

DAFTAR PUSTAKA

Adhikari, A., Devkota, H.P., Masuda, K., Nakane, T., Basnet, P., & Skalko-Basnet, N. (2008). Screening of Nepalese crude drugs traditionally used to treat hyperpigmentation: *In vitro* tyrosinase inhibition. *Int. J. Cosmet. Sci.*, 30, 353–360.

Ahmad, S., Sukri, M. A., & Ismail, N. (2015). Phytochemicals from *Mangifera pajang* Kosterm and their biological activities. *BMC Complementary and Alternative Medicine*, 15, 83.

Andreu, G.L.P., Barrios, M.S., & Curti, C. (2008). Protective effects of *Mangifera indica* L. extract (Vimang), and its major component mangiferin, on iron-induced oxidative damage to rat serum and liver. *Pharmacological Research* 57, 79–86.

Arbain, D. 2012. Inventory, constituents and conservation of biologically important sumatran plants. *Natural Product Communications*, 7, 6, 799-806.

Balci, M. 2005. *Basic ¹H and ¹³C NMR Spectroscopy*. Elsevier.

Basnet, P., Matsushige, K., Hase, K., Kadota, S., & Namba, T. (1996). Potent antihepatotoxic activity of dicafeoyl quinic acids from propolis. *Biol. Pharm. Bull.* 19, 4, 655-657.

Briganti, S., Camera, E., Picardo, M. (2003). Chemical and instrumental approaches to treat hyperpigmentation. *Pigment Cell Res*, 16, 101–110.

Burkill, I. H. 1966. *Adictionary Of The Economic Product Of The Malay Panisula A-Z*. Goverment Of Malaysia And Singapoure By The Ministry Of Agriculture & Co-Operative, Kuala Lumpur, Malaysia.

But, PP-H., Hon, P-M., Cao H, & Che C-T. (1996). New sesquiterpene lactone from *Elephantopus mollis*, *Planta Med.* 62, 474-476.

Chang, T. S. 2009. An updated review of tyrosinase inhibitors. *Int. J. Mol. Sci.*, 10, 2440-2475.

Chang, T. M. 2012. Tirosinase and tirosinase inhibitor. *Journal of Biocatalysis & Biotransformation*. 1-2.

Choudhary, M.I., Sultan, S., Khan, M.T., & Atta-ur-Rahman. (2005). Microbial transformation of 17alpha-ethynyl- and 17alpha-ethylsteroids, and tyrosinase inhibitory activity of transformed products. *Steroids*, 70, 798-802.

Chung, H. Y., Kim, Y. J., No, J. K., & Lee, J. H. (2005). 4,4-Dihydroxybiphenyl as a New Potent Tyrosinase Inhibitor. *Biol. Pharm. Bull.* 28, 2, 323-327.

Elzaawely, A. A., & Tawata, S. 2010. Preliminary phytochemical investigation on mango (*Mangifera indica* L.) leaves. *World Journal of Agricultural sciences*, 6, 735-739.

Fessenden, R. J. dan J. S. Fessenden. 1982. *Kimia Organik* (Ed. 3). Erlangga. Jakarta.

Fitrie, A.A., 2004, Histologi dari melanosit. *e-USU Repository Universitas Sumatera Utara* 5:1-6.

Fuchino, H., Koide, T., Takahashi, M., Sekita, S., & Satake, M. (2001). Leishmanicidal activities sesquiterpene lactones from *Elephantopus mollis* and their, *Planta Med*, 67.

Geng, H. W., Zhang, X. L., Wang, G. C., Yang, X. X., Wu, X., Wang, Y. F., Ye, W. C., & Li, Y. L. (2011). Antiviral dicaffeoyl derivatives from *Elephantopus scaber*. *Journal of Asian Natural Products Research*, 13, 7, 665–669.

Gopalakrishnan, S. & Vadivel, E. (2010). GC-MS Analysis of some bioactive constituents of *Mussaenda frondosa* linn.. *International Journal Of Pharma And Bio Sciences*, 2, 1.

