

REFERENCES

- Aisha, A. F. A., Alrokayan, S. A., Abu-Salah, K. M., Darwis, Y. and Abdul Majid, A. M. S. (2009). *In vitro* cytotoxic and apoptotic properties of the stem bark extract of *Sandoricum koetjape* on breast cancer cells. *International Journal of Cancer Research*, 5(3), 123-129.
- Almeida, E. R. (1993). *Medicinal plants of Brazil: popular and scientific knowledge*. Hemus Ltda: São Paulo (p.341).
- Amin, A., Gali-Muhtasib, H., Ocker, M. and Schneider-Stock, R. (2009). Overview of major classes of plant-derived anticancer drugs. *International Journal of Biochemical Science*, 5(1), 1-11.
- Apak, R., Güçlü, K., Demirata, B., Özyürek, M., Çelik, S. E., Bektasog lu, Berker, K. I. and Özyurt, D. (2007). Comparative evaluation of various total antioxidant capacity assays applied to phenolic compounds with the CUPRAC assay. *Molecules*, 12, 1496-1547.
- Banjerdpongchai, R., Punyati, P., Nakrob, A., Pompimon, W. and Kongtawelert, P. (2011). 4'-Hydroxycinnamaldehyde from *Alpinia galangal* (Linn.) induces human leukemic cell apoptosis via mitochondrial and endoplasmic reticulum stress pathways. *Asian Pacific Journal of Cancer Prevention*, 12(3), 593-598.
- Becker, W. M., Kleinsmith, L. J. and Hardin, J. (2003). The cell cycle: DNA replication, mitosis, and cancer. *The world of the cells* (pp. 564-569). San Francisco: Benjamin Cummings.
- Boik, J. (2001). *Natural compounds in cancer therapy*. Minnesota, USA: Oregon Medical Press.
- Bortner, C. D. and Cidlowski, J. A. (1998). A necessary role for cell shrinkage in apoptosis. *Biochemical Pharmacology*, 56, 1549-1559.
- Bourgaud, F., Gravot, A., Milesi, S. and Gontier, E. (2001). Production of plant secondary metabolites: a historical perspective. *Plant Science*, 161, 839-851.
- Burkill, I. H. (1935). *A Dictionary of the economic products of Malay Peninsular*. Vol.2: 1312.
- Burkill, I. H. (1966). *A dictionary of the economic products of the Malay Peninsula*. Kuala Lumpur: The Ministry of Agriculture and Cooperatives.
- Butler, M. S. (2004). The role of natural product chemistry in drug discovery. *Journal of Natural Product*, 67(12), 2141-2153.

Carmichael, J., DeGaff, W. G., Gadzar, A. F., Minna, J. D. and Mitchell, J. B. (1987). Evaluation of a tetrazolium-based semiautomated colorimetric assay: Assessment of chemosensitivity testing. *Cancer Research*, 47, 936-942.

Chang, N. W., Wu, C. T., Wang, S. Y., Pei, R. J. and Lin, C. F. (2010). *Alpinia pricei* hayata rhizome extracts have suppressive and preventive potencies against hypercholesterolemia. *Food and Chemical Toxicology*, 48, 2350-2356.

Cheng, Y., Wang, Y. and Wang, X. W. (2006). A causal relationship discovery based approach to identifying active components of herbal medicine. *Computational Biology and Chemistry*, 30, 146-154.

Clinton, S. K. (1998). Lycopene: chemistry, biology, and implications for human health and disease. *Nutrition Reviews*, 56, 35-51.

Cook, J. A. and Mitchell, J. B. (1989). Viability measurements in mammalian cell systems. *Analytical Biochemistry*, 179, 1-7.

Electra, C. C., Gail, R. M and Joseph, H. N. (1995). Genetic approaches for studying programmed cell death during development of the laboratory mouse. In Lawrence, M. S and Barbara, A. O. (Eds), *In Methods in Cell Biology* (pp. 387-440). New York: Academic Press.

