

## Daftar Pustaka

- Agoes, G. 2012, *Seri Farmasi Industri 7 : Sediaan Farmasi Likuida Semisolida*, Penerbit ITB, Bandung.
- Allen, L., Popovich, N. and Ansel, H. 2011, *Pharmaceutical Dosage Forms and Drugs Delivery Systems*, 9<sup>th</sup> ed., Lippincott Williams & Wilkins, Philadelphia.
- Anonim, 2004, *Guidlines on Stability Testing of Cosmetic Products*, CTFA and COLIPA, USA.
- Anonim, 2014, *Farmakope Indonesia*, edisi V, Departemen Kesehatan Republik Indonesia, Jakarta.
- Astuti, K.W., Sumirtapura, Y.C. dan Wiwik, S.N.N. 2012, Difusi Natrium Diklofenak dalam Gel Methocel 400 pada Berbagai pH, *Journal of Chemistry*, **6**.
- Aswal, A., Kalra, M. and Rout, A. 2013, Preparation and evaluation of Polyherbal cosmetic cream, *Scholars Research Library*, **5** (1):83–88.
- Berko, S., Balázs, B., Sütho, B., Erhos, G., Gal, B., Sztojokov-Ivanov, A., *et al.* 2014, Monitoring of Skin Penetration and Absorbtion with a New *in Vivo* Experimental Model, *FARMACIA*, **62**: 1157–1163.
- BPOM. 2014, *Peraturan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia, Nomor 7 Tahun 2014, Tentang Pedoman Uji Toksisitas Non klinik Secara In Vivo*, BPOM Republik Indonesia, Jakarta.
- Brennan, M., Bhatti, H., Nerusu, K.C., Bhagavathula, N., Kang, S., Fisher, G.J., *et al.* 2003, Matrix Metalloproteinase-1 is the Major Collagenolytic Enzyme Responsible for Collagen Damage in UV-irradiated Human Skin, *Journal of Photochemistry and Photobiology*, **78**(1): 43–48.
- Dehaven. 2014, Oxidative Stress and Free Radical Damage to Skin, *Science of Skincare*, **1**: 1–4.
- Dewi, R., Anwar, E., dan Yunita, S. 2016, Uji Stabilitas Fisik Formula Krim yang Mengandung Ekstrak Kacang Kedelai (*Glycine max*), *Pharmaceutical Sciences and Research (PSR)*, **1**: 194–208.
- Elya, B., Dewi, R., dan Budiman, M.H. 2013, Antioxidant cream of *solanum lycopersicum L.*, *J Pharm Tech Research*, **5**: 233–238.

- Ermawati, D.E. 2015, 'Optimasi Komposisi Span 80-Croduret 50-Propilen Glikol Formula Sediaan Emulgel Jus Buah Stroberi (*Fragaria vesca* L.) Kering dan Uji Transpor Melewati Membran *Shed Snake Skin*', *Tesis*, M.Sc., Universitas Gadjah Mada, Yogyakarta.
- Erwiyani, A.R. 2016, 'Optimasi Komposisi Emulgator Sediaan Emulgel Jus Stroberi Kering (*Fragaria vesca* L.) dengan Fase Minyak Kemiri dan Transpor Melewati Membran *Shed Snake Skin*', *Tesis*, M.Sc., Universitas Gadjah Mada, Yogyakarta.
- Fajriani, N. 2016, 'Metode Baru Sintesis THPGV-5 dan THHGV-5 serta Formulasinya sebagai Krim dan Gel Anti-aging', *Tesis*, M.Sc., Universitas Gadjah Mada, Yogyakarta.
- Febriana, H.I., 2016. Formulasi 'Gel Tetrahidropentagamavunon-0 (THPGV-0) dan Uji Iritasi Akut Dermal pada Kelinci Serta Penentuan Nilai SPF Secara In Vitro', *Skripsi*, S.Farm., Universitas Gadjah Mada, Yogyakarta.
- Finkel, T. and Holbrook, N. 2000, *Oxidative and the Biology of Aging*, Nature Press, New York.
- Garg, A., Aggarwal, D., Garg, S., and Singla, A.K. 2002, Spreading of Semisolid Formulations : An Update, *Pharmaceutical Technology*, diakses 15 November 2016, [www.pharmtech.com](http://www.pharmtech.com).
- Gilchrest, B.A. and Krutmann, J. 2006, *Skin Aging*, Springer Science and Business Media.
- Godin, B. and Touitou, E. 2007, Transdermal skin delivery : Predictions for humans from in vivo, ex vivo and animal models, *Journal of Advanced Drug Delivery*, **59**: 1152–1161.
- Gurtner, G. 2007, 'Wound Healing : Normal and Abnormal', in *Thorne C.H., Grabb & Smith's Plastic Surgery*, 6<sup>th</sup> ed., Lippincott Williams & Wilkins, Philadelphia.
- Halliwell, B. and Whiteman, M. 2004, Measuring reactive species and oxidative damage in vivo and in cell culture : how should you do it and what do the result mean ?, *British Journal of Pharmacology*, **142** (2): 231–255.
- Hillery, A.M., Lloyd, A.W. and Swarbrick, J. 2001, *Drug delivery and targeting for pharmacists and pharmaceutical scientists*, Taylor & Francis, London, UK.

