

DAFTAR PUSTAKA

- Agromedia, R. 2007. *Panduan lengkap budidaya tomat*. Agromedia, Jakarta.
- Amorati, R., & Valgimigli, L. 2012. *Modulation of the antioxidant activity of phenols by non-covalent interactions*. *Organic & biomolecular chemistry*, 10(21), 4147-4158.
- Anonim. 2009. degenerative disease. (n.d.) *Mosby's Medical Dictionary, 8th edition*. Retrieved September 13 2016 from <http://medical-dictionary.thefreedictionary.com/degenerative+disease>
- Anonim, 2012. *Preface Natl. Inst. Aging*. URL <https://www.nia.nih.gov/research/publication/global-health-andaging/preface> (Diakses pada tanggal 7/11/16).
- Anonim. 2015. *Statistik Penduduk Lanjut Usia 2014*. Jakarta : Badan Pusat Statistik.
- AZZAHRA, A. 2015. *Aktivitas antioksidan ekstrak daun sukun (Artocarpus altilis (Park.) Fosberg) dengan metode FRAP serta penetapan kandungan fenolik dan flavonoid totalnya* (Doctoral dissertation, Universitas Gadjah Mada).
- Batley, J. F., & JrLK, C. 2006. *Alternate methods for preparing pluripotent stem cells*. NIH, Stem Cell Information.
- Benzie, I. F., & Strain, J. J. 1999. *Ferric reducing/antioxidant power assay: Direct measure of total antioxidant activity of biological fluids and modified version for simultaneous measurement of total antioxidant power and ascorbic acid concentration*. *Methods in enzymology*, 299, 15-27.
- Bernhard, D., Moser, C., Backovic, A., & Wick, G. 2007. *Cigarette smoke—aging accelerator?*. *Experimental gerontology*, 42(3), 160-165.
- Campisi, J., Andersen, J. K., Kapahi, P., & Melov, S. 2011. *Cellular senescence: a link between cancer and age-related degenerative disease?*. In *Seminars in cancer biology* (Vol. 21, No. 6, pp. 354-359). Academic Press.
- 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.
- Cheng Li, G.L., 2015. *Characterization of the Time Evolution of Starch Structure from Rice Callus*. *Carbohydr. Polym.* 127.
- Cools, K., Vicente, A., & Terry, L. A. 2011. *18 Methodologies for Extraction, Isolation, Characterization and Quantification of Bioactive Compounds*. *Health-Promoting Properties of Fruits and Vegetables*, 371.
- Dai, J., Mumper, R.J., 2010. *Plant Phenolics: Extraction, Analysis and Their Antioxidant and Anticancer Properties*. *Molecules* 15, 7313–7352.
- Damayanti, E., Kustiyah, L., Khalid, M., dan Farizal, H., 2010. *Antioxidant Activity Rice Bran Higher than Tomato Juice and the Decreasing of Total Antioxidant Activity Serum After High Antioxidant Beverage Intervention*. *Journal of Nutrition and Food*, 5: 2015-210.
- Deng, G. F., Lin, X., Xu, X. R., Gao, L. L., Xie, J. F., & Li, H. B. 2013. *Antioxidant capacities and total phenolic contents of 56 vegetables*. *Journal of functional foods*, 5(1), 260-266.
- Devi, K. P., Suganthy, N., Kesika, P., & Pandian, S. K. 2008. *Bioprotective properties of seaweeds: in vitro evaluation of antioxidant activity and antimicrobial activity against food borne bacteria in relation to*

- polyphenolic content*. BMC complementary and alternative medicine, 8(1), 38.
- Dimitrios, B., 2006. *Sources of Natural Phenolic Antioxidants*. Trends Food Sci. Technol., Innovations in Traditional Foods - EFFoST 2005 conference Innovations in Traditional Foods 17, 505–512.
- Doyle LA, Yang W, Abruzzo LV, Krogmann T, Gao Y, Rishi AK, Ross DD. 1998. *A multidrug transporter from human MCF-7 breast cancer cells*. Proc Natl Acad Sci USA 22:15665–15670
- Everette, J. D., Bryant, Q. M., Green, A. M., Abbey, Y. A., Wangila, G. W., & Walker, R. B. 2010. *Thorough study of reactivity of various compound classes toward the Folin– Ciocalteu reagent*. Journal of Agricultural and Food Chemistry, 58(14), 8139-8144.
- Farage, M.A., Miller, K.W., Elsner, P., Maibach, H.I., 2008. *Intrinsic and extrinsic factors in skin ageing: a review*. Int. J. Cosmet. Sci. 30, 87–95.