Elmore, S. (2007). Apoptosis: a review of programmed cell death. *Toxicologic Pathology*, 35, 495-516.

Fabricant, D. S. and Farnsworth, N. R. (2001). The value of plants used in traditional medicine for drug discovery. *Environmental Health Perspectives*, 109(1), 69-75.

Fadeel, B., Gleiss, B., Hongstrand, K., Chandra, J., Wiedmer, T., Sims, P. J., Henter, J. I., Orrenius, S. and Samali, A. (1999). "Phosphatidylserine exposure during apoptosis is a cell-type-specific event and does not correlate with plasma membrane phospholipid scramblase expression." *Biochemical and Biophysical Research Communications*, 266 (2), 504-511.

Fakim, A. G. (2006). Medicinal plants: traditions of yesterday and drugs of tomorrow. *Molecular Aspects of Medicine*, 27, 1-93.

Fotakis, G. and Timbrell, J. A. (2006). *In vitro* cytotoxicity assays: Comparison of LDH, neutral red, MTT and protein assay in hepatoma cell lines following exposure to cadmium chloride. *Toxicology Letters*, 160, 171-177.

Fouche, G., Cragg, G. M., Pillay, P., Kolesnikova, N., Maharaj, V.J. and Senabe, J. (2008). *In vitro* anticancer screening of South African plants. *Journal of Ethnopharmacology*, 119, 455-461.

Geran, R. I., Greenberg, N. H., McDonald, M. M., Schumacher, A. M. and Abbott, B. J. (1972). Protocols for screening chemical agents and natural products against animal tumor and other biological systems. *Cancer Chemotherapy and Pharmacology*, 3(2), 17-19.

Giang, P. M., Son, P. T., Matsunami, K. and Otsuka, H. (2005). New diarylheptanoids from *Alpinia pinnanensis*. *Chemical and Pharmaceutical Bulletin*, 53(10), 1335-1337.

Gore, M. and Russell, D. (2003). Principle of cancer care. *Cancer in primary care* (pp. 47-88). London: Martin Dunitz, an imprint of Taylor and Francis Group.

Gupta, S. (2007). Prostate cancer chemoprevention: Current status and future prospects. *Toxicology and Applied Pharmacology*, 224, 369-376.

Habsah, M., Amran, M., Mackeen, M. M., Lajis, N. H., Kikuzaki, H., Nakatani, H., Rahman, A., Ghafar, A. and Ali, A. M. (2000). Screening of Zingiberaceae extracts for antimicrobial and antioxidant activities. *Journal of Ethnopharmacology*, 72, 403-410.

Hahm, E. R., Park, S. and Yang, C. H. (2003). 7,8-Dihydroxyflavone as an inhibitor for Jun-Fos-DNA complex formation and its cytotoxic effect on cultured human cancer cells. *Natural Product Research*, 17, 431-436.

Halijah, I. and Ahmad, A. R. (1988). *Several ginger plants (Zingiberaceae) of potential value*. Proceedings of Malaysian Traditional Medicine. Kuala Lumpur, Malaysia, 159-161.

Hanahan, D. and Weinberg, R. A. (2000). The hallmarks of cancer. *Cell*, 100, 57-70.

Harborne, J. B. (1999). Perspectives on Secondary Plant Products, *Classes and functions of secondary product, Chemicals from plants* (pp. 1-25). New Jersey: Walton, D.E. Brown (Eds.) Imperial College Press.

Hasnah, M. S. (1991). *Chemical constituents of some medicinal plants of Zingiberaceae*. Proceedings of medicinal products from tropical rain forests (pp. 299-304).

He, W., Li, Y., Xue, C., Hu, Z., Chen, X. and Sheng, F. (2005). Effect of Chinese medicine alpinetin on the structure of human serum albumin. *Bioorganic and Medicinal Chemistry*, 13, 1837-1845.

