



## DAFTAR PUSTAKA

- Amalia, R., 2013, Pengaruh Jenis dan Konsentrasi Vitamin Terhadap Pertumbuhan dan Perkembangan Biji *Dendrobium laxiflorum* secara In vitro. Surabaya, *Jurnal Sains dan Seni Pomits*, 1(1), 12-19.
- Ameilia, I., dan Herdyastuti, N., 2017, Kitin Dari Cangkang Rajungan Yang Diperoleh Secara Enzimatik Pada Tahap Deproteinasi, *UNESA Journal of Chemistry*, 6(2), 44-51.
- Ali, S.M., dan Yosipovitch, G., 2013, Skin pH: From Basic Science to Basic Skin Care, *Acta Derm Venereol*, 93(1), 261.
- Azeem, A., Rizwan, M., Ahmad, F.J., Iqbal, Z., Khar, R.K., dan Aqil, M., 2009, Nanoemulsion Components Screening and Selection: a Technical Note, *PharmSciTech*, 10, 69-76.
- Azevedo, M. A., Bourbon, A. I., Vicente, A. A., dan Cerqueira, M. A., 2014, Alginate/Chitosan Nanoparticles For Encapsulation And Controlled Release Of Vitamin B2, *International Journal of Biological Macromolecules*, 71, 141-146.
- Basuki, B.R., dan Sanjaya, I.G.M., 2009, Sintesis Ikat Silang Kitosan Dengan Glutaraldehid serta Identifikasi Gugus Fungsi Dan Derajat Deasetilasinya, *Jurnal Ilmu Dasar*, 10(1), 93-102.
- Basttaman, 1989, *Studies On Degradation And Extraction Of Chitin And Chitosan From Prawn Shells*, The Queen University of Belfast, England.
- Bezerra, M.A., Santelli, R.E., Oliveira, E.P., Villar, L.S., dan Escaleira, L.A., 2008, Response Surface Methodology as a Tool For Optimization Analytical Chemistry, *Talanta*, 76, 965-977.
- Bhatt, P., dan Madhav, S., 2011, A Detailed Review On Nanoemulsion Drug Delivery System, *International Journal of Pharmaceutical Sciences and Research*, 2(9), 2292- 2298.
- Cahyono, E., 2015, Produksi Glukosamin Dengan Metode Hidrolisis Bertekanan Sebagai Bahan Penunjang Kesehatan Sendi, *Tesis*, Institut Pertanian Bogor, Bogor.
- Cho, Y.H., Kim, S., Bae, E.K., dan Mok, C.K., 2008, Formulation of a Cosurfactant-Free O/W Microemulsion Using Nonionic Surfactant Mixture, *Int. J. Food Sci.*, 73(1), 115.
- Date, A.A., Desai, N., Dixit, R., dan Nagarsenker, M., 2010, Self Nanoemulsifying Drug Delivery System: Formulation Insight Applications and Advances, *Nanomed*, 5(10), 1595-1616.



Deringer, G., dan R. Suich, 2002, Simultaneous Optimization of Several Response Variables, *J. Qual. Technol.*, 12(4), 214-219.

Dewi, R., Wardana, I., dan Hamidi, N., 2012, Pengaruh Daya Penyinaran Gelombang Mikro Terhadap Karakteristik Pembakaran Droplet Minyak Jarak Pagar, *Jurnal Rekayasa Mesin*, 3(2), 305-316.

Dewi, P.P.K., 2021, Optimasi Pembuatan Nanoemulsi Kitosan Dari Limbah Kulit Udang Dengan Metode Permukaan Respon, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Dompepein, E.J., 2017, Isolasi dan Identifikasi Kitin dan Kitosan dari Kulit Udang Windu (*Panaeus monodon*) Dengan Spektroskopi Inframerah, *Majalah BIAM*.

Duarte, M., Ferreira, M., Marvão, M., & Rocha, J., 2005, An Optimized Method To Determine The Degree Of Acetylation Of Chitin And Chitosan By FTIR Spectroscopy, *Int J Biol Macromol*, 31, 5-6.