- Frei, B. (Ed.). 2012. *Natural antioxidants in human health and disease*. Academic Press.
- Freshney, R. I. 2005. *Culture of specific cell types*. John Wiley & Sons, Inc..
- Gandjar, I.G., Rohman, A., 2007. *Kimia Farmasi Analisis*. Pustaka Pelajar. Yogyakarta.
- Giampieri, F., Alvarez-Suarez, J. M., Mazzoni, L., Forbes-Hernandez, T. Y., Gasparri, M., González-Paramàs, A. M., ... & Battino, M. 2014. *Polyphenol-rich strawberry extract protects human dermal fibroblasts against hydrogen peroxide oxidative damage and improves mitochondrial functionality*. Molecules, 19(6), 7798-7816.
- Gonçalves, E. M., Ventura, C. Â., Yano, T., Macedo, M. L. R., & Genari, S. C. 2006. *Morphological and growth alterations in Vero cells transformed by cisplatin*. Cell biology international, 30(6), 485-494.
- Govorkova, E. A., Murti, G., Meignier, B., De Taisne, C., & Webster, R. G. 1996. *African green monkey kidney (Vero) cells provide an alternative host cell system for influenza A and B viruses*. Journal of virology, 70(8), 5519-5524.
- Halliwell, B. (1999). *Antioxidant defence mechanisms: from the beginning to the end (of the beginning)*. Free radical research, 31(4), 261-272.
- Hana, Alfiani Ch. 2016. *Analisis Kandungan Senyawa Dominan dan Protein dalam Sel Punca (Stem cells) Tanaman Tomat (*Solanum lycopersicum* L.) serta Uji Aktivitas Antioksidan*. Universitas Gadjah Mada. Yogyakarta.
- Hirakawa, Y., Shinohara, H., Kondo, Y., Inoue, A., Nakanomyo, I., Ogawa, M., ... & Fukuda, H. 2008. *Non-cell-autonomous control of vascular stem cell fate by a CLE peptide/receptor system*. Proceedings of the National Academy of Sciences, 105(39), 15208-15213.
- Huang, D., Ou, B., & Prior, R. L. 2005. *The chemistry behind antioxidant capacity assays*. Journal of agricultural and food chemistry, 53(6), 1841-1856.
- Hussein, M. R. 2005. *Ultraviolet radiation and skin cancer: molecular mechanisms*. Journal of cutaneous pathology, 32(3), 191-205.
- Kammeyer, A., Luiten, R.M., 2015. *Oxidative events and skin aging*. Ageing Res. Rev. 21, 16–29.
- Keira, S. M., Ferreira, L. M., Gragnani, A., Duarte, I. D. S., & Santos, I. A. N. D. 2004. *Experimental model for fibroblast culture*. Acta Cirurgica Brasileira, 19, 11-16.

- Kiong, A. L. P., Huan, H. H., & Hussein, S. 2007. *Callus induction from leaf explants of Melaleuca alternifolia*. Intern J Agric Res, 2, 227-237.
- Krishnamurthy, P., Wadhvani, A., 2012. *Antioxidant Enzymes and Human Health, chapter 1, In: El-Missiry, M.A. (Ed.), Antioxidant Enzyme-InTech Science, Technology & Medicine, Vienna, Austria, pp. 4-18. DOI: 10.5772/48109.*
- Kurniawati, Y., Adi, S., Achadiyani, A., Suwarsa, O., Erlangga, D., & Putri, T. 2015. *Kultur primer fibroblas*. Medical Journal of Andalas, 37(5).
- Landau, M., 2007. *Exogenous factors in skin aging*. Curr. Prob. Dermatol. 35, 1-13.
- Laux, T. (2003). *The stem cell concept in plants: a matter of debate*. Cell, 113(3), 281-283.
- Lee, S. K., & Kader, A. A. 2000. *Preharvest and postharvest factors influencing vitamin C content of horticultural crops*. Postharvest biology and technology, 20(3), 207-220.
- Leong, L. P., & Shui, G. 2002. *An investigation of antioxidant capacity of fruits in Singapore markets*. Food chemistry, 76(1), 69-75.
- Lephart, E. D. 2016. *Skin aging and oxidative stress: Equol's anti-aging effects via biochemical and molecular mechanisms*. Ageing Research Reviews.
- López-Otín, C., Blasco, M. A., Partridge, L., Serrano, M., & Kroemer, G. 2013. *The hallmarks of aging*. Cell, 153(6), 1194-1217.
- Mahadkar, S., Jadhav, V., & Deshmukh, S. 2013. *Antioxidant activity of some promising wild edible fruits*. Pelagia Research Library. 4(3):165-169
- Mariska. 2009. *Pengujian kandungan fenol total tomat (Lycopersicum esculentum) secara in vitro*. Skripsi. Universitas Indonesia.
