

DAFTAR PUSTAKA

- Acosta J, Sevilla I, Salomón S, Nuevas L, Romero A, Amaro A. Determination of mangiferin solubility in solvents used in the biopharmaceutical industry. *Journal of Pharmacy & Pharmacognosy Research* 2016;4(2): 49-53
- Barreto JC, Trevisan MT, Hull WE, Erben G, de Brito ES, Pfundstein B, Wurtele G, Spiegelhalder B, Owen RW. Characterization and quantitation of polyphenolic compounds in bark, kernel, leaves, and peel of mango (*Mangifera indica* L.). *Journal Agricultural And Food Chemistry* 2008;56: 5599-5610.
- Camag®. Catalog Instrumental Thin-Layer Chromatography. Camag Scientific Inc. USA
- Chul K, Mi-Jeong A, Jinwoong K. Preparative isolation of mangiferin from *Anemarrhena asphodeloides* rhizomes by centrifugal partition chromatography. *Journal of Liquid Chromatography Related Technologies* 2007;29: 869–875.
- Dar A, Faizi S, Naqvi S, Roome T, Zikr-Ur-Rehman S, Ali M, Firdous S, Moin ST. Analgesic and antioxidant activity of mangiferin and its derivatives: the structure activity relationship. *Biological And Pharmaceutical Bulletin* 2005; 28(4): 596-600.
- El Ansari MA, Reddy KK, Sastry KNS, Nayudamma Y. Dicotyledonae, anacardiaceae polyphenols of *Mangifera indica*. *Phytochemistry* 1971;10: 2239-2241
- Faizi S, Zikr-ur-Rehman S, Ali M, Naz A. Temperature and solvent dependent NMR studies on mangiferin and complete NMR spectral assignments of its acyl and methyl derivatives. *Magnetic Resonance in Chemistry* 2006;44: 838–844.
- Food and Drug Administration. Guidance of Industry: Bioanalytical Methods Validation. Diakses 14 Oktober 2017 dari <http://www..gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm>; 2013.
- Gandjar IG, Rohman A. Kimia Farmasi Analisis. Yogyakarta: Pustaka Pelajar; 2007.
- Gritter RJ, Bobbit JM, Schwarting AE. Pengantar Kromatografi. Bandung: ITB; 1991

Guha S, Ghosal S, Chattopadhyay U. Antitumor, immunomodulatory and anti-HIV effect of mangiferin, a naturally occurring glucosylxanthone. *Cancer Chemotherapy*, 1996;42(6): 443–451.

Harahap Y. Sample Preparation: Bioavailability and Bioequivalence. Jakarta: Departement Farmasi UI; 2010.

Han D, Chen C, Zhang C, Zhang Y, Tang X. Determination of mangiferin in rat plasma by liquid–liquid extraction with UPLC–MS/MS. *Journal of Pharmaceutical and Biomedical Analysis* 2010;5: 260–263.

Hanani, E. Analisis Fitokimia. Jakarta: EGC; 2015.

Harmita. Petunjuk pelaksanaan validasi metode dan cara perhitungannya. Majalah Ilmu Kefarmasian 2004;1(3): 117-135.

Hou S, Wang F, Li Y, Li Y, Wang M, Sun D, Sun C. Pharmacokinetic study of mangiferin in human plasma after oral administration. *Food Chemistry* 2012;132: 289–294

ICH (International Conference in Harmonization). Validasi of analytical procedures: Text and methodology Q2 (R1). ICH Harmonised Tripartite Guideline 2005; 2(1): 6.

Jutiviboonsuk A, Sardsaengjun C. Mangiferin in leaves of three thai mango (*Mangifera indica L.*) varieties. *Isan Journal Pharmaceutic Science* 2010;6(3):122–9.

Joubert E, Manley M, Botha M. Use of NIRS for quantification of mangiferin and hesperidin contents of dried green honeybush (*Cyclopia genistoides*) plant material. *Journal Agriculture And Food Chemistry* 2006;54: 5279–5283.

Kelly, M.T. Drug Analysis in Biological Fluids. Dalam: Chemical analysis in complex matrices. Dublin, Ireland 1990: 17-97.

Khurana RK, Kaur R, Kaur M, Kaur R, Kaur J, Kaur H, Singh B. Exploring and validating physicochemical properties of mangiferin through GastroPlus® software. *Future Science OA* (2017); 3(1): 1-12

Kshirsagar PR, Gaikwad NB, Panda S, Hegde HV, Pai SR. Reverse phase-ultra flow liquid chromatography-diode array detector quantification of anticancerous and antidiabetic drug mangiferin from 11 species of *Swertia* from India. *Pharmacognosy Magazine* 2016;12: 32.

Lai L, Lin LC, Lin JH, Tsai TH. Pharmacokinetic study of free mangiferin in rats by microdialysis coupled with microbore high-performance liquid chromatography and tandem mass spectrometry. *Journal of Chromatography A* 2003;987: 367–374

Leiro J, García D, Escalante M, Delgado R, Ubeira FM. Anthelmintic and antiallergic activities of Mangifera indica L. stem bark components Vimang and mangiferin. *Phytotherapy Research*. 2003;17(10): 1203-1208.

Liu Y, Xu F, Zeng X, Yang L, Deng Y, Wu Z. Application of a liquid chromatography/tandem mass spectrometry method to pharmacokinetic study of mangiferin in rats; *Journal of Chromatography B, Analytical Technologies in the Biomedical and Life Sciences* 2010;878: 3345–3350.

