

DAFTAR PUSTAKA

- Agromedia, R., 2007, *Panduan Lengkap Budidaya Tomat*, Agromedia, Jakarta.
- Anonim, 2000, *Parameter Standar Umum Ekstrak Tumbuhan Obat*, Direktorat Jendral POM-Depkes RI, Jakarta.
- Barbulova, A., Apone, F. & Colucci, G., 2014, Plant Cell Cultures as Source of Cosmetic Active Ingredients, *Cosmetics*, **1**(2), 94–104.
- Bidarigh, S. & Azarpour, E., 2013, Evaluation of The Effect of MS Medium Levels on Rooting in Micro Cutting of Tea (*Camellia sinensis* L.) Under in-vitro Culture Condition, *ARPN Journal of Agricultural and Biological Science*, **8**(1), 24–28.
- Buhler, D.R. & Miranda, C., 2000, *Antioxidant Activities of Flavonoid*, Department of Environmental and Molecular Toxicology Oregon State University, Oregon.
- Burry, R.W., 2011, *Immunocytochemistry: A Practical Guide for Biomedical Research*, Springer Science + Business Media, New York.
- Canene-Adams, K., Campbell, J.K., Zaripheh, S., Jeffery, E.H. & Erdman, J.W., 2005, The Tomato as a Functional Food, *The Journal of Nutrition*, **135**(5), 1226-1230.
- Chang, H.Y., Chi, J.T., Dudoit, S., Bondre, C., van de Rijn, M., Botstein, D. & Brown, P.O., 2002, Diversity, topographic differentiation and positional memory in human fibroblasts, *Proceedings of the National Academy of Sciences*, **99**(20), 12877–12882.
- Conti, V., Izzo, V., Corbi, G., Russomanno, G., Manzo, V., De Lise, F., Di Donato, A. & Filippelli, A., 2016, Antioxidant Supplementation in the Treatment of Aging-Associated Diseases, *Frontiers in Pharmacology*, **7**(2), 1–11.
- Dewi, D.A., 2018, Uji Aktivitas Penghambatan Kematian Ekstrak Etanol Dan Air Sel Punca Tanaman Tomat (*Solanum lycopersicum* L.) Terhadap *Human Dermal Fibroblast Adult* (HDFa) *Cell Line* Yang Diinduksi Hidrogen Peroksida (H₂O₂), *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Fotakis, G. & Timbrell, J.A., 2006, In vitro cytotoxicity assays: Comparison of LDH, neutral red, MTT and protein assay in hepatoma cell lines following exposure to cadmium chloride, *Toxicology Letters*, **160**, 171–177.
- Freshney, R.I., 2005, *Culture of specific cell types*, John Wiley & Sons, Inc.
- Ganceviciene, R., Liakou, A.I., Theodoridis, A., Makrantonaki, E. & Zouboulis, C., 2012, Skin anti-aging strategies, *Dermato-Endocrinology*, **4**(3), 308–319.

