root temperature, air humidity, light intensity and day length. *Acta Hort.* 149, 39-47.
- TSENG, M.J. & CHANG, W.W., 1983. Effects of temperature and growth regulators on flowering and fruit set of mango. *J. Chin. Soc. Hort. Sci.* 29, 87-95.

- VAN DER MEULEN, A., SMITH, J.H.E., VON DEN BOOM, T., KOK, I.B., SHWARTZ, A. & JACOBS, C.J., 1971. Mango growing in South Africa. *Dept. Agric. Techn. Serv.*, 7, Pretoria.
- VAN HAU, T., RADANACHALESS, T., ISHIHATA, K. & SHIOYA, T., 2002. Flower induction with chemicals in 'Cat Hoa Loc' mango trees grown in the Mekong Delta in Viet Nam. *Jap. J. Trop. Agr.* 46, 59-65.
- VIJAYALAKSHMI, D. & SRINIVASAN, P.S., 1999. Morpho-physiological changes as influenced by chemicals and growth regulators in alternate bearing mango cv. "Alphonso". *Madaras Agr. J.* 86, 485-487.
- VIJAYALAKSHMI, D. & SRINIVASAN, P. S., 2002. Impact of chemicals and growth regulators on induction of flowering in 'off' year mango cv. Alphonso. *Orissa J. Hort.* 30, 32-34.
- VOON, C.H., PITAKPAIVAN, C. & TAN, S.J., 1991. Mango cropping manipulation with Cultar. *Acta Hortic.* 291, 219-228.
- WANG, S.Y., SUN, T. & FAUST, M., 1986. Translocation of paclobutrazol, a gibberellin biosynthesis inhibitor in apple seedlings. *Pl. Physiol.* 82, 11-14.
- WEBERLING, F., 1989. Morphology of flowers and inflorescences. Cambridge University Press, Cambridge, 209-213.
- WEBSTER, A.D. & QUINLAN, J.D., 1984. Chemical control of tree growth of Plum (*Prunus domestica L.*). I. Preliminary studies with the growth retardant paclobutrazol. *J. Hort. Sci.* 59, 367-375.
- WERNER, H., 1993. Influence of Paclobutrazol on growth and leaf nutrient content of mango. *Acta Hortic.* 341, 255-259.
- WESTWOOD, M.N., 1988. Temperate Zone Pomology, Revised Edition. Timber press, Oregon.

- WHILEY, A. W., 1993. Environmental effects on phenology and physiology of mango - A review. *Acta Hortic.* 341, 168-176.
- WHILEY, A.W., BARTLEY, J.P., MAYERS, P.E. & SARANAH, J.B., 1993. Breeding mangoes for Australian conditions. *Acta Hortic.* 341, 136.
- WHILEY, A.W., RASMUSSEN, T.S., SARANAH, J.B. & WOLSTENHOLME, B.N., 1989. Effect of temperature on growth, dry matter production and starch accumulation in ten mango (*Mangifera indica* L.) cultivars. *J. Hort. Sci.* 64, 753-765.
- WILLIAMS, M.W., 1979. Chemical thinning of apples. *Hort. Rev.* 6, 270-300.
- WILLIAMS, M.W., 1982. Vegetative growth control of apples with the bioregulator, Paclobutrazol. *HortScience*, 17, 577.
- WILLIAMS, M.W., 1984. Use of bioregulators to control vegetative growth of fruit trees and improving fruiting efficiency. *Acta Hortic.* 146, 97-104.
- WILLIAMS, M.W., CURRY, E.A. & GREENE, G.M., 1985. Chemical control of vegetative growth of pome and stone fruit trees with GA biosynthesis inhibitors. *Acta Hortic.* 179, 453-458.
- WINSTON, E.C., 1992. Evaluation of Paclobutrazol on growth, flowering and yield of mango cv. 'Kensington Pride'. *Aust. J. Exp. Agric.* 32(1), 97-104.
- WINSTON, E.C. & WRIGHT, R.M., 1986. Mango flower induction: ethephon, potassium nitrate and cincturing. *Proc. 1st Aust. Mango Res. Workshop.* CSIRO, Melbourne, 202-210.
- WOLSTENHOLME, B.N., 1990. Resource allocation and vegetative-reproductive competition: opportunities for manipulation in evergreen fruit trees. *Acta Hortic.* 275(2), 451-459.

- WOLSTENHOLME, B.N. & HOFMEYER, D., 1985. Effects of various floral induction treatments on container grown-mango trees. *S. Afr. Mango Grow. Ass. Yr. book 5*, 36-38.
- WOLSTENHOLME, B.N. & MULLINS, P.C., 1982. Flowering, pollination and fruit set of mango -a discussion of limiting factors. *S. Afr. Mango Grow. Ass. Yr. book 2*, 5-11.
- WOLSTENHOLME, B.N. & ROBERT, J.P., 1991. Some horticultural aspects of the mango yield problem and opportunities for research. *S. Afr. Mango Grow. Ass. Yr. book 11*, 11-16.
- WOLSTENHOLME, B. N. & WHILEY, A. W., 1995. Ecophysiology of the mango tree as a basis for pre-harvest management. *S. Afr. Mango Grow. Ass. Yr. book 15*, 10-17.
- WRIGHT, C.J., 1989. Interaction between vegetative and reproductive growth. In C.J. Wright (ed.). *The manipulation of fruiting*. pp.15-27. Butterworths & Co., England.
- YESHITELA, T., ROBBERTSE, P.J. & STASSEN, P.J.C., 2004. Effects of various inductive periods and chemicals on flowering and vegetative growth of 'Tommy Atkins' and 'Keitt' mango (*Mangifera indica*) cultivars. *New Zealand J. Crop Hort. Sc.* 32, 209-215.