References

[1] World Health Organization. Research Guidelines for Evaluating the Safety and Efficacy of Herbal Medicines. Manila: Regional Office for the Western Pacific, 1993.

[2] Zhang, J., Wider, B., Shang, H., Li, X., and Ernst, E. Quality of herbal medicines: Challenges and Solutions. Complementary Therapies in Medicine (2012): 100-106.

[3] Capasso, R., Izzo, A.A., Pinto, L., Bifulco, T., Vitobello, C., and Muscolo, N. Phytotherapy and quality of herbal medicines. Fitoterapia 71(2000): s58-s65.

[4] Reid, K.A., *et al.* Evaluation of the mutagenic and antimutagenic effects of South African plants. Journal of Ethnopharmacology 106 (2006): 44-50.

[5] Mukherjee, P.K. Quality control of herbal drugs: an approach to evaluation of botanicals. 2nd ed. New Delhi: Business horizons, 2007.

[6] World Health Organization. National Policy on Traditional medicine and regulation of herbal medicines. Geneva, 2005.

[7] Narender, T., *et al.* Antihyperglycemic and antidyslipidemic agent from *Aegle marmelos*. Bioorganic & Medicinal Chemistry Letters 17 (2006): 1808-1811.

[8] Bohlin, L. Research on pharmacologically active natural products at the Department of Pharmacognosy, Uppsala University. Journal of Ethnopharmacology 38(1993): 225-232.

[9] Bandaranayake, W. M. Quality Control, Screening, Toxicity, and Regulation of Herbal Drugs, in Modern Phytomedicine. In I. Ahmad, F. Aqil and M. Owais eds, Turning Medicinal Plants into Drugs, Weinheim, Germany: Wiley-VCH Verlag GmbH & Co. KGaA, 2006.

[10] Houghton, P. and Mukherjee, P.K. Evaluation of herbal medicinal products. London: Pharmaceutical Press, 2009.

[11] Liang, Y., Xie, P., and Chan, K. Quality control of herbal medicines. Journal of Chromatography B 812 (2004): 53-70.

[12] Rahman, A., Choudhary, M.I., and Thomson, W.J. Bioassay techniques for drug development. Amsterdam: Harwood academic publishers, 2005.

[13] Erin Howe, B. K., and Khan, I.M. Traditional medicine and medicinal plants: utilization, policy and research in Thailand. Journal of Public Health and Development 2 (2004).

[14] Sahoo, N., Manchikanti, P., and Dey, S. Herbal drugs: Standards and regulation. Fitoterapia 81 (2010): 462-471.

[15] Smitnand, T. and Larsen, K. Flora of Thailand (Vol 5 Part 3). Bangkok: The Forest Herbarium, Royal Forest Department, 1991.

[16] Gurib-Fakim, A. Medicinal plants: Traditional of yesterday and drugs of tomorrow. Molecular Aspects of Medicine 27(2006): 1-93.

[17] Razmovski-Naumovski, V., *et al.* Multiple chromatographic and chemometric methods for quality standardisation of Chinese herbal medicines. Modernization of Traditional Chinese Medicine and Materia Medica 12 (2010): 99-106.

[18] Apraj, V., Thakur, N.D., Bhagwat, A., Mallya, R., Sawant, L., and Pandita, N. Pharmacognostic and phytochemical evaluation of *Citrus aurantifolia* (Christm) Swingle Peel. Pharmacognosy Journal 3 (2011): 70-6.

[19] Chumbhale, D.S. and Upasani, C.D. Pharmacognostic standardization of stems of *Thespesia Lampus* (Cav.) Dalz & Gibs. Asian Pacific Journal of Tropical Biomedicine (2012): 357-363.

[20] Anitha, R. and Kanimozhi, S. Pharmacognostic evaluation of *Altenanthera Sessilis* (L.) R.Br.ex. DC. Pharmacognosy Journal 4(2012): 36-39.

[21] Evans, W.C.and Trease, G.E. Trease and Evans Pharmacognosy. 16th ed. New York: Elsevier, 2009.

[22] Sandhya, S., Venkatramana, k., Vinoid, K.R., Junitha, C.H., and Krishna, M. Pharmacognostical standardization of *Tephrosia maxima* Pers Root. Pharmacognosty Journal 3 (2011): 25-33.

[23] Nisha Raj, R.S. and Radhamany, P.M. Pharmacognostic and physicochemical analysis on the leaves of *Brunfelsia americana* L. Asian Pacific Journal of Tropical Biomedicine (2012): 2305-2307.

[24] Llanchezhian, R., Roshy, J.G., Acharya, F.N., Harisha, C., and Shukla, V.J. Pharmacognostical and physicochemical analysis of Bhallataka (*Semecarpus anacardium* Linn.) fruit. Pharmacognosy Journal 3 (2011): 9-16.

[25] Bitasta, M. and Swati, M. Comparative standardization and physicochemical evaluation of the leaves of *Stevia rebaudiana* Bertoni from different geographical sources. Pharmacognosy Journal 3 (2011): 21-26.

[26] Zhang, J.I., Cui, M., He, Y., Yu, H.I., and Guo, D.A. Chemical fingerprint and methanolic fingerprint analysis of Danshen injection by HPLC-UV and HPLC-MS methods. Journal of Pharmaceutical and Biomedical Analysis 36 (2005): 1029-1035.

[27] Cai, M., Zhou, Y., Gesang, S., Bianba, C., and Ding, L. Chemical fingerprint analysis of rhizomes of *Gymnadenia conopsea* by HPLC-DAD-MS. Journal of Chromatography B 844 (2006): 301-307.

[28] Calixto, J.B. Efficacy, safety, quality control, marketing and regulatory guidelines for herbal medicines (phytotherapeutic agents). Brazillian Journal of Medical and Biological Research 33 (2000): 179-183.

[29] Sohn, S.H., Kim, S.J., Kim, Y., Shim, I., and Bae, H. Safety and efficacy assessment of standardized herbal formula PM012. BMC Complementary and Alternative Medicine (2012): 12-24.

[30] Gad, S.C. *In vitro* toxicology. 2nd ed. New York: Taylor & Francis, 2000.

[31] Kim. E, *et al.* Evidence-based toxicity evaluation and scheduling of Chineseherbal medicines. Journal of Ethnopharmacology 146 (2013): 40-61.

[32] Kasim, L.S., Ayodele, O., Effedua, H.I., Adejumo, O.E., Ekor, M., and Verschaeve, L. Screening of medicinal plants used in South African traditional medicine for genotoxic effects. Toxicology Letters 143 (2003): 195-207.

[33] Bent, S. Herbal medicine in the United States: Review of efficacy, safety, and regulation. Journal of General International Medicine 23 (2008): 854-859.

[34] National Institute of Environmental Health Sciences . Guidance Document on using *in vitro* data to estimate *in vivo* staring doses for acute toxicity. United States: National Institutes of Health. U.S. Public Health Service. (NIH Publication NO: 01-4500)

[35] Garle, M.J., Fentem, J.H., and Fry, J.R. *In vitro* cytotoxicity tests for the prediction of acute toxicity *in vivo*. Toxicology in vitro. 8 (1994): 1303-1312.

