
Reference

1. Adkins, S. W., Samosir, Y. M., Ernamati, A., Godwin, I. D. and Drew, R. A. Control of Ethylene and Use of Polyamines Can Optimise the Conditions for Somatic Embryogenesis in Coconut (*Cocos nucifera*) and Papaya (*Carica papaya* L.). ISHS Acta Horticulturae 461: International Symposium on Biotechnology of Tropical and Subtropical Species Part 2.
2. Aiyelaagbe, I. O. O., Fawusi, M. O. A. and Babalola, O. (1986). Growth, development and yield pawpaw (*Carica papaya* L.) 'Homestead selection' in response to soil moisture stress. *Plant and Soil*, 93: 427-435.
3. Akihiko, H., Naoko, T., Masahiro, S., Jiro, I., Hiroshi, I. and Tetsuaki, Y. (1995). Preparation of N-quinolinylcyclohexanedicarboxamide and N-quinolinylpiperidinedicarboxamide derivatives. *Jpn. Kokai Tokkyo Koho*, 12 pp.
4. Alkaloid Biosynthesis I. Retrieved from <http://www.Alkaloid biosynthesis I-Reference pathway.htm>.
5. Australian Government Office of the Gene Technology Regulator. The Biology of *Carica papaya* L. (papaya, papaw, paw paw). Version 2: 2008.
6. Ashmore, S. E., Azimi, M. and Drew, R. A. Cryopreservation Trials in *Carica papaya*. ISHS Acta Horticulturae 560: International Symposium on *In vitro* Culture and Horticultural Breeding.
7. Azarkan, M., El Moussaoui, A., van Wuytswinkel, D., Dehon, G. and Iooze, Y. (2003). Fractionation and purification of the enzymes stored in the latex of *Carica papaya*. *Journal of Chromatography B*, 790: 229-238.
8. Barger, G., Robinson, R. and Short, W. F. (1937). Synthetical experiments relating to carpaine. II. *J. Chem. Soc.*, 715-718.
9. Barger, G., Robinson, R. and Smith, L. H. (1937). Synthetical experiments relating to carpaine. III. Some derivatives of tetrahydrofuran and intermediates of the aliphatic series. *J. Chem. Soc.*, 718-725.
10. Barger, G., Robinson, R. and Urushibara, Y. (1937). Synthetical experiments relating to carpaine. I. Synthesis of a basic long-chain lactone. *J. Chem. Soc.*, 714-715.
11. Barua, A. B. and Olson, J. A. (1998). Reversed-phase gradient high-performance liquid chromatographic procedure for simultaneous analysis of very polar to nonpolar

- retinoids, carotenoids and tocopherols in animal and plant samples. *Journal of Chromatography B*, 707: 69-79.
12. Bengochea, T. and Dodds, J. H. (1987). *Plant Protoplasts: A Biotechnological Tool for Plant Improvement*. Chapman and Hall, New York.
 13. Bennett, R. N., Mellon, F. A., Rosa, E. A. S., Perkins, L. and Kroon, P. A. (2004). Profiling glucosinolates, flavanoids, alkaloids and other secondary metabolites in tissues of *Azima tetracantha* L. (*Salvadoraceae*). *Journal of Agricultural and Food Chemistry*, 52 (19): 5856-5862.
 14. Bevan, C. W. L. and Ogan, A. U. (1964). Studies on West African medicinal Plants-I. Biogenesis of Carpaine in *Carica papaya* Linn.. *Phytochemistry*, 3: 591-594.
 15. Bhattacharya, J., Renukdas, N. N., Khuspe, S. S. and Rawal, S. K. (2003). Multiple shoot regeneration from immature embryo explants of papaya. *Biologia Plantarum*, 47 (3): 327-331.
 16. Biotechnology Transfer Project: Asia. Retrieved from <http://www.ISAAA SEAsia Projects: Projects-Biotech Transfer.htm>.
 17. Blom, T. J. M., Kreis, W., Iren, F. V. and Libbenga, K. R. (1992). A non-invasive method for the routine-estimation of fresh weight of cells grown in batch suspension cultures. *Plant Cell Reports*, 11: 146 - 149.
 18. Bridg, Hannia-Chapter 3. Retrieved from <http://www.Bridg, Hannia.htm>.
 19. Brown, E. and Bourgouin, A. (1975). Total synthesis of alkaloids of the carpaine and cassine series V. Total synthesis of (\pm)-carpamic acid. *Tetrahedron*, 31 (8): 1047-1051.
 20. Brown, E., Guilmet, E. and Touet, J. (1973). Total synthesis of alkaloids in the carpaine and cassine series. III. Two general methods for synthesis of 4,4-(ethylenedioxy) aldehydes. *Tetrahedron*, 29 (17): 2589-2596.
 21. Brown, E., Lavoue, J. and Dhal, R. (1973). Total synthesis of alkaloids of the carpaine and the cassine series. II. Biogenetic-type total synthesis of pseudoconhydrine. *Tetrahedron*, 29 (2): 455-461.
 22. Brown, E. and Robert, D. (1972). Total synthesis of alkaloids in carpaine and cassine series. I. Model reactions. Synthesis of 2, 6-dialkyl-3-piperidinols. *Bulletin de la Societe Chimique de France*, 11: 4293-4303.
 23. Burdick, E. M. (1971). Carpaine: An Alkaloid of *Carica papaya*-Its Chemistry and Pharmacology. *Economic Botany*, 25 (4): 363-365.