Du, Q., Wang H, dan Xie J., 2011, Thiamine (Vitamin B1) Biosynthesis and Regulation: A Rich Source Of Antimicrobial Drug Targets, *International Journal of Biological Science*, 7(1), 41-52.

Fitzpatrick, T. B., dan Chapman, L.M., 2020, The Importance Of Thiamine (Vitamin B1) In Plant Health: From Crop Yield To Biofortification, *J. Biol. Chem.*, 295(34), 12002–12013.

Fudholi, A., 2013, *Disolusi dan Pelepasan Obat In-vitro*, Pustaka Pelajar, Yogyakarta.

Gupta, P.K., Pandit, J.K., Kumar, A., Swaroop, P., dan Gupta, S., 2010, Pharmaceutical Nanotechnology Novel Nanoemulsion: High Emulsification Preparation, Evaluation, and Application, *The Pharma Research*, 3: 117-138.

Gershanik, T., dan Benita, S., 2000, Self-Dispersing Lipid Formulation for Improving Oral Absorption of Lipophilic Drugs, *European Journal Pharmaceutics and Biopharmaceutics*, 50(1), 179-188.

Gunawan, L. W., 2004, *Budi Daya Anggrek*, Penebar Swadaya, Jakarta.

Gursoy, R.N. dan Benita, S., 2004, Self-Emulsifying Drug Delivery System (SEDDS) for Improved Oral Delivery of Lipophilic Drugs, *Biomed and Pharmacother*, 58, 173-182.

Handayani, F.S., Nugroho, B.H., dan Munawiroh, S.Z., 2018, Optimasi Formulasi Nanoemulsi Minyak Biji Anggur Energi Rendah dengan D-Optimal Mixture Design (DMD), *Jurnal Ilmiah Farmasi*, 14(1), 17-34.



- Harding, D. dan Sashiwa, H., 2015, Chitin and Chitosan Preparation from Marine Sources. Structure, *Properties and Applications. Mar Drug*, 13(3):1134-1174.
- Irianto, H.E., dan Muljanah, I., 2011, Proses dan Aplikasi Nanopartikel Kitosan Sebagai Penghantar Obat, *Squalen*, 6(1), 77-84.
- Islem, Y., Marguerite, R., 2015, Chitin And Chitosan Preparation From Marine Sources. Structure, Properties And Applications, *Mar. Drugs*, 13, 1133-1174.
- Jafari, S.M., 2018, *Nanoencapsulation of Food Bioactive Ingredients: Principles and Application*, Elsevier Science, Saint Louis.
- Jaiswal, P., Kumar, P., dan Singh, V.K., 2014, Areca catechu L.: A Valuable Medicine Against Different Health Problems, *Research Journal of Medicinal Plant* 5(2), 145–152.
- Jia, Z., D. Shen, W., dan Xu, 2005, Synthesis And Antibacterial Activities Of Quaternary Ammonium Salt Of Chitosan, *Carbohydr. Res.*, 333, 1-6.
- Kale, S.N., dan Deore, S.L., 2017, Microemulsion and Nanoemulsion A Review, *Sistematic Review in Pharmacy*, 8(1), 39-47
- Kashyap, P.L., Xiang, X., dan Heiden, P., 2015, Chitosan Nanoparticle Based Delivery System For Sustainable Agriculture, *International Journal of Biological Macromolecules*, 77, 36-51.
- Kataouzian, I., dan Jafari, S. M., 2017, Nano-Encapsulation As A Promising Approach For Targeted Delivery And Controlled Release Of Vitamins, *Trends in Food Science & Technology*, 53(1), 34-48.
- Kenneth, K., 1986, *Principles of combustion*, John Wiley & Sons Inc, New Jersey.
- Keshani, S., Chuah, A.L., Nourouzi, M.M., Russly, A.R., dan Jamilah, B., 2010, Optimization Of Concentration Process On Pomelo Fruit Juice Using Response Surface Methodology (RSM), *International Food Research Journal*, 17, 733–742.
- Khairunnisa, dan Harsono, T., 2014, Pengaruh Pemberian Media Tanam Dan Zpt Tiamin Terhadap Pertumbuhan Gandaria (*Bouea oppositifolia*), *Prosiding Seminar Biologi dan Pembelajarannya*, Universitas Negeri Medan.
- Kurniawan, Y.A., 2016, Analisis Karakteristik Termal Reaktor Gelombang Mikro Untuk Pirolisis Berbahan Baku Limbah Sisa Makanan, *Skripsi*, Jurusan Teknik Mesin Fakultas Teknik UNNES, Semarang.



