

## References

- Allen, D. J., K. Ratner, Y. E. Giller, E. E. Gussakovsky, Y. Shahak and D. R. Ort. 2000. An overnight chill induces a delayed inhibition of photosynthesis at midday in mango (*Mangifera indica* L.). *J. Exp. Bot.* 51(352): 1893-1902.
- Allen, D. J. and D. R. Ort. 2001. Impacts of chilling temperatures on photosynthesis in warm-climate plants. *Trends in Plant Sci.* 6(1): 36-42.
- Andersen, P. C. 1989. Leaf gas exchange characteristics of eleven species of fruit crops in north Florida. *Proc. Fla. State Hort. Soc.* 102: 229.
- Anupan, P. and N. Sukhvibul. 2005. Lychee and longan production in Thailand. *Acta Hort.* 665: 53-59.
- Aradhya, M. K., F. T. Zee and R. M. Manshardt. 1995. Isozyme variation on lychee (*Litchi chinensis* Sonn.). *Scientia Hort.* 63: 21-35.
- Aström, J., L. V. Savitch, A. G. Ivanov, N. P. A. Huner, G. Öquist and P. Gardeström. 1998. Effects of low temperature stress and cold acclimation on photosynthesis in *Arabidopsis thaliana* leaves. p. 2501-2504. *In* G. Garab (ed.). *Photosynthesis: Mechanisms and Effects* vol. IV. Proceedings of the XIth International Congress on Photosynthesis. Budapest, Hungary August 17-22.
- Baker, D. 2000. Vascular transport of auxins and cytokinins in *Ricinus*. *Plant Growth Regul.* 32(2-3): 157-160.
- Balla, J., J. Blazkova, V. Reinohl and S. Prochazka. 2002. Involvement of auxin and cytokinins in initiation of growth of isolated pea buds. *Plant Growth Regul.* 38(2): 149-156.
- Bangerth, F. 1989. Dominance among fruits/sinks and the search for a correlative signal. *Physiol. Plant.* 76: 608-614.
- Bangerth, F. 1994. Response of cytokinin concentration in the xylem exudates of bean (*Phaseolus vulgaris* L.) plants to decapitation and auxin treatment, and relationship to apical dominance. *Planta.* 194: 439-442.
- Bangerth, F. 1997. Can regulatory mechanism in fruit growth and development be elucidated through the study of endogenous hormone concentrations? *Acta Hort.* 463: 77-87.

- Bangerth, F., C. J. Li and J. Gruber. 2000. Mutual interaction of auxin and cytokinins in regulating correlative dominance. *Plant Growth Regul.* 32(2-3): 205-217.
- Batten, N. H. and R. F. Lyndon. 1990. Reversion of flowering. *Bot. Rev.* 56: 162-189.
- Batten, D. J. and C. A. McConchie. 1995. Floral induction in growing buds of lychee (*Litchi chinensis*) and mango (*Mangifera indica*). *Aust. J. Plant Physiol.* 22: 783-791.
- Bernier, G. 1988. The control of floral evocation and morphogenesis. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 39: 175-219.
- Bernier, G. and C. Perilleux. 2005. A physiological overview of the genetics of flowering time control. *Plant Biotech. J.* 3(1): 3 (Abstract). [Online]. Available: <http://D:/Backup%20Data/My%20Documents/A%20physiological%20overview...> [2005, April 13].
- Bernier, G., J. M. Kinet and R. M. Sachs. 1981. *The physiology of flowering. Vol 1.* CRC Press, Boca Raton, Florida.
- Bernier, G., A. Havelange, C. Houssa, A. Petitjean and P. Lejeune. 1993. Physiological signals that induce flowering. *Plant Cell.* 5: 1147-1155.
- Bertling, J. and F. Bangerth. 1995. Changes in hormonal pattern of the new growth of *clerocarya birrea* after rejuvenation treatment with GA<sub>3</sub> and 'heading back'. *Gartenbauwissenschaft.* 60: 119-124.
- Bohner, J. and F. Bangerth. 1988. Effect of fruit set sequence and defoliation on cell number, cell size and hormone levels of tomato fruits (*Lycopersicum esculentum* Mill) within a tree. *Plant Growth Regul.* 7: 141-155.
- Boonplod, N. 1994. Quantitative changes in gibberellin-like substances in stem apex of longan cv. Dor prior to flowering. M.S. Thesis, Chiang Mai University, Chiang Mai.
- Browse, J. and Z. Xin. 2001. Temperature sensing and cold acclimation. *Current Opinion in Plant Biol.* 4: 241-246.
- Brüggemann, W., T. A. W. van der Kooij and P. R. van Hasselt. 1992. Long-term chilling of young tomato plants under low light and subsequent recovery II Chlorophyll fluorescence, carbon metabolism and carboxylase/oxygenase. *Planta (Historical Archive).* 186: 179-187.

- Brüggemann, W. and B. Dauborn. 1993. Long-term chilling of young tomato plants under low light. III. Leaf development as reflected by photosynthesis parameters. *Plant and Cell Physiol.* 34: 1251-1257.
- Byrd, G. T., D. R. Ort and W. L. Ogren. 1995. The effects of chilling in the light on ribulose-1,5-biphosphate carboxylase/oxygenase activation of tomato (*Lycopersicon esculentum* Mill.). *Plant Physiol.* 107: 585-591.
- Cavaender-Bares, J., S. Apostol., I. Moya, J. M. Briantais and F. A. Bazzaz. 1998. The sensitivity to cold stress of two oak species which differ in leaf habit. p. 2513-2516. In G. Garab (ed.). *Photosynthesis: Mechanisms and Effects* vol. IV. Proceedings of the XIth International Congress on Photosynthesis. Budapest, Hungary August 17-22.
- Chacko, E.K. 1991. Mango flowering-still an enigma. *Acta Hort.* 291:12-21.
- Chaikiattiyos, S., C. M. Menzel and T. S. Rasmussen. 1994. Floral induction in tropical fruit trees: effects of temperature and water supply. *J. Hort. Sci.* 69(3): 397-415.
- Chaitrakulsub, T., R. Ogata, S. Subhadrabandhu, S. Powsung and H. Gemma. 1992. Use of paclobutrazol, and ethephon in influencing flowering, and leaf flushing of lychee cv. Hong Huay. *Acta Hort.* 321: 309-317.
- Chaitrakulsup, T. and S. Subhadrabandhu. 1983. Seasonal changes in total non-structural carbohydrates in leaves and stem apexes of *Litchi chinensis* Sonn. var. Hong Huay in relation to average temperature and rainfall. *ASST Newsletter.* 16(1): 21-28.
- Chang, S. T., W. S. Chen, C. Y. Hsu, H. C. Yu, B. S. Du and K. L. Huang. 1999. Changes in cytokinin activities before, during and after floral initiation in *Polianthes tuberosa*. *Plant Physiol. Biochem.* 37(9): 679-684.
- Chen, W. S. 1987. Endogenous growth substances in relation to shoot growth and flower bud development of mango. *J. Amer. Soc. Hort. Sci.* 112: 360-363.
- Chen W. S. 1990. Endogenous growth substances in xylem and shoot tip diffusate of lychee in relation to flowering. *Hort Science.* 25(3):314-315.
- Chen, W. S. 1991. Changes in cytokinins before and during early flower bud differentiation in lychee (*Litchi chinensis* Sonn.). *Plant Physiol.* 96: 1203-1206.
- Chen, W. S., Huang, K. L. and H. C. Yu. 1997. Cytoinins from terminal buds of *Euphoria longana* during different growth stages. *Physiol. Plant.* 99: 185-189.