24. Burkart, M. D. (2002). Metabolic engineering-a genetic toolbox for small molecule organic synthesis. *Org. Biomol. Chem.*, 1: 1-4.
25. Cai, W., Gonsalves, C., Tennant, P., Fermin, G., Souza Jr., M., Sarindu, N., Jan, F. H., Zhu, H. Y. and Gonsalves, D. (1999). A Protocol for Efficient Transformation and Regeneration of *Carica papaya* L. *In Vitro Cell. Dev. Biol. Plant*, 35: 61-69.
26. *Carica papaya* L.. Retrieved from <http://www.Carica papaya.htm>.
27. *Carica papaya* L.. Retrieved from <http://www.PROSEA: Carica papaya.htm>.
28. *Carica Papaya*. Retrieved from <http://www.King's American Dispensatory: Carica Papaya.htm>.
29. Carvalho, P. R. N., Collins, C. H. and Rodriguez-Amaya, D. B. (1992). Comparison of Provitamin A Determination by Normal-Phase Gravity-Flow Column Chromatography and Reversed-Phase High Performance Liquid Chromatography. *Chromatographia*, 33 (3/4): 133-136.
30. Castillo, B., Smith, M. A. L. and Yadava, U. L. (1998). Plant regeneration from encapsulated somatic embryos of *Carica papaya* L. *Plant Cell Reports*, 17: 172-176.
31. Chan, L. K. and Teo, C. K. H. (1994). Micropropagation of Eksotika, a Malaysian Papaya Cultivar, and the Field Performance of the Tissue Culture Derived Clones. *ISHS Acta Horticulturae 575: International Symposium on Tropical and Subtropical Fruits*.
32. Chapter 1: Common Physical Techniques Used in Purification. 1-62.
33. Chapter 4: Separation of Molecules by Chromatography. 34-43.
34. Chen, B., Feng, C., Li, B. G. and Zhang, G. L. (2003). Two New Alkaloids from *Miliusa cuneata*. *Natural Product Research*, 17 (6): 397-402.
35. Chen, M. H. and Chen, C. C. (1992). Plant regeneration from *Carica* protoplast. *Plant Cell Reports*, 11: 404-407.
36. Chen, M. H., Wang, P. J. and Maeda, E. (1987). Somatic embryogenesis and plant regeneration in *Carica papaya* L. tissue culture derived from root explants. *Plant Cell Reports*, 6: 348-351.
37. Cheng, Y. C. and Tsai, S. W. (2004). Enantioselective esterification of (*RS*)-2-(4-chlorophenoxy)-propionic acid via *Carica papaya* lipase in organic solvents. *Tetrahedron: Asymmetry*, 15: 2917-2920.
38. Clayden, J., Greeves, N., Warren, S. and Wothers, P. *Organic Chemistry*, Chapter 51: Chemistry Cross Reference, Biosynthesis of Alkaloid, 62-80.

39. Coke, J. L. and Rice Jr., W. Y. (1968). The Absolute Configuration of Carpaine. *J. Org. Chem.*, 30: 3420-3422.
40. Corey, E. J., Nicolaou, K. C. and Melvin Jr., L. S. (1975). Synthesis of brefeldin A, carpaine, vertaline and erythronolide B from nonmacrocyclic precursors. *Journal of the American Chemical Society*, 97 (3): 654-655.
41. Craig, D. (1998). Cyclisation-Based Approaches to Alkaloid Synthesis. Department of Chemistry, Imperial College of Science, Technology and Medicine.
42. de Almeida, E. P. de Oliveira, R. P. and Dantas, J. L. L. (2000). Papaya somatic embryogenic protocol. *Pesquisa Agropecuaria Brasileira*, 35 (10): 2017-2024.
43. de Winnaar, W. (1988). Clonal propagation of papaya *in vitro*. *Plant Cell, Tissue and Organ Culture*, 12: 305-310.
44. Dawson, R. M. C., Elliott, D. C., Elliott, W. H. and Jones, K. M. (1986). *Data for Biochemical Research* (3rd eds.). Clarendon Press, Oxford.
45. Dixon, R. A. and Gonzales, R. A. (1994). *Plant Cell Culture: A practical Approach* (2nd eds.). IRL Press, New York.
46. Drew, R. A. (1986). Growth of apical and lateral buds of papaw (*Carica papaya* L.) as affected by nutritional and hormonal factors. *Journal of Horticultural Science*, 61 (4): 535-543.
47. Drew, R. A. (1987). The effects of medium composition and cultural conditions on *in vitro* root initiation and growth of papaya (*Carica papaya* L.). *Journal of Horticultural Science*, 62 (4): 551-556.
48. Drew, R. A., Magdalita, P. M. and O'Brien, C. M. Development of *Carica* Interspecific Hybrids. *ISHS Acta Horticulturae* 461: International Symposium on Biotechnology of Tropical and Subtropical Species Part 2.
49. Drew, R. A. and Miller, R. M. (1989). Nutritional and cultural factors affecting rooting of papaya (*Carica papaya* L.) *in vitro*. *Journal of Horticultural Science* 64, (6): 767-773.
50. Drew, R. A., Considine, J. A. and McComb, J. A. (1993). Effect of Fructose on Growth of papaw Shoot Explants *in vitro*. *Aust. J. Bot.*, 41: 739-748.
51. Drew, R. A., McComb, J. A. and Considine, J. A. (1993). Rhizogenesis and root growth of *Carica papaya* L. *in vitro* in relation to auxin sensitive phases and use of riboflavin. *Plant Cell, Tissue and Organ Culture*, 33: 1-7.

