

DAFTAR PUSTAKA

- Al Juhaimi, F., Babiker, E. E., Ghafoor, K., dan Ozcan, M. M., 2016. Fatty Acid Composition of Three Different Moringa Leave Oils, *Riv. Ital. delle Sostanze Grasse*, XCIII, 111-113.
- Anwar, C., dan Salima, R., 2016, Perubahan Rendemen dan Mutu Virgin Coconut Oil (VCO) Pada Berbagai Kecepatan Putar dan Lama Waktu Sentrifugasi, *Jurnal Teknotan.*, 10(2), 51–60.
- Ariviani, S., Raharjo, S., Anggraini, S., dan Naruki, S., 2015, Formulasi Dan Stabilitas Mikroemulsi O/W dengan Metode Emulsifikasi Spontan Menggunakan VCO dan Minyak Sawit Sebagai Fase Minyak: Pengaruh Rasio Surfaktan-Minyak, *Agritech*, 35(1), 27 - 34.
- Assunção, M. L., Ferreira, H. S., Dos Santos, A. F., Cabral, C. R., dan Florêncio, T. M. M. T., 2009, Effects of Dietary Coconut Oil on The Biochemical and Anthropometric Profiles of Women Presenting Abdominal Obesity, *Lipids*, 44(7), 593–601.
- Badan Standarisasi Nasional, 2008, *Standar Mutu Minyak Kelapa Murni*, SNI 7381:2008, BSN, Jakarta
- Bawalan, D. D., dan Chapman, K. R., 2006, *Virgin Coconut Oil: Production Manual for Micro- and Village-Scale Processing*, Thammada Press Co. Ltd, Bangkok.
- Bertolini, A. C., Siani, A. G., dan Grosso, C. R. F., 2001, Stability of Monoterpenes Encapsulated in Gum Arabic by Spray-Drying, *J. Agric. Food Chem.*, 49(2), 780–785.
- Chakrabarti, S., 2010. *Probing Ingredient Functionalities in Food Systems Using Rheological Methods di dalam Ingredient Interactions: Effects on Food Quality, Second Edition*, CRC Press, Boca Raton.
- Cheng, M., Zeng, G., Huang, D., Yang, C., Lai, C., Zhang, C., dan Liu, Y., 2017. Advantages and Challenges of Tween 80 Surfactant-Enhanced Technologies for the Remediation of Soils Contaminated with Hydrophobic Organic Compounds. *Chemical Engineering Journal*, 314, 98–113.
- Chronakis, I. S., 1998, On The Molecular Characteristics, Compositional Properties, and Structural-Functional Mechanisms of Maltodextrins: A review, *Crit. Rev. Food Sci. Nutr.*, 38(7), 599–637.
- Darna, A. R. P., Timbuleng, E. M. L. M. T., Azzahroh, N., Khasanah, P. U., Arofah, G. E., dan Kartikasari, M. N. D., 2019, Peri Dalor (Permen Jeli Daun Kelor) : Inovasi Permen Kaya Antioksidan Sebagai Solusi Kesehatan, *Jurnal Semar.*, 8(1), 35–39.
- Debmandal, M., dan Mandal, S., 2011, Coconut (*Cocos nucifera* L.: *Arecaceae*): In Health Promotion and Disease Prevention, *Asian Pac. J. Trop.*, 4(3), 241–247.

