

BAB 5

SIMPULAN DAN SARAN

5.1. Simpulan

Berdasarkan pada hasil pengamatan, dapat dinyatakan bahwa ekstrak kering seledri dapat diformulasikan sebagai sampo dan memenuhi kriteria mutu fisik, efektifitas, aseptabilitas dan keamanan sediaan. Peningkatan konsentrasi xanthan gum dalam sediaan sampo yang mengandung ekstrak kering seledri (*Apium graveolens* L.) mempengaruhi viskositas dan kestabilan viskositas selama penyimpanan. Namun perbedaan konsentrasi xanthan gum tidak mempengaruhi organoleptis, pH, Homogenitas, pemeriksaan solid dalam sampo, keamanan dan aseptabilitas.

5.2. Saran

Penelitian ini juga dapat dilanjutkan dengan uji potensi mikrobiologi untuk mengetahui efektifitasnya sebagai anti ketombe. Sediaan juga perlu diberi pewarna agar lebih diterima di masyarakat.

DAFTAR PUSTAKA

- Agoes, G. 2007, *Teknologi Bahan Alam*, Penerbit ITB Press, Bandung.
- Backer, C.A. and Brink, R.C. 1965, *Flora of Java (Spermatophyta only)*. Vol II. N.V. P Noordhoff. Groningen. The Nether Land.
- Cao et al. 2003. High Viscosity Heat-Treated Xanthan Gum. *United States Patent*. p. 7-8
- Chandran, S., Vipin, K.V., Augusthy, A.R., Lindumol, K.V., Shirwaikar, A. 2013, development and evaluation of antidandruff shampoo based on natural sources, *Journal of Pharmacy and Phytotherapeutics*: p. 10-13.
- Cheeke, P.R., and L.R. Shull. 1985. Tannins dan Polyphenolic. Compounds. *In* : Cheeke, P.R. (Ed.). *Natural Toxicants in Feeds and Poisonous Plants*. AVI Publishing Company, Connecticut. USA.
- Dalimartha, S. 2000, *Atlas Tumbuhan Obat*, Jilid II, Trubus Agriwidya, Jakarta, Hal. 126-130.
- Departemen Kesehatan RI, 1985, *Formularium Kosmetika Indonesia*, Jakarta: Departemen Kesehatan Republik Indonesia.
- Departemen Kesehatan RI, 1995, *Farmakope Indonesia Ed. IV*, Jakarta: Departemen Kesehatan Republik Indonesia, hal. 4-7, 162, 166, 515, 771, 1087.
- Deshmukh S ,Kaushal B., Ghode S . 2012 , Formulation and evaluation of herbal shampoo and comparative studies with herbal marketed shampoo, *International Journal of Pharma and Biosciences* ,3(3), 638 -645.
- Ditjen POM RI, 1993, *Standard of ASEAN Herbal Medicines Vol I*, ASEAN Countries, Jakarta, hal. 63-74.

- Ditjen POM RI. 2000, *Parameter Standar Umum Ekstrak Tumbuhan Obat edisi I*, Direktorat Jenderal Pengawasan Obat dan Makanan, Direktorat Pengawasan Obat Tradisional, Jakarta.
- Djuanda, A. 2007. *Ilmu Penyakit Kulit dan Kelamin*, 5. FKUI, Jakarta.
- Faizatun, Kartiningsih dan Liliyana. 2008. *Formulasi Sediaan Sampo Ekstrak Chamomile dengan Hidroksi Propil Metil Selulosa sebagai Pengental*. Fakultas Farmasi, Universitas Pancasila. Jakarta .Vol 6. Jakarta. Hal 15-22.
- Fellow, P.J, 1988. *Food Processing Technology Principle and Practice*. Ellis Horwood, New York.
- Funk, W., Droschel, B., 1991, Modern TLC 4, *J.Planar Chromatogr*, 123.
- Gandjar, I. G., dan Rohman, A., 2009, *Kimia Farmasi Analisis*, Jakarta; Pustaka Pelajar.
- Gruenwald, J., Brendler, T., Jaenicke, C. (Eds). 2004, *PDR for Herbal Medicines*, Ed. III, Medical Economics Company, New Jersey, p. 183-184.
- Halfacre,R.G. and J.A.Barden. 1979, *Horticulture*, Mc.Graw-Hill, Book company. United States of America.
- Hangerman A.E. 1992. Tannin-Protein Interaction. *Phenolic Compounds In Food and Their Effects on Health I*. American Chemical Society, Washington D.C.
- Harahap, M, 1990. *Penyakit Kulit*. Penerbit: PT Gramedia. Jakarta
- Harborne, J. B. 1987. Metode Fitokimia: *Penuntun Cara Modern Menganalisis Tumbuhan*, Penerbit ITB: Bandung.
- Harry and Ralph G. 1982. *Harry's Cosmeticology: The Principles and Practice of Modern Cosmetic*. 7th edition, George Dodwin, London.
- Jones, D.S. 2010, *Statistik Farmasi*. ECG. Jakarta. Hal. 55.