52. Drew, R. A., Simpson, B. W. and Osborne, W. J. (1991). Degradation of exogenous indole-3-butyric and riboflavin and their influence on rooting response of papaya *in vitro*. *Plant Cell, Tissue and Organ Culture*, 26: 29-34.
53. Eksotika Papaya for the World (2004). Malaysian Agricultural Research and Development Institute.
54. El-Aouar, Â. A., Azoubel, P. M., Barbosa Jr, J. L. and Murr, F. E. X. (2006). Influence of the osmotic agent on the osmotic dehydration of papaya (*Carica papaya* L.). *Journal of Food Engineering*, 75: 267-274.
55. Ellis, B. E., Kuroki, G. W. and Stafford, H. A. (1994). Recent Advances in Phytochemistry: Genetic Engineering of Plant Secondary Metabolism (28th vol.). Plenum Press, New York.
56. Eric, B. and Alain, B. (1981). Studies on the total synthesis of carpaine and cassine series alkaloids. VII. Total synthesis of (±)-cassine. *Bulletin de la Societe Chimique de France*, 2 (7/8): 281-287.
57. Eric, B. and Robert, D. (1976). Studies related to the total synthesis of alkaloids in the carpaine and cassine series. Part 6. Total synthesis of (±)-azimic acid. *Organic and Bio-Organic Chemistry*, 20: 2190-2193.
58. Facchini, P. J. (2001). Alkaloid Biosynthesis in Plants: Biochemistry, Cell Biology, Molecular Regulation and Metabolic Engineering Applications. *Annual Review of Plant physiology and Plant molecular Biology*, 52: 29-66.
59. Farias, L. R., Costa, F. T., Souza, L. A., Pelegrini, P. B., Grossi-de-Sá, M. F., Neto, S. M., Bloch Jr., C., Laumann, R. A., Noronha, E. F. and Franco, O. L. (2007). Isolation of a novel *Carica papaya* α -amylase inhibitor with deleterious activity toward *Callosobruchus maculatus*. *Pesticide Biochemistry and Physiology*, 87: 255-260.
60. Fennell, C. W., Elgorashi, E. E. and van Staden, J. (2003). Alkaloid Production in *Crinum moorei* Cultures. *J. Nat. Prod.*, 66: 1524-1526.
61. Fernando, J. A., Melo, M., Soares, M. K. M. and da Glória, B. A. (2001). Anatomy of Somatic Embryogenesis in *Carica papaya* L. *Brazilian Archives of Biology and Technology*, 44 (3): 247-255.
62. Fitch, M., Leong, T., Nancy, S., George, Y., Amy, D. C., Yeh, A. W., Susan, W., Maeda, S. H., Ferreira, S. A. and Moore, P. (2003). Photoautotrophic rooting and growth of papayas *in vitro*. *American Society of Plant Biologists*.