- Chen, H. B. and H. B. Huang. 2001. China litchi industry: Development, achievement and problems. *Acta Hort.* 558: 31-39.
- Coen, E. S. and R. Carpenter. 1993. The metamorphosis of flowers. *Plant Cell.* 5: 1175-1181.
- Colasanti, J. and V. Sundaresan. 2000. 'Florigen' enters the molecular age: long-distance signals that cause plants to flower. *Trends Biochem. Sci.* 25(5): 236-240.
- Corbesier, L., P. Lejeune and G. Bernier. 1998. The role of carbohydrates in the induction of flowering in *Arabidopsis thaliana*: comparison between the wild type and a starchless mutant. *Planta.* 206: 131-137.
- Davies, J. and B. S. Littlewood. 1979. *Elementary Biochemistry: An Introduction to the Chemistry of Living Cells.* Prentice-Hall, New Jersey.
- Davies, P. J. 1995. *Plant Hormones Physiology, Biochemistry and Molecular Biology.* Kluwer Academic Publishers. Netherlands.
- Davenport, T. L. and R. Nunez-Elisea. 1990. Ethylene and other endogenous factors possibly involved in mango flowering. *Acta Hort.* 275: 441-448.
- Davenport, T. L. and R. Nunez-Elisea. 1997. Reproduction physiology. *In* R. E. Litz (ed). *The Mango: Botany Production and Uses.* CAB International, University Press, Cambridge.
- Department of Agricultural Extension. 2004. Quantity and value of agricultural exports, 2002-2003. [Online]. Available: <http://www.doae.go.th.statisticexportOVExp.xls> [2004, August 4].
- Dewitte, W., A. Chiappetta, A. Azmi, E. Witters, M. Strnad, J. Rembur, M. Noin, D. Chriqui and H. Van Onckelen. 1999. Dynamics of cytokinins in apical shoot meristems of a day-neutral tobacco during floral transition and flower formation. *Plant Physiol.* 119: 111-121.
- Dreyer, E., X. Le Roux, P. Montpied, F. A. Daudet and F. Masson. 2001. Temperature response of leaf photosynthetic capacity in seedlings from seven temperate species. *Tree Physiol.* 21: 223-232.
- Ehneß, R. and T. Roitsch. 1997. Co-ordinated induction of mRNAs for extracellular invertase and a glucose transporter in *C. rubrum* by cytokinins. *Plant J.* 11: 539-548.
- Emery, R. J., Q. Ma and C. A. Atkins. 2000. The forms and sources of cytokinins in developing white lupine seeds and fruits. *Plant Physiol.* 123: 1593-1604.

- Farrar, J. F. and S. Gunn. 1996. Effects of temperature and atmospheric carbon dioxide on source-sink relations in the context of climate change. P.389-406. In E. Zamski and A. A. Schaffer (eds.). Photoassimilate Distribution in Plants and Crops: Source-Sink Relationships. Marcel Dekker. New York.
- Fletcher, J. C. 2002. Shoot and floral meristem maintenance in *Arabidopsis*. Annu. Rev. Plant Biol. 53: 45-66.
- Fracheboud, Y. 1999. Using chlorophyll fluorescence to study photosynthesis. Inst. of Plant Sci., ETH University, Zurich. [CD-ROM] p. 127. Available  
:\using%20chlorophyll%20Fluorescence%20 to% 20Study%20Photosyn [2002, August 15].
- Fußeder, A., A. Waringer, W. Hartung, E. D. Schulze and H. Heilmeyer. 1992. Cytokinins in the xylem sap of desert grown almond (*Prunus dulcis*) trees: daily courses and their possible interactions with abscisic acid and leaf conductance. New Phytol. 122: 45-52.
- Gazit, S. 2001. How the problem of poor litchi productivity was solved in Israel. Acta Hort. 558: 89.
- Ghosh, S. P. 2001. World trade in litchi: past, present and future. Acta Hort. 558: 23-30.
- Gibson, S. I. 2000. Plant sugar-response pathways, part of a complex regulatory web. Plant Physiol. 124: 1532-1439.
- Goldschmidt, E.E. 1999. Carbohydrate supply as a critical factor for citrus fruit development and productivity. Hort Science. 34(6): 1020-1024.
- Goldschmidt, E. E., M. Tamim, and R. Goren. 1997. Gibberellins and flowering in citrus and other fruit trees: A critical analysis. Acta Hort. 463:201-208.
- Goldschmidt, E. E., N. Aschkenazi, Y. Hezano, A. A. Schaffer and S. P. Monselise. 1985. A role for carbohydrate levels in the control of flowering in citrus. Scientia Hort. 26: 159-166.
- Goren, M. and S. Gazit. 1993. Small-statured litchi orchards: a new approach to the growing of litchi. Acta Hort. 349: 69-72.
- Hartung, W., A. Sauter and E. Hose. 2002. Abscisic acid in the xylem: where does it come from and where does it go to? J. Exp. Bot. 53: 27-32.