Gritter, R., J. M. Bobbit & A. E. Schwarting. 1991. *Pengantar Kromatografi*. Edisi Kedua. Diterjemahkan oleh K. Padmawinata. Penerbit ITB. Bandung.

Grosvenor, P. W., Supriono, A., & Gray, D. O. (1995). Medicinal plants from Riau Province, Sumatra, Indonesia. Part 2: antibacterial and antifungal activity. *Journal of Ethnopharmacology*, 45, 97-111.

Grotewold, E.. 2005. *The Science of Flavonoids*. USA: Springer.

Hartanti, L., & Setiawan, H.K. 2009, Inhibitory potential of some synthetic cinnamic acid derivatives towards tyrosinase enzyme, *Indo J Chem*. 9, 158-168.

Hasegawa, K., Furuya, R., Mizuno, H., Umishio, K. (2010). Inhibitory effect of *Elephantopus mollis* H. B. and K. extract on melanogenesis in B16 Murine melanoma cells by downregulating microphthalmia-associated transcription factor expression. *Biosci. Biotechnol. Biochem.* 74, 9, 1908-1912.

[Http://plants.usda.gov/core/profile?symbol=elmo5](http://plants.usda.gov/core/profile?symbol=elmo5), diakses tanggal 23/06/2015 jam 21.30 WIB.

[Http://www.plantamor.com/index.php?plant=812](http://www.plantamor.com/index.php?plant=812), diakses tanggal 23/06/2015 jam 22.46 WIB.

Jain, P. S., & Bari, S. B. 2010. Isolation of lupeol, stigmasterol and campesterol from petroleum ether extract of woody stem of *Wrightia tinctoria*. *Asian Journal of Plant Sciences*, 1-5.

Jayasinghe, U.L.B., Jayasooriya, C.P., Bandara, B.M.R., Ekanayake, S.P., Merlini, L., & Assante, G. (2000). Antimicrobial activity of some Sri Lankan rubiaceae and meliaceae. *Fitoterapia*. 73, 424-427.

Jeon, H.J., Noda, M., Maruyama, M., Matoba, Y., Kumagai, T., & Suqivama, M. (2006). Identification and kinetic study of tyrosinase inhibitors found in sake lees. *J. Agric. Food Chem.* 54, 9827-9833.

Koe, X. F., Lim, E. L., Seah, T. C., Amanah, A., Wahab, H. A., Adenan, M. I., Sulaiman, S. F., & Tan, M. L. (2013). Evaluation of *in vitro* cytochrome P450 induction and inhibition activity of deoksielefantopin, a sesquiterpene lactone from *Elephantopus scaber* L. *Food and Chemical Toxicology*, 60, 98-108.

Kondo, R., Arung, E. T., & Shimizu, K. (2006). Inhibitory effect of artocarpanone from *Artocarpus heterophyllus* on melanin biosynthesis. *Biol. Pharm. Bull.* 29, 9, 1966-1969.

Kondo, R., Shimizu, K., & Yasutake, S. (2003). A new stilbene with tyrosinase inhibitory activity from *Chlorophora Excelsa*. *Chem. Pharm. Bull.* 51, 3, 318-319.

Kubo, I., & Kinst-Hori, I. 1999. 2-Hidroxy-4-methoxy benzaldehyde: a potent tyrosinase inhibitor from African medicinal plants. *Planta Med.* 65, 19-22.

Kubo, I., Nitoda, T., & Nihei, K-I. (2007). Effects of quercetin on mushroom tyrosinase and B16-F10 melanoma cells. *Molecules*. 12, 1045-1056.

Kubo, I., Kinst-Hori, I., Kubo, Y., Yamagiwa, Y., Kamukawa, T., & Haraguchi, H. (2000). Molecular design of antibrowning agents. *J. Agric. Food Chem.*. 48: 1392-1399.

Kundu, J.K., Rouf, A.S.S., Hossain, M.N., Hasan, C.M., & Rashd, M.A. (2000). Antitumor activity of epifriedelanol from *Vitis trifolia*. *Fitoterapia*, 71, 577-579.