- Irwan, 2011, 'Asam  $\alpha$ -Lipoat Menurunkan Ekspresi MMP-1 pada Kultur Fibroblas Yang Terpapar Ekstrak Asap Rokok In Vitro', *Tesis*, M.Sc, Fakultas Farmasi, Universitas Udayana, Denpasar.
- Isusilaningtyas, E. 2014, 'Optimasi Formula Krim Ekstrak Kubis Ungu (*Brassicaoleracea* L., var. *capitata* f. *rubra*) Sebagai Antioksidan dengan Metode Simplex Lattice Design', *Tesis*, M.Sc., Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.
- Kogan, A., Garti, N. 2006, Microemulsions As Transdermal Drug Delivery Vehicles, *Journal of Colloid and Interface Science*, **123-126** (2006) : 369–385.
- Kumar, K.K., Sasikanth, K., Sabareesh, M. and Dorababu, N. 2011, Formulation and Evaluation of Diacerein Cream, *Asian J Pharm Clin Res*, **4**: 93–98.
- Kumpugdee-Vollrath, M., Subongkot, T. and Ngawhirunpat, T. 2013, Model Membrane from Shed Snake Skins, *International Journal of Medical, Health, Biomedical, Bioengineering and Pharmaceutical Engineering*, **7**: 357–364.
- Lambers, H., Piessens, S., Bloem, A., Pronk, H., Finkel, P., 2006. Natural Skin Surface pH is on Average Below 5, which is Beneficial for its Resident Flora, *Int. J. Cosmet. Sci.*, **28** : 359–370.
- Lee, H.Y., Ghimeray, A.K., Yim, J.H. and Chang, M.S. 2015, Antioxidant, Collagen Synthesis Activity in Vitro and Clinical Test on Anti-Wrinkle Activity of Formulated Cream Containing Veronica officinalis Extract, *Journal of Cosmetics, Dermatological Sciences and Applications*, **05**: 45–51.
- Malmsten, M. 2002, *Surfactants and Polymers in Drug Delivery*, Taylor & Francis, New York.
- Menon, G.K. 2015, 'Skin Basics : Structure and Function', in Pappas, A., *Lipids and Skin Health*, Springer International Publishing, p. 9–23.
- Menter, J.M., Cornelison, L.M., Cannick, L., Patta, A.M., Dowdy, J.C., Sayre, R.M., *et al.* 2003, Effect of UV on the Susceptibility of Acid-Soluble Skh-1 Hairless Mouse Collagen to Collagenase, *Journal of Photodermatol, Photoimmunol and Photomed*, **19**: 28–34
- Mukherjee, P.K., Maity, N., Nema, N.K. and Sarkar, B.K. 2011, Bioactive Compounds from Natural Resources Against Skin Aging, *Phytomedicine*, **19**: 64–73.

