

DAFTAR PUSTAKA

Abbott SJ, Donoghue G, Eady EA. Usnic Acid Topical Formulation. US Patent Application Publication. US; US2014/0057976A1. 2014. 1-11.

Afriyani. Pembentukan Sistem Dispersi Padat Asam Usnat-HPMC 2910 dengan Teknik Freeze Drying. [Skripsi]. Padang: Universitas Andalas; 2017.

Alves LD, de La Roca Soares MF, de Albuquerque CT, da Silva ER, Vieira AC, Fontes DA, Figueirêdo CB, Soares Sobrinho JL, Rolim Neto PJ. Solid Dispersion of Efavirenz in PVP K-30 by Conventional Solvent and Kneading Methods. *Carbohydrate Polymers*. 2014; 104:166-174.

Anastasia A, Tandah MR. Formulasi Sediaan Mouthwash Pencegah Plak Gigi Ekstrak Biji Kakao (*Theobroma cacao*) dan Uji Efektivitas Pada Bakteri *Streptococcus mutans*. *Galenika Journal Pharmacy*. 2017; 3(1):84–92.

Ansel HC. Pengantar Bentuk Sediaan Farmasi (Edisi Keempat). Jakarta: Penerbit UI Press. 2005.

Baki G, Alexander KS. Introduction to Cosmetic Formulation and Technology. New Jersey, USA: John Wiley & Sons; 2015.

Bird T. Kimia Fisik untuk Universitas. Jakarta: Gramedia Pustaka Utama; 1994.

Brodowski MH, White MG. Usnic Acid Deodorant Stick. US Patent Application. US; US005417962A, 1995. 1-6.

Cansaran D, Çetin D, Halıcı MG, Atakol O. Determination of Usnic Acid in Some Rhizoplaca Species from Middle Anatolia and Their Antimicrobial Activities. *Zeitschrift fur Naturforschung-Section C Journal of Bioscience*. 2006; 61(1–2):47–51.

Capuccino JG, Natalie S. Microbiology: A Laboratory Manual (5 Ed.). California: Benjamin Cummings Science Publishing; 1998.

Chiou WL, Riegelman S. Pharmaceutical Applications of Solid Dispersion Systems. *Journal of Pharmaceutical Sciences*. 1971; 60(9):1281–1302.

Cocchietto M, Skert N, Nimis P, Sava G. A Review on Usnic Acid, an Interesting Natural Compound. *Naturwissenschaften*. 2002; 89(4):137–146.

Depkes RI. Farmakope Indonesia (Edisi 4). Jakarta: Departemen Kesehatan Direktorat Jendral Pengawasan Obat dan Makanan. 1995.

Dhirendra K, Lewis S, Udupa N, Atin K. Review Solid Dispersions : a Review. *Pakistan Journal of Pharmaceutical Sciences*. 2009; 22(2):234–246.

Donbrow M, Azaz E, Pillersdorf A. Autoxidation of Polysorbates. *Journal of Pharmaceutical Science*. 1978; 67(12):1676-1681.

Duman DC, Aras S, Atakol O. Determination of Usnic Acid Content in Some Lichen Species Found in Anatolia. *Journal of Applied Biological Sciences*. 2008; 2(3):41–44.

Endarti, Sukandar EY, Soediro I. Kajian Aktivitas Asam Usnat Terhadap Bakteri Penyebab Bau Badan. *Jurnal Bahan Alam Indonesia*. 2004;3(1):1412-285.

Fanun M. *Colloids in Drugs Delivery*. Florida, USA: CRC Press; 2010.

Felton A, Chapman A, Felton S. *Basic Guide to Oral Health Education and Promotion* (4 Ed). UK: John Wiley & Sons; 2014.

Ferrari G, Ghione M, Ghirardi P. Use of Usnic Acid or Derivatives Thereof in the Treatment of Dental Caries. European Patent Application. Europea; EP02565661A1. 2014. 1-11.