- Haumann, J. 2002. Chlorophyll fluorescence as a sensitive tool for photosynthetic performance. Workshop on ecological stress physiology of tropical crops (ESPTC): Innovative techniques and field-oriented data evaluation (ITFE), Lampang, October 16-26, 2002. LARTC, BIOTEC and University of Vienna, Lampang.
- Havelange, A. P. Lejeune and G. Bernier. 2000. Sucrose/cytokinin interaction in *Sinapis alba* at floral induction: a shoot-to-root-to shoot physiological loop. *Physiol. Plant.* 109: 343-350.
- Hedden, P. and Y. Kamiya. 1997. Gibberellin biosynthesis: Enzymes, genes and their regulation. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 48: 431-460.
- Hegele, M., Naphrom, D., Manochai, P., Chattrakul, A., Sruamsiri, P. and F. Bangerth. 2004. Effect of leaf age on the response of flower induction and related hormonal changes in longan trees after KClO<sub>3</sub> treatment. *Acta Hort.* 653: 417-424.
- Hendrickson, L., M. C. Ball, J. T. Wood, W. S. Chow and R. T. Furbank. 2004. Low temperature effects on photosynthesis and growth of grapevine. *Plant, Cell & Env.* 27(7): 795.
- Hicklenton, P. R., J. Y. Reekie, R. J. Gordon and D. C. Pereival. 2000. Seasonal patterns of photosynthesis and stomatal conductance in lowbush blueberry plants managed in a two-year production cycle. *Hort Science.* 35(1): 55-59.
- Hieke, S. 2000. Physiology of leaf and fruit growth in lychee (*Litchi chinensis* Sonn.). Ph.D. Thesis. The Humboldt-University of Berlin, Berlin.
- Hoad, G. V. 1984. Hormonal regulation of fruit bud formation in fruit trees. *Acta Hort.* 149: 13-23.
- Hoad, G. V. 1995. Transport of hormones in the phloem of higher plants. *Plant Growth Regul.* 16: 173-182.
- Hodge, J. E. and B. T. Hofreiter. 1962. Determination of reducing sugar and carbohydrate. p. 380-394. *In* R. L. Whistler and M.L. Wolform (eds.). *Methods in Carbohydrate Chemistry* Vol. 2. Academic Press, New York.
- Hopkins, W. G. 1999. *Introduction to Plant Physiology*. 2nd ed. John Wiley & Sons, New York.

- Hou-Bin, C. and H. Hui-Bai. 2003. Field observations in Guangdong on the low temperature effect on floral induction of lychee (*Litchi chinensis* Sonn.). p. 39. In S. Subadrabundhu and N. Sukvibul (eds.). Proceedings of the secondary international symposium on lychee, longan, rambutan and other sapindaceae plants. Chiang Mai, August 25-28, 2003. Hort. Res. Inst., Dept. of Agriculture, Bangkok. (Abstract)
- Houba-Herlin, N., C. Pethe, J. d'Alayer and M. Laloue. 1999. Cytokinin oxidase from *Zea mays*: purification, cDNA cloning and expression in moss protoplasts. *Plant J.* 17: 615-626.
- Howell, S. H., S. Lall and P. Che. 2003. Cytokinins and shoot development. *Trends in Plant Sci.* 8(9): 453-459.
- Huang, H. and H. Chen. 2003. A phase change approach towards the floral formation in lychee. *Acta Hort.* 665: 185-194.
- Hubick, K. T., J. S. Taylor, D. M. Reid. 1986. The effect of drought on levels of abscissic acid, cytokinins, gibberellins and ethylene in aeroponically grown sunflower plants. *Plant Growth Regul.* 4: 139-151.
- Hunner, N. P. A., G. Öquist and F. Sarhan. 1998. Energy balance and accumulation to light and cold. *Trends in Plant Sci.* 3: 224-230.
- Iglesias, D. J., I. L. Francisco, R. Tadeo and M. Talon. 2002. Regulation of photosynthesis through source:sink imbalance in citrus is mediated by carbohydrate content in leaves. *Physiologia Plantarum.* 116: 563-572.
- Itai, C. and Y. Vaadia. 1965. Kinetin like activity in root exudates of water stressed sunflower plants. *Physiol. Plant.* 18: 941-944.
- Ito, A., H. Hayama, Y. Kashimura, and H. Yoshioka. 2001. Effect of maleic hydrazide on endogenous cytokinin contents in lateral buds, and its possible role in flower bud formation on the Japanese pear shoot. *Scientia Hort.* 87: 199-205.
- Jackson, D. I., and G. B. Sweet. 1972. Flower initiation in temperate woody plants. *Hort. Abstr.* 42: 9-24.
- Lejeune, P., G. Bernier, M. C. Requer and J. M. Kinet. 1993. Sucrose increase during floral induction in the phloem sap collected at the apical part of the shoot of the long-day plant *Sinapis alba*. *Planta.* 190: 71-74.

- Jensen, E., S. Eilertsen, A. Emsten, O. Juntilla and R. Moe. 1996. Thermoperiodic control of stem elongation and endogenous gibberellins in *Campanula isophylla*. *J. Plant Growth Regul.* 15: 167-171.
- Kakimoto, T. 2003. Biosynthesis of cytokinins. *J. Plant Res.* 110: 233-239.
- Kaosampan, C. 1997. Factor affecting growth and development of mango seedlings. MS. Thesis, Chiang Mai University, Chiang Mai.
- Kaosampan, C., N. Yimyam and W. Boonma. 2003. Effect of girdling on off-season flowering of highland litchi. Final report. Multiple Cropping Center (MCC), Fac. of Agriculture, Chiang Mai University, Chiang Mai.
- Kiatsakun, D. 2004. Effect of potassium chlorate on physiology of longan root. Ph.D. Thesis, Chiang Mai University, Chiang Mai.
- Kingston-Smith, A. H., J. Harbinson, J. Williams and C. H. Foyer. 1997. Effects of chilling on carbon assimilation, enzyme activation, and photosynthetic electron transport in the absence of photoinhibition in maize leaves. *Plant Physiol.* 114: 1039-1046.
- Koch, C., G. Noga and G. Strittmatter. 1994. Photosynthetic electron transport is differentially affected during early stages of cultivar/race-specific interactions between potato and *Phytophthora infestans*. *Planta.* 193: 51-557.
- Koo-Duang, A. 1984. Effects of branch girdling on total nonstructural carbohydrates and total nitrogen contents in relation to flowering of two litchi (*Litchi chinensis* Sonn.) varieties. MS. Thesis. Kasetsart University, Bangkok.
- Koshita, Y., Takahara, T. Ogata, and A. Goto. 1999. Involvement of endogenous plant hormones (IAA, ABA, GAs) in leaves and flower bud formation of satsuma mandarin (*Citrus unshiu* Marc.). *Scientia Hort.* 79: 185-194.
- Kozlowski, T. T. and T. Keller. 1966. Food relation of wood plant. *Bot. Rev.* 32: 293-382.
- Kulkarni, V. J. 1991. Physiology of flowering in mango studied by grafting. *Acta Hort.* 291: 95-104.
- Larcher, W. 1995. *Physiological Plant Ecology*. 3rd ed. Springer, Berlin.
- Lawlor, D. W. 1993. *Photosynthesis: Molecular, Physiological and Environmental Processes*. 2nd ed. Longman Group UK Limited, Hong Kong.



