

DAFTAR PUSTAKA

- Bhowmik, A., Khan, L.A., Akhter, M., and Rokeya, B., 2009, Studies on the antidiabetic effects of *Mangifera indica* stem-barks and leaves on nondiabetic, type 1 and type 2 diabetic model rats, *Bangladesh J. Pharmacol.*, 4, 110-114.
- Carey, F.A., 2000, *Organic Chemistry*, 4th Edition, McGraw-Hill. Publisher, New York.
- Colby, D.S., 1988, *Biochemistry: A Synopsis*, Lange Medical Publications, New York.
- Corwin, E.J., 2009, *Buku Saku Patofisiologi*, EGC, Jakarta.
- Darmawan, P.A., 2016, Mempelajari Reaksi Inhibisi Dari Kayu Manis dan Sinamaldehida Terhadap α -amilase Sebagai Agen Antidiabetes, *Tesis*, FMIPA UGM, Yogyakarta.
- Diporo, J.T., Robert, L.T., Gary, C.Y., Gary, R., Marzke, Barbara, G.W., and Michael, L. P., 2005, *Pharmacotherapy: A Pathophysiologic Approach*, McGraw-Hill. Publisher, New York.
- Du, Z.Y., Liu, R.R., Shao, W.Y., Mao, X.P., Ma, L., Gu, L.Q., Huang, Z.S., and Chan, A.S.C., 2006, α -Glucosidase inhibition of natural curcuminoids and curcumin analogs, *Eur. J. Med. Chem.*, 41, 213-218.
- Fessenden, R.J. dan Fessenden, J.S., 1986, *Kimia Organik*, Erlangga, Jakarta.
- Ghosh, S., Banerjee, S., and Sil, C.P., 2017, The beneficial role of curcumin on inflammation, diabetes and neurodegenerative disease: A recent update, *Food Chem. Toxicol.*, 83, 111-124.
- Imran, S., Taha, M., Selvaraj, M., Ismail, N.H., Chigurupati, S., and Mohammad, J.I., 2017, Synthesis and biological evaluation of indole derivatives as α -amylase inhibitor, *Bioorg. Chem.*, 73, 121-127.
- Junejo, J.A., Rudrapal, M., Nainwal, L.M., and Zaman, K., 2017, Antidiabetic activity of hydro-alcoholic stem bark extract of *Callicarpa arborea* Roxb. with antioxidant potential in diabetic rats, *Biomed. Pharmacother.*, 95, 84-94.
- Kadokawa, J., 2012, Preparation and Applications of Amylose Supramolecules by Means of Phosphorylase-Catalyzed Enzymatic Polymerization, *Polymers*, 4(1), 116-133.

- Kumar, S., Kumar, V., Rana, M., and Kumar, D., 2012, Enzymes Inhibitors from Plants: An Alternative Approach to Treat Diabetes, *Pharmacognosy. Comm.*, 2(2), 18-33.
- Liang, R., Yuan, H., Xi, G., and Zhou, Q., 2009, Synthesis of Wheat Straw-G-Poly (Acrylic Acid) Superabsorbent Composites and Release of Urea from it, *Carbohydr. Polym.*, 2(77), 181-187.
- Lin, H., Hu, G., Guo, J., Ge, Y., Liang, G., Lian, Q., Chu, Y., Yuan, X., Huang, P., and Ge, R., 2011, Mono-Carbonyl Curcumin Analogues, as 11β -Hydroxysteroid Dehydrogenase 1 Inhibitors, *Bioorg. Med. Chem. Lett.*, 23, 4362-4366.
- Mancía, S.R., Garcíab, M.C.L., and Chaverric, J.P., 2015, Experimental evidence for curcumin and its analogs for management of diabetes mellitus and its associated complications, *Eur. J. Pharmacol.*, 756, 30-37.
- Marshall, J.J. and Lauda, C.M., 1975, Purification and properties of phaseolamin, an inhibitor of alpha-amylase, from the kidney bean, *Phaseolus vulgaris*, *J. Biol. Chem.*, 250(20), 8030-8037.
- Martha, R.D., 2016, Sintesis dan Uji Inhibisi Enzim α -Glukosidase Pada Analog Kurkumin Dari Vanilin dan Bromovanilin, *Tesis*, FMIPA UGM, Yogyakarta.
- Masek, A., Chrzescijanska, E., and Zaborski, M., 2013, Characteristics of curcumin using cyclic voltammetry; UV-Vis; fluorescence; and thermogravimetric analysis, *Electrochim. Acta.*, 107, 441-447.
- Meiyanto, E., 1999, Kurkumin Sebagai Obat Antikanker: Menelusuri Mekanisme Aksinya, *Indonesian J. Pharm.*, 10(4), 224-236.
- Nampoothiri, S.V., Parthapan, A., Cherian, L.O., Raghu, K.G., Venugovalan, V.V., and Sundaresan, A., 2011, In Vitro Antioxydant and Inhibitory Potential of Terminalia Ballerica and Emblica Offcinalis Fruits Against Oxidation and Enzymes Linked to Type 2 Diabetes, *Food Chem. Toxicol.*, 49, 125-131.
- Nigam, P. and Singh, D., 1995, Enzyme and microbial system involved in starch processing, *Enzyme Microb. Technol.*, 17, 770-778.
- Oboh, G., Ogunsuyia, O.B., Ogunbadejo, M.D., and Adefegha, S.A., 2016, Influence of gallic acid on α -amylase and α -glucosidase inhibitory properties of acarbose, *J. Food Drug Anal.*, 3(24), 627-634.
- Pari, L. and Saravannan, G., 2008, Hypoglycaemic and Antihyperglycaemic Effect of Syzygium cumini Bark in Streptozotocin-Induced Diabetic Rats, *J. Toxicol. Pharmacol.*, 3, 1-10.