63. Fitch, M., Moore, P. and Leong, T. Progress in Transgenic Papaya (*Carica papaya*) Research: Transformation for Broader Resistance among Cultivars and Micropropagating Selected Hybrid Transgenic Plants. ISHS Acta Horticulturae 461: International Symposium on Biotechnology of Tropical and Subtropical Species Part 2.
64. Fitch, M. M. M. (1993). High frequency somatic embryogenesis and plant regeneration from papaya hypocotyls callus. *Plant Cell, Tissue and Organ Culture*, 32: 205-212.
65. Fitch, M. M. M. and Manshardt, R. M. (1990). Somatic embryogenesis and plant regeneration from immature zygotic embryos of papaya (*Carica papaya* L.). *Plant Cell Reports*, 9: 320-324.
66. Gamborg, O. L. (2002). Plant Tissue Culture. Biotechnology. Milestones. *In Vitro Cell. Dev. Biol. Plant*, 38: 84-92.
67. George, E. F., Puttock, D. J. M. and George, H. J. (1987). *Plant Culture Media: Formulations and Uses* (1st vol.). Exegetics Limited, Westbury.
68. Gupta, S. D. and Ibaraki, Y. (2006). *Plant Tissue Culture Engineering*. Springer, Dordrecht.
69. Gomez, K. A. and Gomez, A. A. (1984). *Statistical Procedures for Agricultural Research*, John Wiley and Sons, New York.
70. Govindachari, T. R. (2002). Five decades in the study of natural products. *Proc. Indian Acad. Sci. (Chem. Sci.)*, 114 (3): 175-195.
71. Govindachari, T. R. and Narasimhan, N. S. (1954). Stereochemistry of Carpamic Acid. *Chemical Laboratories, Presidency College, Madras*, 1563-1564.
72. Govindachari, T. R. and Narasimhan, N. S. (1953). Constitution of Carpaine. *Chemical Laboratories, Presidency College, Madras*, 2635-2637.
73. Govindachari, T. R., Pai, B. R. and Narasimhan, N. S. (1954). Pseudocarpaine, a new alkaloid from *Carica papaya*. *J. Chem. Soc.*, 1847-1849.
74. Habsah Dinin. Betik banyak khasiat. *Berita Harian*, 9 December 2001, 11.
75. Hagendoorn, M. J. M., Wagner, A. M., Segers, C., van der Plas, L. H. W., Oostdam, A. and van Walraven, H. S. (1994). Cytoplasmic Acidification and Secondary Metabolite Production in Different Plant Cell Suspensions': A Comparative Study. *Plant Physiol.*, 106: 723-730.

-
76. Hardisson, A., Rubio, C., Baez, A., Martin, M. M. and Alvarez, R. (2001). Mineral composition of the papaya (*Carica papaya* variety Sunrise) from Tenerife Island. *Eur. Food Res. Technol.*, 212: 175-181.
 77. Heldt, H. W. (1997). *Plant Biochemistry and Molecular Biology*. Oxford University Press, New York.
 78. Hernández, Y., Lobo, M. G. and González, M. (2006). Determination of vitamin C in tropical fruits: A comparative evaluation of methods. *Food Chemistry*, 96: 654-664.
 79. Hornick, C. A., Sanders, L. I. and Lin, Y. C. (1978). Effect of carpaine, a papaya alkaloid, on the circulatory function in the rat. *Research Communications in Chemical Pathology and Pharmacology*, 2 (22): 277-299.
 80. Hossain, M., Rahman, S. M., Islam, R. and Joarder, O. I. (1993). High efficiency plant regeneration from petiole explants of *Carica papaya* L. through organogenesis. *Plant Cell Reports*, 13: 99-102.
 81. Hranueli, D., Perić, N., Borovička, B., Bogdan, S., Cullum, J., Waterman, P. G. and Hunter, I. S. (2001). *Molecular Biology of Polyketide Biosynthesis*. *Food technol. biotechnol.*, 39 (3): 203-213.
 82. Jacques, F., Alain, D., Anna, K., Chantal, E., Bridget, H. and Francois, S. (1997). Novel carpaine-derived macrocyclic ethers. *PCT Int. Appl.*, 31 pp.
 83. Jacques, F., Stylianos, M., Dennis, B., Anna, K. and Robert, K. (1994). Preparation of carpaine diamide anticancer agents. *Fr. Demande*, 16 pp.
 84. Jacques, F., Stylianos, M., Dennis, B., Anna, K. and Robert, K. (1994). Preparation of synthetic carpaine monoamides and their use as anticancer drugs. *PCT Int. Appl.*, 22 pp.
 85. Jalil, M., Khalid, N. and Othman, R. Y. (2003). Plant regeneration from embryogenic suspension cultures of *Musa acuminata* cv. Mas (AA). *Plant Cell, Tissue and Organ Culture*, 75: 209-214.
 86. Jalil, M., Wong, W.C., Othman, R. Y. and Khalid, N. (2008). Morphohistological examination on somatic embryogenesis of *Musa acuminata* cv. Mas (AA). *Scientia Horticulturae*, 117: 335-340.
 87. Jenke-Kodama, H. and Dittmann, E. (2005). Combinatorial polyketide biosynthesis at higher stage. *Molecular Systems Biology*, 10: 1038-1039.
 88. Jones, M. P. A., Yi, Z., Murch, S. J. and Saxena, P. K. (2006). Thidiazuron-induced regeneration of *Echinacea purpurea* L.: Micropropagation in solid and liquid culture systems. *Plant Cell Rep.*, 1000-1007.