Hong, C., Firestone, G. L. and Bjeldanes, L. F. (2002). Bcl-2 family-mediated apoptotic effects of 3,3'-diindolylmethane (DIM) in human breast cancer cells. *Biochemical Pharmacology*, 63, 1085-1097.

Hong, W. K and Sporn, M. B. 1997. Recent advances in chemoprevention of cancer. *Science*, 278, 1073-1077.

Holtum, R. E. (1950). The Zingiberaceae of the Malay Peninsula. *Garden Bulletin Singapore*, 13, 1-249.

Houghton, P. J. and Raman, A. (1998). Laboratory handbook for the fractionation of natural extracts (1st ed). London, New York: Chapman and Hall.

- Hsiung, W. Y and Kadir, H. A. (2011). *Leea indica* ethyl acetate fraction induces growth-inhibitory effect in various cancer cell lines and apoptosis in Ca Ski human cervical epidermoid carcinoma cells. *Evidence-Based Complementary and Alternative Medicine*. Vol 2011. Article ID 293060, 13 pages.
- Hsu, S. Y., Lin, M. H., Lin, L. C. and Chou, C. J. (1994). Toxicologic studies of dihydro-5,6-dehydrokawain and 5,6-dihydrokawain. *Planta Medica*, 60, 88-90.
- Huerta, S., Goulet, E. J. and Huerta-Yepez, S. (2007). Screening and detection of apoptosis. *Journal of Surgical Research*, 139, 143-156.
- Ibrahim, H., Aziz, A. N., Syamsir, D. R., Ali, N. A. M., Mohtar, M., Ali, R. M. and Awang, K. (2009). Essential oils of *Alpinia conchigera* Griff. and their antimicrobial activities. *Food Chemistry*, 113, 575-577.
- Ibrahim, H., Sim, K. S., Syamsir, D. R., Mohd Nor, N. R., Sri Nurestri, A. M. and Awang, K. (2010). Cytotoxic activity of leaf and rhizome extracts of *Alpinia scabra* (Blume) Náves, a wild ginger from Peninsular Malaysia. *African Journal of Pharmacy and Pharmacology*, 4(10), 708-711.
- Ito, N., Hasegawa, R., Imaida, K., Hirose, M., Asamoto, M. and Shirai, T. (1995). Concept in multistage carcinogenesis. *Oncology/Hematology*, 21, 105-133
- Itokawa, H., Morita, H. and Mihashi, S. (1980). Labdane and bisnorlabdane type diterpene from *Alpinia speciosa*. *Chemical Pharmaceutical Bulletin*, 28(11), 3452-3454.
- Jemal, A., Siegel, R., Xu, J. and Ward. (2010). Cancer Statistics 2010. *CA Cancer Journal for Clinicians*, 60, 277-300.
- Joseph, R., Joseph, T. and Jose, J. (2001). Volatile essential oil constituents of *Alpinia smithiae* (Zingiberaceae). *Review Biology Tropical*, 49, 509-512.
- Juntachote, T., Berghofer, E., Siebenhandl, S. and Bauer, F. (2006). The antioxidative properties of Holy basil and Galangal in cooked ground pork. *Meat Science*, 72, 446-456.
- Kapuscinski, J. (1995). DAPI: a DNA-specific fluorescent probe. *Biotechnic and Histochemistry*, 70, 220-233.
- Kelloff, G. J., Crowell, J. A., Steele V. E., Boone C. W., Lubet, R. A and Malone, W. A. (1999). Progress in cancer chemoprevention. *Annals of the New York Academy of Sciences*, 889, 1-13.
- Kelloff, G. J., Lieberman, R., Steele, V. E., Boone, C. W., Lubet, R. A and Kopelovich, L. (2001). Agents, biomarkers and cohorts for chemopreventive agent development in prostate cancer. *Urology*, 57, 46-51.
- Kerr, J. F., Wylie, A. H. and Curie, A. R. (1972). Apoptosis: a basic biological phenomenon with wide-ranging implications in tissue kinetics. *British Journal of Cancer*, 26(4), 239-257.