- Lejeune, P., G. Bernier, M. C. Requier and J. M. Kinet. 1993. Sucrose increase during floral induction in the phloem sap collected at the apical part of the shoot of the long-day plant *Sinapis alba*. *Planta*. 190: 71-74.
- Lekpaijitr, S. 1999. Analysis and quantitative changes in cytokinin-like substances in stem apex prior to leaf flushing of lychee cv. Hong Huay. MS. Thesis, Chiang Mai University, Chiang Mai.
- Levy, Y. Y. and C. Dean. 1998. Review article: The transition to flowering. *Plant Cell*. 10: 1973-1989.
- Li, C. J. and F. Bangerth. 1999. Autoinhibition of indoleacetic acid transport in the shoots of two-branched pea (*Pisum sativum*) plants and its relationship to correlative dominance. *Physiologia Plantarum*. 106: 415-420.
- Li, C. and Y. Xiao. 2001. Girdling increases yield of 'Nuomici' litchi. *Acta Hort*. 558: 233-242.
- Li, Y. C., R. Davenport, R. Rao and Q. Zheng. 2001. Nitrogen, flowering and production of lychee in Florida. *Acta Hort*. 558: 221-224.
- Loveys, B.R. and P. E. Kriedemann. 1974. Internal control of stomatal physiology and photosynthesis. I. Stomatal regulation and associated changes in endogenous levels of abscisic and phaseic acids. *Aust. J. Plant Physiol*. 1(3): 407-415.
- Lu, J. L., J. Ertl and C. M. Chen. 1990. Cytokinin enhancement of the light induction of nitrate reductase transcript levels in etiolated barley leaves. *Plant Mol. Biol*. 14: 585-594.
- Machácková, I., J. Eder, V. Motyka, J. Hanus and J. Krekule. 1996. Photoperiodic control of cytokinin transport and metabolism in *Chenopodium rubrum*. *Physiol. Plant*. 98: 564-570.
- Machácková, I. and J. Krekule. 2002. Sixty-five years of searching for the signals that trigger flowering. *Fiziologiya Rastanii*. 49(4): 507-515.
- McGaw, B. A. and R. Burch. 1995. Hormonal regulation of apical dominance. p.98-117. In P. J. Davies (ed). *Plant Hormones*. Kluwer Academica Publishers, Dordrecht.
- Makhonpas, C. 2001. Waterlogging effects on dwarfed apple trees as dependent on fruit load. Ph.D. Thesis. Rheinischen Friedrich-Wilhelms University, Bonn.

- Manochai, P. and N. Jarassamrit. 2000. The flowering manipulation of litchi. p. 35-41. *In* N. Jarassamrit, P. Manochai, N. Thobunyanon, T. Chantarachit, W. Wiriya-alongron and P. Somboonwong (eds). *Litchi Production*. Sirinartha kanpim, Chiang Mai. (in Thai)
- Manochai, P., W. Suthon, W. Wiriya-alongkron, P. Sruamsiri and F. Bangerth. 2001. Effects of repeated applications of KClO<sub>3</sub> on the flowering habit of longan. p.17-18. *In* S. M. Kang, F. Bangerth and S. K. Kim (eds.). *Extended abstracts of the 9<sup>th</sup> international symposium on plant bioregulators in fruit production*. 2001. ISHS and KSHS, Korea.
- Manochai, P., w. Suthon, W. Wiriya-Alongorn, S. Utsahatanon and N. Jarassamrit. 2003. Flowering induction by stem girdling in 'Petsakorn-twai' longan (*Dimocarpus longan* Lour.). p. 95. *In* S. Subadrabundhu and N. Sukvibul (eds.). *Proceedings of the secondary international symposium on lychee, longan, rambutan and other sapindaceae plants*. Chiang Mai, August 25-28, 2003. Hort. Res. Inst., Dept. of Agriculture, Bangkok. (Abstract)
- Marini, R. P. and M. C. Marini. 1983. Seasonal changes in specific leaf weight, net photosynthesis, and chlorophyll content of peach leaves as affected by light penetration and canopy position. *J. Amer. Soc. Hort. Sci.* 108(4): 609-612.
- Martin, B., D. R. Ort, J. S. Boyer. 1981. Impairment of photosynthesis by chilling-temperatures in tomato (*Lycopersicon esculentum* cultivar Rutgers). *Plant Physiol.* 68: 329-334.
- Menzel, C. 1983. The control of floral initiation in lychee: a review. *Scientia Hort.* 21: 201-215.
- Menzel, C. 2001. The physiology of growth and cropping in lychee. *Acta Hort.* 558: 175-184.
- Menzel, C. 2002a. Lychee production in Australia. p. 14-27. *In* M. K. Papademetriou and F.J. Dent (eds.). *Lychee Production in the Asia-Pacific Region*. FAO. Bangkok.
- Menzel, C. 2002b. *The Lychee Crop in Asia and the Pacific*. FAO, Bangkok.
- Menzel, C. and D. R. Simpson. 1988. Effect of temperature on growth and flowering of litchi (*Litchi chinensis* Som.) cultivars. *J. Hort. Sci.* 63: 347-358.
- Menzel, C. and D. R. Simpson. 1990. Performance and improvement of lychee cultivars: a review. *Fruit varieties J.* 44: 197-215.
- Menzel, C. and D. R. Simpson. 1991. Buildup tree reserves for good flowering and cropping. *Yearbook Aust. Lychee Growers' Assoc.* 1: 75-76.

