

DAFTAR PUSTAKA

- Adhami, VM., F. Afaq, N. Ahmad. 2003. Suppression of Ultraviolet B exposure Mediated Activation of NF-kappa B in Normal Human Keratinocyte by Resveratol. *Neoplasia* 5(1): 74-82.
- Ahmad Sjamsul. 1986. *Kimia Organik Bahan Alam*. Karunia Jakarta Universitas Terbuka. Jakarta.
- Anonim. 1986. *Sediaan Galenik*. 10-13. Departemen Kesehatan Republik Indonesia. Jakarta.
- Armoskaite, V. *et al.* 2011. The Analysis of Quality and Antioxidant Activity of Green Tea Extracts. *Journal of Medicinal Plants* 5(5): 811-816.
- Bag/SMF Ilmu Kesehatan kulit dan kelamin FK UNAIR/RSU Dr Soetomo. 2011. *Atlas Penyakit Kulit dan kelamin*. Edisi kedua Cetakan ketiga. Airlangga University Press. Surabaya.
- Badan Pengawas Obat dan Makanan Republik Indonesia. 2008. Bahan Tambahan Kosmetik. *Naturakos* 3(9).
- Badan Standarisasi Nasional. 2016. Standar Nasional Indonesia 3945. Jakarta: Badan Standar Nasional.
- Bambang, S. dan S. Purwantiningsih. 2008. Optimasi Ekstrak Polifenol dari Teh Hijau secara Batch. *Jurnal Tumbuhan Obat Indonesia* 1(1).
- Baumann, L., and I.B. Alleman. 2009. Depigmentation Agent. In Baumann, L., Saghari, S., Weisberg, E., editors. *Cosmetic Dermatology*. 2nd edition. Mc. GrawHill. New York. 280-288.
- Baumann, L., S. Saghari. 2009. Skin Pigmentation and Pigmentation Disorders. In Baumann L, S. Saghari, E. Weisberg editors. *Cosmetic Dermatology*. 2nd ed. New York: McGraw Hill. 98-106.
- Biswas, K.P. 2006. Description of tea plant. *In Encyclopaedia of Medicinal Plants*. New Dehli: Dominant Publishers and Distributors, pp. 964-966.

- Chan, E.W. 2017. Antioxidant, Anti-tyrosinase, and Antuquorum Sensing Activities of Four Mangrove Tree Species vs. Green Tea. *Journal of Applied Pharmaceutical Science* 7(7): 225-229.
- Chen, Z.Y., P.T. Chan, H.M. Ma, K.P. Fung and J. Wang. 1996. Antioksidative effect of ethanol tea extract on oxidation of canola oil. *JAOCS* 73 (3):375-380.
- Cooper Cooper, H.M. 1984. *The integrative research review: A systematic approach*. Applied social research methods series (Vol. 2) Beverly Hills, CA: Sage 12.
- Creswell, J.W. 2008. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Third Edition. Sage Publication. California. Terjemahan Achmad Fawaid. 2010. *Research Design: Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Cetakan 1. Pustaka Pelajar. Yogyakarta.
- Dalimartha, S. 2008. *1001 Resep Herbal*. Penebar Swadaya. Jakarta.
- Departemen Kesehatan RI. 1995. *Materia Medika*. Jilid VI. Jakarta: Diktorat Jendral POM-Depkes RI.
- Departemen Kesehatan RI. 2000. *Parameter Standar Umum Ekstrak Tumbuhan Obat.* Jakarta: Diktorat Jendral POM-Depkes RI.
- Direktorat Jenderal POM. 1985. *Formularium Kosmetik Indonesia*. Departemen Kesehatan Republik Indonesia. Jakarta.
- D'Orazio, J., S. Jarrett, A. Amaro-Ortiz, and T. Scott. 2013. UV Radiation and The Skin. *International Journal of Molecular Sciences* 14:12222-12248.