Kikuzaki, H. (2000). Ginger for drug and spice purposes. In Oomah, B. D. and Mazza, G. (Eds.). *Functional foods and nutraceuticals series- Herbs, botanicals and teas* (pp. 75-105). Technomic Publishing Company Inc: USA.

Kintzios, S. E. and Barberaki, M. G. (2003). What do we know about cancer and its therapy? *Plant that fight cancer* (pp 1-10). Washington, D.C: CRC Press.

Kleinsmith, L.J. (2006). *Principles of Cancer Biology*. (pp. 1-23). San Francisco: Pearson Benjamin Cummings.

Kress, W. J., Liu, A. Z., Newman, M. and Li, Q. J. (2005). The molecular phylogeny of *Alpinia* (Zingiberaceae): A complex and polyphyletic genus of gingers. *American Journal of Botany*, 92(1), 167-178.

Kris-Etherton, P. M., Hecker, K. D., Bonanome, A., Coval, S. M., Binkoski, A. E., Hilpert, K. F., Griel, A. E. and Etherton, T. D. (2002). Bioactive compounds in foods: their role in the prevention of cardiovascular disease and cancer. *American Journal of Botany*, 113, 71-88.

Kuster, R. M., Mpalantinos, M. A., Holanda, M. C., Lima, P., Brand, E. T. and Parente, J. P. (1999). GC-MS Determination of kava pyrones in *Alpinia zerumbet* leaves. *Journal of High Resolution Chromatography*, 22, 129-130.

Lam, K. S. (2007). New aspects of natural products in drug discovery. *TRENDS in Microbiology*, 15, 6.

Larsen, K., Ibrahim, H., Khaw, S. H. and Saw, L. G. (1999). *Gingers of peninsular Malaysia and Singapore*. Kota Kinabalu: Natural History Publications (Borneo).

Lee, C. C. and Houghton, P. (2005). Cytotoxicity of plants from Malaysia and Thailand used traditionally to treat cancer. *Journal of Ethnopharmacology*, 100, 237-243.

Lee, J., Kim, K. A., Jeong, S., Park, H. J., Kim, N. J. and Limb, S. (2009). Anti-inflammatory, anti-nociceptive and anti-psychiatric effects by the rhizomes of *Alpinia officinarum* on complete Freund's adjuvant-induced arthritis in rats. *Journal of Ethnopharmacology*, 126, 258-264.

Ly, T. N., Yamauchi, R., Shimoyamada, M. and Kato, K. (2002). Isolation and structure elucidation of some glycosides from the rhizomes of smaller galangal (*Alpinia officinarum* Hance). *Journal of Agriculture and Food Chemistry*, 50, 4919-4924.

Mahavorasirikul, W., Viyanant, V., Chaijoroenkul, W., Itharat, A. and Na-Bangchang, K. (2010). Cytotoxicity activity of Thai medicinal plants against human cholangiocarcinoma, laryngeal and hepatocarcinoma cells *in vitro*. *BMC Complementary and Alternative Medicine*, 10(55), 1-8.

Matassov, D., Kagan, T., Leblanc, J., Sikorska, M. and Zakeri, Z. (2004). Measurement of apoptosis by DNA fragmentation. In Brady, H. J. M. (ed), *Methods in Molecular Biology: Apoptosis Methods and Protocols* (pp. 17). Totowa: Human Press Inc.

Matsuda, H., Morikawa, T., Managi, H. and Yoshikawa, M. (2003). Antiallergic principles from *Alpinia galanga*: structural requirements of phenylpropanoids for inhibition of degranulation and release of TNF- α . *Bioorganic and Medicinal Chemistry Letters*, 13, 3197-3202.

Matsuda, H., Nakashima, S., Oda, Y., Nakamura, S. and Yoshikawa, M. (2009). Melanogenesis inhibitors from the rhizomes of *Alpinia officinarum* in B16 melanoma cells. *Bioorganic and Medicinal Chemistry Letters*, 17, 6048-6053.