89. Jordan, M. (1986). Somatic embryogenesis from cell suspension cultures in *Carica candamarcensis*. *Plant Cell, Tissue and Organ Culture*, 7: 257-261.
90. Jordan, M. and Velozo, J. (1996). Improvement of somatic embryogenesis in highland-papaya cell suspensions. *Plant Cell, Tissue and Organ Culture*, 44 (3): 189-194.
91. Jørgensen, K., Rasmussen, A. V., Morant, M., Nielsen, A. H., Bjarnholt, N., Zagrobelny, M., Bak, S. and Møller, B. L. (2005). Metabolon formation and metabolic channeling in plant secondary metabolism enable plants to effectively synthesize. *Current Opinion in Plant Biology*, 8: 280-291.
92. Kabaleeswaran, V., Rajan, S. S., Krishnakumari, G. N. and Govindachari, T. R. (1999). Conformational flexibility of carpaine and its hydrobromide derivative. *Acta Crystallographica, Section C: Crystal Structure Communications*, 55 (11): 1935-1937.
93. Kay, J. B., Robinson, J. B. and Thomas, J. (1965). Preparation of some stereospecific tropane and N-alkylntropane derivatives. *J. Chem. Soc.*, 5112-5115.
94. Khuzhaev, V. U. and Aripova, S. F. (2000). Pseudocarpaine from *Carica papaya*. *Chemistry of Natural Compounds*, 36 (4): 418.
95. Kiefer, K. and Herwehe, K. (1996). Use of BSTFA Silylating Reagent to Prepare Volatile Derivatives for GC. *The Reporter*, 15 (4): 4-5.
96. Knez, Ž, Habulin, M. and Primožič, M. (2003). Hydrolases in supercritical CO₂ and their use in a high-pressure membrane reactor. *Bioprocess Biosyst. Eng.*, 25: 279-284.
97. Kottenmeier, W., Chang, H., Siegel, S. M. and Siegel, B. Z. (1982). Stimulation of Growth in Papaya and Other Plants by Dilute Salt Solutions. *Water, Air and Soil Pollution*, 20: 447-450.
98. Kyte, L. (1983). *Plants from Test Tubes: An Introduction to Micropropagation*. Timber Press, Oregon.
99. Lai, C. C., Yeh, S. D. and Yang, J. S. (2000). Enhancement of papaya axillary shoots proliferation *in vitro* by controlling the available ethylene. *Bot. Bull. Acad. Sin.*, 41 (3): 203-212.
100. Lai, C. C., Yu, T. A., Yeh, S. D. and Yang, J. S. (1998). Enhancement of *in vitro* growth of papaya multishoots by aeration. *Plant Cell, Tissue and Organ Culture*, 53: 221-225.
101. Litz, R. E. and Conover, R. A. (1983). High-frequency Somatic Embryogenesis from *Carica* Suspension Cultures. *Ann. Bot.* 51: 683-686.

102. Loewy, A. G. and Siekevitz, P. (1971). Cell Structure and Function (2nd eds.). Holt. Rinehart and Winston, London.
103. Mahmood, K. and Abd. Rahman, N. (1998). Kaedah Spektroskopi dalam Pengenalpastian Sebatian Organik. Penerbit Universiti Malaya, Kuala Lumpur.
104. Manrique, G. D. and Lajolo, F. M. (2004). Cell-wall polysaccharide modifications during postharvest ripening of papaya fruit (*Carica papaya*). Postharvest Biology and Technology, 33: 11-26.
105. Manrique, G. D. and Lajolo, F. M. (2002). FT-IR spectroscopy as a tool for measuring degree of methyl esterification in pectins isolated from ripening papaya fruit. Postharvest Biology and Technology, 25: 99-107.
106. Manshardt, R. M. and Drew, R. A. Biotechnology of Papaya. ISHS Acta Horticulturae 461: International Symposium on Biotechnology of Tropical and Subtropical Species Part 2.
107. Martin, S. F. (1997). General strategies for the stereoselective synthesis of alkaloid natural products. Pure & Appl. Chem., 69 (3): 571-576.
108. Mat Saat, Z. (1984). Pengantar Statistik. Penerbit Fajar Bakti Sdn. Bhd., Kuala Lumpur.
109. McCubbin, M. J. and van Staden, J. (2004). A modified technique for *in vitro* propagation of papaya (*Carica papaya* L.). South African Journal of Botany, 69 (3), 287-291.
110. Menzella, H. G., Reid, R., Carney, J. R., Chandran, S. S., Reisinger, S. J., Patel, K. G., Hopwood, D. A. and Santi, D. V. (2005). Combinatorial polyketide biosynthesis by *de novo* design and rearrangement of modular polyketide synthase genes. Nature Biotechnology, 23: 1171-1176.
111. Michel, P. and Eric, B. (1985). Studies related to the total synthesis of alkaloids in the carpaine and cassine series. Part 8. Total syntheses of (\pm)-spicigerine, methyl (\pm)-spicigerinate and (\pm)-spectaline. Journal of Chemical Research, 9: 278-279.
112. Miller, R. M. and Drew, R. A. (1990). Effect of explants type on proliferation of *Carica papaya* L. *in vitro*. Plant Cell, Tissue and Organ Culture, 21: 39-44.
113. Minh, T. V. and Thu, B. T. T. (2001). Manipulation of Embryogenesis and Organogenesis Culture for Papaya (*Carica papaya* L.) Improvement and Development in Vietnam: Mass Embryogenic Cell Propagation via Embryogenesis Culture. PAG-IX: Manipulation of Embryogenesis and Organogenesis.