- Dewi, A. K., dan Satibi, L., 2009, Kajian Pengaruh Temperatur Pengeringan Semprot (*Spray Dryer*) Terhadap Waktu Pengeringan dan Rendemen Bubuk Santan Kelapa (*Coconut Milk Powder*), *Konversi*, 4, 25–31.
- Diantoro, A., Rohman, M., Budiarti, R., Palupi, H. T., Pertanian, F., dan Yudharta, U., 2015, Pengaruh Penambahan Ekstrak Daun Kelor (*Moringa Oleifera L.*) Terhadap Kualitas Yoghurt, *Jurnal Teknologi Pangan*, 6(2), 59 - 66.
- Djafar, F., dan Supardan, M. D., 2019, Pengaruh Penyalut Maltodekstrin Terhadap Produk Mikrokapsul Minyak Jahe Dengan Teknik Spray Drying, *J. Litbang Ind.*, 9, 1–7.
- Elfiyani, R., Amalia, A., dan Pratama, S. Y., 2017, Effect of Using the Combination of Tween 80 and Ethanol on the Forming and Physical Stability of Microemulsion of Eucalyptus Oil as Antibacterial, *J. Young Pharm.*, 9(1), S1–S4.
- Fatima, S., Masriani, dan Salsabila, S., 2019, Penambahan Konsentrasi Ekstrak Jahe Merah (*Zingiber Officinale Rocs*) Terhadap Uji Organoleptik Kelapa Dalam, *J-PEN Borneo*, 2(1), 1 - 7.
- Ferrari, C. C., Marconi Germer, S. P., Alvim, I. D., dan de Aguirre, J. M., 2013, Storage Stability of Spray-Dried Blackberry Powder Produced with Maltodextrin or Gum Arabic, *Dry. Technol.*, 31 (4), 470–478.
- Franjione, J., dan Niraj, V., 2003, *The Art and Science of Microencapsulation*, Botanical Garden Press, New York.
- Fuglie, L. J., 2001, Combating Malnutrition with Moringa, Church World Service, Senegal.
- Ghani, N. A. A., Channip, A. A., Chok Hwee Hwa, P., Ja'afar, F., Yasin, H. M., dan Usman, A., 2018, Physicochemical Properties, Antioxidant Capacities, and Metal Contents of Virgin Coconut Oil Produced by Wet and Dry Processes, *Food Sci. Nutr.*, 6(5), 1298–1306.
- Gharsallaoui, A., Roudaut, G., Chambin, O., Voilley, A., dan Saurel, R., 2007, Applications of Spray-Drying in Microencapsulation of Food Ingredients: An Overview, *Int. Food Res. J.*, 40(9), 1107–1121.
- Gibbs, B. F., Kermasha, S., Alli, I., dan Mulligan, C. N., 1999, Encapsulation in The Food Industry: A Review, *Int. J. Food Sci. Nutr.*, 50(3), 213–224.
- Gopalakrishnan, L., Doriya, K., dan Kumar, D. S., 2016, Moringa Oleifera: A Review on Nutritive Importance and Its Medicinal Application, *Food Sci. Hum. Wellness.*, 5(2), 49–56.
- Gugule, S., dan Fatimah, F., 2019, Karakterisasi *Virgin Coconut Oil* (VCO) Rempah, *Chem. Prog.*, 3(2), 104–110.
- Hakeem, S. A. El, Ali, N. A., Saeed, S. A. M., Ibrahim, S. E., Alamri, S. M.,