- Kadajji, V.G. and Betageri, G.V. 2011. “ *Water Soluble Polymer for Pharmaceutical Application*”. ISSN 2073-4360. p. 1972-2009.
- Kartika, B., 1991, Uji Mutu Pangan, *Proyek Peningkatan Perguruan Tinggi Universitas Gajah Mada*, Yogyakarta, hal. 107-111, 199.
- Katzbauer, B. 1998. Properties and Applications of Xanthan Gum. *Polym. Degrad. Stabil*, 59, 81-84.
- Khandavalli, S. and Rothstein, J.P. 2014, Extensional rheology of shear-thickening fumed silica nanoparticles dispersed in an aqueous polyethylene oxide solution, *Extensional Rheology Of Colloidal Dispersions*, 58(2) : 411-414.
- Klein K., 1986, Evaluating Shampoo Foam. *Cosmetics and Toiletries*, 119 (10),32-35.
- Kumar, A., Mali, R. R. 2010, Evaluation of Prepared Shampoo Formulations and to Compare Formulated Shampoo with Marketed Shampoos. *International Journal of Pharmaceutical Sciences Review and Research*, Vol. III.
- Kurniawan, D.W., Sulaiman, S.T.N., 2009, *Teknologi Sediaan Farmasi*, Graha Ilmu, Yogyakarta, hal. 7-84, 91-102.
- Leinmuller, E., H.G. Steingass and K.H. Menke. 1991. *Tannins in Ruminant Feedstuffs*. Animal Research and Development : Institute for Scientific Co. Tubingen Germany. 33: 9-62.
- Mainkar, A.R. and Jolly, C.I. 2000. Formulation of natural shampoo. *Internarional Journal of Cosmetic Science*. Vol 23, p. 59-62.
- Maldovan, M. and Parauan, S. 2012. *Cosmetic Evaluation of Some Commercial Shampoo*. Departement of Dermopharmacy and Cosmetic, Faculty of Pharmacy, University of Medisine and Pharmacy. Vol. 85. Cluju Napoja. P.378-383

- Mitsui, T. 1997. *New Cosmetic Science*, Elsevier Science B.V, Amsterdam.
- Mufida, L.2013, 'Pengaruh Penggunaan Konsentrasi FPE (*Fermented Plant Extrac*) Kulit Pisang terhadap Jumlah Daun, Kadar Klorofil dan Kadar Kalsium Tanaman Seledri (*Apium Graveolens*)', skripsi, *Sarjana Pendidikan Biologi*, IKIP PGRI, Semarang.
- Mujumdar,A.S., 1987. *Handbook of Industrial Drying*, McGill University, Montreal, Quebec, Canada.
- Namita and Nimisha. 2013, Formulation and Evaluation of Herbal Shampoo Having Antimicrobial Potential, *International Journal of Pharmacy and Pharmaceutical*. Vol V,p. 710.
- Nimas, M., Astuti, I.Y., Asriningdhiani, B. 2012, Formulasi Shampo Antiketombe Ekstrak Etanol Seledri (*Apium graveolens L.*) dan Aktivasnya terhadap Jamur *Pityrosporum ovale*, *Jurnal Fakultas Farmasi Universitas Muhammadiyah Purwokerto*, 09(02) : hal. 128-139.
- Novary, E. W. 1997, *Penanganan dan Pengolahan Sayuran Segar*, Penebar Swadaya. Jakarta.
- Olsen, E. A. 1994. *Hair Growth Disorders*. Mc Graw-Hill, 754.
- Osborne, D. W. and Amann, A. H. 1990. Topical Drug Delivery Formulations, *Drug and the Pharmaceutical Science.*, Vol. XLII, Marcel Dekker, Inc., New York.
- Ozacar, M. and Sengil, I.A. 2001. *The Use of Tannin from Turkish Acorns(Valonia) in Water Treatment as a Coagulant and Coagulant Aid*. Sakarya University, Science & Arts Faculty, Departement of Chemistry. Vol 26. Turkey. P. 255-263
- Permono, A. 2002. *Membuat Sampo Skala Rumah Tangga Skala Menengah*.Yogyakarta: Puspa Swara.