- Elias, I.T., and G. Richard. 2006. An Overview of Albinism and Its Visual System manifestations. <http://www.oculist.net/downaton502/prof/ebook/duanes/pages/v4/v4c038.html#intro>. 7 Juni 2020 (14:35).
- Endarini, L.H. 2016. *Framakognisi dan Fitokimia*. Pusdik SDM Kesehatan. Jakarta.
- Farnsworth, N.R. 1966. Biological and Phytochemical Screening of Plants. *Journal of Pharmaceutical Sciences* 55(3): 225-277.
- Feng, H.L., L. Tan, W.M. Chai, X.X. Chen, Y. Shi, Y.S. Gao, *et al.* 2014. Isolation and Purification of Condensed Tannins from Flamboyant Tree and their

- Antioxidant and Antityrosinase Activity. *Appl Biochem Biotechnol* 173(1): 179-1792.
- Fithria, dkk. 2015. The Antihyperpigmentation Effect Pare Leaves (*Momordica charantia* L.) Ethanol Extract on Guinea Pig (*Cavia porcellus*) Skin. *Jurnal Ilmiah Cendekia Eksakta*. 47-53.
- Fithria, R.F. 2015. *Mengatasi Hiperpigmentasi Ringan dengan Produk Sediaan Topikal*. Wahid Hasyim University Press. Semarang.
- Friedmann, P.S., F.E. Wren, and J.N. Matthews. 1990. Ultraviolet Stimulated Melanogenesis by Human Melanocytes is Augmented by di-acyl glycerol but not TPA. *J. Cell Physiol* 142: 334–341.
- Gillbro, J.M., M.J. Olsson. 2011. The Melanogenesis and Mechanisms of Skin-lightening Agent-existing and New Approaches. *Int J Cosm Sci* 33: 210-21.
- Gunawan, D., dan S. Mulyani. 2004. *Ilmu Obat alam (Farmakognosi)*. Jilid pertama. Penebar Swadaya. Yogyakarta.
- Harahap, M. 1990. *Penyakit Kulit*. PT. Gramedia. Jakarta.
- Harbone, J.B. 1987. *Metode Fitokimia Penuntun Cara Modern Menganalisis Tumbuhan*. ITB Press. Bandung.
- Hartoyo, A. 2003. *Teh dan Khasiatnya Bagi Kesehatan*, 15-17. Kanisius. Yogyakarta.
- Hastiningsih, L., dan Indiradewi. 2015. Krim Ekstrak Etanol Kulit Batang Pohon Nangka (*Arthocarpus heterophilus*) sama Efektifnya dengan Krim Hidrokuinon dalam Mencegah Peningkatan Jumlah Melanin pada Kulit Marmut (*Cavia Porcellus*) yang dipapar Sinar UVB, Tesis, Program Studi Ilmu Biomedik Program Pascasarjana Universitas Udayana. Denpasar.
- Hindun, S., et al. 2017. Potensi Limbah Kulit Jeruk Nipis (*Citrus Auronfolia*) sebagai Inhibitor Tirosinase. *IJPST* 4(2): 64-69.
- Hong, Y.H., et al. 2014. Physiological Effects of Formulation Containing Tannase-Converted Green Tea Extract on Skin Care: Physical Stability, Collagenase, Elastase, and Tyrosinase activities. *Integrative Medicine Research* 3: 25-33.

- Hong YH, *et al.* 2014. Enzymatic Improvement in the Polyphenol Extractability and Antioxidant Activity of Green Tea Extracts. *Biosel Biotechnol Biochem* 77(1): 22-29.
- Hosttetman, K., M. Hosttetman, dan A. Marston. 1985. *Cara Kromatografi Preparatif: Penggunaan pada Isolat Senyawa Alam*. Terjemahan Kosasih Padmawinata. Institut Teknologi Bandung. Bandung.
- Ichihashi, M. 2009. Photoaging of the Skin. *JAAM*. [Online]. 6(6). Available from: www.anti-aging.gr.jp/english/pdf/2009/6-8.pdf. 10 September 2020. (22.34).