[36] Bhuwan, B., *et al.* Antifungal constituents isolated from the seeds of *Aegle marmelos*. Phytochemistry 71(2012): 230-234.

[37] Srivastava, S.D., Srivastava, S., and Srivastava, S.K. A new insecticidal protolinonoid. Fitoterapia 67 (1996): 83-83.

[38] Jaketia, G.C., Venkatesh, P., and Baliga, M.S. *Aegle marmelos* (L.) Correa inhibits the proliferation of transplanted ehrlich ascites carcinoma in mice. Biological and Pharmaceutical Bulletin 28 (2005):58-64.

[39] Sharma, G.N., Dubey, S.K., Sharma, P., and Sati, N. Medicinal values of bael (*Aegle marmelos*) (L.) Corr.: A Review. International Journal of Current Pharmaceutical Review and Research 1 (2011): 12-22.

[40] Riyanto, S., *et al.* Alkaloids from *Aegle marmelos* (Rutaceae). Malaysian Journal of Analytical Sciences 7 (2001): 463-465.

[41] Maity, P., Hansda, D., Bandyopadhyay, U., and Mishra D.K. Biological activities of crude extract and chemical constituent Bael. Indian Journal of Experimental Biology 47 (2009): 849-861.

[42] Phuwapraisirisan, P., Puksasook, T., Jong-aramruang, J., and Kokpol, U. Phenylethyl cinnamides: A new series of α-glucosidase inhibitors from the leaves of *Aegle marmelos*. Bioorganic & Medicinal Chemistry Letters 18 (2008): 4956-4958.

[43] Kaur, H.P., Garg, S.N., Sashidhara, K.V., Yadav, A., Naqui, A.A., and Khanuja, S.P.S. Chemical composition of the essential oil of the twigs and leaves of *Aegle marmelos* (L.) Correa. Journal of Essential Oil Research 18(2006): 288-289.

[44] Chakthong, S., *et al.* Alkaloid and coumarins from the green fruits of *Aegle marmelos*. Phytochemistry 75 (2012): 108-113.

[45] Laphookhieo, S., Phungpanya, C., Tantapakul, C., Techa, S., Tha-in, S. and Narmdorkmai, W. Chemical constituents from *Aegle marmelos*. Journal of the Brazilian Chemical Society 22 (2011): 176-178.

[46] Patel, P.K., Sahu, J., Sahu, L., Narendra, K., and Dubey, P. *Aegle marmelos* : A Review on its medicinal properties. Internatinal Journal of Pharmaceutical and Phytopharmacological Research 1 (2012): 332-341.

[47] Shankarananth, V NB., Suresh, D., Sureshpandian, G., Edwin, E., and Sheeja, E. Analgesic activity of methanol extract of *Aegle marmelos* leaves. Fitoterapia 78 (2007): 258-259.

[48] Arul, V., Miyazaki, S., and Dhananjayan, R. Studies on the anti-inflammatory, antipyretic and analgesic properties of the leaves of *Aegle marmelos*. Journal of Ethnopharmacology 96 (2005): 159-163.

[49] Narender, T., *et al.* Antihyperglycemic and antidyslipidemic agent from *Aegle marmelos*. Bioorganic & Medicinal Chemistry Letters 17 (2006): 1808-1811.

[50] Kesari, A.N., Gupta, R.K., Singh, S.K., Diwakar, S., and Watal, G. Hypoglycemic and antihyperglycemic activity of *Aegle marmelos* seed extract in normal and diabetic rats. Journal of Ethnopharmacology 107 (2006): 374-379.

[51] Costa-Loturo, L.V. Studies of the anticancer potential of plants used in Bangladeshi folk medicine. Journal of Ethnopharmacology 99 (2005): 21-30.

[52] Lampronti, I., et al. In vitro antiproliferative effects on human tumor cell lines of extracts from the Bangladeshi medicinal plant *Aegle marmelos* Correa. Phytomedicine 10 (2003): 300-308.

[53] Veerappan, A., Kadarkaraisamy, S.M., Ranganathan, D. Acute and subacute toxicity studies of *Aegle marmelos* Cor., an Indian medicinal plant. Phytomedicine 14 (2007): 209-215.

[54] Beal. [online]. Available from : http://www.en.wikipedia.org/wiki/Bael [2011, May 20]

[55] Huang, H. B. Advances in fruit physiology of the arillate fruits of litchi and longan. Annual Review for Horticultural Science, 1 (1995): 107-120.

[56] Huang, X., Huang, H.B., and Zeng, L. Lychee and longan production in China. Acta Horticulturae 665 (2005), 27-36.

[57] Yunchalad, M., *et al.* Pre-concentration of longan juice extract with microfiltration and reverse osmosis. Asian Journal of Food and Agro-Industry 1 (2008): 17-23.

[58] Wang, X., Smythe, G.A. Assessment of hydroxyl radical generation and radical scavenging activity of Chinese medicinal herbs using GC/MS. Redox Report 8 (2003): 223-228.

[59] Soong, Y. Y. and Barlow, P. J. Antioxidant activity and phenolic content of selected fruit seeds. Food Chemistry 88 (2004): 411-417.

[60] Hsieh, M.C., Shen,Y.J., Kuo,Y.H., and Hwang,L.S. Antioxidative activity and active components of Longan (*Dimocarpus longan* Lour.) flower extracts. Journal of Agricultural and Food chemistry 56 (2008): 7010-7016.

[61] Wang, L.J., Li, W., Huang, Y., Yu, H., Lui, J., Xianfu. GC-MS analysis of essential oil from inflorescences of *Dimocarpus longan* Lour. from Guangxi. Zhongyaocai 33 (2010): 1270-1273.

[62] Sheng, K. M. and Wang, H. J. Advances in research of chemical constituents and pharmacological activities of arillus longan. Chinese Journal of Experimental Traditional Medical Formulae 16 (2010): 236-238.

[63] Rangkadilok, N., Worasuttayangkurn, Bennett, N.R., and Satayavivad, J. Identification and quantification of polyphenolic compounds in Longan (*Euphobia longana* Lam.) fruit. Journal of Agricultural and Food chemistry 53 (2005): 1387-1392.

[64] Wall, M.M. Ascorbic acid and mineral composition of longan (*Dimocarpus longan*), lychee (*Litchi chinensis*) and rambutan (*Nephelium lappaceum*) cultivars grown in Hawaii. Journal of Food Composition and Analysis 19 (2006): 655-663.

[65] Jiang,Y.M. Purification and some properties of polyphenol oxidase of longan fruit. Food Chemistry, 66 (1999): 75-79.

[66] Jaitrong, S., Rattanapanone, N., and Manthey, J. A. Analysis of the phenolic compounds in longan (*Dimocarpus longan* Lour.) peel, Proceedings of the Florida State Horticultural Society, pp. 371-375. United States, 2006.

