

DAFTAR PUSTAKA

- Adikwu, M. U. & Alozie, B. U., 2007. Application of snail mucin dispersed in detarium gum gel in wound healing. *Sci. Res. Essays.*, 2(6), pp195-8.
- Berniyanti, T., Waskito, E. B., & Suwarno, 2007. Biochemical characterization of an antibacterial glycoprotein from *Achatina fulica* ferussac Snail Mucus local isolate and their implication on bacterial dental infection. *Indonesian J Biotechnology*, (12), pp943-51.
- Borkow, G., 2014. Using copper to improve the well-being of the skin. *Curr. Chem. Biol.*, (8), pp89-102.
- Campisi, J., 1996. Replicative senescence: An old lives' tale? *Cell*, (84), pp497–500.
- Chen, Y. E., 2004. MMP-12, An old enzyme plays a new role in the pathogenesis of rheumatoid arthritis? *Am. J. Pathol.*, 165(4), pp1069-70.
- Chen, Z., Seo, J., Kim, Y., Lee, S., Kim, K., Cho, K. *et al.*, 2005. Heat modulation of tropoelastin, fibrillin-1, and matrix metalloproteinase-12 in human skin in vivo. *J. Investig. Dermatol.*, (124), pp70–8.
- Chiang, H., Chen, H., Lin, T., Shih, I., Wen, K., 2015. *Michelia alba* extract attenuates UVB-induced expression of matrix metalloproteinases via MAP kinase pathway in human dermal fibroblasts. *Food Chem. Toxicol.*, 50(12), pp4260-9.
- Chu, D. H. Development and structure of skin. In: Goldsmith, L. A., Katz, S., Gilchrist, B., Paller, A., Leffell, D., Wolff, K, editors. *Fitzpatrick's Dermatology in General Medicine*. 8th ed. New York: McGraw-Hill Companies Inc., 2012: 58-75.
- Debacq-Chainiaux, F., Leduc, C., Verbeke, A., Toussaint, O., 2012. UV, stress and aging. *Dermatoendocrinol*, 4(3), pp236–40.
- Deyrup-Olsen, I., Luchtel, D.L., Martin, A.W., 1983. Components of mucus of terrestrial slugs (Gastropoda). *Am. J. Physiol.*, 245(3), pp448-52.
- Federer, W. T. *Experimental design: theory and application*. New York: The Macmillan Company, 1955.
- Fernandes, I. R., Russo, F. B., Pignatari, G. C., Evangelinellis, M. M., Tavolari, S., Muotri, A. R. *et al.*, 2016. Fibroblast sources: Where can we get them? *Cytotechnology*, 68 (2), pp.223-8.

- Freymler, E. G., 2004. Platelet-rich plasma: evidence to support its use. *J. Oral Maxillofac. Surg.*, 62(8), pp1046-8.
- Gesteira, T. F., Coulson-Thomas, V. J., Ogata, F. T., Farias, E. H. C., Cavalheiro, R. P., de Lima, M. A. *et al.*, 2011. A novel approach for the characterisation of proteoglycans and biosynthetic enzymes in a snail model. *Biochim. Biophys. Acta*, (1814), pp1862-69.
- Harman, D., 2006. Free radical theory of aging: An update: Increasing the functional life span. *Ann. N. Y. Acad. Sci.*, (1067), pp10-21.
- Harti, A. S., Sulisetyawati, S. D., Murharyati, A., Oktariani, M., 2016. The effectiveness of snail slime and chitosan in wound healing. *Int. J. Pharma Bio Sci.*, 5(1), pp76-80.
- Hwang, Y. P., Kim, H. G., Choi, J. H., Han, E. H., Kwon, K. I., Lee, Y. C. *et al.*, 2011. Saponins from the roots of *Platycodon grandiflorum* suppress ultraviolet A-induced matrix metalloproteinase-1 expression via MAPKs and NF- κ B/AP-1-dependent signaling in HaCaT cells. *Food Chem. Toxicol.*, (49), pp3374-82.
- Im, A. R., Kim, H. S., Hyun, J. W., Chae, S. W., 2016. Potential for tyndalized *Lactobacillus acidophilus* as an effective component in moisturizing skin and anti-wrinkle products. *Exp. Ther. Med.*, (12), pp759-64.
- Jeong, J., Toida, T., Muneta, Y., Kosiishi, I., Imanari, T., Lindhardt, J. T. *et al.*, 2010. Localization and characterization of acharan sulfate in the body of the giant African snail *Achatina fulica*. *Comp. Biochem. Physiol. B*, (130), pp513-9.
- Jummai, A. T & Okoli, B. J., 2013. Compositional evaluation of giant East African snail. *Res. J. Eng. Appl. Sci.*, 2(5), pp397-401.
- Landesberg, R., Roy, M., Glickman, R. S., 2000. Quantification of growth factor levels using a simplified method of platelet-rich plasma gel preparation. *J. Oral Maxillofac. Surg.*, 58(3), pp297-301.
- Marx, R. E., 2014. Platelet-rich plasma: evidence to support its use. *J. Oral Maxillofac. Surg.*, 62(4), pp489-96.
- Mescher, A. L. *Histologi Dasar Junqueira: Teks & Atlas*. 8th ed. New York: McGraw-Hill Companies Inc, 2014.