Kusumawardhani, R.F., 2018, Optimasi Pembuatan Nanoemulsi Asap Cair Dengan Metode Respon Permukaan Dan Uji Daya Hambat Terhadap Jamur Aspergilus sp., *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Lawrence, M.J., dan Ress, G.D., 2000, Microemulsion-based Media as Novel Drug Delivery System, *Adv. Drug Delivery Rev.*, 45(1), 89-121.

Li, Q., Dunn, E.T., Grandmaison, E.W., dan Goosen M.F.A., 1992, Applications And Properties Of Chitosan, *J. Bioactive and Compatible Polym*, 7, 370-397.

Liana, N. W. M., Maharani, T., Sutharini, M. R., Wijayanti, N. P. A. D., dan Astuti, K. W., 2017, Karakteristik Nanoemulsi Ekstrak Buah Manggis (Garciana mangostana L.), *Jurnal Farmasi Udayana*, 6(1), 6-10.

Limarni, L., N. Akhir, I. Suliansyah, dan A. Riyadi, 2008, Pertumbuhan Bibit Anggrek (Dendrobium Sp.) Dalam Kompot Pada Beberapa Jenis Media Tanam Dan Konsentrasi Vitamin B1, *Jurnal Jerami*, 1(1), 38 – 45.

Mahatmanti, F. W., Sugiyo, W., dan Sunarto, W., 2007, Sintesis Kitosan dan Pemanfaatannya sebagai Anti Mikrobia Ikan Segar, *FMIPA Unnes*, 101-111.

Maulana, S., Fadli, A., dan, Drastinawati, 2017, Kinetika Reaksi Demineralisasi Isolasi Kitin dari Cangkang Ebi, *Jom Fteknik*, 4(2), 1-5.

Mason, T. G., Wilking, J.N., Meleson, K., Chang, C.B., dan Graves, S.M., 2006, Nanoemulsion: Formation, Structure, and Physical Properties, *J. Physic*, 18, 635-666.

Mat, B.Z., 1995, *Chitin and Chitosan*, University Kebangsaan Malaysia, Kuala Lumpur.

Mekawati, Fachriyah, E. dan Sumardjo. D., 2000, Aplikasi Kitosan Hasil Transformasi Kitin Limbah Udang (*Peneus merguiensis*) Untuk Adsorpsi Ion Logam Timbal, *Jurnal Sains dan Matematika FMIPA Undip Semarang*, 8, 51-54.

Mishra R.K., G.C. Soni, R.P., 2014, Review Article: On Nanoemulsion, *World Journal of Pharmacy and Pharmaceutical Science*, 3(9), 258-274.

Montgomery, D.C., 1991, *Design and Analysis of Experiments*, Jhon Wiley and Sons, Inc., New Jersey.

Montgomery, D.C., 2005, *Design and Analysis of Experiment*, Jhon Wiley and Son Inc., New Jersey.

Montgomery, D.C., 2015, *Design and Analysis of Experiments*, John Wiley and Sons, Inc., New Jersey.



Nurmala, N.A., Susatyo, E.B., dan Mahatmanti, F.W., 2018, Sintesis Kitosan dari Cangkang Rajungan Terkomposit Lilin Lebah dan Aplikasinya Sebagai Edible Coating Pada Buah Stroberi, *Indo. J. Chem. Sci.*, 7(3), 277-284.

Nuri, W., 2010, Pemecahan Emulsi Minyak Mentah Indonesia Menggunakan Proses Gelombang Mikro, *Tesis*, Fakultas Teknik UNDIP, Semarang.

Noventa, D.R., Ramadiana, S., Rugayah, dan Yusnita, 2014, Pengaruh Benziladenin dan Vitamin B Terhadap Pertumbuhan Bibit Anggrek *Dendrobium*, *J. Agrotek. Tropika*, 2(3), 364-368.