[67] Yang, B., *et al.* Structural characterisation of polysaccharides purified from longan (*Dimocarpus longan* Lour.) fruit pericarp. Food Chemistry 115 (2009): 609-614.

[68] Yang, B., Zhao, M. M., Shi, J., Cheng, G. P., Ruenroengklin, N., and Jiang, Y. M. Variations in water-soluble saccharides and phenols in longan fruit pericarp after drying. Journal of Food Process Engineering 31 (2008): 66-77.

[69] Soong, Y.Y. and Barlow, P.J. Isolation and structure elucidation of phenolic compounds from longan (*Dimocarpus longan* Lour.) seed by high-performance liquid chromatography electrospray ionization mass spectrometry. Journal of Chromatography A 1085 (2005): 270-277.

[70] Zheng, G. M., *et al.* Polyphenols from longan seeds and their radical-scavenging activity. Food Chemistry 116 (2009): 433-436.

[71] Sudjaroen, Y., *et al.* Isolation and characterization of ellagitannins as the major polyphenolic components of Longan (*Dimocarpus longan* Lour) seeds. Phytochemistry 77 (2012): 226-237.

[72] Waris, G.and Ahsan, H. Reactive oxygen species: role in the development of cancer and various chronic conditions. Journal of Carcinogenesis 5 (2006): 14.

[73] Francisco, J. R., *et al.* Lipid peroxidation products and antioxidants in human disease. *Environ.* Health Perspect 106 (1998): 1229-1234.

[74] Rangkadilok, N., *et al. In vitro* antifungal activities of longan (*Dimocarpus longan* Lour.) seed extract. Fitoterapia 83 (2012): 545-553.

[75] Worasuttayangkurn, Watcharasit, P., Rangkadilok, N., Suntararuks, S., Khamkong, P., and Satayavivad, J. Safety evaluation of longan seed extract: Acute and repeated oral administration. Food and Chemical Toxicology 50 (2011): 3929-3955.

[76] Wang, B.S., Tang, C.H., Chiu, C.K., and Huang, M.H. Inhibitory effects of water extract from longan twigs on mutation and nitric oxide production. Food Chemistry 135 (2012): 440-445.

[77] Guoxiang Jiang, Lingrong Wen, Feng Chen, Fuwang Wu, Sen Lin, Bao Yang and Yueming Jiang. Structural characteristics and antioxidant activities of polysaccharides from longan seed. Carbohydrate Polymers 92(2013): 758-764.

[78] Yang, B. Structural characterization of polysaccharides purified from longan (*Dimocarpus longan* Lour.) fruit pericarp. Food Chemistry 115 (2009): 609-614.

[79] Montoso Gardens. *Dimocarpus longan* (Sapindaceae) [Online]. 2007. Available from : 2011, May 20]

[80] Sinaphet, B., Noiarsa, P., Rujirawat, S., Otsuka, H., and Kanchanapoom, T. Dolichandroside, a new phenolic triglycoside from *Dolichandrond serrulata* (DC.) Seem. Journal of Natural Medicines 60 (2006): 251-254.

[81] Pancharoen, O. and Klomkaew, R. A new cyclohexylethanoid from *Dolichandrone serrulata*, Proceedings of the 1st Kamphaengsaen International Natural Products Symposium, Bangkok, Thailand, pp. 156-161, Bangkok, 2010.

[82] Wetwitayaklung, P., Phaechamud, T., Limmatvapirat, C., and Keokitichai, S. The study of antioxidant activities of edible flower extracts. Proceedings of International Workshop on Medicinal and Aromatic Plants, Thailand, pp. 185-191, 2007.

[83] Phomkaivon, N., and Areekul, V. Screening for antioxidant activity in selected Thai wild plants. Asian Journal of Food and Agro-Industry 2 (2009): 433-440.

[84] Thai Forest Bulletin. The Encyclopedia of Plants in Thailand [Online]. 2009. Available from : http://web3.dnp.go.th/botany/detail.aspx?wordsnamesci=Dolichandrone 0serrulata0(DC.)0Seem. [16, June 2010]

[85] Ahad, A., *et al.* Therapeutic potential of *Oroxylum indicum*: A review. Journal of Pharmaceutical Research Opinion 2 (2012): 163-172.

[86] Nakahara, K., Kameyama, O.M., Ono, H., Yoshida, M., and Trakoontivakorn, G. Antimutagenic activity against Trp-P-1 of the edible Thai plant, *Oroxylum indicum* Vent. Bioscience, Biotechnology and Biochemistry 65 (2001): 2358-2360.

[87] Srinivas, S.K.and Aparna, S.A. High Performance Thin Layer Chromatographic Determination of Chrysin in *Oroxylum indicum* Vent. from different geographical regions of India. E-Journal of Chemistry 9 (2012): 313-317.

[88] Dev, R.L., Anuraq, M., and Rajiv, G. *Oroxylum indicum*: A review. Pharmacognosy Journal 2 (2010): 304-310.

[89] Yuan, Y., *et al.* Separation of flavonoids from the leaves of *Oroxylum indicum* by HSCCC. Chromatographia 68 (2008): 885-892.

[90]Yan, Y.R., *et al.* Antioxidant flavonoids from the seed of *Oroxylum indicum*. Fitoterapia 82 (2011): 841-848.

[91] Kruger, A. and Ganzera, M. *Oroxylum indicum* seeds-Analysis of flavonoids by HPLC-MS. Journal of Pharmaceutical and Biomedical Analysis 70 (2012): 553-556.

[92] Chan, J.L., Gumes, E.D., and Jones, J. Isolation and identification of four flavonoid constituents from the seeds of Oroxylum indicum by high-speed counter-current chromatography. Journal of Chromatography A 988 (2008): 95-105.

[93] Lui, R., Xu, L., Li, A., and Sun, A. Preparative isolation of flavonoid compound from *Oroxylum indicum* by high-speed counter –current chromatography by using ionic liquids as the modifier of two-phase solvent system. Journal of separation science 33 (2010): 1058-1063.

[94] Maungjunburee, S. and Mahabusarakam, W. Flavonoids from the stem bark of *Oroxylum indicum* (L.) Benth. ex Kurz, Proceedings of the 7th IMT-GT UNINET and the 3rd International PSU-UNS Conferences on Bioscience, Songkhla, Thailand, 2010.

[95] Babu, H.T., *et al.* Gastroprotective flavonoid constituents from Oroxylum indicum Vent. Bioorganic & Medicinal Chemistry Letters 20 (2010): 117-120.

[96] Ali, M.S., Houghton, P.J., Raman, A., and Hoult, J.R.S. Antimicrobial and anti-inflammatory activities of extracts and constituents of *Oroxylum indicum* (L.) Vent. Phytomedicine 5 (1998): 375-381.

[97] Zaveri, M., Khandhar, A., and Jain, S. Quantification of Baicelein, Chrysin,Biochanin-A and Ellagic acid in root bark of *Oroxylum indicum* by RP-HPLC with UV detection. Eurasian Journal of Analytical Chemistry 3 (2008): 245-257.