Mishra, R. C. (2011). Microtubule binding natural substances in cancer chemotherapy. *Research Signpost*, 37(2), 269-282.

Miyazawa, M., Nakamura, Y. and Ishikawa, Y. (2000). Insecticidal sesquiterpene from *Alpinia oxyphylla* against *Drosophila melanogaster*. *Journal of Agriculture and Food Chemistry*, 48, 3639-3641.

Moongkarndi, P., Kosem, N., Kaslungka, S., Luanratana, O., Pongpan, N and Neungton, N. (2004). Antiproliferation, antioxidation and induction of apoptosis by *Garcinia mangostana* (mangosteen) on SKBR3 human breast cancer cell line. *Journal of Ethnopharmacology*, 90, 161-166.

Mosmann, T. (1983). Rapid colorimetric assay for cellular growth and survival: application to proliferation and cytotoxicity assays. *Journal of Immunological Methods*, 1(2), 55-63.

Mpalantinos, M. A., de Moura, R. S., Parente, J. P. and Kuster, R. M. (1998). Biologically active flavanoid and kava pyrones from aqueous extract of *Alpinia zerumbet*. *Phytotherapy Research*, 12, 442-444.

Muangnoi, P., Lu, M., Lee, J., Thepouyporn, A., Mirzayans, R., Le, X. C., Weinfeld, M. and Changbumrung, S. (2007). Cytotoxicity, apoptosis and DNA damage induced by *Alpinia galangal* rhizome extract. *Planta Medica*, 73(8), 48-754.

Murthy, N. S. and Mathew, A. (2004). Cancer epidemiology, prevention and control. *Current Science*, 86 (4), 518-527.

NCI. (2009). Defining of cancer. <http://www.cancer.gov/cancertopics/cancerlibrary/what-is-cancer>, 9 April 2010.

Newman, D. J., Cragg, G. M. and Snader, K. M. (2003). Natural products as sources of new drugs over the period 1981-2002. *Journal of Natural Product*, 66, 1022-1037.

Oufnac, D. S., Xu, Z., Sun, T., Sabliow, C., Prinyawiwatkul, W. and Godber, J. S. (2007). Extraction of antioxidants from wheat bran using conventional solvent and microwave-assisted methods. *Cereal Chemistry*, 84, 125-129.

Pieters, L. and Vlietinck, A. J. (2005). Bioguided isolation of pharmacologically active plant component, still a valuable strategy for the finding of new lead compound? *Journal of Ethnopharmacology*, 100, 57- 60.