Gotouda H, Shinozaki-Kuwahara N, Taguchi C, Shimosaka M, Ohta M, Ito T, Kurita-Ochiai T, Nasu I. Evaluation of the Proportion of Cariogenic Bacteria Associated with Dental Caries. *Epidemiology (Sunnyvale)*. 2017; 7(5):1–6.

Handayani F, Sundu R, Sari RM. Formulasi dan Uji Aktivitas Antibakteri Streptococcus mutans dari Sediaan Mouthwash Ekstrak Daun Jambu Biji (Psidium Guajava L.). *Jurnal Sains dan Kesehatan*. 2017; 1(8):422–433.

Huneck S, Yoshimura I. *Identification of Lichen Substances* (1 Ed). Berlin: Springer; 1996.

Huynh-BA K. *Handbook of Stability Testing in Pharmaceutical Development: Regulation, Methodologies and Best Practice*. New York: Springer Science Business Media. 2008.

Indra, Peki. Pembuatan dan Karakterisasi Dispersi Padat Kuersetin dengan PVP K-30 Menggunakan Teknik Spray Drying. [Skripsi]. Padang: Universitas Andalas; 2018.

Ingolfsdottir K. Usnic acid. *Phytochemistry*. 2002; 61(7):729–736.

Iswandana R, Sihombing L. Formulasi, Uji Stabilitas Fisik dan Uji Aktivitas Secara In Vitro Sediaan Spray Antibau Kaki yang Mengandung Ekstrak Etanol Daun Sirih (Pipper betle L.). *Pharmaceutical Science Research*. 2017; 4(3):121-131.

Jafari E. Preparation, Characterization and Dissolution of Solid Dispersion of Diclofenac Sodium Using Eudragit E-100. *Journal of Applied Pharmaceutical Science*. 2013; 3(8):167–170.

Juntavee A, Sinagpulo AN, Juntavee N. Modern Approach to Pediatric Dental Caries Prevention and Treatment. *Annals of Pediatrics & Child Health*. 2017; 5(2):8–5.

Justicia AK, Ferdinand A, Maya M. Formulasi Mouthwash Minyak Atsiri Daun Kemangi (*Ocimum Sanctum*) dan Kayu Manis (*Cinnamomum Zeylanicum*) dengan Menggunakan Tween 80 sebagai Surfaktan. *Jurnal Ilmiah Ibnu Sina*. 2017; 2(1):134–146.

Karpiński T, Szkaradkiewicz A. Microbiology of Dental Caries. *Journal of Biology and Earth Sciences*. 2013; 3(1):M21–M24.

Kidd E, Bechal S. Dasar-dasar Karies : Penyakit dan Penanggulangannya alih bahasa oleh Narlan Sumawinta & Safrida Faruk. Jakarta: EGC; 2012.

Kinraide WTB, Ahmadjian V. The Effects of Usnic Acid on the Physiology of Two Cultured Species of the Lichen Alga *trebouxia* Puym. *The Lichenologist*. 1970; 4(3):234–247.

Kono SR, Yamlean PY, Sudewi S. Formulasi Sediaan Obat Kumur Herba Patikan Kebo (*Euphorbia hirta*) dan Uji Antibakteri *Prophyromonas gingivalis*. *Jurnal Ilmiah Farmasi*. 2018; 7(1):37–46.

Kumar GP, Prashanth N, Kumari BC. Fundamentals and Applications of Lyophilization. *Journal of Advanced Pharmaceutical Research*. 2011; 2(4):157–169.

Lauterwein M, Oethinger M, Belsner K, Peters T, Marre R. In Vitro Activities of the Lichen Secondary Metabolites Vulpinic Acid, (+)-Usnic Acid and (-)-Usnic Acid Against Aerobic and Anaerobic Microorganisms. *American Society for Microbiology*. 1995; 39(11):2541–2543.

Lay BW. Analisis Mikroba di Laboratorium (1 Ed.). Jakarta: Raja Grafindo Persada; 1994.

Lay BW, Hastowo S. Mikrobiologi. Jakarta: Rajawali Press; 1992.