- Jimbow, K., and M. Jimbow. 2004. Pigmentary Disorder in Oriental Skin. In : *Clinics in Dermatology*. 2nd Ed. Elsevier. 7: 11-27.
- Khan, B.A., N. Akhtar, I. Hussain, K.A. Abbas, and A. Rasul. 2013. Whitening Efficacy of Plant Extracts Including Hippophae rhamnoides and Cassia fistula Extracts on the Skin of Asian Patients with Melasma. *Postępy Dermatologii Alergologii* 15: 226-232.
- Kementerian Kesehatan RI. 2011. *Formularium Obat Herbal Asli Indonesia*. Kementerian Kesehatan RI. Jakarta.
- Kellogg, J.J. *et al.* 2017. Comparison of Metabolomics Approaches for Evaluating the Variability of Complex Botanical Preparations: Green Tea (*Camellia sinensis*) as a case study. *Journal of Natural Products* 80:1257-1466.
- Kim, D., *et al.* (2019). Camellia sinensis leaf extracts lacking catechins exert depigmentary effects through ERK-dependent, MiTF-mediated tyrosinase downregulation in melan-a cells and a human skin equivalent. *Arch Biol Sci*. 71(3): 483-488.
- Kim, E., *et al.* 2018. Skin Protective Effect of Epigallocatechin Gallate. *J. Mol. Sci.* 19:173.
- Kim, D.S., *et al.* 2004. (-)-Epigallocatechin-3-gallate and Hinokitiol Reduce Melanin Synthesis via Decreased MITF Production. *Arch Pharm Res* 27(3): 334-339.
- Kim. Y.C., S.Y. Choi, E.Y. Park. 2015. Anti-melanogenic Effects of Black, Green, and White Tea Extracts on Immortalized Melanocytes. *J Vet Sci* 16(2): 135-143.

- Kindred, C., and R. Halder. 2010. Pigmentation and Skin of Color. *In: Draelos, Z. D., editor. Cosmetic Dermatology Products and Procedures*. First edition. Wiley-Blackwell. 27-35. New Jersey.
- Kubo, I., Kints-Hori, Ikuyo. 1999. Flavonols from Saffron Flower: Tyrosinase Inhibitory Activity and Inhibition Mechanism. *J. Agric. Food Chem* 47: 4121-4125.
- Kusmita, L., I. Puspitaningrum, L. Limantara. 2015. Identification, Isolation and Antioxidant Activity of Pheophytin from Green Tea (*Camellia sinensis* (L.) Kuntze). *Procedia Chemistry* 14: 232-238.
- Mitsui, T. 1997. *New Cosmetic Science*. Elsevier Science. 32-25. New York.
- Nguyen, *et al.* 2016. Tyrosinase inhibitory activity of flavonoids from *Artocarpus heterophyllous*. *Chemistry Central Journal* 4-9.
- Oktaviana, M., dan S.W. Yenny. 2019. Perkembangan Penggunaan Kosmeseutikal Herbal pada Terapi Melasma. *Jurnal Kesehatan Andalas* 8(3): 717-725.
- Luthria, D.L. 2006. Influence of Sample Preparation on The Assay of Phytochemicals. *American Laboratory*. March. 12 – 14.
- Leaw, T.S., S. Benjakui, B.K. Simpson. 2017. Effect of catechin and its derivatives on inhibition of polyphenoloxidase and melanosis of Pacific white shrimp. *J Food Sci Technol* 54(5): 1098-1107.
- Lee, L.S., *et al.* 2014. Quantitative Analysis of Major Constituents in Green Tea with Different Plucking Periods and Their Antioxidant Activity. *Molecules* 19: 9173-9186.
- Liang, Y.R., *et al.* 2014. Inhibitory Effects of (-)-Epigallocatechin-3-gallate on Melanogenesis in Ultraviolet A-Induced B16 Murine Melanoma Cell. *Tropical Journal of Pharmaceutical* 13(11): 1825-1831.
