

DAFTAR PUSTAKA

- Adnan M. Teknik Kromatografi Untuk Analisis Bahan Makanan. Yogyakarta: Penerbit Andi 1997
- Agoes G. Teknologi Bahan Alam. Bandung: ITB Press; 2007.
- Al-Thani RF, Al-Meri HA. Study of Some Lichens of Qatar. Atlas Journal of Biology. 2011;1(3):41-46. doi: 10.5147/ajb.2011.0046
- Amalraj A, P A, Gopi S, Gopi S. Biological Activities of Curcuminoids, other Biomolecules from Turmeric and Their Derivates. Journal of Traditional and Complementary Medicine. 2017;7(2):205-233. doi:10.1016/j.jycme.2016.05.005.
- Araiza AC, Akhtar M, Sarkar A. Recent Advantages in emulsion-based Delivery Approaches for Curcumin: From Encapsulation to Bioaccessibility. Trends in Food Science & Technology. 2017. doi: 10.1016/j.tifs.2017.11.009.
- Arbain D, Bakhtiar A, Putra DP, Nurainas. Review: Tumbuhan Obat Sumatra. Padang: UPT Sumber Daya Hayati Sumatera Universitas Andalas; 2014
- Atun S. Metode Isolasi dan Identifikasi Senyawa Organik Bahan Alam. J Konsevasi Cagar Budaya Borobudur. 2014;8(2):53-61.
- Beever RE, Bollard EG. The Nature of the Stimulation of Fungal Growth by Potato Ekstract Journal of General Microbiology. 1970;60:273-279.
- Bermawie N. Mengatasi Demam Berdarah dengan Tanaman Obat. Warta Penelitian dan Pengembangan Pertanian 2006;28: 6-8
- Bi YM, Bi XB, Zhao QR, Chen YT, Xie JL. Four Novel Dihydroisocoumarin (3,4 Dihydro-1H-2-benzopyran-1-one) Glucosides from the Fungus *Cephalosporium sp* AL031. Helvetica Chimica Acta. 2004.87.2890-2896.
- Borges KB, Borges WS, Patron RD, Pupo TM, Bonato PS, Collado IG. Tetrahedron: Asymmetry Stereoselective Biotransformations Using Fungi As Biocatalysts. Tetrahedron: Asymmetry. 2009;20(4):385-397. doi: 10.1016/j.tetasy.2009.02.009.
- Cai, Le, Dong JW, Zhao LX, Zhou H, Xing Y, Li Y, Li ZJ. Duan WH, Li XJ, Ding ZT. An improved water-soluble/stereospecific biotransformation of aporphine alkaloids in *Stephania epigaea* to 4R-hydroxyaporphine alkaloids by *Clonostachys rogersoniana*. Process Biochem. 2016; 8.
- CLSI. Performance Standards for Antimicrobial Susceptibility Testing. 27th ed. CLSI supplement M100. Wayne, PA: Clinical and Laboratory Standards Institute; 2017.

Eyong KO, Ambassa P, Yimdjo MC, Sidjui LS, Folefoc GN. A New Source of Kojic Acid Isolated from *Kigelia Africana*: A Possible Precursor for Quinone Biosynthesis. *Rasayan Journal Chemistry*. 2012;5 (4): 477-480.

Gandjar IG, Rohman A. *Kimia Farmasi Analisis*. Pustaka Pelajar;Yogyakarta. 2007

Ghosh SS, Gehr TWB, Ghosh S. Curcumin and Chronic Kidney Disease (CKD): Major Mode of Action through Stimulating Endogenous Intestinal Alkaline Phosphatase. *Molecules*. 2014;9:20139-20156 doi: 10.3390/molecules191220139

Gritter RJ, Bobbit JM, Schwarting AE. Introduction to Chromatography. *Journal of Chemical Education*. 1968;45(12):968. doi:10.1021/ed045pA986.1

Harborne JB,. *Phytochemical methods*. diterjemahkan oleh Niksolihin S, Padmawinata, Sudiro I. Bandung: Penerbit ITB; 1996.

Hegazy MEF, Mohamed TA, Elshamy AI, Mohammed AEHH, Mahalel UA, Reda EH, Shaheen AM, Tawfik WA, Shahat AA, Shams KA, Azim NSA., Hammouda FM. Microbial Biotransformation As A Tool For Drug Development Based On Natural Products From Mevalonic Acid Pathway. *Journal of Advanced Research*. 2015;6(1):17–33. doi:10.1016/j.jare.2014.11.009.

Ismed F, Dévéhat FLLH, Delalande O, Sinbandhit S, Bakhtiar A, Boustie J. Lobarin from the sumatran lichen, *Stereocaulon halei*: *Fitoterapia*. 2012; 83: 1693–1698.

Kang MK dan Rhe YH, Carboxymethyl Cellulase Active and stable at Alkaline pH from Alkalophilic *Cephalosporium sp* RYM-202. *Biotechnology Letters*. 1995.17-5

Kelly L, Jacobs MR. Appelbaum, P.C. 1999. *Microbiol. Clin*, J, 37, 3296.