- Moneim, A., dan Sulieman, E., 2020, Effect of Moringa Oleifera Leaf and Flax Seed on Physicochemical and Sensory Characteristics of Chicken Burger, *Biosci.*, 13(3), 1055–1062.
- Harlinanda, S. N., 2017, Optimasi Formulasi Krim Antioksidan Vitamin E (Dl-Alfa Tokoferol Asetat) Dengan VCO (*Virgin Coconut Oil*), *Skripsi*, Fakultas Ilmu Kesehatan, Universitas Muhammadiyah Malang, Malang.
- Harris, M., Hutchins, A., dan Fryda, L., 2017, The Impact of Virgin Coconut Oil and High-Oleic Safflower Oil on Body Composition, Lipids, and Inflammatory Markers in Postmenopausal Women, *J. Med. Food*, 20(4), 345–351.
- Hartayanie, L., Adriani, M., dan Lindayani, 2014, Karakteristik Emulsi Santan dan Minyak Kedelai yang Ditambah Gum Arab dan Sukrosa Ester, *J. Teknol. dan Industri Pangan*, 25(2), 152 - 157.
- Hasenhuettle. L., dan Hartel, R. W., 1997, *Food Emulsifiers and Their Applications*, Chapman and Hall, New York.
- Hidayah, N., 2016, Perbandingan Berbagai Teknik Mikroenkapsulasi Pakan dalam Menghasilkan Daging Sapi Sehat, *Proceeding UMM SeNas Pro 2016*, 143–151.
- Hofman, D. L., van Buul, V. J., dan Brouns, F. J., 2016, Nutrition, Health, and Regulatory Aspects of Digestible Maltodextrins, *Crit. Rev. Food Sci. Nutr.*, 56(12), 2091–2100.
- Huang, X., Liang, K. hong, Liu, Q., Qiu, J., Wang, J., dan Zhu, H., 2020, Superfine Grinding Affects Physicochemical, Thermal and Structural Properties of Moringa Oleifera Leaf Powders, *Ind. Crops. Prod.*, 151, 112472.
- Indayanti D., 2014, Uji Stabilitas Fisik dan Komponen Kimia Pada Minyak Biji Jinten Hitam (*Nigella sativa L.*) Dalam Bentuk Emulsi Tipe Minyak Dalam Air Menggunakan GC-MS, *Skripsi*, Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Islam Negeri Syarif Hidayatullah, Tangerang.
- Indirasvari, K. S. N., Permana, I. D. G. M., dan Suter, I. K., 2018, Stabilitas Mikroemulsi VCO Dalam Air Pada Variasi HLB, *Itepa*, 7(4), 184–191.
- Kandansamy, K., dan Somasundaram, P.D., 2012, Microencapsulation of Colors by Spray Drying: A Review, *Int. J. Food Eng.*, 8 (2), 1–15.
- Kappally, S., Shirwaikar, A., dan Shirwaikar, A., 2016, Coconut Oil – A Review of Potential Applications, *Hygeia J. D. Med.*, 7, 34–41.
- Kar, S., Mukherjee, A., Ghosh, M., dan Bhattacharyya, D. K., 2013, Utilization of Moringa Leaves as Valuable Food Ingredient in Biscuit Preparation, *Int. J. Appl. Sci.*, 1(1), 29–37.
- Karuniawan, A., 2007, *Formulasi Emulsi Virgin Coconut Oil/VCO Dengan*

Modifikasi Emulgator Pada HLB 6, *Skripsi*, Fakultas Matematika Dan Ilmu Pengetahuan Alam, Universitas Islam Indonesia, Yogyakarta.

Kasolo, J. N., Bimenya, G. S., Ojok, L., Ochieng, J., dan Ogwal-Okeng, J. W., 2010, Phytochemicals and Uses of Moringa Oleifera Leaves in Ugandan Rural Communities, *J. Med. Plant Res.*, 4(9), 753–757.

Khalafalla, M. M., Abdellatef, E., Dafalla, H. M., Nassrallah, A. A., Aboul-Enein, K. M., Lightfoot, D. A., El-Deeb, F. E., dan El-Shemy, H. A., 2010, Active Principle From Moringa Oleifera Lam Leaves Effective Against Two Leukemias and A Hepatocarcinoma, *Afr. J. Biotechnol.*, 9(49), 8467–8471.

Khan, B. A., Akhtar, N., Khan, H. M. S., Waseem, K., Mahmood, T., Rasul, A., Iqbal, M., dan Khan, H., 2011, Basics of pharmaceutical emulsions: A review, *Afr. J. Pharmacy Pharmacol.*, 5(25), 2715–2725.

Krisnadi, D. A., 2015, *Kelor Super Nutrisi*, Kelorina.com, Blora.

Kusumowardani, R. R., 2010, Optimasi Komposisi Surfaktan Tween 80 dan Span 80 Dalam Virgin Coconut Oil: Aplikasi Desain Faktorial, *Skripsi*, Fakultas Farmasi Universitas Sanata Darma, Yogyakarta.

Lahmudin, A., 2006, Proses Pembuatan Tepung Putih Telur dengan Pengering Semprot, *Skripsi*, Fakultas Peternakan, Institut Pertanian Bogor, Bogor.

Laohasongkram, K., Mahamaktudsanee, T., dan Chaiwanichsiri, S., 2011, Microencapsulation of Macadamia Oil by Spray Drying, *Procedia Food Sci.*, 1, 1660–1665.

Leone, A., Spada, A., Battezzati, A., Schiraldi, A., Aristil, J., dan Bertoli, S., 2015, Cultivation, Genetic, Ethnopharmacology, Phytochemistry and Pharmacology of Moringa Oleifera Leaves: An Overview, *Int. J. Mol. Sci.*, 16(6), 12791–12835.

Marcus, J. B., 2019, *Aging, Nutrition and Taste*, Academic Press, Highland Park.