- Giampieri, F., Alvarez-suarez, J.M., Mazzoni, L., Forbes-hernandez, T.Y., Gasparini, M., Gonzalez-paramàs, A.M., Santos-buelga, C., Quiles, J.L., Bomprade, S., Mezzeti, B. & Battino, M., 2014, Polyphenol-Rich Strawberry Extract Protects Human Dermal Fibroblasts against Hydrogen Peroxide Oxidative Damage and Improves Mitochondrial Functionality, *Molecules*, **19**, 7798–7816.
- Gonzalez, R., Woynarowski, D. & Geffner, L., 2015, Stem Cells Targeting Inflammation as Potential Anti-aging Strategies and Therapies, *Cell & Tissue Transplantation & Therapy*, **7**, 1-8.
- Grafi, G., Florentin, A., Ransbotyn, V. & Morgenstern, Y., 2011, The Stem Cell State in Plant Development and in Response to Stress, *Frontiers in Plant Science*, **2**(10), 1–10.
- Grela, E., Ząbek, A. & Grabowiecka, A., 2015, Interferences in the Optimization of the MTT Assay for Viability Estimation of *Proteus mirabilis*, *Avicenna Journal of Medical Biotechnology*, **7**(4), 159–167.
- Hana, C.A., 2016, Analisis Kandungan Senyawa Dominan dan Protein dalam Sel Punca (*Stem cells*) Tanaman Tomat (*Solanum lycopersicum* L.) serta Uji Aktivitas Antioksidan, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Harish, M.C., Rajeevkumar, S. & Sathishkumar, R., 2010, Efficient in vitro Callus Induction and Regeneration of Different Tomato Cultivars of India, *Asian Journal of Biotechnology*, **2**(3), 178-184.
- Hendaryono, D.P.S. & Wijayani, A., 1994, *Teknik Kultur Jaringan: Pengenalan dan Petunjuk Perbanyakan Tanaman Secara Vegetatif-Modern*, Kanisius, Yogyakarta.
- Hung, C.F., Fang, C.L., Al-Suwayeh, S.A., Yang, S.Y. & Fang, J.Y., 2012, Evaluation of drug and sunscreen permeation via skin irradiated with UVA and UVB: Comparisons of normal skin and chronologically aged skin, *Journal of Dermatological Science*, **68**(3), 135–148.
- Immanuel, H., 2015, Aktivitas Antikanker Ekstrak Etil Asetat Daun Keladi Tikus (*Typhonium flagelliforme* Lodd. Blume) Terhadap Sel Kanker Kolon WiDr Melalui Penekanan Ekspresi Protein COX-2, *Skripsi*, Fakultas Farmasi Universitas Sanata Dharma, Yogyakarta.
- Izykowska, I., Cegielski, M., Gebarowska, E., Podhorska-okolow, M., Piotrowska, A., Zabel, M. & Dziegiel, P., 2009, Effect of Melatonin on Human Keratinocytes and Fibroblasts Subjected to UVA and UVB Radiation In Vitro, *Department of Histology and Embryology University School of Medicine*, **23**, 739–745.

- Jabbar, S.A.B., Twentyman, P.R. & Watson, J.V., 1989, The MTT assay underestimates the growth inhibitory effect of interferon, *The Macmillan Press Ltd*, **60**, 523-528.
- Javois, L.C., 1999, *Immunocytochemical Methods and Protocols*, Second Edition, Humana Press Inc, New Jersey.
- Kammeyer, A. & Luiten, R.M., 2015, Oxidation events and skin aging, *Ageing Research Reviews*, **21**, 16–29.
- Kanagalakshmi, A., Agilan, B., Mohana, S., Ananthkrishnan, D., Velmurugan, D., Karthikeyan, R., Ganesan, M., Srithar, G. & Rajendra, P.N., 2014, Ferulic acid modulates ultraviolet-B radiation mediated inflammatory signaling in human dermal fibroblasts, *Journal of Research in Biology*, **4**(8), 1505–1515.
- Koller, M.R., Palsson, B.O. & Masters, J.R.W., 2002, *Human Cell Culture Volume V: Primary Mesenchymal Cells*, Kluwer Academic Publisher.
- Lee, M.E., Kim, S.R., Lee, S., Jung, Y.J., Choi, S.S., Kim, W.J. & Han, J. A., 2012, Cyclooxygenase-2 inhibitors modulate skin aging in a catalytic activity-independent manner, *Experimental and Molecular Medicine*, **44**(9), 536–544.
- Luo, C., Urgard, E., Vooder, T. & Metspalu, A., 2011, The role of COX-2 and Nrf2/ARE in anti-inflammation and antioxidative stress: Aging and anti-aging, *Medical Hypotheses*, **77**(2), 174–178.
- Marionnet, C., Tricaud, C. & Bernerd, F., 2015, Exposure to Non-Extreme Solar UV Daylight: Spectral Characterization, Effect on Skin and Photoprotection, *International Journal of Molecular Sciences*, **16**, 68-90.
- Masaki, H., 2010, Role of antioxidants in the skin: Anti-aging effects, *Journal of Dermatological Science*, **58**(2), 85–90.
- Nethercott, H.E., Brick, D.J. & Schwartz, P.H., 2013, Immunocytochemical Analysis of Human Pluripotent Stem Cells, *Methodes Mol Biol.*, 201-220.
- Nilforoushzadeh, M.A., Ashtiani, H.R.A., Jaffary, F., Jahangiri, F., Nikkhah, N., Mahmoudbeyk, M., Fard, M., Ansari, Z. & Zare, S., 2017, Dermal Fibroblast Cells: Biology and Function in Skin Regeneration, *Journal of Skin and Stem Cell*, **4**(2).
- Ningsih, R., Purwoko, B.S., Syukur, M. & Dewi, I.S., 2016, Induksi Kalus dan Regenerasi Tiga Genotipe Tomat (*Solanum lycopersicum* L.) melalui Kultur Antera, *J. Hort. Indonesia*, **7**(2), 75-82.