Lee, K.H., Ibuka, T., Forukawa, H., Kozuka, M., Wu, R.Y., Hall, I.H., & Huang H.C. (1979). Antitumor agents XXXVIII : isolation and structural elucidation of novel germacranolides and triterpen from *Elephantopus mollis*, *Journal of Pharmaceutical Sciences*, 68, 9.

Li, M., Pu, Y., Yoo, C.G., & Ragauskas, A.J. (2016). The occurrence of trisin and its derivatives in plants. *The Royal Society of Chemistry*.

Lin C-C., Tsai C-C., & Yen M-H. (1987). The evaluation of hepatoprotective effects of taiwan folk medicine 'Teng-Khia-U', *Journal of Ethnopharmacology*, 45, 113-123.

Lin, C.C., Tsai, C.C., Yen, & M.H. (1995). The evaluation of hepatoprotective effect of taiwan folk medicine 'Teng-Khia-U'. *Journal of Ethnopharmacology*, 113-123.

Maqid, A.A., Vautquenne-Nazabadioko, L., Bontemps, G., Litaudon, M., & Lavaud, C. (2008). Tyrosinase inhibitors and sesquiterpene diglycosides from *Guioa villosa*. *Planta Med*, 74, 55-60.

Mayer, A.M. 1987. Polyphenol oxidases in plants-recent progress. *Phytochemistry*, 26,11-20.

Maisuthisaku, P., & Gordon, M.H. 2009. Antioxidant and tyrosinase inhibitory activity of mango seed kernel by product. *Food Chemistry*, 117, 332–341.

Miyazawa, M., & Tamura, N. 2007. Inhibitory compound of tyrosinase activity from the sprout of *Polygonum hydropiper* L. (Benitade). *Biol. Pharm. Bull.* 30, 3, 595-597.

Momtaz, S., Mapunya, B.M., Houghton P.J., Edgerly, C., Hussein, A., Naidoo, S., Lall, N. (2008). Tyrosinase inhibition by extracts and constituents of *Sideroxylon inerme* L. stem bark, used in South Africa for skin lightening. *Journal of Ethnopharmacology*, 119, 507-512.

Montgomery, R., Conway, T.W., & Spector, A.A. 1993. *Biokimia Berorientasi pada Kasus-Klinik*, Staf Pengajar FKUI, penerjemah; Jakarta: Binarupa Aksara.

Ngueguim, F.T., Khan, M.P., Donfack, J.H., Donfack, J.H., Siddiqui, J.A., Tewarib, D., Nagar, G.K., Tiwari, S.C., Theophile, D., Maurya, R., & Chattopadhyay, N. (2012). Evaluation of cameroonian plants towards experimental bone regeneration. *Journal of Ethnopharmacology*, 141, 331-337.

Nofrizal. 2016. *Kajian Senyawa Kimia Utama dan Bioaktivitas Paku-Pakuan Sumatera (Cephalomanes javanicum (Blume) Bosch. dan Oleandra pistillaris (Sw.) C. Chr.).* (Tesis). Padang : Universitas Andalas.

Nugroho, A., Choi, J.K., Park, J.H., Lee, K.T., Cha, B.C., & Park, H.J. (2009). Two new flavonol glycosides from *Lamium amplexicaule* L. and their *in vitro* free radical scavenging and tyrosinase inhibitory activities. *Planta Med.* 75, 364-366.

Ohguchi, T., Tanaka, T., Iliya, I., Ito, T., Iinuma, M., Matsumoto, K., Akao, Y., & Nozawa, Y. (2003). Gnetol as a Potent Tyrosinase Inhibitor from Genus *Gnetum*. *Biosci. Biotechnol. Biochem.* 67, 663-665.

Ooi, K.L., Muhammad, T.S.T., Tan, M.L., & Sulaiman, S.F. (2011). Cytotoxic, apoptotic and anti- α -glucosidase activities of 3,4-di-O-caffeooyl quinic acid, an antioxidant isolated from the polyphenolic-rich extract of *Elephantopus mollis* Kunth. *Journal of Ethnopharmacology*, 135, 685-695.