Matkowski A, Kus P, Goralska E, Wozniak D. Mangiferin. A bioactive xanthonoid, not only from mango and not just antioxidant. *Mini Medicinal Chemistry* 2013;13(3): 439-55.

Mirza RH, Chi N, Chi Y. Therapeutic potential of the natural product mangiferin in metabolic syndrome. *Journal Nutritional Therapeutic* 2013;2: 74–79.

Morais TC, Lopes SC, Carvalho KM, Arruda BR, Souza FT. Mangiferin, a natural xanthone, accelerates gastrointestinal transit in mice involving cholinergic mechanism. *World Journal of Gastroenterology* 2012;15(25): 3207-3214.

Mulya M, Suherman. Instrumen Analisis. Surabaya: Airlangga Universitas Press; 1995.

Muruganandan S, Lal J, Gupta PK, Gupta S, Srinivasan K. Effect of mangiferin on hyperglycemia and atherogenicity in streptozotocin diabetic rats. *Journal of Ethnopharmacology* 2005;97: 497–501

National Center for Biotechnology Information. PubChem Compound Database; CID=5281647. Diakses tanggal 23 November 2017 dari <https://pubchem.ncbi.nlm.nih.gov/compound/5281647>.

Prabhu S, Jainu M, Sabitha K, Devi CS. Cardioprotective effect of mangiferin on isoproterenol induced myocardial infarction in rats. *Indian Journal Experimental Biology* 2006; 44: 209.

Rajendran P, Ekambaram G, Magesh V, Sakthisekaran D. Chemopreventive efficacy of mangiferin against benzo (a) pyrene induced lung carcinogenesis in experimental animals. *Environ Toxicol Pharmacol*. 2008;26(3): 278–82.

Reich E, Schibli A. High Performance Thin-Layer Chromatography For The Analysis of Medical Plants. New York: Thieme Medical Publisher Inc;2007

Rohman A. Kromatografi untuk Analisis Obat. Yogyakarta: Graha Ilmu; 2009.

Sastromidodjo. Kromatografi. Yogyakarta: Liberty; 1985.

Schulman, Stephen G, Daavis JA, Brazeau GA. Analysis of Biological Fluids, dari Encyclopedia of Pharmaceutical Technology; 2002

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. *Journal Agriculture And Food Chemistry* 2003; 51: 5006-5011

Scott RPW. *Chromat Silica Gel and Bonded Phase*. Chichester: John Wiley And Sons 1993.

Shahat AA, Hassan RA, Nazif NM, Van Miert S, Pieters L. Isolation of mangiferin from *Bombax malabaricum* and structure revision of shamimin. *Planta Med* 2003;69: 1068–1070.

Shargel L, Wu-Pong S, Andrew BCYu, Biofarmasetika dan Farmakokinetika Terapan Edisi Kedua. Diterjemahkan oleh Dr. Fasich, Apoteker dan Dra. Siti Sjamsiah, Apoteker. Surabaya. Universitas Airlangga; 2005.

Sherwood L. *Fisiologi Manusia dari Sel ke Sistem* Edisi IV. Jakarta: Penerbit Buku Kedokteran EGC 2002: 346-363

Shewiyo DH, Kaale E, Risha PG, Dejaegher B, Smeyers-Verbeke J, Vander Heyden Y. HPTLC methods to assay active ingredients in pharmaceutical formulations: A review of the method development and validation steps. *Journal of Pharmaceutical and Biomedical Analysis* 2012;66: 11–23

Singh SK, Sharma VK, Kumar Y, Kumar SS. Phytochemical and pharmacological investigations on mangiferin. *Herba Polonica* 2009;55(1). 127-139

Stahl E. 1973. *Drug Analysis by Chromatography and Microscopy: A Practical Supplement To Pharmacopoeias*. Diterjemahkan oleh Padmawinata. Bandung: Penerbit ITB.

Talamond P, Mondolot L, Gargadennec A, De Kochiko A, Hamon S. Process for the extraction of mangiferin and isomangiferin. US Patent 2011;12(936): 859.

United State Pharmacopeia. USP 30. Washington DC: United States Pharmacopeia Convention Inc; 2007.

Wang H, Ye G, Tang YH, Zhu HY, Ma RR, Sun ZL, Huang CG High-performance liquid chromatographic method for the determination of mangiferin in rat plasma and urine. *Biomedical Chromatography* 2006; 20 (12): 1304-8.

Watson DG. *Pharmaceutical Analysis: A textbok for pharmacy student and pharmaceutical chemist*. New York: Harcourt Publishers; 2009.

Yoshikawa M, Ninomiya K, Shimoda H, Nishida N, Matsuda H. Hepatoprotective and antioxidative properties of *Salacia reticulata*: preventive effects of

phenolic constituents on CCl₄-induced liver injury in mice. *Biology And Pharmaceutic Bulletin* 2002;25(1): 72-6.

Yoshimi N, Matsunaga K, Katayama M, Yamada Y, Kuno T, Qiao Z, Hara A, Yamahara J, Mori H. The inhibitory effects of mangiferin, a naturally occurring glucosylxanthone, in bowel carcinogenesis of male F344 rats. *Cancer Letters* 2001;163: 163-170.