Lehner T. Immunologi pada penyakit mulut, alih bahasa : Farida R & Suryadhana N. Jakarta: EGC; 1995.

Madamombe I, Afolayan A. Evaluation Antimicrobial Activity of Extracts from South African *Usnea barbata*. *Pharmaceutical Biology*. 2003; 41(3):199-202.

Martin A, James S, Arthur C. Farmasi Fisik: Dasar-dasar Kimia Fisik dalam Ilmu Farmasetik I. Depok: UI Press; 1993.

McCullough MJ, Farah CS. The Role of Alcohol in Oral Carcinogenesis with Particular Reference to Alcohol-Containing Mouthwashes. *Australian Dental*

Journal. 2008; 53(4):302–306.

Mir KB, Khan NA. Solid Dispersion: Overview of the Technology. International Journal of Pharmaceutical Sciences and Research. 2017; 8(6):2378–2387.

Mitsui T. New Cosmetic Science. Amsterdam: Elsevier Science; 1997.

Nabors LO. Alternative Sweeteners (3 Ed). New York: Marcel Dekker Inc; 2001.

National Health Surveillance Agency. Cosmetic Product Stability Guide/ National Health Surveillance (1 Ed). Brazil: Anvisa; 2005.

Nikghalb LA, Singh G, Singh G, Kakheshan KF. Solid Dispersion: Methods and Polymers to Increase the Solubility of Poorly Soluble Drugs. Journal of Applied Pharmaceutical Science. 2012; 2(10):170–175.

Nireesha G, Divya L, Sowmya C, Venkateshan N, Babu MN, Lavakumar V. Lyophilization/Freeze Drying-An Review. International Journal of Novel Trends in Pharmaceutical Sciences. 2013; 3(4):87–98.

Nurhadi. Pengaruh Konsentrasi Tween 80 Terhadap Stabilitas Fisik Obat Kumur mInyak Atsiri Herba Kemangi (*Ocimum americanum* L.). [Skripsi]. Jakarta: UIN Syarif Hidayatullah; 2015.

Philip G, Mundor MD, Divater V, Prasad S. Emerging Concepts in Oral Chemical Plaque Control-An Overview. International Journal of Dental Clinics. 2012; 4(2):49–51.

Pratiwi R. Perbedaan Daya Hambat terhadap *Streptococcus mutans* dari Beberapa Pasta Gigi yang Mengandung Herbal. Dental Journal (Majalah Kedokteran Gigi). 2005; 38(2):64–67.

Rani KS, Poornima G, Krishnaveni A, Brahmaiah B, Nama S. A Review on Solid Dispersions. Asian Journal of Pharmaceutical Research. 2013; 3(2):93–98.

Ranković B, Kosanić M, Stanojković T, Vasiljević P, Manojlović N. Biological Activities of *Toninia candida* and *Usnea barbata* Together with Their Norstictic Acid and Usnic Acid Constituents. International Journal of Molecular Sciences. 2012; 13(11):14707–14722.

Rieger M. Harry's Cosmetology (8 Ed). New York: Chemical Publishing; 2001.

Roslan, Anis Nadhia Bt. Jenny Sunariani. Anis Irmawat. Penurunan Sensitivitas Rasa Manis Akibat Pemakaian Pasta Gigi yang Mengandung Sodium Lauryl Sulphate 5 %. Jurnal Dersatuan Dokter Gigi Indonesia. 2009; 58(2):10-13.

Rowe R., Sheskey P, Quinn M. Handbook of Pharmaceutical Excipients (6 Ed). London: Pharmaceutical Press; 2009.

Saraswati AR, Norisca Aliza Putriana. Formulasi Shampo Anti Ketombe Dan Anti Kutu Rambut dari Berbagai Macam Tanaman Herbal : Article Review. Farmaka. 2017; 15(1):248-261.