Kimura T dan Tsuchiya K. Characteristics of Protease Production by *Cephalosporium sp* *Applied and Environmental Microbiology*. 1982.43-3

Kjer J, Debbab A, Ali AH, Proksch P. Methods for isolation of Marine-derived Endophytic Fungi and their Bioactive Secondary Product. *Nature Publishing Group*. 2010;5(3):479-490. doi:10.1038/nprot.2009.233.

Kumala S, Utji R, Sudarmono P, Kardono LBS. Isolation of Endophyte Fungi from *Brucea javanica* L (Merr) and Cytotoxic Evaluation of their n-Butanol Extract from Fermentation Broth. *Pakistan Journal of Biological Science*. 2006; 9, 825-832. doi:10.3923/pjbs.2006.825.832

Kocher A, Schibor C, Behnam D, Frank J. The oral bioavailability of curcuminoids in healthy humans is markedly enhanced by micellar solubilisation but not further improved by simultaneous ingestion of sesamin, ferulic acid, naringenin and xanthohumol. *Journal of Functional Foods*. 2015;14:183–191. doi:10.1016/j.jff.2015.01.045.

Kohyama A, Yamakoshi H, Hongo S, Kanoh N, Shibata H, Iwabuchi Y. Structure-Activity Relationships of the Antitumor C5-Curcuminoid GO-Y030. *Molecules*. 2015; 20(8):15374–15391. doi:10.3390/molecules200815374.

Komatsu KI, Mizuno M, Koidara R. Effect of Methionine on Cephalosporin C and Penicillin N Production by a Mutant of *Cephalosporium Acremonium*. *The Journal Of Antibiotics*. 1975;18(11):881-888.

Kusumaningtyas, E., Astuti, E., & Darmono. 2008. Sensitivitas metode bioautografi kontak dan agar overlay dalam penentuan senyawa anti kapang. *Jurnal Ilmu Kefarmasian Indonesia*, 6(2), 75–79.

Liu YM, Zhang QZ, Xu DH, Fu YW, Lin DJ, Zhou SY, Li JP. Antiparasitic Efficacy Of Curcumin From *Curcuma Longa* Against *Ichthyophthirius Multifiliis* In Grass Carp. *Veterinary Parasitology*.2017;236,128–136.doi:10.1016/j.vetpar.2017.02.011

Martin, GRUBE, Gabriel BERG. Microbial Consortia of Bacteria and Fungi with Focus on the Lichen Symbiosis. *Fungal Biology Review* 23, 2009, 72-85.

Masuda T, Jitoe A, Isobe J. Antioxidative and Antiinflammatory Curcumin-Related Phenolic from Rhizomes of *Curcuma domestica*. *Phytochemistry*.1993;32(6):1557–1560.

Mathews VV, Biru P, Paul MVS, Abhilash M, Manju A, Nair RH. Hepatoprotective efficacy of curcumin against arsenic trioxide toxicity. *asian pacific journal of tropical Biomedicine*. 2012; 706-711.

Mathew D, Hsu WL. Antiviral Potential of Curcumin. *Journal of Functional Foods*. 2018;40: 692–699. doi:10.1016/j.jff.2017.12.017.

Meng, FC, Zhou YQ, Ren D, Wang R, Wang C, Lin IG, Zhang XQ, Ye WC, Zhang QW. Turmeric: A Review of Its Chemical Composition, Quality Control, Bioactivity, and Pharmaceutical Application, dalam Grumezescu AM, Holban AM. *Handbook of Food Bioengineering: Natural and Artificial Flavoring Agents and Food Dyes*.2017. 7 : 299–350.

Melgar GZ, Assis FVSD, Rocha LCD, Fanti SC, Sette LD, Porto ALM. Growth Curves of Filamentous Fungi for Utilization in Biocatalytic Reduction of Cyclohexanones. 2013; 13(5).

Meyer MSA, Rodriguez AD, Berlinck RGS, Hamann MT. Marine pharmacology in 2003 :Marine compounds with anthelmintic, antibacterial, anticoagulant, antifungal, anti-inflamantory, antimalarial, antiplatelet, antiprotozoal, antituberculosis, and antiviral activities, affecting the cardiovascular, immune and nervous systems, and other miscellaneous mechanism of action. 2007;145: 553-581.

Molen KMV, Raja A, Elimat TE, Oberlies NH. 2013. Evaluation of culture media for the production of secondary metabolites in a natural products screening program. *AMB Express*. 2013; 3(71).

Mun SH, Kim SB, Kong R, Choi JG, Kim YC, Shin DW, Kang OH, Kwon DY. Curcumin Reverse Methicillin Resistance in *Staphylococcus Aureus*. *Molecules*. 2014;19(11): 18283-18295.doi:[10.3390/molecules191118283](https://doi.org/10.3390/molecules191118283)

Nalli M, Ortar G, Moriello AS, Marzo VD, Petrocellis LD. Effects Of Curcumin And Curcumin Analogues on TRP Channels. *Fitoterapia*.2017;122:126–131.doi: 10.1016/j.fitote.2017.09.007.