- Ramasamy, S., Abdul Wahab, N., Zainal Abidin, N., Manickam, S. and Zakaria, Z. (2012). Growth inhibition of human gynecologic and colon cancer cells by *Phyllanthus watsonii* through apoptosis induction. *Plos One*, 7, e34793.
- Ramlan, A. A. (2003): Turning Malaysia into a global herbal producer, a personal perspective. Malaysia: Universiti Teknologi Malaysia.
- Reddy, N. S., Navanesan, S., Sinniah, S. K., Wahab, N. A. and Sim, K. S. (2012). Phenolic content, antioxidant effect and cytotoxic activity of *Leea indica* leaves. *BMC Complementary and Alternative Medicine*, 12, 128.
- Reed, J. C. and Tomaselli, K. J. (2000). Drug discovery opportunities from apoptosis research. *Current Opinion in Biotechnology*, 11, 86-592.
- Riddell, R. J., Panacer, D. S., Wilde, S. M., Clothier, R. H. and Balls, M. (1986). The importance of exposure period and cell type in *in vitro* cytotoxicity tests. *Alternatives to Laboratory Animals*, 14, 86-92.
- Ridley, H. N. (1924). Monocotyledones. *The Flora of the Malay Peninsula*, 4, 277-285.
- Rimando, A. M., Olofsdotter, M., Dayan, F. E. and Duke, S. O. (2001). Searching for rice allelochemicals: An example of bioassay-guided isolation. *Agronomy Journal*, 93, 16-20.
- Ruddon, R. W. (2007). Cause of cancer. *Cancer biology*. (4th ed, pp. 17-61) New York: Oxford University Press, Inc.
- Sarker, S. D., Latif, Z. and Gary. A. I. (2006a). Natural product isolation. *Natural product isolation*. (2nd ed, pp. 1-26) New Jersey: Humana press Inc.
- Sarker, S. D., Latif, Z. and Gary. A. I. (2006b). Isolation of Natural Product by Low-Pressure Column Chromatography. *Natural product isolation*. (2nd Ed, pp. 117-158) New Jersey: Humana press Inc.
- Scheers, M. E., Ekwall, B. A. and Dierickx, J. P. (2001). *In vitro* long-term cytotoxicity testing of 27 MEIC chemicals on HepG2 cells and comparison with acute human toxicity data. *Toxicology In Vitro*, 15, 153-161.
- Scholzova, E., Malik, R., Evcik, J. S. and Kleibl, Z. (2007). RNA regulation and cancer development. *Cancer Letter*, 246, 12-23.
- Sirirugsa, P. (1997). Thai Zingiberaceae: Species diversity and their uses. Proceedings of the *International Conference on Biodiversity and Bioresources: Conservation and Utilization*, Phuket, Thailand.
- Sirirugsa, P. (1999). Thai Zingiberaceae: Species diversity and their uses, www.iupac.org/symposia/proceedings/phunket97/sirirugsa
- Smith, T. J., Hong, J. Y., Wang, Z. Y and Yang, C.S. (1995). How can carcinogenesis be inhibited? *Annals of the New York Academy of Sciences*, 768, 82-90.

Sporn, M. B. (1976). Approaches to prevention of epithelial cancer during the preneoplastic period. *Cancer Research*, 36, 2699-2702.

Sri Nurestri, A. M., Sim, K. S. and Norhanom, A. W. (2009). Phytochemical and cytotoxic investigations of *Pereskia grandifolia* Haw. (Cactaceae) leaves. *Journal of Biological Sciences*, 9(5), 488-493.

Surh, Y. J. (1999). Molecular mechanisms of chemopreventive effects of selected dietary and medicinal phenolic substances. *Mutation Research*, 428, 305-327.

Swanson, S. M. and Pezzuto, J. M. (1990). Bioscreening technique for cytotoxicity potential and ability to inhibit macromolecule biosynthesis. In Thompson, E. B. (ed), *Drug Bioscreening: Drug Evaluation Techniques in Pharmacology*. (pp. 273-297). New York: VCH Publishers.

Sy, L. K. and Brown, G. D. (1997). Labdane diterpenoids from *Alpinia chinensis*. *Journal of Natural Product*, 60, 904-908.

Takeara, R., Jimenez, P. C., Wilke, D. V., M Odorico de Moraes., Pessoa, C., Peoporine Lopes N., Lopes, J. L. C., Cruz Lotufo T. M. and Costa-Lotufo, L. V. (2008). Antileukemic effects of *Didemnum psammatoedes* (Tunicata: Ascidiacea) constituents. *Comparative Biochemistry and Physiology A*, 151, 363-369.

Tan, M. L., Ooi, J. P., Nawfal Ismail., Ahmed Ismail Hassan Moad and Tengku Muhammad. (2009). Programmed cell death pathway and current antitumor target. *Pharmaceutical Research*, 26, 1547-1560.

Tannock, I. F., Hill, R. P., Bristow, R. G. and Harrington, L. (2005). Chemical and Radiation Carcinogenesis. (4th Ed, pp. 25-49). *The basic science of oncology*. United State: McGraw-Hill.

Taraphdar, A. K., Roy, M. and Bhattacharya, R. K. (2001). Natural products as inducers of apoptosis: implication for cancer therapy and prevention. *Current Science*, 80, 10-11.