- Martinezy, C. J., Loarca-Pinaz, G. and Ortizy, G. D., 2003, *Antimutagenic Activity of Phenolic Compounds, Oligosaccharides and Quinolizidinic Alkaloids from Lupinus Campestris Seeds*, Food Additives and Contaminants, 20, 940-948.
- Martini, F., 2004. *Fundamentals of Anatomy and Physiology*. Benjamin-Cummings, San Francisco, CA
- Murray, P. M., Moane, S., Collins, C., Beletskaya, T., Thomas, O. P., Duarte, A. W. F., Nobre, F. S., Owoyemi, I. O., Pagnocca, F. C., Sette, L. D., McHugh, E., Causse, E., Pérez-López, P., Feijoo, G., Moreira, M. T., Rubiolo, J., Leirós, M., Botana, L. M., Pinteus, S., Alves, C., Horta, A., Pedrosa, R., Jeffryes, C., Agathos, S. N., Allewaert, C., Verween, A., Vyverman, W., Laptev, I., Sineoky, S., Bisio, A., Manconi, R., Ledda, F., Marchi, M., Pronzato, R., & Walsh, D. J. (2013). *17 Sustainable production of biologically active molecules of marine based origin*. New Biotechnology, 30(6), 839-850.
- Muth, J.E. 1999. *Basic statistic and pharmaceutical analysis*. 572,585. Marcel, Dekker, Inc. New York.
- Natarajan, V.T., Ganju, P., Ramkumar, A., Grover, R., Gokhale, R.S., 2014. *Multifaceted pathways protect human skin from UV radiation*. Nat. Chem. Biol. 10, 542-551
- Negri, E., La Vecchia, C., Franceschi, S., D'Avanzo, B., & Parazzini, F. 1991. *Vegetable and fruit consumption and cancer risk*. International journal of cancer, 48(3), 350-354.

- Pattison, D. I., & Davies, M. J. 2006. *Actions of ultraviolet light on cellular structures*. In *Cancer: cell structures, carcinogens and genomic instability* (pp. 131-157). Birkhäuser Basel.
- Poljsak, B., Dahmane, R.G., Godic, A., 2012. *Intrinsic skin aging: the role of oxidative stress*. *Acta Dermatovenerol. Alp Panon. Adriat.* 21, 33–36.
- Piluzza, G., & Bullitta, S. 2011. *Correlations between phenolic content and antioxidant properties in twenty-four plant species of traditional ethnoveterinary use in the Mediterranean area*. *Pharmaceutical biology*, 49(3), 240-247.
- Ou, B., Huang, D., Hampsch-Woodill, M., Flanagan, J. A., & Deemer, E. K. 2002. *Analysis of antioxidant activities of common vegetables employing oxygen radical absorbance capacity (ORAC) and ferric reducing antioxidant power (FRAP) assays: a comparative study*. *Journal of agricultural and food chemistry*, 50(11), 3122-3128.
- Rao, M. S., & Mattson, M. P. 2001. *Stem cells and aging: expanding the possibilities*. *Mechanisms of ageing and development*, 122(7), 713-734.
- Riso, P., Brusamolino, A., Porrini, M., & Watson, R. R. 2003. *Tomato and cancer*. In *Functional foods & nutraceuticals in cancer prevention* (pp. 133-152). Iowa State Press.
- Rittie, L., Fisher, G.J., 2002. *UV-light-induced signal cascades and skin aging*. *Ageing Res. Rev.* 1, 705–720.
- Sahoo, Y., Pattnaik, S.K., Chand, P.K., 1997. *Plant Regeneration from Callus Cultures of *Morus indica* L. derived from Seedlings and Mature Plants*. Elsevier 69, 85–98
- Schauer, N., Zamir, D., & Fernie, A. R. 2005. *Metabolic profiling of leaves and fruit of wild species tomato: a survey of the *Solanum lycopersicum* complex*. *Journal of Experimental Botany*, 56(410), 297-307.
- Scheres, B. 2005. *Stem cells: a plant biology perspective*. *Cell*, 122(4), 499-504.
- Schmid, D., Schürch, C., Blum, P., Belser, E., Züllli, F., 2008. *Plant Stem Cell Extract for Longevity of Skin and Hair*. SOFW J.-Seifen Ole Fette Wachse 137, 30.
- Schofield, P., Mbugua, D. M., & Pell, A. N. 2001. *Analysis of condensed tannins: a review*. *Animal Feed Science and Technology*, 91(1), 21-40.