- Plewig, G. and Jansen T. S. 2008, In : Fitzpatrick TB, Katz SI, et al. *Dermatology in general medicine*. Edisi 7. New York: McGraw-Hill: p. 219-2.
- Potluri, A., Harish, G., Kumar, B. P., Durraivel. 2013. Formulation and Evaluation of Herbal anti-dandruff shampoo. *Indian Journal of Research in Pharmacy and Biotechnology*. P. 835-839.
- Poucher, W. A., 2000, *Modern Cosmetics: Perfumes, Cosmetics and Soaps*, Edisi 10, Chapman and Hall, London, p. 289-306
- Preethi,J.P., Padmini, K., Srikanth, J., Lohita, M., Swetha, K., Rao, V.P. 2013. “ A Review on Herbal Shampoo and Its Evaluation”. www.asianpharmaonline.org. p. 153-154
- Pusponegoro, E. H.D. 2002. Kerontokan Rambut Etiopatogenesis. Dalam: Wasitaadmadja, Sjarif M, dkk.*Kesehatan dan Keindahan Rambut*. Jakarta: Kelompok Studi Dermatologi Kosmetik Indonesia, 1-13.
- Risnasari, I. 2001. *Pemanfaatan Tanin Sebagai Bahan Pengawet Kayu*. Skripsi. Medan: Universitas Sumatera Utara.
- Rowe, R.C., Paul, J.S., and Marian, E.Q., 2009, *Handbook of Pharmaceutical Excipient 6th*, Pharmaceutical Press, USA.
- Rubatzky, V.E. and M. Yamaguchi. 1998, *Sayuran dunia 2*, Edisi II. ITB, Bandung.
- Rukmana,R. 1995, *Bertanam Seledri. Kanisius*. Yogyakarta.
- Sharma R.M, Shaha K,Patel J. 2011, Evaluation of prepared formulations and to compare formulated shampoo with marketed Shampoo, *International Journal of Pharmacy and Pharmaceutical Sciences*,3(4):402-405.

- Sharma, B.R N.L., Dhuldhoya, N.C., Merchant, S.U., Merchant, U.C. 2006. Xanthan Gum A Boon to Food Industry. *Food Promot. Chron*, 1, 27-30.
- Shinde, P.R, Tatiya, A.U and Surana, S.J. 2013. Formulation Development and Evaluation of Herbal Antidandruff Shampoo. *Internation Journal of Research in Cosmetic Science*. India. P 25-33
- Soepardiman, L. 2010. Kelainan Rambut : Djuanda, Adhi, dkk. *Ilmu Penyakit Kulit dan Kelamin*. Jakarta: Badan Penerbit Fakultas Kedokteran Universitas Indonesia, 301-311.
- Supardiman, L. 2002. Berbagai Macam Kerontokan Rambut. Dalam: Wasitaadmadja, Sjarif M, dkk. Kesehatan dan Keindahan Rambut. Jakarta: Kelompok Studi Dermatologi Kosmetik Indonesia, 15-27.
- Suryani, N. L. P. 2008. Optimasi Formula Tablet Ekstrak Herba Seledri (*Apium graveolens* L.) menggunakan Metil Selulosa dan PVP K-30 sebagai Pengikat. *Skripsi Fakultas Farmasi Universitas Widya Mandala Surabaya*
- Swain, T., 1979. Tannins and lignins. In : Rosenthal, G.A., and D.H. JANzen (Eds). *Herbivores: Their Interaction with Secondary Plant Metabolites*. Academic Press. New York.
- Tortora, G.J. and Derrickson, B.H. 2009. *Principles of Anatomy and Physiology*. Twelfth Edition. Asia: Wiley
- Toruan, T. 1989. *Ketombe dan Penanggulungannya*. Jakarta : Pustaka.
- Tranggono, R.I.S., dan Latifah, F. 2007, *Buku Pegangan Ilmu Pengetahuan Kosmetik*, Gramedia Pustaka Utama, Jakarta.
- Voigt, R. 1994, *Buku pelajaran teknologi farmasi edisi ke-5*. Penerjemah Noerono S. Yogyakarta. Gadjahmada University Press.

- Wasitaatmadja, S. M. 1997. *Penuntun Ilmu Kosmetik Medik*. Penerbit Universitas Indonesia: Jakarta.
- Watson, D., 2005, *Pharmaceutical Analysis 2*, Elsevier Limited, Oxford, United Kingdom.
- Whistler, R.L. and Bemiller, J.N. 1993. *Industrial Gums Polysaccharides and Their Derrivatives*. Third Edition. Academic Press.
- Wilkinson. 1982, *Harry's Cosmetology : The Principles of Modern Cosmetic*, 6th Editor, Leonard Hill Book, London.