- Ponnusamy, S., Zinjarde, S., Bhargava, S., Rajamohanan, P.R., and Kumar, R.A., 2012, Discovering bisdemethoxycurcumin from *Curcuma longa* rhizome as a potent small molecule inhibitor of human pancreatic α -amylase, a target for type-2 diabetes, *Food Chem.*, 135, 2638-2642.
- Prabhakar, P.K., Prasad, R., Ali, S., and Doble, M., 2013, Synergistic interaction of ferulic acid with commercial hypoglycemic drugs in streptozotocin induced diabetic rats, *Phytomedicine.*, 20, 488-494.
- Rinasih, L., 1998, Sintesis Senyawa 3,4-dimetoksibenzaldehida dari Vanilin dalam Suasana Basa, *Skripsi*, FMIPA UGM, Yogyakarta.
- Ritmaleni dan Simbara, A., 2010, Sintesis Tetrahidropentagamavunon-0, *Indonesian J. Pharm.*, 21(2), 100-105.
- Sardjiman, S.S., Reksohardiprodjo, M.S., Hakim, L., Goot, H.V.D., and Timmerman, H., 1997, 1,5-Diphenyl-1,4-pentadiene-3-ones and cyclic analogues as antioxidative agents. Synthesis and structure-activity relationship, *J. Med. Chem.*, 32, 625-630.
- Schatz, P.F., 1996, Bromination of Acetanilide, *J. Chem. Educ.*, 73, 267.
- Silverstein, R.M., Basster, G.C., and Morrill, T.C., 2005, *Spectrometric Identification of Organic Compounds*, 7th Edition, John Wiley and Sons, New York.
- Sundarram, A. and Murthy, T.P.K., 2014, α -Amylase Production and Applications: A Review, *J. Appl. Environ. Microbiol.*, 4(2), 166-175.
- Tafesse, T.B., Hymete, A., Mekonnen, Y., and Tadesse, M., 2017, Antidiabetic activity and phytochemical screening of extracts of the leaves of *Ajuga remota* Benth on alloxan-induced diabetic mice, *BMC Complement. Altern. Med.*, 243(17), 1-9.
- Tonnesen, H.H. and Karlsen, J., 1987, Studies on curcumin and curcuminoids: V. Alkaline Degradation of Curcumin, *Z Lebnem Uniers Forch.*, 2(180), 132-134.
- Valsanescum, T., Mateescu, M.A., Schell, H.D., Enache, E., Bentia, T., Scanteile, L., Zarchievic, V., and Rotaru, C., 1985, All-Reagent Test Tablets and Methode for Rapid and Selective α -amylase Iodometric Determination, *Analy. Biochem.*, 146, 299-306.
- Woodley, M. dan Whelan, A., 1995, *Pedoman Pengobatan*, Andi Offset Esensia Medika, Yogyakarta.
- Xiao, Z., Storms, R., and Tsang, A., 2006, A quantitative starch-iodine method for measuring alpha-amylase and glucoamylase activities, *Anal. Biochem.*, 351, 146-148.



Yuan, X., Li, H., Bai, H., Su, Z., Xiang, Q., Wang, C., Zhao, B., Zhang, Y., Zhang, Y., Chu, Y., and Huang, Y., 2014, Synthesis of Novel Curcumin Analogues for Inhibition of 11β -Hydroxysteroid Dehydrogenase Type 1 With Anti-Diabetic Properties, *Eur. J. Med. Chem.*, 1(77), 223-230.

Zhao, Z. and Moghadasian, M.H., 2008, Chemistry, natural sources, dietary intake and pharmacokinetic properties of ferulic acid: a review, *Food Chem.*, 109, 691-702.