- Menzel, C. M. and D. R. Simpson. 1994. Lychee. p. 123-145. In B. Schaffer and P. C. Andersen (eds). Handbook of Environmental Physiology of Fruit Crops Vol. II: Sub-Tropical and Tropical Crops. CRC Press, Florida.
- Menzel, C. M. and D. R. Simpson. 1995. Temperatures above 20°C reduce flowering in lychee (*Litchi chinensis* sonn.). J. Hort. Sci. 70: 981-987.
- Menzel, C. M., T. S. Rasmussen and D. R. Simpson. 1989. Effects of temperature and leaf water stress on growth and flowering of litchi (*Litchi chinensis* Sonn.). J. Hort. Sci. 64: 739-752.
- Menzel, C. M., T. S. Rasmussen and D. R. Simpson. 1995. Carbohydrate reserves in lychee trees (*Litchi chinensis* Sonn.). J. Hort. Sci. 70: 245-255.
- Mitra, S. K. 2002. Overview of lychee production in the Asia-Pacific region. p. 5-13. In M. K. Papademetriou and F.J. Dent (eds.). Lychee Production in the Asia-Pacific Region. FAO. Bangkok.
- Moonfoui, J. 2001. Changes in quality of gibberellin-like substances in stem apex prior to leaf flushing and flowering of longan cv. Dor. MS. Thesis, Chiang Mai University, Chiang Mai.
- Morris, D.A. 1979. The effect of temperature on the velocity of exogenous auxin transport in intact chilling-sensitive and chilling-resistant plants. Planta. 146: 603-605.
- Murray, J. A. H., D. Freeman, J. Greenwood, R. Hrntley, J. Makkerh and C. Riou-Khamlichi. 1998. Plant D cyclins and retino-blstoma protein homologues. In Francis D. (ed.). Plant Cell division. Portland Press, London. p. 99-127. Cited in Roitsch, T. and R. Ehneß.
2000. Regulation of source/sink relations by cytokinins. Plant Growth Regul. 32 : 359-367.
- Nartvaranan, P. 1997. Relationship between carbohydrate content in various parts of mango (*Mangifera indica* L.) cv. Namdokmai on fruit retention. MS. Thesis. Kasetsart University, Bangkok.
- Naphrom, D., C. Potjanapimon, W. Patranapoo, N. Boonplod, T. Thanyapar and S. Subhadrabandhu. 2001. Changes in cytokinin and gibberellin-like substances in stem apex of lychee cv. Hong Huay prior to flowering. Acta Hort. 558: 199-203.

- Naphrom, D. 2004. Effect of cool temperature and GAs-Biosynthesis Inhibitors on Flower Induction and Related Hormonal Changes in Mango (*Mangifera indica* L.) Trees. Ph.D. Thesis, University Hohenheim, Stuttgart.
- Naphrom, D., M. Hegele, P. Manochai, N. Boonplod, P. Srumsiri and F. Bangerth. 2004. Hormonal changes in various tissue of mango trees during flower induction following cold temperature. *Acta Hort.* 645: 453-457.
- Ngemsri, N. 2003. Effect of Potassium chlorate on growth, development and cytokinin-like substances in lychee. MS Thesis, Chiang Mai University, Chiang Mai.
- Nir, G., K. Ratner, E. D. Gussakovsky and Y. Shahak. 1997. Photoinhibition of photosynthesis in mango leaves: effect of chilly nights. *Acta Hort.* 455: 228-235.
- Nunez-Elisea, R. and T. L. Davenport. 1992. Requirement for mature leaves during floral induction and floral transition in developing shoots of mango. *Acta Hort.* 296: 33-37.
- Nunez-Elisea, R. and T. L. Davenport. 1995. Effect of leaf age, duration of cool temperature treatment, and photoperiod on bud dormancy release and floral initiation in mango. *Scientia Hort.* 62 : 63-73.
- Nunez-Elisea, R., M. L. Caldeira and t. L. Davenprot. 1990. Thidiazuron effects on growth initiation and expressing in mango (*Mangifera indica* L.). *Hort Science.* 25: 1167. (Abstract)
- Nunez-Elisea, R, T. L. Davenport and M. L. Caldeira. 1996. Control of bud morphogenesis in mango (*Mangifera indica* L.) by girdling, defoliation and temperature modification. *J. Hort. Sci.* 71: 25-39.
- O'Hare, T. J. 1989. The control of floral induction in lychee (*Litchi chinensis* Sonn.). Ph. D. Thesis, Dept. of Botany, University of Queensland, Queensland.
- O'Hare, T. J. 2002. Interaction of temperature and vegetative flush maturity influences shoot structure and development of lychee. *Scientia. Hort.* 95: 203-211.
- O'Hare T. J. 2004. Impact of root and shoot temperature on bud dormancy and floral induction in lychee (*Litchi chinensis* Sonn.). *Scientia Hort.* 99: 21 – 28.
- Ohto, M., K. Onai, Y. Furukawa, E. Aoki, T. Araki and K. Nakamura. 2001. Effects of sugar on vegetative development and floral transition in *Arabidopsis*. *Plant Physiol.* 127: 252-261.