114. Mondal, M., Gupta, S. and Mukherjee, B. B. (1990). In vitro propagation of shoot buds of *Carica papaya* L. (*Caricaceae*) var. Honey Dew. *Plant Cell Reports*, 8: 609-612.
115. Mondal, M., Gupta, S. and Mukherjee, B. B. (1994). Callus culture and plantlet production in *Carica papaya* (var. Honey Dew). *Plant Cell Reports*, 13: 390-393.
116. Monmarson, S., Michaux-Ferriere, N. and Teisson, C. (1995). Production of high-frequency embryogenic calli from integuments of immature seeds of *Carica papaya* L. *Journal of Horticultural Science*, 70 (1): 57-64.
117. Murashige, T. and Skoog, F. (1962). A revised medium for rapid growth and bioassays with tobacco tissue cultures. *Physiol. Plant*, 18: 100-127.
118. Murdoch, J. and Barnes, J. A. (1998). *Statistical Tables for Students of Science, Engineering, Psychology, Business, management and Finance*. (eds. 4th). Palgrave Macmillan, New York.
119. Namdeo, A. G. (2007). Plant Cell Elicitation for Production of Secondary Metabolites: A Review. *Pharmacognosy Reviews*, 1 (1): 69-79.
120. Natural products as Medicinally Useful Agents. Retrieved from <http://www.NaturalProductsasMedicinallyUsefulAgents.htm>.
121. Newcomb, E. H. (2001). Folke K. Skoog 1908-2001. *Plant Molecular Biology Reporter*, 19: 109-112.
122. Newman, D. J., Cragg, G. M. and Snader, K. M. (2003). Natural Products as Sources of New Drugs over the Period 1981-2002. *J. Nat. Prod.*, 66: 1022-1037.
123. Nishioka, T. and Funatsu, K. (1999). Chemical Knowledge for Predicting Biosynthetic Pathways of Secondary metabolites. *Genome Informatics*, 10: 243-244.
124. Nitsawang, S., Hatti-Kaul, R. and Kanasawud, P. (2006). Purification of papain from *Carica papaya* latex: Aqueous two-phase extraction versus two-step salt precipitation. *Enzyme and Microbial Technology*, 39: 1103-1107.
125. Nossack, A. C., Vilegas, J. H. Y., von Baer, D. and Lanças, F. M. (2000). Supercritical Fluid Extraction and Chromatographic Analysis (HRGC-FID and HRGC-MS) of *Lupinus spp.* Alkaloids. *J. Braz. Chem. Soc.*, 11 (5): 495-501.
126. O'Neil, M., Smith, A., Heckelman, P. E., Obenchain Jr., J. R., Gallipeau, J. A. R., D'Arecca, M. A. and Budavari, S. (2001). *The Merck Index* (13th eds.). Merck & Co., Inc., New Jersey.
127. Ogan, A. U. (1970). *Caricaceae*: The Basic Constituents of the Leaves of *Carica papaya*. *Phytochemical Reports*, 10: 2544-2547.

128. Oksman-Caldentey, K. M. and Inzé, D. (2004). Plant cell factories in the post-genomic era: new ways to produce designer secondary metabolites. *TRENDS in Plant Science*, 10: 1-19.
129. Papaya. Retrieved from [http://www.Papaya \(Abuta grandifolia\).htm](http://www.Papaya (Abuta grandifolia).htm).
130. Papaya. Retrieved from <http://www.Papaya Fruit Facts.htm>.
131. Papaya. Retrieved from <http://www.Papaya 1.htm>.
132. Passera, C. and Spettoli, P. (1981). Chemical composition of papaya seeds. *Qual. Plant Foods Human Nutr.*, 31: 77-83.
133. Paull, R. E., Gross, K. and Qiu, Y. (1999). Changes in papaya cell walls during fruit ripening. *Postharvest Biology and Technology*, 16: 79-89.
134. Rahman, A. U. and Choudhary, M. I. Logical Approach to Structure Elucidation of Natural Compounds. H. E. J. Research Institute of Chemistry, University of Karachi, 121-144.
135. Rajeevan, M. S. and Pandey, R. M. (1986). Lateral bud culture of papaya (*Carica papaya* L.) for clonal propagation. *Plant Cell, Tissue and Organ Culture*, 6: 181-188.
136. Rajeevan, M. S. and Pandey, R. M. (1983). Propagation of Papaya through Tissue Culture. *ISHS Acta Horticulturae 131: In vitro Culture*, XXI IHC.
137. Rajnikant, Dinesh and Kamni. (2005). Weak C-H...O hydrogen bonds in alkaloids: An overview. *Bull. Mater. Sci.*, 28 (3): 187-198.
138. Randl, S. and Blechert, S. (2003). Concise total synthesis of (+)-carpamic acid. *Institut für Chemie, Technische Universität Berlin*.
139. Rapoport, H. and Baldrige Jr., H. D. (1952). The Nitrogen-Containing Ring of Carpaine, Department of Chemistry, University of California and Naval medical Research Institute, 5365.
140. Regulation and Metabolic Engineering of Secondary Metabolite Biosynthesis. Retrieved from <http://www.Research Metabolic Engineering.htm>.
141. Renukdas, N. Mohan, M. L., Khuspe, S. S. and Rawal, S. K. (2003). Influence of boron on somatic embryogenesis in papaya. *Biologia Plantarum*, 47 (1): 129-132.
142. Reuveni, O. Shlesinger, D. R. and Lavi, U. (1990). *In vitro* clonal propagation of dioecious *Carica papaya*. *Plant Cell, Tissue and Organ Culture*, 20: 41-46.
143. Rice Jr., W. Y. (1967). The absolute configuration of carpaine. The structure and stereochemistry of cassine. Synthetic studies related to crinine. *Diss. Abstr. B.*, 27 (8): 2657.