[98] Tepsuwan, A., Furihata, C., Rojahapo, W., and Matsushima, T. Genotoxicity and cell proliferative activity of a nitrosated *Oroxylum indicum* Vent. fraction in the pyloric mucosa of rat stomach. Mutation Research 281 (1992): 55-61.

[99] Phadungkit, M., Somdee, T., and Kangsadalampai, K. Phytochemical screening, antioxidant and antimutagenic activities of selected Thai edible plant extracts. Journal of Medicinal Plants Research 6 (2012): 662-666.

[100] Samatha, T., Shyamsundarachary, R., Srinivas, P., and Swamy, R.N. Quantification of total phenolic and total flavonoid contents in extracts of *Oroxylum indicum* L. Kurz. Asian Journal of Pharmaceutical and Clinical Research 5 (2012): 177-179.

[101] Maoirangthem, S.D., Talukdar, C.N., Bora, U., Kasoju, N., and Das, K.R. Differential effects of *Oroxylum indicum* bark extracts: antioxidant, antimicrobial, cytotoxic and apoptotic study. Cytotechnology 65 (2013): 83-95.

[102] Misha, S.L., Sinhamahapatra, P.K., Nayak, A., Das, R., and Sannigrahi, S. *In vitro* antioxidant potential of different parts of *Oroxylum indicum*: A comparative study. Indian Journal of Pharmaceutical Sciences 72 (2010): 267-269.

[103] Khandhar, M., Shah, M., Santani, D., and Jain, S. Antiulcer activity of the root bark of *Oroxylum indicum* against experimental gastric ulcer. Pharmaceutical Biology 44 (2006): 363-370.

[104] Adikay, S.U.U., and Koganti, B. Effect of Chrysin isolated from *Oroxylum indicum* against cisplatin-induced acute renal failure. Recent Researches in Modern Medicine. ISBN: 978-960-474-278-3.

[105] Zaveri, M., Gohil, P., and Jain, S. Immunostimulant activity of n-butanol fraction of root bark in *Oroxylum indicum* Vent. Journal of Immunotoxicology 3 (2006): 83-99.

[106] Siriwatanametanon, N., Fiebich, L.B., Efferth, T., Prieto, M.J., and Heinrich, M. Traditionally used Thai medicinal plants: *In vitro* anti-inflammatory, anticancer and antioxidant activities. Journal of Ethnopharmacology 130 (2010): 196-207.

[107] Kumar, N.D.R., George, C.V., Suresh, K.P., and Kumar ,A.R. Cytotoxicity, Apoptosis Induction and anti-metastatic potential of *Oroxylum indicum* in human breast cancer cells. Asian Pacific Journal of Cancer Prevention 13 (2012): 2729-2734.

[108] Doshi, K., Ilanchexhian, R., Acharya, R., Patel B.R., and Ravishankar, B. Anti-inflammatory activity of root bark and stem bark of shyonaka. Journal of Ayurveda & Integrative Medicine. 3 (2012).

[109] Tamboli, M.A., Karpe, T.S., Shaikh, A.S., Manikrao, M.A., and Kature, V.D. Hypoglycemic activity of extracts of *Oroxylum indicum* (L.) Vent roots in Animal models. Pharmacologyonline 2 (2011): 890-899.

[110] Singh, H., Singh, V., Kumar, D., and Chaudhary, K.A. Wound Healing and Antimicrobial Potential of *Oroxylum indicum* Vent. in Albino mice. The Natural Products Journal 1 (2011): 128-134.

[111] Shyonaka or Sonpata powder - *Oroxylum indicum*. [Online]. 2001. Available from:http://www.herbalveda.co.uk/index.php?dispatch=products.view&product_id=30326 [2011, July 11]

[112] Polyium, U., Ta-Ngam, P., and Thongnoi, A. Antimycobacterial and cytotoxic activity of crude extract from the stem bark of *Walsura trichostemon* Miq, International Conference Lanna, Chiang Mai, Thailand, 23-29 August 2009.

[113] Sichaem, J., Aree, T., Khumkratok, S., Jong-aramruang, J., and Tip-Pyang, S. A new cytotoxic apotirucallane from the roots of *Walsura trichostemin*. Phytochemistry Letters 5 (2012): 665-667.

[114] Yin, S., Wang, N.X., Fan, Q.C., Liao, G.S., and Minyue, T. The first Limonoid Peroxide in the Meliacead family: Walsuronoid A from *Walsura robusta*. Organic letters 9 (2007): 2353-2356.

[115] สถาบันวิจัยวิทยาศาสตร์และเทคโนโลยีแห่งประเทศไทย. กัดลิ้น. [Online]. Available from: http://www.tistr.or.th/sakaerat/Plant%20in%20Sakaerat/plant%20list/020%E0%B8%81%E0%B8%B1%E0%B8%94%E0%B8%A5%E0%B8%B4%E0%B9%89%E0%B8%99.pdf [2011, May 10]

[116] Sherma, J., and Fried, B. Handbook of Thin Layer Chromatography. New York: Marcel Dekker, 1991.

[117] Poole, F.C. Thin-layer chromatography: Challenges and opportunities. Journal of Chromatography A 1000 (2003): 963-984.

[118] Berezkin, V.G., Balushkin, A.O., Tyaglov, B.V., and Litvin. Use of low volatility mobile phase in electroosmotic thin-layer chromatography. Journal of Chromatography A 1084 (2005): 13-17.

[119] Reich, E., and Blatter, A. Thin-layer chromatography/Method Development. Encyclopedia of Analytical Science 2 (2005): 83-91.

[120] Springfield, E.P, Eagles, P.K.F, and Scott, G. Quality assessment of South African herbal medicines by means of HPLC fingerprinting. Journal of Ethnopharmacology 101 (2005): 75-83.

[121] Tong, L., Wang, Y., Xiong, J., Cui, Y., Zhou, Y., and Yi, L. Selection and fingerprints of the control substances for plant drug *Eucommia ulmodies* Oliver by HPLC and LC-MS. Talanta 76 (2008): 80-84.

[122] Steinmann, D. and Ganzera, M. Recent advances on HPLC/MS in medicinal plant analysis. Journal of Pharmaceutical and Biomedical analysis 55 (2011): 744-757.

[123] Korfmacher, W.A. Foundation review: Principles and applications of LC-MS in new drug discovery. DDT 10 (2005) October.

[124] Chunnian, H., Yong, P., Yixiong, F., Bing, P., Zhe, W., and Peigen, X. Quick comparison of Radix Raeonia Alba, Radix Paeonia Rubra, and Cortex Moutan by High Performance Liquid Chromatography Coupled with Monolithic columns and their chemical pattern recognition. Pharmacognosy Magazine 8 (2012): 237-243.

[125] Zhao, L., Huang, C., Shan, Z., Xiang, B., and Mei, L. Fingerprint analysis of *Psirakea cirtkufikua* L. by HPLC and LC-MS. Journal of Chromatography B 821 (2005): 67-74.

[126] Pour, B.M. and Sasidharan, S. In vivo toxicity study of Lantana camara. Asian Pacific Journal of Tropical Biomedicine (2011): 230-232.

