

DAFTAR PUSTAKA

- Abderrahim, B., Mercedes, M., and Jose, A., 2007, Long Storage Stability of Biodiesel from Vegetable and Used Frying Oil, *Fuel*, 86, 2596-2602.
- Abigor, R.D., Patrick, O.U., Thomas, A.F., Michael, J.H., Kareen, S., and Brett, J.S., 2002, Partial Purification and Properties of Lipase from Germinating Seeds of *Jatropha curcas* L., *JAOCS*, 79, 1123-1126.
- Amalia, R., Rumondang, B., dan Firman, S., 2013, Penentuan pH dan Suhu Optimum untuk Aktivitas Ekstrak Kasar Enzim Lipase dari Kecambah Biji Karet (*Hevea brasiliensis*) terhadap hidrolisis PKO, 2013, *J. Saintia Kimia*, 1.
- Angelo, A.J.St., and Robert, L.O., 1982, Lipid Degradation During Seed Deterioration, *Symposium: Deterioration Mechanism in Seeds*, USA.
- Atadashi, I.M., Aroua, M.K., and Abdul, A., 2010, High Quality Biodiesel and Its Diesel Engine Application: A Review, *Renew. Sust. Energ. Rev.*, 14, 1999-2008.
- Bajaj, A., Purva, L., Prabhat N.J., and Rajesh, M., 2010, Biodiesel Production Trough Lipase Catalyzed Transesterification: An Overview, *J. Mol. Catal. B: Enzym.*, 62, 9-14.
- Barros, M., Fleuri, L.F., and Macedo, G.A., 2010, Seed Lipases: Sources, Applications, and Properties - A Review, *BJCHE*, 27, 15-29.
- Caro, Y., Villeneuve, P., Michel, P., Reynes, M. and Jean, G., 2000, Lipase Activity and Fatty acid Typoselectivities of Plant Extracts in Hydrolysis and Interesterification. *JAOCS*, 77, 349-354.
- Cherukuvada, S.L., Seshasayee, A.S., Raghunathan, K., Anishetty, S., and Phennatur, G., 2005, Evidence of a Double-Lid Movement in *Pseudomonas aeruginosa* Lipase: Insight from Molecular Dynamics Simulation, *PLoS. Comput. Biol.*, 1, e28.
- Das, L.M., Dilip, K.B., Subhalaxmi, P., Malaya, K.N., Naik, S.N., 2009, Long Term Storage Stability of Biodiesel Produce from Karanja Oil, *Fuel*, 88, 2315-2318.
- Eder, K., 1995, Gas Chromatography Analysis of Fatty Acid Methyl Esters: A Review, *J Chromatogr B Biomed Appl.*, 671, 113-131.

- Ekawati, L., 2016, Transesterifikasi Minyak Kelapa Sawit Menggunakan Lipase dari Ekstrak Kasar Kecambah Biji Adas (*Foeniculum vulgare* Mill), *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.
- Ferrari, R.A., Ana, L.M.T.P, and Kil, J.P., 2011, *Biodiesel Production and Quality-Biofuel Engineering Process Technology*, Intech, Croatia.
- Fukuda, H., Akihiko, K., and Hideo, N., 2001, Biodiesel Fuel Production by Transesterification of Oils: Review, *J Biosci Bioeng.*, 92, 405-416.
- Gadge, P.P., Madhikar, S.D., and Yewle, J.N., 2011, Biochemical Studies of Lipase from Germinating Oil Seeds (*Glycine max*). *Am. J. Biochem. & Biotech.*, 7, 141-145.
- Hermansyah, H., Septian, M., Rita, A., Tania, S.U., dan Anondho W., 2009, Interesterifikasi Minyak Kelapa Sawit dengan Metil Asetat untuk Sintesis Biodiesel Menggunakan *Candida rugosa* Lipase Terimobilisasi, *JTKI*, 8, 24-32.
- Huang, A.H.C., and Robert, A.M., 1978, Lipases in Storage Tissues of Peanut and Other Oil Seeds During Germination, *Planta*, 141, 111-116.
- Jitputti, J., Boonyarach, K., Pramoch, R., Kunchana, B., Lalita, A., and Peesamai, J., 2006, Transesterification of Crude Palm Kernel Oil and Crude Coconut Oil by Different Solid Catalysts, *Chem. Eng. J.*, 116, 61-66.
- Kings, F.R., 1985, Meat Fat Formulation, *JAOCS*, 815-818.
- Kitson, F.G., Barbara, S.L., and Charles, N.M., 1996, *Gas Chromatography and Mass Spectrometry: A Practical Guide*, Academic press, USA.
- Knothe, G., Jon, V.G., and Jurgen K., 2004, *The Biodiesel Handbook*, AOCS Press, United States.
- Kulkarni, M.G., and Dalai, A.K., 2006, Waste Cooking Oil — An Economical Source for Biodiesel: A Review. *Ind. Eng. Chem. Res.*, 45, 2901–2913.
- Li, L., Du, W., Liu, D., Wang, L., and Li, Z., 2006, Lipase-Catalyzed Transesterification of Rapeseed Oils for Biodiesel Production with A Novel Organic Solvent as The Reaction Medium, *J. Mol. Catal. B: Enzym.*, 43, 1-4.
- Lotti, M. and Alberghina, L., 2007, *Lipases: molecular structure and function*, In: Polaina, J. and Mac- Cabe, (ed.), *Industrial Enzym: Structure, Function and Application*, Springer, Netherland.
- Lukovic O.N., Knežević J. Z., and Bezbradica D, 2011, *Biodiesel Fuel Production by Enzymatic Transesterification of Oils: Recent Trends, Challenges and*

Future Perspectives, Faculty of Technology and Metallurgy University of Belgrade, Serbia.