144. Rice Jr., W. Y. and Coke, J. L. (1965). The absolute configuration of carpaine. *J. Org. Chem.*, 30 (10): 3420-3422.
145. Rice Jr., W. Y. and Coke, J. L. (1966). Structure and configuration of alkaloids. II. Cassine. *J. Org. Chem.*, 31 (4): 1010-1012.
146. Rimberia, F. K., Adaniya, S., Ishimine, Y. and Etoh, T. (2007). Morphology of papaya plants derived via anther culture. *Scientia Horticulturae*, 111: 213-219.
147. Rimberia, F. K., Sunagawa, H., Urasaki, N., Ishimine, Y. and Adaniya, S. (2005). Embryo induction via anther culture in papaya and sex analysis of the derived plantlets. *Scientia Horticulturae*, 103: 199-208.
148. Saha, M., Bhot, M., Phatak, A. and Chandra, N. (2003). *In vitro* propagation of *Carica papaya* L. var. 'COORG honeydew' from nodal explants. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*, 5 (3): 331-332.
149. Salim, A. A., Garson, M. J. and Craik, D. J. (2004). New Alkaloids from *Pandanus amaryllifolius*. *J. Nat. Prod.*, 67: 54-57.
150. Sato, T., Aoyagi, S. and Kibayashi, C. (2003). Enantioselective Total Synthesis of (+)-Azimine and (+)-Carpaine. *Org. Lett.*, 1-8.
151. Satoh, S. and Flores, H. E. (1990). *Plant, Genes and Agriculture*. Chapter 14: Valuable Chemicals from Plant Cell and Tissue Culture, 384-399.
152. Saturday Magazine. Retrieved from <http://www.satmag.htm>.
153. Sharma, S. K. and Millam, S. (2004). Somatic embryogenesis in *Solanum tuberosum* L.: a histological examination of key developmental stages. *Plant Cell Rep.*, 23: 115-119.
154. Shlesinger, D., Reuveni, O. and Lavi, U. (1987). Tissue Culture Propagation of Papaya. *ISHS Acta Horticulturae* 212: Symposium on *In vitro* Problems Related to Mass Propagation of Horticultural Plants.
155. Somsri, S., Fletcher, R. J., Jobin, M., Drew, R., Lawson, W. and Graham, M. W. Developing Molecular Markers for Sex prediction in Papaya (*Carica papaya* L.). *ISHS Acta Horticulturae* 461: International Symposium on Biotechnology of Tropical and Subtropical Species Part 2.
156. Stasolla, C. and Yeung, E. C. (2003). Recent advances in conifer somatic embryogenesis: improving somatic embryo quality. *Plant Cell, Tissue and Organ Culture*, 74: 15-35.