- Luper, S. 1999. *A Review of Plants in the Treatment of Liver Diseases: Part Two*. *Alternative Medicine Review* 4(3).
- Lv N., J.H. Koo, H.Y. Yoon, J. Yu, K.A. Kim, I.W. Choi, dkk. 2007. Effect of angelica gigas extract on melanogenesis in B16 melanoma cells. *Int J Mol Med* 20(5):763-7.

- Mahmood, *et al.* 2010. The morphology, characteristics, and medicinal properties of *Camellia sinensis* tea. *Journal of Medicinal Plants* 4(19): 2028-2003.
- Marliana, S.D., V. Suryanti, Suyono. 2005. Skrining Fitokimia dan Analisis Kromatografi Lapis Tipis Komponen Kimia Buah Labu Siam (*Sechium edule* Jacq. Swartz.) dalam Ekstrak Etanol. *Biofarmasi* 3(1):26-31.
- Margaretta, S., S.D. Handayani, N. Indraswati, H. Hindarso, 2011. Ekstraksi Senyawa *Phenolic Pandanus Amaryllifolius* Roxb. sebagai Antioksidan Alami. *Jurnal Widya Teknik* 10(1):21-30.
- Martin, G. 2013. Guinea Pig. <http://www.animalresearch.info/en/listing/265/guinea-pig/>. 8 Juni 2020 (12.30).
- McMullen, R. L., E. Bauza, C. Gondran, G. Oberto, N. Domloge, C. Dal Farra, and D.J. Moore. 2010. Image Analysis To Quantify Histological and Immunoflourescent Staining Of Ex Vivo Skin and Skin Cell Culture. *International Journal Cosmetic Science* 32(2): 143-154.
- Mitrowihardjo, S. 2012. Kandungan Katekin dan Hasil Pucuk beberapa Klon the (*Camellia sinensis* (L.) O. Kuntze) Unggulan pada Ketinggian yang berbeda di kebun Pagilaran. Disertasi Program Studi Pemuliaan Tanaman. Fakultas Pertanian UGM. Yogyakarta.
- Mukhriani. 2014. Ekstraksi, pemisahan senyawa, dan identifikasi senyawa aktif. *Jurnal Kesehatan* 7(2).
- Mustarichie, R., I. Musfiroh, J. Levita. 2011. *Metode Penelitian Tanaman Obat*. Hlm 8-17. Widya padjajaran. Bandung.
- Narendra, D., A. Tanaka, D.F. Suen, and R.J. Youle. 2008. Parkin is Recruited Selectively to Impaired Mitochondria and Promotes their Autophagy. *J. Cell Biol* 183(5): 795-803.
- Nazarrudin., B. Fary, Paimin. 1993. *Pembudidayaan dan Pengolahan Teh*. Penebar Swadaya. Jakarta.
- Ningsih. 2009. Identifikasi Hidrokuinon dalam Krim Pemutih Selebritis Night Cream dengan Metode KLT. Medan.
- Nguyen, *et al.* 2016 Tyrosinase Inhibitory Activity of Flavonoids from *Artocarpus heterophyllous*. *Chemistry Central Journal* 4-9.

- Orhan, I.E., dan M.T.H. Khan. 2014. *Current Topics in Medicinal Chemistry*. Flavonoid Derivatives As Potent Tyrosinase Inhibitors – A Survey of Recent Findings Between 2008-2013. Vol 14.
- Ottawa Humane Society. 2011. A Quick Guide to Guinea Pigs. www.ottawahumane.ca. 8 Juni 2020 (18:30).
- Pandel, R., B. Poljsak, A. Godic, R. Dahmane. 2013. Skin Photoaging and the Role of Antioxidants in its prevention. *ISRN Dermatology*. Article ID 930164.
- Park, H.Y., M. Yaar. 2012. Dalam: Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, Wolff K, penyunting. Fitzpatrick's dermatology in general medicine. *Biology of melanocytes*. Edisi ke-8. McGraw-Hill. New York. pp 795–81.