Ma, F. and Hanna, M.A., 1999, Biodiesel Production: A Review, *Bioresour Technol*, 70, 1-15.

Maharani, N.M.A., 2016, Transesterifikasi Minyak Kelapa Sawit Menggunakan Lipase dari Ekstrak Kasar Kecambah Biji Kakao (*Theobroma cacao* L.), *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Mahmud, Z., dan Yulius, F., 2005, Prospek Pengolahan Hasil Samping Kelapa, *Perspektif*, 4, 55-63.

Matthews, H.R., Richard, F. and Roger, I.M., 1997, *Biochemistry: A Short Course*, Wiley-Liss, Inc., New York.

Meher, L.C., Sagar, D.V., and Naik, S.S., 2006, Technical Aspects of Biodiesel Production by Transesterification, *Renew. Sust. Energ. Rev.*, 10, 248-268.

Mittelbach, M., 1996, Diesel Fuel Derived from Vegetable Oils, VI: Specifications and Quality Control of Biodiesel, *Bioresour Technol*, 56, 7-11.

Mulyani, S., Lutfi, S., Dewi, A., dan Mayun, P., 2010, Aktifitas Lipase Beberapa Kecambah Biji sebagai Biokatalisator Sintesa Ester Metil Asam lemak, *Proceeding Seminar Nasional APTA*, Yogyakarta, 16 Desember 2010.

Muniyappa, P.R., Brammer, S.C., and Nouredini, H., 1996, Improved Conversion of Plant Oils and Animal Fats into Biodiesel and Co-Product, *Bioresour Technol*, 56, 19-24.

Murray, R.K., Daryl, K.G., Peter, A.M., and Victor, W.R., 2003, *Harper's Illustrated Biochemistry*, McGraw-Hill Companies, New York.

Musa, I.A., 2016, The Effect of Alcohols to Oil Molar Ratios and the Type of Alcohol on Biodiesel Production Using Transesterification Process, *Egyptian Journal of Petroleum*, 25, 21-31.

Nakpong, P., and Sasiwimol, P., 2010, High Free Fatty Acid Coconut Oil as a Potential Feedstock for Biodiesel Production in Thailand, *Renew. Energ.*, 35, 1682-1687.

Nogoseno., 2003, Informasi Perkelapaan, *Prosiding Hari Perkelapaan Ke-4 Direktorat Jenderal Perkebunan*, Bandung, 20-22 September 2002.

Noor, I. M., Hasan, M., and Ramachandran, K. B., 2003, Effect of Operating Variables on the Hydrolysis Rate of Palm Oil by Lipase, *Process Biochem.*, 39, 13-20.

- O'Brien, R.D., 1998, *Fats and Oils: Formulating and Processing for Applications*, Technomic Publishing Company, USA.
- Parwoko, E., 2009, Pengaruh Tahapan Proses Esterifikasi, Transesterifikasi dan Netralisasi terhadap Karakteristik Biodiesel dari Biji Kesambi, *Tesis*, FTP IPB, Bogor.
- Permana, I.G.D.M., Retno, I., Pudji, H., dan Suparmo, 2013, Aktivitas Lipase Indigenous Selama Perkecambahan Biji Kakao (*Theobroma cacao* L.), *Agritech.*, 33.
- Quitter, A.L and Eastmond, P.J., 2009, Storage Oil Hydrolysis during Early Seedling Growth, *Plant Physiol Biochem*, 47, 485.
- Riberio, B.D., de Castro, A.M., Coelho, M.A.Z., and Freire, D.M.G., 2011, Production and Use of Lipases in Bioenergy: A Review from the Feedstock to Biodiesel Production, *Enzyme Res.*, 1-16.
- Riberio, L.M.O., Albania, E.S., Margarete C.S.S., and Renata, M.R.G.A., 2014, A Study of Ethanolysis and Methanolysis of Coconut Oil for Enzymatically Catalyzed Production of Biodiesel, *JSBS*, 4, 215-224.
- Rukmana, R., 1998, *Kacang Tanah*, Penerbit Kanisius, Yogyakarta.
- Sastrohamidjojo, Hardjono., 2001, *Kromatografi*, Penerbit Liberty, Yogyakarta.
- Schmid, R.D., and Verger, R., 1998, Lipases: Interfacial Enzymes with Attractive Applications, *Angewandte Chemie*, 37, 1608-1633.
- Suhendra, L., 2005, Aktifitas Indigenous Selama Perkecambahan Kacang-kacangan, *Tesis*, FTP, Universitas Gadjah Mada, Yogyakarta.
- Sun, J., Bin, Y., Philip, C., and Shao, Q.L., 2012, Lipase Catalysed Transesterification of Coconut Oil with Fusel Alcohols in Solvent-Free System, *Food. Chem.*, 134, 89-94.
- Syah, A.N.A., 2006, *Biodiesel Jarak Pagar: Bahan Bakar Alternatif yang Ramah Lingkungan*, Agromedia Pustaka, Jakarta.
- Vasudevan, P.T., Briggs M., 2008, Biodiesel Production-Current State of The Art and Challenges, *J Ind Microbiol. Biotechnol. A.*, 35, 421-430