Pietrangeli, G. and Quintero, L., Jones, T., dan Darugar, Q., 2014, Treatment of Water in Heavy Crude Oil Emulsion With Innovative Microemulsion Fluids, *Society of Petroleum Engineers-SPE Heavy and Extra Heavy Oil Conference*, Latin America.

Patel, J., Kevin, G., Patel, A., Raval, M., dan Sheth N., 2013, Design and Development of A Self-nanoemulsifying Drug DeliverySystem for Telmistran for Oral Drug Delivery, *International Jornal of Pharmaceutical Investigation*, 1(2), 112-118.

Pourcel, L., Moulin, M., dan Fitzpatrick, T.B., 2013, Examining Strategies to Facilitate Vitamin B1 Biofortification of Plants by Genetic Engineering, *Frontier in Plant Science*, 12(4), 160-168.

Rahayu, L.H., dan Purnavita, S., 2007, Optimasi Pembuatan Kitosan dari Kitin Limbah Cangkang Rajungan (*Portunus pelagicus*) Untuk Adsorben Logam Merkuri, *Reaktor*, 11(1), 45-49.

Rachmawati, H., Budiputra, D.K., dan Mauludin, R., 2015, Curcumin Nanoemulsion foe Transdermal Application: Formulation and Evaluation, *Drug Development and Industrial Pharmacy*, 41(4), 560-566.

Rahayu, P., dan Khabibi, K., 2016, Adsorpsi Ion Logam Nikel (II) oleh Kitosan Termodifikasi Tripolifosfat, *Jurnal Kimia Sains dan Aplikasi*, 19(1), 21-26.

Ramli, R. A., Laftah, W. A., dan Hashim, S., 2013, Core–shell polymers: a review, *RSC Advances*, 3(36), 1554.

Rochima, E., 2007, Karakterisasi Kitin dan Kitosan Asal Limbah Rajungan Cirebon Jawa Barat, *Buletin Teknologi Hasil Perikanan*, 10(1), 32-38.

Rowe, R.C., Sheskey, P.J., dan Quinn, M.E., 2009, *Handbook of Pharmaceutical Excipient 6<sup>th</sup> Edition*, Pharmaceutical Press, London.

Salami, L., 1998, Pemilihan Metode Isolasi Kitin Dan Ekstraksi Kitosan Dari Limbah Kulit Udang Windu (*Peneaus Monodon*) Dan Aplikasinya Sebagai



Bahan Koagulasi Limbah Cair Industri Tekstil, *Skripsi*, Jurusan Kimia FMIPA UI, Jakarta.

Santoso, D., Karnan, Japa, L., dan, Raksun, 2016, Karakteristik Bioekologi Rajungan (Portunus Pelagicus) Di Perairan Dusun Ujung Lombok Timur, *Jurnal Biologi Tropis*, 16(2), 94-105.

Shah P, Bhalodia D, dan Shelat P., 2010, Nanoemulsion: A Pharmaceutical Review. *Sys Rev Pharm*, 1(1), 24-29.

Sokolov, Y. V., 2014, Nanoemulsion Formulation By Low-Energy Methods: A Review, *News of Pharmacy*, 3(79), 16- 18.

Solan, P., Izquierdo, J. Nolla, N. Azemar, dan M. J. Garcia-Celma, 2005, Nano-Emulsions, *Colloid and Interface Science*, 10, 3-4.

Sopianti, D.S., dan Novero, A., 2017, Ekstraksi Etanol Daun Salam (Eugenia polyantha Wight) Sebagai Formulasi Obat Kumur, *Jurnal Ilmiah Farmasi*, 4(2), 162.

Stephani, 2015, Pengaruh Variasi Fase Minyak Virgin Coconut Oil dan Medium Chain Triglycerides Oil Terhadap Stabilitas Fisik Nanoemulsi Minyak Biji Delima Dengan Kombinasi Surfaktan Tween 80 dan Kosurfaktan PEG 400, *Skripsi*, Fakultas Farmasi Universitas Sanata Dharma, Yogyakarta.