- Nugroho, A.K. 2013, *Sediaan Transdermal : Solusi Masala Terapi Obat*, Pustaka Pelajar, Yogyakarta, hal 89-90.
- Pokorny, J. 2001, 'Introduction Antioxidants in Food', in *Pokorny J. Yanishlieva N., Gordon M., Antioxidants in Food*, Woodhead Publishing Ltd, Cambridge, England.
- Prausnitz, M.R., Elias, P.M., Franz, T.J., Schmuth, M., Tsai, J.-C., Menon, G.K., *et al.* 2012, Skin Barrier and Transdermal Drug Delivery, *Dermatology*, 2065–2073.
- Pudyastuti, B., Nugroho, A.K. dan Martono, S. 2016, Formulasi Matriks Transdermal Pentagamavunon-0 dengan Kombinasi Polimer PVP K30 dan Hidroksipropil Metilselulosa, *Jurnal Farmasi Sains dan Komunitas*, **11**(2): 44-49.
- Rahman, K. 2007, Studies on Free Radicals, Antioxidants, and Co-factors, *Clinical Interventions in Aging*, **2**: 219.
- Rigg, P.C. and Barry, B.W. 1990, Shed Snake Skin and Hairless Mouse Skin as Model Membranes for Human Skin During Permeation Studies, *Society for Investigative Dermatology*, **22** (2): 669-676.
- Ritmaleni, Praditya, I., Wibowo, H. and Sardjiman. 2014, Synthesis of Tetrahydrohexagamavunon-5 and Tetrahydrohexagamavunon-7, *Indonesian J. Pharm*, **26** (2): 103–107.
- Rowe, R., Sheskey, P. and Owen, S. 2006, *Handbook of Pharmaceutical Excipients*, Pharmaceutical Press.
- Ruszczak, Z. 2003, Effect of Collagen Matrices on Dermal Healing, *Journal of Advanced Drug Delivery*, **55** (12): 1595.
- Sari, P.K.N., Ritmaleni, dan Sardjiman. 2015, 'Uji Aktifitas Antioksidan Senyawa Tetrahydroheksagamavunon-5 (THHGV-5)', Universitas Negeri Solo, *Seminar Nasional Kimia dan Pendidikan Kimia VII*, 18 April 2015, Surakarta, hal 1-7.
- Serafini, M.R., Detoni, C.B., Menezes, P. dos P., Pereira Filho, R.N., Fortes, V.S., *et al.* 2014, UVA-UVB Photoprotective Activity of Topical Formulations Containing *Morinda citrifolia* Extract, *International Journal of Biomedical Research*, 1–10.

- Singh, I. and Morris, A.P. 2011, Performance of Transdermal Therapeutic Systems: Effects of Biological Factors, *International Journal of Pharmaceutical investigation*, **1**(1): 4–9.
- Smaoui, S., Hilma, H.B., Jarraya, R., Komaun, N.G., Ellouze, R., Damak, M. 2012, Cosmetic Emulsion from Virgin Olive Oil : Formulation and Bio-physical Evaluation, *African Journal Of Biotechnology*, **11**(40): 9664- 9667.
- Soenarjady, H.W. 2014, 'Pemberian Krim Ekstrak Teh Hijau (Camelia sinensis) Dapat Mencegah Penurunan Jumlah Kolagen Dermis dan Peningkatan Ekspresi Matriks Metalloproteinase-1 pada Mencit BALB-C yang Dipapar Sinar Ultraviolet B', *Tesis*, M.Sc, Fakultas Farmasi, Universitas Udayana, Denpasar.
- Swastika, A., Purwanto, and Mufrod. 2013, Antioxidant Activity of Cream Dosage Form of Tomato Extract (*Solanum lycopersicum L.*), *Traditional Medicine Journal*, **18**(3): 132–140.
- Ueda, C.T., Shah, V.P., Derdzinski, K., Ewing, G., Flynn, G., Maibach, H., *et al.*, 2009. Topical and Transdermal Drug Products, *Pharmacopeial Forum*, **35**(3): 750–764.
- Uitto, J., Chu, M. and Gallo, R. 2008, *Collagen, Elstic Fibers and Extracelular Matrix of the Dermis*, McGraw-Hill Companies, USA.
- Winarsi. 2007, *Antioksidan Alami dan Radikal*, Kanisius, Jakarta, hal 18-20.
- Wahyono, P., Soetjipto, Harjanto, and Suhariningsih. 2011, The Effect of Tomato (*Lycopersicum Pyriforme*) Juice on the Prevention of Photoaging of the Skin as a Result from Ultraviolet-b Irradiation, *JBP*, **13**(3): 169–177.
- Wibowo, H. 2013, 'Sintesis Tetrahidroksigamavunon-5 dari *starting* material heksagamavunon-5 dengan katalis paladium karbon melalui reaksi hidrogenasi', *Skripsi*, S.Farm., Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.
- Wilhelm, K.-P., Zhai, H. and Maibach, H.I. 2012, *Dermatotoxicology*, 8<sup>th</sup> edition, Informa Healthcare, London.
- Zulkarnain, A.K., Meiroza, S. and Aliva, N.L. 2013, The Physical Stability of Lotion O/W and W/O From *Phaleria macrocarpa* Fruit Extract As Sunscreen and Primary Irritation Test on Rabbit, *Traditional Medicine Journal*, **18** (3): 141–150.