Oasis FJ, Lavenia P, Rifa N, Oktavia M, Amenike DW. Laporan Akhir Program Kreativitas Mahasiswa Isolasi Metabolit Sekunder dari Mycobiont Lichen Sumatera *Stereocaulon Halei* dan Aktivitas terhadap Antibakteri.2016

Pan MH, Huang T, Lin J. Biotransformation of Curcumin Through Reduction and Glucuronidation in Mice. *The American Society for Pharmacology and Experimental Therapeutics*.1999;27(1):486–494.

Patra S. Biotransformation of caffeine to value added products. Departement of Fermentation Technology and Bioengineering Central Food Technology Research Institute Mysore.2007:1–319.

Pelczar MJ, Chan ECS, Hadjioetomo RS. *Element of Microbiology*.United State: McGraw-Hill;1981.

Pisano MA, Oleniacz WS, Mason RT, Fleischman AI, Vaccaro SE, Catalano GR. Enzyme Production by Species of *Cephalosporium* *APPL Microbiology*. 1962. 11-114

Pitson SM, Seviour RJ, dan McDougall BM. Production of β -glucan degrading enzymes by *Acremonium* and *Cephalosporium* spesies. *Mycology Research*. 1997.101-2

Rahim NA, Hassandravish P, Golbabapour S, Ismail S, Tayyab S, Abdulla MA. Gastroprotective Effect of Ethanolic Extract of *Curcuma xanthorrhiza* Leaf against Ethanol-Induced Gastric Mucosal Lesions in Sprague-Dawley Rats. *Biomed Research International*. 2014.41640. doi:10.1155/2014/416409.

Radji, M. Peranan Bioteknologi dan Mikroba Endofit dalam Pengembangan Obat Herbal. *Majalah Kefarmasian*. 2005;2(3):113-126.

Reeves DS, Philips I, William JD. *Laboratory Methods in Antimicrobial Chemoterapy*. Churchill Livingstone: New York; 1978.

Rosazza. *Microbial Transformation of Bioactive Coumpound*. Chemical Rubber Company. 2000;1.

Rymbai H, Sharma RR, Srivastav MM. Biocolorants and Its Implications in Health and Food Industry. *International Journal of PharmTech Research*.2011;3(4):2228–2244.

Sastrohamidjojo H. *Kimia Dasar*. Yogyakarta: Gajah Mada University Press. 2002.

Seidel V. Initial and Bulk Extraction. dalam Sarker SD, Latif Z, Gray AI. *Natural Products Isolation*.Humana Press Inc.2006;31-5.

Septiana E. Potensi Lichen sebagai Sumber Bahan Obat: Suatu Kajian Pustaka. *Jurnal Biologi XV*.2011;(1):1–5.

Silverstein RM, Webster FX, Kiemle DJ. *Spectrometric Identification Of Organic Compounds*. State University of New York; 2005.

Simanjuntak P, Biotransformasi Senyawa Alkaloid Sinkona Oleh Kapang *Xylaria Sp* Menjadi Alkaloid Sinkona N-Oksida. *Majalah Farmasi Indonesia*.2002;13(2):95-100.

Smith B, Warren SC, Newtom GGF, Abraham EP. Biosynthesis of Penicillin N and Cephalosporin C : Antibiotic Production and other Features of the Metabolism of a *Cephalosporium sp*. *Biochem J*.1967;3(108):877-890.

Tajbakhsh S, Mohammad K, Dealamil I, Zandil K, Vauladvand, Ramadani E, Asayeshi G. Antibacterial Activity of Indium Curcumin and Indium Diacetylcurcumin. *Biotechnology*.2008;21:3832-3835.doi:10.5897/AJB08.

790.

Tolstoy VP,. Chernyshova IV., Skryshevsky VA. *Handbook of infrared spectroscopy of ultrathin films*. USA: John Wiley and Sons Publication;2003.

Valgas C, de Souza SM, Smania EF, Smania A. Screening Methode to Determine Antibacterial Activity of Natural Product. *Brazilian Journal of Microbiology*.2007;34: 369-380.

Vanissetty RK, Keshetty S, Veeresham C. Biotransformation of Vincamine using Microbial Cultures.2014. *IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS)*. 2014;9(3):71-78

Waksmundzka SMJ, Kowalska T. *Thin Layer Chromatography In Phytochemistry*. Chemical Rubber Company.2008;1 -6.

Zheng B, Zhang Z, Chen F, Luo X, McClement DJ. Food Hydrocolloids Impact of delivery system type on Curcumin Stability : Comparison of Curcumin Degradation In Aqueous Solutions, Emulsions, and Hydrogel Beads.*Food hydrocolloids*.2017;71, 187–197. doi:10.1016/j.foodhyd. 2017.05.022.

<https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?lvl=0&id=361771> diakses pada tanggal 16 April 2018