[127] Meyer, B.N., Ferrigni, N.R., Putnam, J.E., Jacobsen, L.B., Nichols, D.E., McLaughlin, J.L. Brine shrimp: A convenient General Bioassay for Active Plant Constituents. Journal of Medicinal Plants Research 45 (1982): 31 -34.

[128] Flora, S.D. Mechanisms of inhibitors of mutagenesis and carcinogenesis. Mutation Research 343 (1998): 247-257.

[129] White, R.D., Krumperman, P.H., Cheeke, P.R., and Buhler, D.R. An evaluation of acetone extracts from six plants in the Ames mutagenicity test. Toxicology Letter 15 (1983): 25-31.

[130] Maron, D.and Ames, B.N. Revised methods for the *Salmonella* mutagenicity test. Mutatation Research 113 (1983): 173-215.

[131] Ames, B.N., Lee, F.D., and Durston, W.E. An improved bacterial test system for the detection and classification of mutagen and carcinogens. Proc. Nat. Acad. Sci. USA 70 (1973): 782-786.

[132] Singharachai, C., Palanuvej C., Kiyohara H., Yamada H., Ruangrunsi N. Safety evaluation of Thai traditional medicine remedy: Ben-Cha-Lo-Ka-Wi-Chian. Journal of Health Research 25 (2011): 83-90.

[133] Mortelman, K. and Zeiger, E. The Ames Salmonella/microsome mutagenicity assay. Mutation Research 455 (2000): 29-60.

[134] Collin, R.N., Dobson, L.V., Dusinska, M., Kennedy, G., and Stetina, R. The comet assay: What can it really tell us?. Mutation Research 375 (1997): 183-193.

[135] Kumaravel, T.S., Vilhar, B., Faux, P.S., and Jha, N.A. Comet Assay measurement: a perspective. Cell Biology and Toxicology 25 (2009): 53-64.

[136] Liao, W., McNutt, A.M., and Zhu, G.W. The comet assay: A sensitive method for detecting DNA damage in individual cells. Methods 48 (2009): 46-53.

[137] Tice, R.R., *et al.* Single Cell Gel/Comet Assay: Guidelines for *In vitro* and *In vivo* Genetic Toxicology Testing. Environmental and Molecular Mutagenesis 35 (2000): 206-221.

[138] Baijayee, M., Pandey, K.A., Parmar, D., Mathur, N., Seth, K.P., and Dhawan, A. Comet assay responses in human lymphocytes are not influenced by the menstrual cycle: a study in healthy Indian females. Mutation Research 565 (2005): 163-172.

[139] Wong, W.C.V., Szeto, Y.T., Collins, R.A., and Benzie, F.F.I. The comet assay: a biomonitoring tool for nutraceutical research. Current Topics in Nutraceutical Research 3(1) (2005): 1-14.

[140] Calomme, M., Pieters, L., Vlirtnck, A., Berghe, V.D. Inhibition of bacterial mutagenesis by Citrus flavonoids. Planta Medica 62 (1996): 222-226.

[141] Rios, J.L., and Recio, M.C. Medicinal plants and antimicrobial activity. Journal of Ethnopharmacology 100 (2005): 80-84.

[142] Kuete, V., Tabopda, T.K., Ngameni, B. Nana, F., Tshikalange, T.E., and Ngadjui, B.T. Antimycobacterial, antibacterial and antifungal activities of *Terminalia superba* (Canbretaceae). South African Journal of Botany 76 (2010): 125-131.

[143] Jenkins, G.S., and Jerris, C.R. Critical assessment of issues applicable to development of antimicrobial susceptibility testing breakpoints. Journal of Clinical Microbiology 49(9) (2011): s5-s10.

144] Clinical and Laboratory Standards Institute. Performance Standards for Antimicrobial susceptibility testing. Seventeenth Informational Supplement (M100-S17) 1 (2007): 16-18.

[145] Schwalbe, R., Steele-Moore, L., and Geodwin, A.C. Antimicrobial susceptibility testing protocols. New York: CRC Press , 2007

[146] Tadeg, H., Mohammed, E., Asres, K., and Mariam, G.T. Antimicrobial activities of some selected traditional Ethiopian medicinal plants used in the treatment of skin disorders. Journal of Ethnopharmacology 100 (2005): 168-175.

[147] Alves, A.M.T., *et al.* Biological screening of Brazilian Medicinal Plants. Memorias do Instituto Oswaldo Cruz Rio de Janeiro 95(3) (2000): 367-373.

[148] European Committee for Antimicrobial Susceptibility Testing (EUCAST) of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID). Determination of minimum inhibitory concentration (MICs) of antibacterial agents by broth dilution. 2003. EUCAST DISCUSSION DOCUMENT E.Dis 5.1.

[149] Brand-Williams, W., Cuvelier, M.E., and Berset, C. Use of a free radical method to evaluate antioxidant activity. Lebensm Wissu Technol 28(1) (1995): 25-30

[150] Jayaprakasha, G.K., Jena, B.S., Negi, P.S., and Sakariah, K.K. Evaluation of antioxidative activities and antimutagenicity of tumeric oil: A Byproduct from curcumin production. Z. Naturforsch 57 (2002): 828-835.

[151] Rocha, S.B., Gago, B., Barbosa, M.R., and Laranjinha, J. Dietary polyphenols generate nitric oxide from nitrite in the stomach and induce smooth muscle relaxation. Toxicology 265 (2009): 41-48.

[152] Bredt, D.S. and Snyder, S.H. Nitric oxide: A physiologic messenger molecule. Annual Review of Biochemistry 63 (1994): 175–95.

[153] Chaea, S.Y. Protection of insulin secreting cells from nitric oxide induced cellular damage by crosslinked hemoglobin. Biomaterials 25 (2004): 843–850.

[154] Sun, J., Zhang, X., Broderick, M., and Fein, H. Measurement of nitric oxide production in biological systems by using Griess Reaction assay. Sensors 3(8) (2003): 276-284.

[155] Ramli, S., Harada, I.K., and Ruangrungsi, N. Antioxidant, antimicrobial and cytotoxicity activities of *Acacia farnesiana* (L.) Wild. leaves ethanolic extract. Pharmacognosy Journal 3(23) (2011): 50-58.

[156] Emmy H.K.I., *et al.* Antioxidant capacity and total phenolic content of Malaysian underutilized fruits. Journal of Food Composition and Analysis 22 (2009): 388-393.

[157] Aronoff, M.D. and Neilson, G.E. Antipyretics: Mechanisms of action and clinical use in fever suppression. American Journal of Medicine 111 (2001): 304-315.

[158] Habib, M. and Waheed, I. Evaluation of anti-nociceptive, anti-inflammatory and anti-pyretic activities of *Artemisia scoparia* hydromethanolic extract. Journal of Ethnopharmacology 145 (2013): 18-24.

[159] Miert, A. and Duin, C. The antipyretic effect of flurbiprofen. European Journal of Pharmacology 44 (1977): 197-204.