- Nurrochmad, A., Wirasti, Dirman, A., Lukitaningsih, E., Rahmawati, A. & Fakhrudin, N., 2018, Effects of Antioxidant Anti-Collagenase Anti-Elastase Anti-Tyrosinase of The Extract and Fraction From *Turbinaria decurms* Bory, *Indonesian Journal Pharmacy*, **29**(4), 188-197.
- O'Brien, J., Hayder, H. & Peng, C., 2016, Automated Quantification and Analysis of Cell Counting Procedures Using ImageJ Plugins, *Journal of Visualized Experiment*, **117**.
- Orazio, J.D., Jarrett, S., Amaro-ortiz, A. & Scott, T., 2013, UV Radiation and the Skin, *International Journal of Molecular Sciences*, **14**, 12222–12248.
- Prastowo, D., 2017, Uji Efek Sitoprotektif Ekstrak Sel Punca Tomat (*Lycopersicon Esculentum* Mill.) dan Uji Daya Reduksi dengan metode FRAP (*Ferric Reducing Antioxidant Power*) secara In Vitro, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Purnamaningsih, R. & Ashrina, M., 2011, Pengaruh BAP dan NAA Terhadap Induksi Kalus dan Kandungan Artemisinin dari *Artemisia annua* L., *Berita Biologi*, **10**(4), 481–489.
- Rahayu, S.A. & Komala, N., 2011, Karakteristik Indeks Ultraviolet (UV) dan Ozon di Bandung dengan Menggunakan Data *Ozone Monitoring Instrument* (OMI), *Seminar Nasional Sains Atmosfer dan Antariksa*.
- Rashid, R., Bhat, J.A., Bhat, Z.A., Dar, W. A. & Shafi, W., 2012, Callus formation and organogenesis of tomato (*Solanum lycopersicum* L.), *Vegetos*, **25**(2), 243–248.
- Sahoo, Y., Pattnaik, S.K. & Chand, P.K., 1997, Plant regeneration from callus cultures of *Moms indica* L. derived from seedlings and mature plants, *Scientia Holticulturae*, **69**, 85–98.
- Setiaji, A., 2019, Respon Pertumbuhan, Optimasi Medium Kultur, Dan Aktivitas Antioksidan Pasca Perlakuan Cekaman Kekeringan Secara *In Vitro* Pada Kalus Tomat (*Solanum lycopersicum* L.), *Proposal Skripsi*, Fakultas Biologi Universitas Gadjah Mada, Yogyakarta.
- Setiawan, B., 2006, Aplikasi Terapeutik Sel Stem Embrionik Pada Berbagai Penyakit Degeneratif, *Cermin Dunia Kedokteran*, **153**, 5-8.
- Scalbert, A. & Williamson, G., 2000, Chocolate: Modern Science Investigates an Ancient Medicine, *Journal of Medicinal Food*, **3**(2), 121–125.
- Schmid, D., Schürch, C., Blum, P. & Belser, E., 2008, Plant Stem Cell Extract for Longevity of Skin and Hair, *SOFW-Journal*, **134**, 29-35.