- Parvez, S., M. Kang, H. Chung, dan H. Bae. 2007. Naturally Occuring Tyrosinase Inhibitors Mechanism and Applications in Skin Health, Cosmetics and Agricultures Industries. *Phytotherapy Research* 21: 805-816.
- Pintus, F., & D. Span. 2015. Antityrosinase activity of Euphorbia characias extracts. *Peerj*. 1305.
- Purwono. 2010. Studi Kepustakaan <http://www.scribd.com/doc/49046967/STUDI-KEPUSTAKAAN,2> diakses 10 November 2020 (21.03).
- Prof. Dr. adhi Djuanda, 1999. *Ilmu Penyakit Kulit dan Kelamin*. Edisi ketiga. Bagian Ilmu Kulit dan Kelamin. FKUI. Jakarta.
- Prof. Dr. Mawarli Harahap. *Ilmu Penyakit Kulit*. Hipocrates. Jakarta
- Prof. Dr. R.S. Siregar, Sp.KK(K). 2005. *Saripati Penyakit Kulit*. Edisi dua. ECG.
- Puspitasari P., A.A.G.P. Wiraguna, W. Pangkahila. 2017. Krim Ekstrak Teh Hijau 20% (*Camellia sinensis*) Mencegah Peningkatan Jumlah Melanin sama Efektif dengan Krim Hidrokuinon 4% pada Kulit Marmut (*Cavia porcellus*) yang Dipajan Sinar Ultraviolet B. *Jurnal Biomedik (JBM)* 9(2): 101-106.
- Rahmi, H., R. Ramadhan, N.S. Radjab. 2017. Pengaruh Konsentrasi Natrium Alginat terhadap Gel Ekstrak Daun Teh Hijau (*Camellia sinensis* L.) sebagai Inhibitor Tirosinase. *PHARMACY* 14(2): 162-172.

- Ramkumar S, *et al.* 2016. Biochemical and molecular analysis of *Camellia sinensis* (L.) O. Kuntze tea from the selected P/11/15 clone. *Journal of Genetic Engineering and Biotechnology* 14: 69-75.
- Redjeki, S. 2014. Uji Aktivitas Antimikroba Infusum Teh Hijau dan Teh Hitam (*Camellia sinensis* (L.) Kuntze) terhadap *Escherichia coli* dan *Candida albicans*. *Jurnal Kesehatan Bakti Tunas Husada* 11(1): 98-107.
- Rigel, D.S., R.A. Weiss, H.W. Lim, and J.S. Dover. 2004. *Photoaging*, Marcel Dekker Inc. 34.
- Robinson, T. 1995. *Kandungan Organik Tumbuhan Tinggi*. Edisi IV. Institut Teknologi Bandung. Bandung. Hlm 281.
- Ross, I.A. 2005. Tea Common Names and its uses. In medicinal Plants of the World. 3rd Vol. Humana Press. New Jersey. pp. 1-19.
- Sangsrichan, S., R. Ting. 2010. Antioxidation and Radical Scavenging Activities and Tyrosinase Inhibition of Fresh Tea Leaves *Camellia sinensis* L. *Science Sci. J. UBU* 1(1):76-81.
- Sarker, S.D., Z. Latif, dan A.I. Gray. 2006. Natural Products Isolation. In: Sarker S.D, Z. Latif, dan A.I. Gray, editors. *Natural Products Isolation*. 2nd ed. Humana Press Inc. Totowa (NEW Juersey). pp. 6-10,18.
- Sato, K., M. Toriyama. 2009. Depigmenting Effect of Catechins. *Molecules* 14: 4425-4432.
- Setyamidjaja, D. 2000. *Teh Budidaya dan Pengolahan Pascapanen*. Penerbit Kanisius. Yogyakarta.