Tawata, S., Taira, S., Kobamoto, N., Ishihara, M. and Toyama, S. (1996). Syntheses and biological activities of dihydro-5,6-dehydrokawain derivatives. *Bioscience, Biotechnology and Biochemistry*, 60, 1643-1645.

Tezuka, Y., Ali, M. S., Banskota, A. H. and Kadota, S. (2000). Blepharocalyxins C-E: three novel antiproliferative diarylheptanoids from the seeds of *Alpinia blepharocalyx*. *Tetrahedron Letters*, 41, 5903-5907.

Wattenberg, L. W. (1985). Chemoprevention of cancer. *Cancer Research*, 45, 1-8.

Weyermann, J., Lochmanna, D. and Zimmer, A. (2005). A practical note on the use of cytotoxicity assays. *International Journal of Pharmaceutics*, 288, 369-376.

- White, M. K. and Cinti, C. (2004). A morphological approach to detect apoptosis based on electron microscopy. *Methods in Molecular Biology*, 285, 105.
- Willingham, M. C. (1999). Cytochemical methods for the detection of apoptosis. *Journal of Histochemistry and Cytochemistry*, 47(9), 1101-1109.
- Wilson, A. P. (2000). Cytotoxicity and viability assays. In Master, J. R. W (Ed), *Animal cell culture: A practical approach* (pp. 175-219). UK: Oxford University Press.
- Wyllie, A. H. (1980). Glucocorticoid-induced thymocyte apoptosis is associated with endogenous activation. *Nature*, 284, 555-556.
- Wyllie, A. H., Morris, R. G., Smith, A. L. and Dunlop, D. (1984). Chromatin cleavage in apoptosis: association with condensed chromatin morphology and dependence on macromolecular synthesis. *Journal of Pathology*, 142, 67-77.
- Xu, M., Floyd, H. S. and Greth, S. M. (2004). Perillyl alcohol-mediated inhibition of lung cancer cell line proliferation: potential mechanisms for its chemotherapeutics effects. *Toxicology and Applied Pharmacology*, 195(2), 232-246.
- Yadav, P. N., Liu, Z. and Rafi, M. M. (2003). A diarylheptanoid from lesser galangal (*Alpinia officinarum*) inhibits proinflammatory mediators via inhibition of mitogen activated protein kinase, p44/42, and transcription factor nuclear factor-kB. *Journal of Pharmacology and Experimental Therapeutics*, 305, 925-931.
- Yew, H. C., Fariza, J. N., Rozie, S., Thiam, T. T., Noor, R. A. and Zakiah, I. (2009). Combined xanthorrhizol-curcumin exhibits synergistic growth inhibitory activity via apoptosis induction in human breast cancer cells MDA-MB-231. *Cancer Cell International*, 9, 1.
- Yuan, R. and Lin. Y. (2000). Traditional Chinese medicine: an approach to scientific proof and clinical validation. *Pharmacology and Therapeutic*, 86, 191-198.
- Zakeri, Z. F., Quaglino, D., Latham, T. and Lockshim, R. A. (1993). Delayed internucleosomal DNA fragmentation in programmed cell death. *FASEB Journal*, 7, 470-478.
- Zhang, J and Xu, M. (2002). Apoptotic DNA fragmentation and tissue homeostasis. *Trends in Cell Biology*, 12(2), 84-89.
- Zhivotovsky, B., Wade, D., Gahm, A., Orrenius, S. and Nicotera, P. (1994). Formation of 50 kbp chromatin fragments in isolated liver nuclei is mediated by protease and endonuclease activation. *FEBS Letters*, 351, 150-154.
- Zuo, Y., Chen, H. and Deng, Y. (2002). Simultaneous determination of catechins, caffeine and gallic acids in green, oolong, black and pu-erh teas using HPLC with photodiode array detector. *Talanta*, 57, 307-316.