Sudjana, 2002, *Metoda Statistika*, Tarsito, Bandung.

Sun, D.X., dan Wu, C.F.J., 1993, Interaction Graph For 3-Level Fractional Factorial Design, *J.IIQP Res. Rep.*, 93-104.

Suzetti, E.V., 2017, Formulasi dan Karakterisasi Nanoemulsi Minyak Biji Kelor (Moringa oleifera) Dengan Surfaktan, *Skripsi*, Fakultas Farmasi Universitas Setia Budi, Surakarta.

Tesch, S., dan Schubert, H., 2002, Influence of Increasing Viscosity Of The Aqueous Phase On The Short Term Stability Of Protein Stabilized Emulsion, *J. Food. Eng.*, 52(3), 305-312.

Trinh, T.K., dan Kang, L.S., 2010, Chemical Engineering Research and Design Response Surface Methodological Approach to Optimize the Coagulation Flocculation Process in Drinking Water Treatment, *Chem. Eng. Res. Des.*, 89, 1126-1135.

Trinidad, L.E., 2011, Enggining Modelling, Analysis And Optimal Design Of Custom Foot Orthotic, *Disertasi*, University of Massachusetts, Boston.



Trujillo, L.S., Qian, C., Beloso, O.M., dan McClement, D.J., 2013, Influence Of Particle Size On Lipid Digestion and b-Carotene Bioaccessibility in Emulsions and Nanoemulsions, *Food Chem.*, 141(2), 1472..

Vega, C., Delgado, M., dan Vega, B., 2002, Treatment of Waste-Water/Oil Emulsion Using Microwave Radiation, *International Conference on Health, Safety, and Environtment in Oil and Gas Exploration and Production*, 1483-1494.

Volker, A., 2009, *Dynamic Light Scattering: Measuring the Particle Size Distribution*, LS Instrumen, Fribourg Swizerland.

Wahyuni, Ridhay, A., dan Nurakhirawati, 2016, Pengaruh Waktu Proses Deasetilasi Kitin Dari Cangkang Bekicot (Achatina Fulica) Terhadap Derajat Deasetilasi, *Kovalen*, 2(1), 1-7.

Wahyuningsih, L., dan Putranti, W., 2015, Optimasi Perbandingan Tween 80 dan Polietilenglikol 400 pada Formula Self Nanoemulsifying Drug Delivery System (SNEDDS) Minyak Biji Jinten Hitam, *Pharmacy*, 12(2), 223-241.

Widiastoety, D., Solvia, N., dan Kartikaningrum, S., 2009, Pengaruh Tiamin Terhadap Pertumbuhan Planlet Anggrek Oncidium Secara In Vitro. *Jurnal Hortikultura*, 19(1), 35-39.

Yao, K., Li, J., Yao, F., dan Yin, Y., 2012, *Chitosan-Based Hidrogels : Functions and Applications*, CRC Press, USA.

Yuen, F., dan Hameed, B.H., 2009, Recent Developments In The Preparation And Regeneration Of Activated Carbons By Microwaves, *Advances in Colloid and Interface Science*, 149:19-27.

Yuliani, S.H., M. Hartini, Stephanie, B., Pudyastuti, dan E.P. Istyastono, 2016, Perbandingan Stabilitas Fisis Sediaan Nanoemulsi Minyak Biji Delima dengan Fase Minyak Long-Chain Triglyceride dan Medium Chain Triglyceride, *Traditional Medicine Journal*, 12(1), 3-7.

Yustisia, I.R., 2017, Penambahan Vitamin B1 (Tiamin) Pada Media Tanam (Anggrek Kayu dan Sabut Kelapa) Untuk Meningkatkan Pertumbuhan Bibit Anggrek (*Dendrobium sp*) Pada Tahap Aklimatisasi. *Simki-Techsain*, 11(1), 3-12.

Yulusman dan Adelina, P.W., 2010, Pemanfaatan Kitosan dari Cangkang Rajungan Pada Proses Adsorpsi Logam Nikel dari Larutan NiSO<sub>4</sub>, *Seminar Rekayasa Kimia dan Proses*, UNDIP, Semarang.