157. Sutanto, A., Aziz, M. A., and Rashid, A. A. (1999). High-Frequency Somatic Embryo Formation from Cell Suspension of Papaya (*Carica papaya* L.) cv. Eksotika II. 11th National Biotechnology Seminar 99, 22-24 November 1999, Melaka, Malaysia.
158. Tang, C. S. (1978). New Macrocyclic Δ^1 - Piperidine Alkaloids from Papaya Leaves: Dehydrocarpaine I and II. *Phytochemistry*, 18: 651-652.
159. Tang, C. S. and Takenaka, T. (1983). Quantification of a Bioactive Metabolite in Undisturbed Rhizosphere-Benzyl Isothiocyanate from *Carica papaya* L. *Journal of Chemical Ecology*, 9 (8): 1247-1252.
160. The Medicinal Properties of the Papaya, *Carica papaya* L.. Retrieved from <http://www.Ethnobotanical Leaflets.htm>.
161. The Secondary Metabolism of Plants: Secondary Defense Compounds. Retrieved from <http://www.Botany online: The Secondary metabolism of Plants: Secondary Defense Compounds.htm>.
162. The World of Polyketides
163. Thorpe, T. A. (1995). *Current Plant Science and Biotechnology in Agriculture: In vitro Embryogenesis in Plants*. Kluwer Academic Publishers, Berkshire.
164. Tisdale, S. L. dan Nelson, W. L. (1981). *Baja dan Kesuburan Tanah* (edisi ketiga). Dewan Bahasa dan Pustaka, Kuala Lumpur.
165. Tsay, H. S. and Su, C. Y. (1985). Anther culture of papaya (*Carica papaya* L.). *Plant Cell Reports*, 4: 28-30.
166. Topuriya, L. I. (1983). *Carica papaya* alkaloids. II. *Khimiya Prirodnikh Soedinenii*, 2: 243.
167. Vasil, I. K. (1986). *Cell Culture and Somatic Cell Genetics of Plants* (1st vol.). Academic Press, Inc., London
168. Vasil, I. K. (1986). *Cell Culture and Somatic Cell Genetics of Plants* (3rd vol.). Academic Press, Inc., London.
169. Verpoorte, R., van der Heijden, R., Hoge, J.H.C. and ten Hoopen, H.J.G. (1994). Plant cell biotechnology for the production of secondary metabolites. *Pure & Appl. Chem.*, 66 (10/11): 2307-2310.
170. Vilasini, P., Latipah, Z., and Salasiah, A. (2000). Induction of somatic embryogenesis and plant regeneration from immature embryos of Eksotika papaya (*Carica papaya*). *Journal of Tropical and Food Sciences*, 28 (2): 121-126.

-
171. Vinci, G., Botrè, F. and Mele, G. (1994). Ascorbic acid in exotic fruits: a liquid chromatographic investigation. *Food Chemistry*, 53: 211-214.
172. Vitoria, A. P., de Souza Filho, G. A., Bressan-Smith, R. E., Pinto, F. O., Paiva, L. B., Guimaraes, P. S., Abreu de Oliveira, M. D. P., Daher, R. F. and Gonzaga Pereira, M. DNA fingerprint of *Carica papaya* L. genotypes by RAPD markers. *Journal of New Seeds*, 6 (1): 51-65.
173. Wall, M. M. (2006). Ascorbic acid, vitamin A and mineral composition of banana (*Musa sp.*) and papaya (*Carica papaya*) cultivars grown in Hawaii. *Journal of Food Composition and Analysis*, 19: 434-445.
174. Wilberg, V. C. and Rodriguez-Amaya, D. B. (1995). HPLC Quantification of Major Carotenoids of Fresh and Processed Guava, Mango and Papaya. *Lebensm.-Wiss. u.-Technol.*, 28 (5): 474-479.
175. Wilson, R. K., Kwan, T. K., Kwan, C. Y. and Sorger, G. J. (2002). Effects of papaya seed extract and benzyl isothiocyanate on vascular contraction. *Life Sciences*, 71 (5): 497-507.
176. Wong, W.C., Jalil, M., Abdullah. M. O., Othman, R.Y. and Khalid, N. (2006). Enhancement of Banana Plant Regeneration by Incorporating a Liquid-Based Embryo Development Medium for Embryogenic Cell Suspension. *Journal of Horticultural Science & Biotechnology*, 81 (3): 385–390.
177. Yamamoto, H. and Tabata, M. (1989). Correlation of papain-like production with laticifer formation in somatic embryos of papaya. *Plant Cell Reports*, 8: 251-254.
178. Yang, J. S. Papaya Somatic Embryo Induction from Fruit-Bearin Field Plants: Effects of Root Supporting Material and Position of the Root Explants. *ISHS Acta Horticulturae 560: International Symposium on In vitro Culture and Horticultural Breeding*.
179. Yazaki, K. (2005). Transporters of secondary metabolites. *Current Opinion in Plant Biology*, 8: 301-307.
180. Yu, T. A., Yeh, S. D., Cheng, Y. H. and Yang, J. S. (2000). Efficient rooting for establishment of papaya plantlets by micropropagation. *Plant Cell, Tissue and Organ Culture*, 61: 29-35.
181. Yu, T. A., Yeh, S. D., Cheng, Y. H. and Yang, J. S. (2001). Effects of carbenicillin and cefotaxime on callus growth and somatic embryogenesis from adventitious root of papaya. *Bot. Bull. Acad. Sin.*, 42: 281-286.

182. Yu, T. A., Yeh, S. D., Cheng, Y. H. and Yang, J. S. (2003). Comparison of the effects of kanamycin and geneticin on regeneration of papaya from root tissue. *Plant Cell, Tissue and Organ Culture*, 74: 169-178.