[160] Zhu, Z.Z., *et al.* Analgesic, anti-inflammatory and antipyretic activities of the petroleum ether fraction from the ethanol extract of *Desmodium podocarpum*. Journal of Ethnopharmacology 133 (2011): 1126-1131.

[161] Santos, F.A. and Rao, V.S. A study of the anti-pyretic effect of quinine, an alkaloid effective against cerebral malaria, on fever induced by bacterial endotoxin and yeast in rats. Journal of Pharmacy and Pharmacology 50 (1998): 225-229.

[162] Kundu, K.J. and Surh, J.Y. Emerging avenues linking inflammation and cancer. Free Radical Biology & Medicine 52 (2012): 2013-2037.

[163] Vane, J. and Botting, R. Inflammation and the mechanism of action of anti-inflammatory drugs. The Journal of the Federation of American Scocieties for Experimental Biology 1 (1987): 89-96.

[164] Vodovotz, Y., Constantine, G., Rubin, J., Csete, M., Voit, O.E., and An, G. Mechanistic simulations of inflammations: Current state and future prospects. Mathematical Biosciences 217 (2009): 1-10.

[165] Panthong, A., Norkaew, P., Kanjanapothi, D., Taesotikul, T., Anantachoke, N., and Reutrakul, V. Anti-inflammatory, analgesic and anti-pyretic activities of the extract of gamboges from *Garcinia hanburyi* Hook.f. Journal of Ethnolpharmacology 111 (2007): 335-340.

[166] Morris, C.J. Carrageenan-Induced paw edema in rat and mous. Methods in molecular Biology, Vol. 225. Inflammation Protocols. New Jersey: Humana Press Inc.

[167] Guay, J., Bateman, K., Gordon, R., Mancini, J., and Riendeau, D. Carrageenan-induced Paw Edema in Rat Elicits a predominant Prostaglandin E_2 (PGE_2) Response in the central nervous system associated with the induction of microsomal PGE_2 synthase-q. The Journal of Biological Chemistry 279 (2004): 24866-24872.

[168] Winter, C. A., Risley, E. A., and Nuss, C. W. Carrageenan-Induced Edema in Hind Paw of the Rats as an Assay for Anti-inflammatory Drugs. Proceedings of the Society of Experimental Biology and Medicine 111 (1962): 544-547.

[169] Chao, J., *et al.* Analgesic and anti-inflammatory activities of ethanol root extract of *Mahonia oiwakensis* in mice. Journal of Ethnopharmacology 125 (2009): 297-303.

[170] Dongmo, A.B., *et al.* Anti-inflammatory and analgesic properties of the stem bark extract of *Mitragyna ciliate* in rats. Journal of Ethnopharmacology 84 (2003): 17-21.

[171] Woolf, J.C. Pain: Moving from symptom control toward mechanism specific pharmacologic management. Physiology in medicine: A series of articles linking medicine with science. Annals of International Medicine 140(6) (2004): 441-451.

[172] Patel, B.N. Physiology of Pain in Guide to Pain management in Low-Resource settings. International Association for the study of Pain.

[173] Basbaum, I.A., Bautista, M.D., Scherrer, G., and Julius, D. Cellular and Molecular Mechanisms of Pain. Cell 139 (2009): 267-284.

[174] Woolfe, G., and MacDonald, A. D. The evaluation of the analgesic action of Pethidine Hydrochloride (Demerol). The Journal of Pharmacology and Experimental Therapeutics 80 (1944): 300.

[175] Tallarida, R.J., and Murray, R.B. Manual of pharmacologic calculation with computer programs, 2nd ed, New York: Springer-Verlag, 1987.

[176] Hunskaar, S. and Hole, K. The formalin test in mice: dissociation between inflammatory and non-inflammatory pain. Pain 30 (1987): 103-14.

[177] TjØlsen, A., Berge, O. G., Hunskaar, S., Rosland, J. H., and Hole, K. The formalin test: an evaluation of the method. Pain 51 (1992): 5-17.

[178] Ridtitid, W., Sae-Wong, C., Reanmongkol, W., and Wongnawa, M. Antinociceptive activity of the methanolic extract of *Kaempferia galangal* Linn. in experimental animals. Journal of Ethnoparmacology 118 (2008): 225-230.

[179] Arslan, R., Bektas, N., and Ozturk, Y. Antinociceptive activity of methanol extract of fruits of *Capparis ovate* in mice. Journal of Ethnopharmacology 131 (2010): 28-32.

[180] Koster, R., Anderson, M., and De-Beer, E. J. Acetic acid for analgesic screening. Federation Proceedings 18 (1959): 412-418.

[181] Khalid, H.M., *et al.* Antinociceptive effect of the essential oil of *Zingiber zerumbet* in mice: Possible mechanisms. Journal of Ethnopharmacology 137 (2011): 345-351.

[182] Shiotusuki, H., *et al.* A rotarod test for evaluation of motor skill learning. Journal of Neuroscience Methods 189(2) (2010): 180-185.

[183] Pearl, J., Stander, H., and McKean, D. B. Effects of analgesics and other drugs on mice in phenylquinone and rota-rod test. Journal of Pharmacology and Experimental Therapeutics 167 (1969): 9-13.

[184] Sunarto, A.T. *Aegle marmelos* (L.) Correa [Online]. 1991. Record from Proseabase. Verheij, E. W. M. and Coronel, R. E. (eds.). Prosea (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. Available from: http://www.proseanet.org. [2011, May 10]

[185] Kapoor, L.D. *Aegle marmelos*. Hand book of Ayurvedic Medicinal Plants. United States of America: CRC Press LLC, 2001.

[186] Choo, W.K., and Ketsa, S. *Dimocarpus longan* Lour. [Online]. 1991. Record from Proseabase. Verheij, E.W.M. and Coronel, R.E. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. Available from: http://www.proseanet.org. [2011, April 30]

[187] Sinaphet, B., Noiarsa, P., Ruchirawat, S., Otsuka, H., and Kanchanapoom, T. Dolichandroside, a New Phenolic Triglycosides from *Dolichandrone serrulata* (DC.) Seem. Journal of Natural Medicines 60 (2006): 251-254.

[188] Rasadah, M.A. *Oroxylum indicum* (L.) Kurz. [Online]. 2001. Record from Proseabase. Van Valkenburg, J.L.C.H.; and Bunyapraphatsara, N. (eds.). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. Available from: http://www.proseanet.org. [2011,April 8]

[189] Polyium, U., and Malaphan, T. Antimycrobial and cytotoxic activity of crude extract from the leaf of *Walsura trichostemon* Miq., The 2nd Annual International Conference of Northeast Pharmacy Research, Mahasarakharm, Thailand, 13-14 Feb 2010.

[190] Liu, W. Traditional herbal medicine research methods: Identification, analysis, bioassay, and pharmaceutical and clinical studies. United State: A John Wiley&Sons, 2011.