- Olesen, T., C. M. Menzel, N. Wiltshire and C. A. McConchie. 1999. Manipulating flushing cycles, and flowering in lychee. p. 47-52. *In* Proceedings of the 5<sup>th</sup> National Lychee Conference. Twin Waters, Australia.
- Öquist, G. 1983. Effects of low temperature on photosynthesis. *Plant, Cell and Env.* 6: 281-300.
- Paul, M. J., S. P. Driscoll and D. W. Lawlow. 1992. Sink-regulation of photosynthesis in relation to temperature in sunflower and rape. *J. Exp. Bot.* 43: 147-153.
- Plant Variety Protection Office. 2003. Plant Germplasm Database Litchi. Agri-Co-opt. Group (Thailand), Bangkok.
- Pichakum, A., S. Kunyamee and V. Kaewladdakorn. 2003. Studies on the canes of carbohydrates and plant bioregulators contents during the development of the terminal, shoots in longan (*Dimocarpus longan* Lour.). p. 87 *In* S. Subadrabundhu and N. Sukvibul (eds.). Proceedings of the secondary international symposium on lychee, longan, rambutan and other sapindaceae plants. Chiang Mai, August 25-28, 2003. Hort. Res. Inst., Dept. of Agriculture, Bangkok. (Abstract)
- Piromya, R., N. Luangprasert, N. Juntawong, W. Yeesawat and W. Kidomporn. 1998. Changes in cytokinin-like substances in stem apex prior to flowering of lychee cv. Hong Huey. Kasetsart University, Bangkok.
- Pongsomboon, W., S. Subadrabandhu, R. A. Stephenson. 1997. Some aspects of the ecophysiology of flowering intensity of mango (*Mangifera indica* L.) cv. Nam Doc Mai. In a semi-tropical monsoon Asian climate. *Scientia Hort.* 70: 45-56.
- PP Systems. 1996. CIRAS-1 Photosynthesis Equations: Operator's Manual version 1.2. Last printed (original 1993). Hitchin, Herts.
- Qiu, J., X. Luo and D. Wu. 2001. Regulation of flower bud differentiation in longan. *Acta Hort.* 558: 225-228.
- Ramburn, N. 2001. Effects of girdling and growth retardants on flowering and fruiting of litchi in Mauritius. *Acta Hort.* 558: 229-232.
- Rameshwar, A. 1989. Mango flowering-stress induced. *Acta Hort.* 231: 433-439.
- Rankunta, Y. 1997. Effect of tip pruning on flowering of lychee. BS. Thesis, Maejo University, Chiang Mai.



- Reich, L. 1985. Carbohydrate in the apple tree: effects associated with pruning and deblooming. Hort Science. 20 (2): 238-240.
- Roe, D. J., J. H. Oosthuizen and C. M. Menzel. 1995. Rate of soil drying, and previous water deficit influence the relationship between CO<sub>2</sub> assimilation, and tree water status in potted lychee (*Litchi chinensis* Sonn.). J. Hort. Sci. 70: 15-24.
- Roitsch, T. and R. Ehneß. 2000. Regulation of source/sink relations by cytokinins. Plant Growth Regul. 32: 359-367.
- Ross, J. and D. O'Neill. 2001. New interactions between classical plant hormones. Trends in Plant Sci. 6(1): 2-4.
- Ross, J. J., D. P. O'Neill, J. J. Smith, L. H. J. Kerckhoffs and R. C. Elliott. 2000. Evidence that auxin promotes gibberellin A<sub>1</sub> biosynthesis in pea. Plant J. 21: 547-552.
- Ruaengam, M., M. Saelim and S. Sadudee. 2002. Influence of root pruning on flowering induction of longkong (*Lansium domestica* Corr.). Agri. Sci. 33(4-5Suppl): 79-82. (in Thai)
- Sachs R.M. 1977. Nutrient diversion: an hypothesis to explain the chemical control of flowering. Hort Science. 12 (3): 220-222.
- Sakakibara, H. and K. Takei. 2002. Identification of cytokinin biosynthesis genes in Arabidopsis: a breakthrough for understanding the metabolic pathway and the regulation in higher plants. J. Plant Growth Regul. 21: 17-23.
- Salazar-Garcia, S. , E.M. Lord and G.J. Lovatt. 1998. Inflorescence and flower development of the 'Hass' avocado (*Persea americana* Mill.) during "On" and "Off" crops years. J. Amer. Soc. Hort. Sci. 123(4): 537-544.
- Salinas, J. 2002. Molecular mechanisms of signal transduction in cold acclimation. 2002. p.116-139. In D. Scheel and C. Wasternack (eds). Plant Signal Transduction. Oxford University Press, New York.
- Savitch, L. V., G. R. Gray and N. P. A. Huner. 1997. Feedback-limited photosynthesis and regulation of sucrose-starch accumulation during cold acclimation and low-temperature stress in a spring and winter wheat. Planta. 201: 18-26.

- Savitch, L. V., J. B. aström, A. G. Ivanov, V. Hurry, G. Öquist, N.P. A. Huner and P. Gardeström. 2001. Cold acclimation of *Arabidopsis thaliana* results in incomplete recovery of photosynthetic capacity, associated with an increased reduction of the chloroplast stroma. *Planta*. [Online]. Available: <http://Springer-Verlag2001DOI10.1007/s004250100622> [1 March 2003].
- Schaffer, B. and G.O. Gaye. 1989. Gas exchange, chlorophyll and nitrogen content of mango leaves as influenced by light environment. *Hort Science*. 24(3): 507-509.
- Schaffer, B. and P. Andersen. 1994. *Handbook of Environmental Physiology of Fruit Crops. Vol. II: Sub-tropical and tropical Crops*. CRC Press, Florida.
- Searle, C., A. W. Whiley, D. R. Simpson and J. B. Saranah. 1995. A preliminary phenophysiological model for 'Kensington' mango in subtropical Australia. p. 127-135. *In Department of Primary Industries (ed). Workshop Proceedings of Mango 2000-Marketing Seminar and Production*. Brisbane.
- Sethapakdee, R. 1997. Physiology of flowering in lychee and longan. p. 19-41. *In Extension and training Inst. (ed). Workshop on Newly technology for production of lychee and longan*. Chiang Mai, November 4-6, 1997. Inst. of Agricultural Extension and Training and Tropical and Sub-tropical Fruit Research and Development Center, Kasetsart University. (in Thai)
- Sethapakdee, R. 2002. Lychee production in Thailand. p. 106-113. *In M. K. Papademetriou and F.J. Dent (eds.). Lychee Production in the Asia-Pacific Region*. FAO. Bangkok.
- Sherriff, I., J. McKay, J. J. Ross, J. B. Reid and C. I. Willis. 1994. Decapitation reduces the metabolism of gibberellin A-20 to A-1 in *Pisum sativum* L., decreasing the Le-le difference. *Plant Physiol*. 104: 277-280.
- Shukla, R. K. and P. N. Bajpai. 1974. Blossom bud differentiation, and ontogeny in litchi (*Litchi chinensis* Sonn.). *Indian J. Hort*. 31: 226-228.
- Sinlaphasomboon, W. 1994. Effects of climate, leaf water potential and foliar fertilizers on nutritional contents and flowering of 'Hong Huay' lychee. MS.Thesis, Kasetsart University, Bangkok.
- Smith, D., G. M. Paulsen and C. A. Raguse. 1964. Extraction of total available carbohydrate from grass and legume tissue. *Plant Physiol*. 39: 960-962.