Marhaeniyanto, E., Rusmiwari, S., dan Susanti, S., 2015, Pemanfaatan Daun Kelor Untuk Meningkatkan Produksi Ternak Kelinci New Zealand White, *Buana Sains*, 15(2), 119–126.

^aMarina, A. M., Che Man, Y. B., dan Amin, I., 2009, Virgin Coconut Oil: Emerging Functional Food Oil, *Trends Food Sci. Technol.*, 20(10), 481–487.

^bMarina, A. M., Che Man, Y. B., Nazimah, S. A. H., dan Amin, I., 2009, Chemical Properties of Virgin Coconut Oil, *J. Am. Oil Chem. Soc.*, 86(4), 301–307.

Masruriati, E., 2014, Optimasi Setil Alkohol dan Tween 80 Dalam Krim Minyak Atsiri Daun Cengkeh (*Eugenia Caryophyllata*) Terhadap Aktivitas Antibakteri, *Jurnal Farmasetis*, 3(2), 55 - 62.

McClements, D. J., 2005., *Food Emulsions: Principles, Practice, and Techniques*. CRC Press, Boca Raton.

- McClements, D. J., dan Decker, E. A., 2000, Lipid Oxidation in Oil-in-Water Emulsions: Impact of Molecular Environment on Chemical, *J. Food Sci.*, 65(8), 1270–1282.
- Mohamed, A. I. A., Sultan, A. S., Hussein, I. A., dan Al-Muntasheri, G. A., 2017, Influence of Surfactant Structure on the Stability of Water-in-Oil Emulsions under High-Temperature High-Salinity Conditions, *J. Chem.*, 2017, 1 - 11.
- Murlan, Ruwiah, Suardi, S., Lestari, W., dan Pratiwi, N. L., 2015, Pengetahuan , Sikap Dan Perilaku Ibu Balita Dalam Pada Makanan Lokal Untuk Peningkatan Gizi Balita di Kabupaten Buton, *Buletin Penelitian Sistem Kesehatan*, 18(3), 257–265.
- Nakama, Y., 2017, *Cosmetic Sciences and Technology*, Elsevier Ltd., Cambridge.
- Nevin, K. G., dan Rajamohan, T., 2010, Effect of topical application of virgin coconut oil on skin components and antioxidant status during dermal wound healing in young rats, *Skin Pharmacol. Physiol.*, 23(6), 290–297.
- Nganji, M. U., Lewu, L. D., Jawang, U. P., Killa, Y. M., dan Tarigan, S. I., 2021, Pemanfaatan Daun Kelor Sebagai Minuman Herbal Dalam Rangka Mencegah Penyebaran Covid-19, *Jurdimas.*, 4(2), 189–196.
- Paliwal, R., Sharma, V., dan Pracheta, 2011, A Review on Horse Radish Tree (*Moringa oleifera*): A Multipurpose Tree with High Economic and Commercial Importance, *Asian J. Biotechnol.*, 3(4), 317–328.
- Parrotta, J. A., 1993, *Moringa oleifera Lam. Reseda, Horseradish Tree. Moringaceae, Horseradish Tree Family*, USDA Forest Service, International Institute of Tropical Forestry.
- Perdani, C. G., Pulungan, M. H., dan Karimah, S., 2019, Pembuatan Virgin Coconut Oil (VCO), Kajian Suhu Inkubasi dan Konsentrasi Enzim Papain Kasar, *Industria*, 8(3), 238–246.
- Petrović, G.M., Stojanović, G.S., dan Radulović, N.S., 2010, Encapsulation of cinnamon oil in β -cyclodextrin, *J. Med. Plants Res.*, 4, 1382–1390
- Pinalia, A., Prianto, B., dan Puspitasari, R. R., 2016, Optimasi Proses Pengeringan Semprot untuk Memperkecil Ukuran Partikel AP Hingga $\leq 38 \mu\text{M}$, *Proceeding Seminar Nasional IPTEK Penerbangan dan Antariksa XX-2016*, 161 - 170.
- Popoola, J. O., dan Obembe, O. O., 2013, Local knowledge, Use Pattern and Geographical Distribution of *Moringa Oleifera Lam.* (Moringaceae) in Nigeria, *J. Ethnopharmacol.*, 150(2), 682–691.
- Rahmawati, E., dan Khaerunnisya, N., 2018, Pembuatan VCO (Virgin Coconut Oil) dengan Proses Fermentasi dan Enzimatis, *J. Food Culinary*, 1(1), 1- 6.
- Raghavendra, S. N., dan Raghavarao, K. S. M. S., 2010, Effect of Different Treatments for The Destabilization of Coconut Milk Emulsion, *J. Food Eng.*,

97(3), 341–347.