[191] Kadam, P.V., Kavita, Y.N., Ankita, P.N., Vidya, N.S., Sumeet, B.K., Manoha, R.J. Phytopharmacopoeial specifications of *Garcinia indica* fruit rinds. Pharmacognosy Journal 4 (2012): 23-8.

[192] Llanchezhian, R., Roshy, J.G., Acharya, F.N., Harisha, C., and Shukla, V.J. Pharmacognostical and physicochemical analysis of Bhallataka (*Semecarpus anacardium* Linn.) fruit. Pharmacognosy Journal 3 (2011): 9-16.

[193] Heinrich, M., Barnes, J., Gibbons, S., and Williamson, E.M. Fundamental of pharmacognosy and phytotherapy. New York: Churchill Livingstone, 2008.

[194] Babili, F.E., Fouraste, I., Rougaignon, C., Moulis, C., and Chatelain, C. Anatomical study of secondary tuberized roots of *Harpagophytum procumbens* DC and quantification of harpagoside by high performance liquid chromatography method. Pharmacognosy Magazine 8 (2012): 175-80.

[195] Kruawan, K., Kangsadalampai, K. Antioxidant activity, phenolic compound contents and antimutagenic activity of some water extract of herbs. Thai Journal of Pharmaceutical Sciences 30 (2006): 28-35.

[196] Higashimoto, M., *et al.* Mutagenicity and antimutagenicity of extract of tree spices and a medicinal plant in Thailand. Mutation Research 303 (1993): 135-142.

[197] Wakabayashi, K., Nagao, M., Ochial, M., Tahira, T., Yamaizumi, Z., and Sugimura, T., A mutagen precursor in Chinese cabbage, indole-3-acetronitrile,

which becomes mutagenic on nitrite treatment. Mutation Research 143 (1985): 17-21.

[198] Kato, T., Tadokoro, N., Tsutsui, M., and Kikugawa, K. Transformation of arylamines into direct-acting mutagens with nitrite. Mutation Research 249 (1991): 243-254.

[199] Brambilla, G. and Martelli, A. Genotoxic and carcinogenic risk to humans of drug-nitrite interaction products. Mutation Research 635 (2007): 17-52.

[200] Mirvish, S.S. Blocking the formation of *N*-nitroso compounds with ascorbic acid *in vitro* and *in vivo*. Cancer Research 54 (1994): 175-180.

[201] Sugimura, T.and Sato, S. Bacterial mutagenicity of natural materials, pyrolysis products and additives in food stuffs and their association with genotoxic effects in mammals. Developments in Toxicology & Environmental Science 11 (1983): 115-133.

[202] Kyrtopoulos, S.A. Ascorbic acid and the formation of *N*-nitroso compounds: possible role of ascorbic acid in cancer prevention. American Journal of Clinical Nutrition. 45 (1987): 1344-1350.

[203] Mirvish, S.S. Formation of *N*-nitroso compounds: Chemistry, Kinetics, and *In vivo* occurance. Toxicology and Applied Pharmacology 31 (1975): 325-351.

[204] Bagwe, A.N., Ganu, U.K., Gokhale, S.V., and Bhisey, R.A. Evaluation of the mutagenicity of 'pan masala' a chewing substitute widely used in India, Mutation Research 241 (1990): 349-354.

[205] Verschaeve, L., Staden, J.V. Mutagenic and antimutagenic properties of extracts from South African traditional medicinal plants. Journal of Ethnopharmacology 119 (2008): 575-587.

[206] Salmeen, I., Durisin, A.M., Prater, T.J. Riley, T., and Schuetzle, D. Contribution of 1-nitropyrene to direct-acting Ames assay mutagenicities of diesel particulate extracts. Mutation Research 104 (1982): 17-23.

[207] Tongyonk, L., *et al.* Mutagenic and Anti-mutagenicity of Thai Traditional medicine: Ya-Rid-Si-Duang-Mahakal. Journal of Health Research 20 (2006.), 155-170.

[208] Wongwattanasathien, O., Tongyonk, L., and Kangsadalampai, K. Antimutagenicity of some flowers grown in Thailand. Food and Chemical Toxicology 48 (2010): 1045-1051.

[209] Cherdshewasart, W., Chulasiri, W., Pulcharoen, K., Panriansaen, R., and Chulasiri, M. Antimutagenic potential of the Thai herb, *Mucuna collettii* Lace. Journal of Ethnopharmacology 115 (2008): 96-103.

[210] Kusamran, W.R., Tepsuwan, A., and Kupradinun, P. Anti-mutagenic and anticarcinogenic potentials of some Thai vegetables. Mutation Research 402 (1998): 247-258.

[211] Jakotia, G.C., Venkatesh, P., and Baliga, M.S. Fruit extract of *Aegle marmelos* protects mice against radiation-induced lethality. Integrative Cancer Therapies 3 (2004): 323-332.

[212] Veerapan, A., Miyazaki, S., Kadarkaraisamy, M., and Ranganathan, D. Acute and subacute toxicity studies of *Aegle marmelos* Correa. Ind. Med. Plant. Phytomed. 14 (2007): 209-215.

[213] Hartmann, A., *et al.* Recommendations for conducting the *in vivo* alkaline comet assay. Mutagenesis 18 (2003): 45-51.

[214] Hartmann, A., Plappert, U., Poetter, F., and Suter, W. Comparative study with the alkaline comet assay and the chromosome aberration test. Mutation Research 536 (2003): 27-28.

[215] Das, K., Tiwari, R.K.S., and Shrivastava, D.K. Technique for evaluation of medicinal plant products as antimicrobial agent current methods and future trends. Journal of Medicinal Plant Research 4(2) (2010): 104-111.

[216] Khancnik, A., Piskernik, S., Jersek, B., and Mozina, S.S. Evaluation of diffusion and dilution methods to determine the antibacterial activity of plant extracts. Journal of Microbiological Methods 81 (2010): 121-126.

ชื่อผู้เขียนวิทยานิพนธ์./ชื่อวิทยานิพนธ์./ระดับปริญญา./ชื่อสาขาวิชาหรือภาควิชา/คณะ/ชื่อมหาวิทยาลัย,/ปีพิมพ์.

[217] Jiang, L. Comparison of disk diffusion, agar dilution, and broth microdilutionnnnnnn for antimicrobial susceptibility testing of five chitosans. Master's Thesis, Graduate Faculty of the Louisiana state university and Agricultural and Mechanical College, Louisia state University, 2011.

[218] Martins, *et al.* Antibacterial activity of crude methanolic extract and fraction obtained from *Larrea tridentate* leaves. Industrial Crops and Products 41 (2013): 306-311.

[219] Andrews, M.J. Determination of minimum inhibitory concentrations. Journal of Antimicrobial Chemotherapy 48 (2001): 5-16.

[220] Humeera, N., Kamili, N.A., Bandh, A.S., Amin, U.S., Lane, AB., and Gousia, N. Antimicrobial and antioxidant activities of alcoholic extracts of *Rumex dentatus* L. Microbial Pathogenesis 57 (2013): 17-20.