- Mitra, D., Sarkar, M., Allen, A.K., 1987. Further characterization of the cold agglutinin from the snail *Achatina fulica*. *Biochem. J.*, (242), pp331-38.
- Mukherjee, S., Sarkar, S., Munshi, C., Bhattacharya, S. The uniqueness of *Achatina fulica* in its evolutionary success. In: Ray, S., editor. *Organismal and Molecular Malacology*. Rijeka: InTech, 2017: 219-32.
- Pittayapruek, P., Meephansan, J., Prapapan, O., Komine, M., Ohtsuki, M., 2016. Role of Matrix Metalloproteinases in Photoaging and Photocarcinogenesis. *Int. J. Med. Sci.*, (17), pp868-87.
- Prabowo, B. Y., 2015. Efek minyak esensial biji *myristica fragrans houtt* dalam menghambat kematian sel fibroblas akibat pajanan sinar ultraviolet B. *Master thesis*, Universitas Gadjah Mada, Yogyakarta.
- Quan, T., Qin, Z., Xia, W., Shao, Y., Voorhees, J. J., Fischer, G. J., 2009. Matrix-degrading metalloproteinases in photoaging. *J. Investig. Dermatol. Symp. Proc.*, 14(1), pp20-4.
- Ramos-e-Silva, M., Celem, L. R., Ramos-e-Silva, S., Fucci-da-Costa, A. P., 2013. Anti-aging cosmetics: Facts and controversies. *Clin. Dermatol.*, (31), pp750-8.
- Santana, W. A., de Melo, C. M. Cardoso, J. C., Pereira-Filho, R. N., Rabelo, A. S., Reis, F. P. *et al.*, 2012. Assessment of antimicrobial activity and healing potential of mucous secretion of *Achatina fulica*. *Int. J. Morphol.*, 30(2), pp365-73.
- Saraswati, P., 2010. Pengaruh pemberian alpha lipoic acid terhadap sintesis kolagen dan viabilitas fibroblas pada biakan fibroblas manusia setelah mendapat pajanan sinar ultraviolet A. *Master thesis*, Universitas Gadjah Mada, Yogyakarta.
- Sbardella, D., Fasciglione, G. F., Gioia, M., Ciaccio, C., Tundo, G. R., Marini, S. *et al.*, 2012. Human matrix metalloproteinases: An ubiquitous class of enzymes involved in several pathological processes. *Mol. Asp. Med.*, (33), pp119-208.
- Shin, J. W., Kwon, S. H., Choi, J. Y., Na, J. I., Huh, C. H., Choi, H. R. *et al.*, 2019. Molecular mechanisms of dermal aging and antiaging approaches. *Int. J. Mol. Sci.*, 20(9), pp2126.
- Taddese, S., Jung, M. C., Ihling, C., Heinz, A., Neubert, R. H. H., Schmelzer, C. E. H., 2010. MMP-12 catalytic domain recognizes and cleaves at multiple sites in

human skin collagen type I and type III. *Biochim. Biophys. Acta.*, (1804), pp731-9.

Tewari, A., Grys, K., Kollet, J., Sarkany, R., Young, A., 2014. Upregulation of MMP-12 and its activity by UVA1 in human skin: potential implications for photoaging. *J. Investig. Dermatol.*, (134), pp2598-609.

Van Doren, S. R., 2015. Matrix metalloproteinase interactions with collagen and elastin. *Matrix Biol.*, (0), pp224–31.

Visse, R. & Nagase, H., 2003. Matrix metalloproteinases and tissue inhibitors of metalloproteinases structure, function, and biochemistry. *Circ. Res.* (92), pp827-39.

Weibrich, G., Kleis, W. K., Hafner, G., 2002. Growth factor levels in the platelet-rich plasma produced by 2 different methods: curasan-type PRP kit versus PCCS PRP system. *Int. J. Oral Maxillofac. Implants*, 17(2), pp184-90.

Wrotniak, M., Bielecki, T., Gałdzik, TS., 2007. Current opinion about using the platelet-rich gel in orthopaedics and trauma surgery. *Ortop. Traumatol. Rehabil.*, 9(3), pp227-38.

Xuan, Y., Chi, L., Tian, H., Cai, W., Sun, C., Wang, T. *et al.*, 2016. The activation of the NF- κ B-JNK pathway is independent of the PI3K-Rac1-JNK pathway involved in the bFGF-regulated human fibroblast cell migration. *J. Dermatol. Sci.*, 82(1), pp28-37.

Yaar, M. & Gilchrist B. A. Aging of skin. In: Goldsmith, L. A., Katz, S., Gilchrist, B., Paller, A., Leffell, D., Wolff, K, editors. *Fitzpatrick's Dermatology in General Medicine*. 8th ed. New York: McGraw-Hill Companies Inc., 2012: 1213-26.

Yuasa, H.J., Furuta, E., Nakamura, A., Takagi, T., 1998. Cloning and sequencing of three C-type lectins from body surface mucus of the land slug, *Incilaria fruhstorferi*. *Comp. Biochem. Physiol. B*, (119), pp479-84.

Zhong, J., Wang, W., Yang, X., Yan, X., Liu, R., 2013. A novel cysteine-rich antimicrobial peptide from the mucus of the snail of *Achatina Fulica*. *Peptides*, (39), pp1-5.