Riehm, D. A., Rokke, D. J., Paul, P. G., Lee, H. S., Vizanko, B. S., dan McCormick, A. V., 2017, Dispersion of Oil Into Water Using Lecithin-Tween 80 Blends: The Role of Spontaneous Emulsification, *J. Colloid Interface Sci.*, 487, 52–59.

Rowe, R. C., Sheskey, P. J., dan Quinn, M. E., 2009, *Handbook of Pharmaceutical Excipients, Edisi 6*, Pharmaceutical Press, Washington D.C.

Sahin, S., dan Sumnu, S. G., 2006, *Physical Properties of Foods*, Springer Science and Bussiness Media, New York.

Sakaia, T., Kamogawa, K., Harusawa, F., Momozawa, N., Sakai, H., dan Abe, M., 2001, Influence of Oil Droplet Size on Flocculation/Coalescence in Surfactant-Free Emulsion, *Stud. Surf. Sci. Catal.*, 132, 157–160.

Seneviratne, K. N., dan Sudarshana, D. M., 2008, Variation of Phenolic Content in Coconut Oil Extracted by Two Conventional Methods, *Int. J. Food Sci.*, 43(4), 597–602.

Sipahelut, S. G., 2011, Sifat Kimia dan Organoleptik Virgin Coconut Oil Hasil Fermentasi Menggunakan Teknik Pemecah Rantai, *Jurnal Agroforestri*, 6(1), 57–64.

Srikanth, V. S., Mangala, S., dan Subrahmanyam, G., 2014, Improvement of Protein Energy Malnutrition by Nutritional Intervention with Moringa Oleifera among Anganwadi Children in Rural Area in Bangalore, India, *Int. J. Sci. Study*, 2(1), 32–35.

Suaniti, N., Manurung, M., dan Hartasiwi, N., 2014, Uji Sifat Virgin Coconut Oil (VCO) Hasil Ekstraksi Enzimatis Terhadap Berbagai Produk Minyak Kelapa Hasil Publikasi, *Jurnal Kimia*, 8(2), 171–177.

Supriningsih, D., 2010, Pembuatan Metil Ester Sulfonat (MES) Sebagai Surfaktan Untuk Enhanced Oil Recovery (EOR), *Tesis*, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Indonesia, Depok.

Supriyadi, dan Rujita, A. S., 2013, Karakteristik Mikro kapsul Minyak Atsiri Lengkuas dengan Maltodekstrin sebagai Enkapsulasi, *J. Teknol. dan Industri Pangan*, 24(2), 201 - 208.

Sutrisno L., 201, Efek Pemberian Ekstrak Methanol Daun Kelor (*Moringa oleifera*) Meningkatkan Apoptosis pada Sel Epitel Kolon Tikus (*Rattus norvegicus*) Wistar yang di Induksi 7,12 Dimetibenz (a) Atrasen (DMBA), *Skripsi*, Universitas Brawijaya, Malang.

Susanto, T., 2012, Kajian Metode Pengasaman dalam Proses Produksi Minyak Kelapa Ditinjau Dari Mutu Produk dan Komposisi Asam Amino Blondo, *J. Dinamika Penelit. Ind.*, 23(2), 124–130.