Ooi, K.L, Muhammad, T. S. T., Lam, L. Y., Sulaiman, S. F. (2012). Cytotoxic and apoptotic effects of ethyl acetate extract of *Elephantopus mollis* Kunth. in human liver carcinoma HepG2 cells through caspase-3 activation. *Integrative Cancer Therapies XX(X)*.

Putra, D.P, Fatra, H.A., & Bakhtiar, A. (2010). Isolasi senyawa antioksidan dari kelopak bunga nusa indah (*Mussaenda frondosa* L.). *Jurnal Farmasi Indonesia*, 5, 1.

Ragasa, C.Y., Alimboyoguen, A.B., & Shen, C.C. (2009). Antimicrobial terpenoid from *Elephantopus mollis*. *NRCP Reserch Journal*, 10, 1, 33:38.

Ramirez, J.E., Zambrano, R., Sepulveda, B. (2014). Antioxidant properties and hyphenated HPLC-PDA-MS profiling of Chilean *Pica* mango fruits (*Mangifera indica* L. Cv. piqueño). *Molecules*, 19, 438-458.

Rawdkuen, S., Sai-Ut, S., & Benjakul, S. (2016). Optimizing the tyrosinase inhibitory and antioxidant activity of mango seed kernels with a response surface methodology. *Food Anal. Methods*.

Schieber, A., Berardini, N., & Carle, R. Identification of flavonol and xanthone glycosides from mango (*Mangifera indica* L. Cv. "Tommy Atkins") peels by High-Performance Liquid Chromatography-Electrospray Ionization Mass Spectrometry.

Shah, K.A., Patel, M.B., Patel, R.J., & Parmar, P.K. (2010). *Mangifera indica* (Mango). *Phcog Rev.* 4, 7, 42-48.

Shahat, A.A., Hassan, R.A., Nazif, N.M., Miert, S.V., Pieters, L., Hammuda, F.M., & Vlietinck, A.J. (2003). Isolation of mangiferin from *Bombax malabaricum* and structure revision of Shamimin. *Planta Medica.* 69, 1068-1070.

Siju, E.N., Rajalakshmi, G.R., Kavitha, V.P., Joseph, A. (2010). *In Vitro* antioxidant activity Of *Mussaenda Frondosa*. *International Journal of PharmTech Research*, 2, 2, 1236-1240.

Silverstein, R.M., Bassler, G.C., & Morrill, T.C. 1991. *Spectrometric Identification of Organic Compound* (4th Ed). John Wiley and Sons. Singapore.

Solano, F., Briganti, S., Picardo, M., Ghanem, G. (2006). Hypopigmenting agents: an updated review on biological, chemical and clinical aspects. *Pigment Cell Res.* 19, 550–571.

Srinivasan, R., Chandrasekar, M.J.N., & Nanjan, M.S. 2011. Phytochemical investigation of *Caesalpinia dgyana* root. *E-Journal of Chemistry.* 8, 4, 1843-1847.

Tabobda, T.K., Liu, J., Ngadjui, B. T., Luu B. (2007). Cytotoxic triterpene and sesquiterpene lactone from *Elephantopus mollis* and induction of apoptosis in neuroblastoma cells. *Chem. Planta Med.* 73, 376-380.

Tabopda, T.K., Ngoupayo, N., Liu, J.L., Shaiq, A.M., Khan, S.N., Ngdjui, B.T., & Luu, B. (2008). Further cytotoxic sesquiterpene lactones from *Elephantopus mollis* KUNTH. *Chem. Pharm. Bull.*, 56, 2, 231—233.

Ullah, F., Hussain, H., Hussain, J., Bukhari, I.A., Khan, M.T., Choudhary, M.I., Gilani, A.H., & Ahmad, V.U. (2007). Tyrosinase inhibitory pentacyclic triterpenes and analgesic and spasmolytic activities of methanol extracts of *Rhododendron collettianum*. *Phytother. Res.* 21, 1076-1081.

Vidyalakshmi, K.S., Hannah, R., Vasanthi, H.R., Rajamanickam, G.V. (2008). Ethnobotany, phytochemistry and pharmacology of *Mussaenda* Species (Rubiaceae). *Ethnobotanical Leaflets*, 12, 469-475.