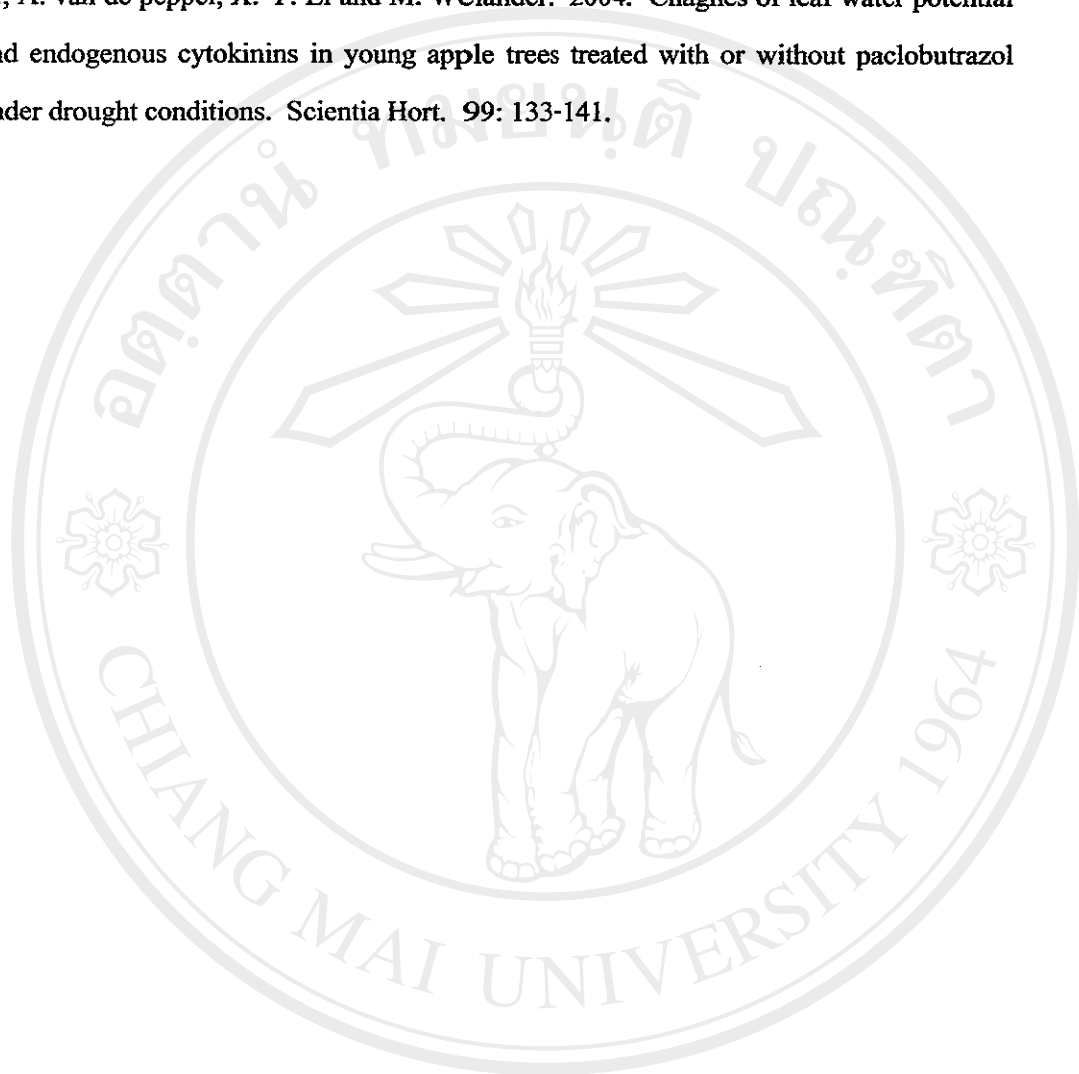
- Sritontip, C. 1996. Effect of root temperatures on growth and development of lychee. MS.Thesis, Chiang Mai University, Chiang Mai.
- Sritontip, C., Y. Khaosumain, S. Changiaraja and R. Poruksa. 2003. Effect of potassium chlorate ( $KClO_3$ ), potassium nitrate ( $KNO_3$ ), sodium hypochlorite ( $NaOCl$ ) and thiourea on off-season flowering and photosynthesis of longan (*Dimocarpus longan* LOUR.) cv. Daw. p. 99. In S. Subadrabundhu and N. Sukvibul (eds.). Proceedings of the secondary international symposium on lychee, longan, rambutan and other sapindaceae plants. Chiang Mai, August 25-28, 2003. Hort. Res. Inst., Dept. of Agri., Bangkok. (Abstract)
- Srivastava, L. M. 2002. Plant Growth and Development: Hormones and Environment. Academic Press. China.
- Sruamsiri, P. and Manochai, P. 2001. Professional Off-Season Production in Longan. Thanabuun Kanpim, Chiang Mai. (in Thai)
- Sruamsiri, P., P. Manochai, D. Naphrom, A. Chattrakul, S. Roygrong and K. Sringam. 2003. Reducing alternation and production of off-season fruit in litchi, longan and mango. Final report, Fac. of Agriculture, Chiang Mai University, Chiang Mai. (in Thai)
- Sruamsiri, P. 2004. Chiang Mai University, personal communication.
- Stephenson, R. a., E. C. Gallagher and T. S. Rasmussen. 1989. Effects of growth manipulation on carbohydrate reserves in macadamia trees. *Scientia Hort.* 40: 227-235.
- Stern, R.A. 1992. Elucidation of the factors affecting litchi productivity in Israel, and the development of methods to improve its yield. Ph.D. Diss., Hebrew University Jerusalem, Jerusalem.
- Stern, R., A. L. Adato, M. Goren, D. Eisenstein and S. Gazit. 1993. Effect of autumnal water stress on litchi flowering, and yield in Israel. *Scientia Hort.* 54: 295-302.
- Stern, R. A. and Gazit, S. 2003. The reproductive biology of the lychee. *Hort. Rev.* 28: 393-453.
- Stern, R. A., A. Naor, N. Bar, S. Gazit and B. A. Bravdo. 2003. Xylem-sap zeatin-riboside and dihydrozeatin-riboside levels in relation to plant and soil water status and flowering in 'Mauritius' lychee. *Scientia Hort.* 98: 285-291.
- Stitt, M. and Hurry, V. 2002. A plant for all seasons: alterations in photosynthetic carbon metabolism during cold acclimation in *Arabidopsis*. *Current Opinion in Plant Physiol.* 5: 199-206.