Sekiguchi K, Obi N. Studies on Absorption of Eutectic Mixture. I: A Comparison of the Behavior of Eutectic Mixture of Sulfathiazole and That of Ordinary Sulfathiazole in Man. Chemical Pharmaceutical Bulletin. 1961; 9(11):866–872.

Shanebrook. Formulation and Use of Surfactant in Toothpastes. 2004.

Singh N, Mk S. Solid Dispersion-A Novel Approach for Enhancement of Bioavailability of Poorly Soluble Drugs in Oral Drug Delivery System. Global Journal of Pharmacy & Pharmaceutical Science. 2017; 3(2):1–8.

Soerodjo TS, Devijanti R, Qomarijah N, Andayani S, Artama. Antibodi Monoklonal igA, igG terhadap S. mutans (1, c) Indonesia untuk Prevalensi Karies Gigi. Usulan Hak Paten; 2001.

Stark BYJB, Walter ED, Owens HS. Method of Isolation of Usnic Acid from Ramalina reticulata. Journal of American Chemical Society. 1950;1819–1820.

Sultana S, Saifuddin AHM. Review Article: Solid Dispersion Currently Practiced in Pharmaceutical Field. International Journal of Advancements in Research & Technology. 2016; 5(3):170–175.

Sweerman SC. Martindale The Complete Drug Reference (36 Ed). Pharmaceutical Press; 2009.

Takai M, Uehara Y, Baisler JA. Usnic Acid Derivatives as Potential Antineoplastic Agents. Journal of Medicinal Chemistry. 1979; 22(11):1380–1384.

Talumewo M, Mintjelungan C, Wowor M. Perbedaan Efektivitas Obat Kumur Antiseptik Beralkohol dan Non Alkohol dalam Menurunkan Akumulasi Plak. Pharmacon. 2015; 4(4):1–8.

Tanaka N, Imai K, Okimoto K, Ueda S, Tokunaga Y, Ibuki R, Higaki K, Kimura T. Development of Novel Sustained-Release System, Disintegration-Controlled Matrix Tablet (DCMT) with Solid Dispersion Granules of Nilvadipine. Journal of Controlled Release 2006; 112(1):51–56.

Tarigan R. Karies Gigi (2 Ed). Jakarta: EGC; 2013

Tay T, Türk AÖ, Yilmaz M, Türk H, Kivanç M. Evaluation of the Antimicrobial Activity of the Acetone Extract of the Lichen Ramalina farinacea and its (+)-Usnic Acid, Norstictic Acid and Protocetraric Acid Constituents. Zeitschrift fur Naturforschung - Section C Journal of Biosciencesiosciences. 2004; 59(5–6):384–388.

Thybo P, Jakob K, Lars H. Characterization and Physical Stability of Tolfenamic Acid-PVP K30 Solid Dispersions. *Pharmaceutical Development and Technology*. 2007; 12:43-53

Van den Mooter G, Weuts I, De Ridder T, Blaton N. Evaluation of Inutec SP1 as A New Carrier in the Formulation of Solid Dispersions for Poorly Soluble Drugs. *International Journal of Pharmaceutics*. 2006; 316(1–2):1–6.

Verma S, Rawat A, Kaul M, Saini S. Solid Dispersion: a Strategy for Solubility Enhancement. *International Journal of Pharmacy and Technology*. 2011; 3(2):1062–1099.

Widiyarti G, Andini Sundowo, Marissa Angelina. Pembuatan Sediaan Oral Nutraceutical dari Ekstrak Gambir. *Jurnal Ilmu Kefarmasian Indonesia*. 2014; 12(2):145-153.

Zaini E, Lili Fitriani, Muthia Fadhila. Preparation of Efavirenz – PVP K-30 Solid Dispersion by Spray Drying Technique. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 2015; 6(6):925-930.

Zhijun H, Junyan T, Jinlan R, Chongming L, Guohua Z. Anti-inflammatory Effects and Mechanisms of Usnic Acid, a Compound Firstly Isolated from Lichen *Parmelia saxatilis*. *Journal of Medicinal Plants Research*. 2014;8(4):197–207.