- Swasono, A. W. P., Sianturi, P. D. E. S., dan Masyithah, Z., 2012, Sintesis Surfaktan Alkil Poliglikosida Dari Glukosa dan Dodekanol dengan Katalis Asam, *Jurnal Teknik Kimia USU*, 1(1), 5–9.
- Syamsuni, 2005, *Farmasetika Dasar dan Hitungan Farmasi*, Penerbit Buku Ketokteran EGC, Jakarta.
- Tipvakarnkoon, T., 2009, Material Sciences Properties of Coconut Milk, Cheese, and Emulsions, *Dissertation*, Institute of Food Rheology, Technology University of Berlin, Berlin.
- Utomo, H., dan Ana, I. D., 2021, *Pengalaman Melembagakan Inovasi*, Gadjah Mada University Press, Yogyakarta.
- Vázquez-Ovando, A., Betancur-Ancona, D., dan Chel-Guerrero, L., 2013, Physicochemical and Functional Properties of A Protein-Rich Fraction Produced by Dry Fractionation of Chia Seeds (*Salvia hispanica L.*), *CyTA J. Food*, 11(1), 75–80.
- Velasco, J., Dobarganes, C., dan Marques-Ruiz, G., 2003, Variables Affecting Lipid Oxidation in Dried Microencapsulated Oils, *Grasas Aceitis*, 54, 304 - 314.
- Vergara-Jimenez, M., Almatrafi, M. M., dan Fernandez, M. L., 2017, Bioactive Components in Moringa Oleifera Leaves Protect Against Chronic Disease. *Antioxidants*, 6(4), 1–13.
- Venkatesan, P., Manavalan, R., dan Valliappan, K., 2009, Microencapsulation: A Vital Technique in Novel Drug Delivery System, *J. Pharm. Sci. & Res.*, 1, 26-35.
- Wahyudi, M. A., dan Septaryanto, J., 2020, Pelatihan Pemanfaatan Daun Kelor Menjadi Kelor Celup sebagai Minuman Kesehatan Tubuh di Gili Timur, Bangkalan, *J. Pengabd. Kpd. Masy.*, 1(01), 37–46.
- Widowati, I., Efiyati, S., dan Wahyuningtyas, S., 2014, Uji Aktivitas Antibakteri Ekstrak Daun Kelor (*Moringa oleifera*) terhadap Bakteri Pembusukan Ikan Segar, *Jurnal Penelitian Mahasiswa UNY*, IX, 146–157.
- Wijaya, P. C. H., dan Suharta, S., 2019, Ragam Enkapsulasi Perisa Pangan, *Food Review Indonesia*, 14(3), 50–54.
- Wong, Y. C., dan Hartina, H., 2014, Virgin Coconut Oil Production by Centrifugation Method, *Orient. J. Chem.*, 30(1), 237–245.
- Yuliani, S., Desmawarni, Harimurti, N., dan Yuliani, S. S., 2007, Pengaruh Laju Alir Umpan dan Suhu Inlet *Spray Drying* Pada Karakteristik Mikrokapsul Oleoresin Jahe, *J. Pascapanen*, 4(1), 18–26.
- Yuliani, S. H., Putri, D. C. A., dan Virginia, D. M., 2020, *Kajian Risiko Peracikan Obat*, Sanata Dharma University Press, Yogyakarta.

- Yulianti, R., 2008, Pembuatan Minuman Jeli Daun Kelor (*Moringa oleifera* L.) Sebagai Sumber Vitamin C dan β -Karoten, *Skripsi*, Fakultas Pertanian, Institut Pertanian Bogor, Bogor.
- Yuni Hendrawati, T., Meta Sari, A., Iqbal Syauqi Rahman, M., Ariatmi Nugrahani, R., dan Siswahyu, A., 2019, *Microencapsulation Techniques of Herbal Compounds for Raw Materials in Food Industry, Cosmetics and Pharmaceuticals* di dalam *Microencapsulation - Processes, Technologies and Industrial Applications*, InTechOpen, London.
- Zhang, R., Wang, Y., Tan, L., dan Zhang, H. Y. M., 2020, Analysis of Polysorbate 80 and Its Related Compounds by RP-HPLC with ELSD and MS Detection, *J. Chromatogr. Sci.*, 50(7), 598–607.
- Zhou, W., dan Zhu, L., 2005, Distribution of Polycyclic Aromatic Hydrocarbons in Soil–Water System Containing A Nonionic Surfactant, *Chemosphere*, 60, 1237-1245.
- Zuidam, N. J., dan Shimoni, E., 2010, *Overview of Microencapsulates for Use in Food Products and Processes* di dalam *Encapsulation Technologies for Active Food Ingredients and Food Processing*, Springer, New York.