[221] Tsafack, A., *et al.* Antimicrobial activity of the crude extracts and five flavonoids from the twigs of *Dorstenai barteri* (Moraceae). Journal of Ethnopharmacology 116 (2008): 483-489.

[222] Hou, L., Shi, Y. Zhai, P., and Le, G. Antibacterial activity and *in vitro* anti-tumor activity of the extract of the larvae of the housefly (*Musca domestica*). Journal of Ethnopharmacology 111 (2007): 227-231.

[223] Mishra, K., Ojha, H., and Chaudhury, K.N. Estimation of antiradical properties of antioxidant using DPPH assay: A critical review and results. Food Chemistry 130 (2012): 1036-1043.

[224] Noipa, T., Srijaranai, S., Tuntulani, T., and Ngeontae, W. New approach for evaluation of the antioxidant capacity based on scavenging DPPH free radical in micelle systems. Food Research International 44 (2011): 798-806.

[225] Hinneburg, I., Dorman, D.H.J., and Hiltunen, R. Antioxidant activities of extracts from selected culinary herbs and spices. Food Chemistry 97 (2000): 122-129.

[226] Hossain, A.M., Shah, D.M., Gnangraj, C., and Iqbal, M. *In vitro* total phenolic, flavonoids contents and antioxidant activity of essential oil, various organic extracts from the leaves of tropical medicinal plant Tetra stigma from Sabah. Asian Pacific Journal of Medicine (2011): 717-721.

[227] Jayaprakasha, G.K., Singh, R.P., Sakariah, K.K. Antioxidant capacity of grape seed (*Vitis vinifera*) extracts on peroxidation models *in vitro*. Food Chemistry 73 (2001): 285-290.

[228] Hayes, J.E., Allen, P., Brunton, N., Grady, M.N.O., and Kerry, J.P. Phenolic composition and *in vitro* antioxidant capacity of four commercial phytochemical product: Olive leaf extract (*Olea europaea* L.) lutein, sesamol and ellagic acid. Food Chemistry 126 (2011): 948-955.

[229] Hazra, B., Biswas, S., and Mandal, N. Antioxidant and free radical scavenging activity of *Spondias pinnata*. BMC Complementary and Alternative Medicine (2008): 8-63.

[230] Zhu, X.K., Lian, X.C., Guo, N.X., Peng, W., and Zhou, M.H. Antioxidant activities and total phenolic contents of various extracts from defatted wheat germ. Food Chemistry 126 (2011): 1122-1126.

[231] Perianayagam, B.J., Sharma, S.K., Joseph, A., and Christina, A.J.M. Evaluation of anti-pyretic and analgesic activity of *Emblica officinalis* Gaerth. Journal of Ethnopharmacology 95 (2004): 83-85.

[232] Vane, J.R. Inhibition of prostaglandin synthesis as a mechanism of action for aspirin-like drugs. Nature: New biology 231(1971): 232-235.

[233] Blatteis, C. M. Endotoxic fever: New concepts of its regulation suggest new approaches to its management. Pharmacology and Therapeutics 111(2006): 194-223

[234] Kuger, M. J. Fever: Role of Pyrogens and Cryogens. American Physiological Society 71(1991): 93-127.

[235] Vilela, C.F., Bitenoourt, D.A., Cabral, D.M., Franqui, S.L., Soncini, R., and Paiva, G.A. Anti-inflammatory and antipyretic effects of *Sonchus oleraceus* in rats. Journal of Ethnopharmacology 127 (2010): 737-741.

[236]Andrade, S.F., Cardoso, L.G.V., Carvalho, J.C.T., and Bastos, J.K. Antiinflammatory and antinociceptive activities of extract, fractions and populnoic acid from bark wood of *Austroplenckia populnea.* Journal of Ethnopharmacology 109 (2007): 464-471.

[237]Kale, M., Misar, A.V., Dave, V., Joshi, M., and Mujumdar, A.M. Antiinflammatory cctivity of *Dalbergia lanceolaria* bark ethanol extract in mice and rats. Journal of Ethnopharmacology 112 (2007): 300–304.

[238] Di Rosa, M., and Sorrentino, L. The mechanism of the inflammatory effect of carrageenan. European Journal of Pharmacology 4 (1968): 340-342.

[239] Morris, C.J. Carrageenan-Induced Paw Edema in Rat and Mouse. In Winyard, P. G. and Wiloughby, D. A. (eds.). Inflammation Protocols, pp. 115-121. United States of America: Human Press Inc., 2003.

[240] Zhu, Z.Z., *et al.* Analgesic, anti-inflammatory and anti-pyretic activities of the petroleum ether fraction from the ethanol extract of *Desmodium podocarpum.* Journal of Ethnopharmacology 133(3) (2011): 1126-1131.

[241] Vinegar, R., Schreiber, W., and Hugo, R. Biphasic development of carrageenan oedema in rats. Journal of Pharmacology and Experimental Therapeutics 166 (1969): 96-103.

[242] Rao, C.V., Amresh, S.K.O., Mehrotra, S., and Pushpangadan, P. Analgesic, anti-inflammatory and antiulcerogenic activity of the unripe fruits of *Aegle marmelos*. Acta Pharmaceutica Turcica 45 (2003): 85-91.

[243] Zaveri, M., and Jain, S. Anti-inflammatory and analgesic activity of root bark of *Oroxylum indicum*, Vent. Journal of Global Pharma Technology 2 (2010): 79-87.

[244] Ibrahim, B., Sowemino, A., Rooyen, V.A., and Venter, V.D.M. Anti-inflammatory, analgeis and antioxidant activities of *Cyathula prostrata* (Linn.) Blume (Amaranthaceae). Journal of Ethnopharmacology 141 (2012): 282-289.

[245] Su, S., *et al.* Anti-inflammatory and analgesic activity of different extracts of *Commiphora myrrha*. Journal of Ethnopharmacology 134 (2011): 251-258.

[246] Bars, D.L., Gozariu, M., and Cadden, S.W. Animal models of nociception. Pharmacological Reviews 53 (2001): 597-652.

[247] Shibata, M., Ohkubo, T., Takahashi, H., and Inoki, R. Modified formalin test: Characteristic biphasic pain response. Pain 38 (1989): 347-52.

[248] Bentley, G.A., Newton, S.H., and Starr, J. Studies on antinociceptive action of α-agonist drugs and their interactions with opioid mechanisms. British Journal of Pharmacology 79 (1983): 125-134.

[249] Deraedt, R., Jouquey, S., Delevallee, F., and Flahaut, M. Release of Prostaglandins E and F in an Algogenic Reaction and Its Inhibition. European Journal of Pharmacology 61 (1980): 17-24.

[250] Duaret, I.D., Nakamura, M., and Ferreira, S.H. Participation of the sympathetic system in acetic acid induced writhing in mice. Brazilian Journal of Medical and Biological Research 21 (1988): 341-43.

[251] Okuyama, E., Ebihara, H., Takeuchi, H., and Yamazaki, M. Adenosine, The anxiolytic-like principle of the Arillus of *Euphoria longana*. Planta Medica 65 (1999): 115-119.