- Sitanggang, T.C. 2019. Krim Astaxanthin Mencegah Peningkatan Melanin Kulit Marmut (*Cavia porcellus*) yang Dipapar Sinar Ultraviolet B. *Jurnal Media Sains* 3(2):71-77.
- Shabri, dan Dadan Rohdiana. 2016. Optimasi dan Karakteristik Ekstrak Polifenol Teh Hijau dari Berbagai Pelarut. <http://tcrjournal.com/tcrj/article/view/82/78>. 26 Juli 2020 (07:17).
- Shae, C. R., and J.A. Parrish. 1991. *Nonionizing Radiation and The Skin*. In : LA G, editor. *Physiology, Biochemistry and Molecular Biology of The Skin*. Oxford University Press. 910-927.

- Solano, F. 2014. Melanins: Skin Pigments and Much More Types, Structural Models, Biological Functions, and Formation Routes. *New Journal of Science* 6: 1-28.
- Song, W., *et al.* 2017. Structural Features, Antioxidant and Tyrosinase Inhibitory Activities of Proanthocyanidins in Leaves of Two Tea Cultivars. *International Journal of Food Properties* 20(6): 1348-1358.
- Sri Lestari. 2011. Cosmeutical untuk Hiperpigmentasi. *Journal of Cosmetic Dermatology Update Symposium Proceedings*.
- Stahl. 1969. *The chemistry of tea and soluble tea and soluble tea manufacturing*. Mc. Cormick and Co., Inc. Baltimore. Maryland.
- Suryanto, B. R. 2012. Pemeliharaan dan Penggunaan Marmut Sebagai Hewan Percobaan. http://www.bbvetwates.comuploadjurnalPemeliharaan_dan_Penggunaan_Marmut_sebagai_Hewan_Percobaan1.pdf (2). 8 Juni 2020 (08:43).
- Suryaningsih, BE. 2003. Pengaruh Krim Ekstrak Teh Hijau terhadap Eritema dan Pigmentasi Akibat Paparan UV-B. *Thesis*. Fakultas Universitas Gadjah Mada. Yogyakarta.
- Syarif, M., dan Wasitaatmadya. 2011. *Dermatologi Kosmetik*. Edisi kedua. FKUI. Jakarta.
- Szekalsa, M., P. Agata, S. Emilia, C. Patrycja, W. Katarzyna. 2016. Alginate: Current use and Future Perspectives in Pharmaceutical and Biomedical Applications. *International Journal of Polymer Science* (1): 1-17.
- Tadokoro Tadokoro, T., F. Bonte, J.C. Archambault, J.H. Cauchard, M. Neveu, K. Ozawa, *et al.* 2010. Whitening efficacy of plant extracts including orchid extract on Japanese female skin with melasma and lentigo senilis. *J of Derm* 37:522-30.
- Tahir, I., I. Yulastuti, dan Juminah. 2002. Analisis Aktivitas Perlindungan Sinar UV secara *In Vitro* dan *In Vivo* dari Beberapa Senyawa Ester Sinamat Produk Reaksi Kondensasi Benzaldehida Tersubstitusi dan Alkil Asetat. Makalah Seminar Nasional Kimia XI UGM. Yogyakarta.

- Thi, N., T. Mai, X. Nguyen, D. Hai, P. Hoang, P. Nguyen, *et al.* 2012. Three New Geranyl Aurones from the Leaves of *Artocarpus altilis*. *Phytochem Lett* 5(3): 647-650.
- Thitimuta, *et al.* 2017. Camellia sinensis L. Extract and Its Potential Beneficial Effects in Antioxidant, Anti-Inflammatory, Anti-Hepatotoxic, and Anti-Tyrosinase Activities. *Molecules*. hlm 1-14. 22, 401; doi:10.3390/molecules22030401.
- Trisianty, S. 2014. Pemberian Kombinasi Krim Hidrokuinon Dan Asam Traneksamat Oral Menurunkan Jumlah Melanin Lebih Banyak Dibanding Krim Hidrokuinon Pada Marmut Betina (*Cavia porcellus*) yang dipapar UVB, Tesis, Program Studi Ilmu Biomedik Program Pascasarjana, Universitas Udayana. Denpasar.