- Setiawan, B. 2006. *Aplikasi Terapeutik Sel Stem Embrionik pada Berbagai Penyakit Degeneratif*. *Cermin Dunia Kedokteran*, 153, 5-8.
- Sies, H. 1997. *Oxidative stress: oxidants and antioxidants*. *Experimental physiology*, 82(2), 291-295.
- Soobrattee, M. A., Neergheen, V. S., Luximon-ramma, A., Aruoma, O. I. and Bahorun, T., 2005, *Phenolics as Potential Antioxidant Therapeutic Agents: Mechanism and Actions*, *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 579, 200-213.
- Sudarmadji, I. B. 2003. *Analisa Bahan Makanan dan Pertanian* (Edisi ke 2 ed., Vol. III). Yogyakarta, DIY, Indonesia: Liberty Yogyakarta.
- Su, X., Paris, M., Gi, Y. J., Tsai, K. Y., Cho, M. S., Lin, Y. L., ... & Miller, F. D. 2009. *TAp63 prevents premature aging by promoting adult stem cell maintenance*. *Cell stem cell*, 5(1), 64-75.
- Tavares, A.C., Salgueiro, L.R., Canhoto, J.M., 2009. *In Vitro Propagation of the Wild Carrot *Daucus carota* L. subsp. *halophilus* (Brot.) A. Pujadas for*

- Conservation Purposes. Vitro Cell. Dev. Biol. - Plant* 46, 47–56.
doi:10.1007/s11627-009-9258-y
- Thaipong, K., Boonprakob, U., Crosby, K., Cisneros-Zevallos, L., & Byrne, D. H. 2006. *Comparison of ABTS, DPPH, FRAP, and ORAC assays for estimating antioxidant activity from guava fruit extracts*. *Journal of food composition and analysis*, 19(6), 669-675.
- Thomson, J.A., Itskovitz-Eldor, J., Shapiro, S.S., Waknitz, M.A., Swiergiel, J.J., Marshall, V.S., Jones, J.M., 1998. *Embryonic Stem Cell Lines Derived from Human Blastocysts*. *Science* 282, 1145–1147.
- Toor and Savage, 2005, *Antioxidant Activity in Different Fractions of Tomatoes*, *Food Research International*, 38, 487-494.
- Tyrrell, R. M., & Pidoux, M. 1986. *Endogenous glutathione protects human skin fibroblasts against the cytotoxic action of UVB, UVA and near-visible radiations*. *Photochemistry and photobiology*, 44(5), 561-564
- Villareal, R. L., & Lai, S. H. 1979. *Development of heat tolerant tomato varieties in the tropics*. In *Proceedings of the 1st International Symposium on Tropical Tomatoes* (pp. 188-200).
- Waris, R. 2015. *Efek Sitoprotektif dan Antioksidan dari Ekstrak Etanolik Buah Jambu Biji Merah (*Psidium guajava* L.) dan Tomat (*Lycopersicon lycopersicum* L. Karsten)* (Doctoral dissertation, Universitas Gadjah Mada).
- Weigel, D., & Jürgens, G. 2002. *Stem cells that make stems*. *Nature*, 415(6873), 751-754.
- Wlaschek, M., Tanchcheva-Poór, I., Naderi, L., Ma, W., Schneider, L. A., Razi-Wolf, Z., ... & Scharffetter-Kochanek, K. 2001. *Solar UV irradiation and dermal photoaging*. *Journal of Photochemistry and Photobiology B: Biology*, 63(1), 41-51.
- Witsqa, A. A. S. 2014. *Efek kombinasi fraksi non n-Heksan ekstrak etanol sarang semut (*Myrmecodia tuberosa* Jack) dengan antikanker doksorubisin terhadap sel limfosit, sel vero, dan sel T47D in vitro*. (Doctoral dissertation, Universitas Gadjah Mada).
- Yates, H. E., Frary, A., Doganlar, S., Frampton, A., Eannetta, N. T., Uhlig, J., & Tanksley, S. D. 2004. *Comparative fine mapping of fruit quality QTLs on chromosome 4 introgressions derived from two wild tomato species*. *Euphytica*, 135(3), 283-296.
- Yin, L., Morita, A., & Tsuji, T. 2001. *Skin premature aging induced by tobacco smoking: the objective evidence of skin replica analysis*. *Journal of Dermatological Science*, 27, 26-31.
- Zakiah, K. (2015). *Uji Efek Antiproliferasi Campuran Senyawa Eugenol dan Isolat Katekin Gambir (*Uncaria gambir* Roxb) dari Fase Etil Asetat Terhadap Kultur Sel Kanker Serviks (HeLa cell line)*.