- Sujawipan, M. 1982. Plant Micro-technique. Dept. Bot. Fac. Sci. Kasetart Bangkok.
- Strand, A., V. Hurry, P. Gustafsson and P. Gardestron. 1997. Development of *Arabidopsis thaliana* leaves at low temperatures releases the suppression of photosynthesis and photosynthetic gene expression despite the accumulation of soluble carbohydrates. *Plant J.* 12: 605-614.
- Subhadrabandhu, S. and C. Yapawattanaphun. 2001. Lychee and longan production in Thailand. *Acta Hort.* 558: 51-57.
- Sukhvibul, N., Whiley, A. W. , Smith, M. K. Hetherington, S. E. and Vithanage, V. 1999. Effect of temperature on inflorescence and floral development in four mangle (*Mangifera indica* L.) cultivars. *Scientia Hort.* 82: 67-84.
- Sultana, N., T. Ikeda and R. Itoh. 1999. Effect of NaCl salinity on photosynthesis and dry matter accumulation in developing rice grains. *Environ. and Exp. Bot.* 42(3): 211-220.
- Sun, J., G. E. Edwarda and T. W. Okita. 1999. Feedback inhibition of photosynthesis in rice measured by O<sub>2</sub> dependent transient. *Photosyn. Res.* 59(2-3): 187-200.
- Taiz, L. and E. Zeiger. 1998. *Plant Physiology*. 2<sup>nd</sup> ed. Sinauer Associates, Massachusetts. 792 p.
- Takei, K., H. sakakibara, M. Taniguchi and T. Sugiyama. 2001. Nitrogen-dependent accumulation of cytokinins in root and the translocation to leaf: implication of cytokinin species that induces gene expression of maize response regulator. *Plant Cell Physiol.* 42: 85-93.
- Thomas, R. 1963. Floral induction and the simulation of cell division in *Xanthium*. *Science.* 140: 54-56.
- Thomas, C. Moore and J. A. Moore. 1991. Induction of ent-kaurene biosynthesis by low temperature in dwarf peas. *Plant Growth Regul.* 10: 91-95.
- Thonglem, W. 2000. Changes in ethylene and total non structural carbohydrate contents in stem apex prior to flowering of longan cv.Dor, lychee cv.Hong Huay and marian plum cv. Toon Kloaw. MS. Thesis, Chiang Mai University, Chiang Mai.
- Tongumpai, P. and R. Ogata. 2000. Anatomical study of terminal bud development of mango treated with paclobutrazol. *Acta Hort.* 509: 100-107.

- Tongumpai, P., K. Jutamane, R. Sethapakdee and S. Subhadrabandu. 1991. Variation in level of gibberellin-like substances during vegetative growth and flowering of mango cv. Khiew Sawoey. *Acta Hort.* 291: 105-107.
- Ulger, S., Sonmez, M. Karkacier, N. Ertoy, O. Akdesir and M. Aksu. 2004. Determination of endogenous hormones, sugars and mineral nutrition levels during the induction, initiation and differentiation stage and their effects on flower formation in olive. *Plant Growth Regul.* 42: 89-95.
- Urban, L., M. Jannoyer, X. L. Roux, H. Sinoquet and S. Jaffuel. 2004. A model of leaf photosynthesis for mango cv. Lirfa. *Acta Hort.* 645: 411-416.
- Van Heerden, P. D. R., G. H. j. Kruger, J. E. Loveland, M. A. J. Parry and C. H. Royer. 2003. Dark chilling imposes metabolic restrictions on photosynthesis in soybean. *Plant, Cell & Environ.* 26(2): 323.
- Wanichanukul, S. 1990. Effect of spraying monopotassium phosphate fertilizer on flowering and nutritional contents in the shoot of two lychee cultivars. M.S. Thesis, Kasetsart University, Bangkok.
- Wellensiek, S. J. 1977. Principles of flower formation. *Acta Hort.* 68: 17-21.
- Whiley, A. W., T. S. Rasmussen, J. B. Saranah and B. N. Wolstenholme. 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.
- Whiley, A. W., T. S. Rasmussen, B. N. Wolstenholme, J. B. Saranah and B. W. Cull. 1991. Interpretation of growth responses of some mango cultivars grown under controlled temperatures. *Acta Hort.* 291: 22-31.
- Wong, K. C. and S. Ketsa. 1991. *Dimocarpus longan* Lour. In Plant resources of South-East Asia. Wageningen: Pudoc No.2: Edible fruits and nuts, The Netherlands.
- Yapwattanaphun, C. and S. Subhadrabandhu. 2001. Litchi cultivars in Thailand. *Acta Hort.* 558: 93-101.
- Yemm, E. W. 1935. The respiration of barley plants. I. Method for the determination of carbohydrates in leaves. *Proc. Royal Soc. London (Ser. B.)* 117: 483-504.
- Yudkin, M. and R. Offord. 1973. *Comprehensible Biochemistry*. 1st ed. William Clowes & Sons. London.



- Zheng, Q., T. L. Davenport and Y. Li. 2001. Stem age, winter temperature and flowering of lychee in South Florida. *Acta Hort.* 558: 237-242.
- Zhu, L.-H., A. van de peppel, X.-Y. Li and M. Welander. 2004. Changes of leaf water potential and endogenous cytokinins in young apple trees treated with or without paclobutrazol under drought conditions. *Scientia Hort.* 99: 133-141.



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