- Tsai, T.C., B.M. Hantash. 2008. Cosmeceutical Agents: A Comprehensive Review of the Literature. *Clinical Medicine Insights: Dermatology* 1:1.
- Ukwubile, C.A., *et al.* 2020. Phytochemical Composition and Toxicity Evaluation of *Camellia sinensis* (L.) O. Kuntze (Theaceae) (Green Tea) Leaves Collected from Mambila Beverages Ltd Nigeria. *International Journal of Medicinal Plants and Natural Products* 6(2): 1-13.
- Voight, R. 1995. *Buku Pelajaran Teknologi Farmasi*. Alih Bahasa Drs. Soendani Noerono Soewandhi. Universitas Gajah Mada. Yogyakarta. 577-578.
- Wang, H., G.J. Provan, K. Helliwell. 2000. Tea Flavonoids: Their functions, utilization and analysis. *Trends. Food. Sci. Technol* 11:152-160.
- Wang, Y., *et al.* 2019. Impact of Six Typical Processing Methods on the Chemical Composition of Tea Leaves Using a Single *Camellia sinensis* Cultivar, Longjing 43. *Journal of Agricultural and Food Chemistry* 67: 5423-5436.
- Wasitaatmadja., M. Syarif. 2010. *Ilmu Penyakit Kulit dan Kelamin*. Jakarta: badan Penerbit Fakultas Kedokteran Universitas Indonesia. hlm 253.
- Winarno, F.G. 1992. *Kimia Pangan dan Gizi*. Gramedia. Jakarta.
- Wiraguna, A.A.G.P. 2013. Pemberian Gel Ekstrak Bulung Boni (*Cauleerpa spp.*) Topikal Mencegah Penuaan Kulit melalui Peningkatan Ekspresi Kolagen, Penurunan Kadar dan Ekspresi MMP-1 serta Ekspresi 8-OhdG pada Tikus Wistar yang Dipapar Sinar Ultra Violet-B. *Disertasi*. Universitas Udayana. Denpasar.

- Woolery-Lloyd, H.J.N., dan Kammer. 2011. Treatment of hyperpigmentation. *Seminar In Cutaneous Medicine and Surgery* 30(171-175).
- Yamamoto, D. 2015. *Guinea Pig*. Reaction Books Ltd. London. 5.
- Yeragamreddy, P.R., *et al.* 2013. In vitro Antitubercular and Antibacterial activities of isolated constituents and column fractions from leaves of *Cassia occidentalis*, *Camellia sinensis* and *Ananas comosus*. *African Journal of Pharmacology and Therapeutics* 2(4): 116-123.
- Yuxu, X., *et al.* 2019. Effects of Tannase and Ultrasound Treatment on the Bioactive Compounds and Antioxidant Activity of Green Tea Extract. *Antioxidants* 8(362): 1-14.
- Yoshida, M., *et al.* 2002. Histamine is Involved in Ultraviolet B-Induced Pigmentation of Guinea Pig Skin. *The Journal of Investigative Dermatology* 118(2):255-260.
- Zaddana, C., Almasyuri, R.A. Shalatin. 2020. Selai lembaran Kombinasi Apel (*Malus sylvestris* (L.) Mill.) dan Teh Hijau (*Camellia sinensis* L.) sebagai Pangan Fungsional. *Jurnal AcTion: Aceh Nutrition Journal* 5(1): 87-97.
- Zheng, Chao., & Wang. 2008. Tyrosinase Inhibitors from Paper Mulberry (*Broussonetia papyrifera*). *Food Chemistry* 106:529-535.
- Zubair, S., G. Mujtaba. 2009. Comparison of Efficacy of Topical 2% Liquiritin, Topical 4% Liquiritin and Topical 4% Hydroquinone in the Management of Melasma. *J Pak Assoc Dermatol* 19:158-63.