- Sriram, G., Bigliardi, P.L. & Bigliardi-Qi, M., 2015, Fibroblast heterogeneity and its implications for engineering organotypic skin models in vitro, *European Journal of Cell Biology*, **94**(11), 483–512.
- Sorrell, J.M., 2004, Fibroblast heterogeneity: more than skin deep, *Journal of Cell Science*, **117**(5), 667–675.
- Subedi, L., Lee, T.H., Wahedi, H.M., Baek, S.H., & Kim, S.Y., 2017, Resveratrol-Enriched Rice Attenuates UVB-ROS-Induced Skin Aging via Downregulation of Inflammatory Cascades, *Oxidative Medicine and Cellular Longevity*, **2017**.
- Surowiak, P., Gansukh, T., Donizy, P., Halon, A. & Rybak, Z., 2014, Increase in cyclooxygenase-2 (COX-2) expression in keratinocytes and dermal fibroblasts in photoaged skin, *Journal of Cosmetic Dermatology*, **13**(3), 195–201.
- Trehan, S., Michniak-kohn, B. & Beri, K., 2017, Plant stem cells in cosmetics : current trends and future directions, *Future Science OA*, **3**(4).
- Utama, A.D., 2018, Uji Aktivitas Sitoprotektif Ekstrak Air Dan Etanol Sel Punca Tanaman Tomat (*Solanum lycopersicum* L.) Melalui Modulasi Profil Siklus Sel *Human Dermal Fibroblast Adult* (HDFa) Yang Dipaparkan Hidrogen Peroksida (H₂O₂), *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Vang, R., Gown, A.M., Barry, T.S., Wheeler, D.T. & Ronnet, B.M., 2006, Immunohistochemistry for estrogen and progesterone receptors in the distinction of primary and metastatic mucinous tumors in the ovary : an analysis of 124 cases, *Mod Pathol*, **19**(1), 97-105.
- Vaughn, K., 2013, *Immunocytochemistry of plant cells*. Springer Science + Bussiness Media, London.
- Verdeil, J., Alemanno, L., Niemenak, N. & Tranbarger, T.J., 2007, Pluripotent versus totipotent plant stem cells: dependence versus autonomy?, *TRENDS in Plants Science*, **12**(6).
- Watson, R.R., 2003, *Functional Foods and Nutraceuticals in Cancer Prevention*, Iowa State Press.
- Wen, K., Shih, I., Hu, J., Liao, S., Su, T. & Chiang, H, 2011, Inhibitory Effects of *Terminalia catappa* on UVB-Induced Photodamage in Fibroblast Cell Line, *Hindawi Publishing and Corporation*, **2011**, 9.
- Wijaya, N.R., Suharto, D. & Sudrajad, H., 2017, Pengaruh BAP dan 2,4-D Terhadap Inisiasi dan Pertumbuhan Kalus Pulesari (*Alyxia reinwardtii* Blume), *Jurnal Pertanian Agros*, **19**(1), 37-44.

- Wirdani Fitri, E., 2016, The Effectiveness of Topical Mangosteen Pericarp Extract on the Collagen of Mice Skin Exposed to Ultraviolet B, *American Journal of Clinical and Experimental Medicine*, **4**(3), 88.
- Young, A.R., Claveau, J. & Rossi, A.B., 2017, Ultraviolet radiation and the skin: Photobiology and sunscreen photoprotection, *J Am Acad Dermatol*, **76**(3).
- Zhang, S. & Duan, E., 2018, Fighting against Skin Aging: The Way from Bench to Bedside, *Cell Transplantation*, **27**(5), 729–738.