

BIBLIOGRAPHY

- Agustina, R., Indrawati, D.T., Masruhin, M.A. 2015. Aktivitas Ekstrak Daun Salam (*Eugenia plyantha*) sebagai Antiinflamasi pada Tikus Putih (*Rattus norvegicus*). *Journal of Tropical Pharmacy and Chemistry*. 3(2):120-123.
- Akrom and Hidayati, T. 2021. *Imunofarmakologi Peradangan*. Azkiya Publishing. Jakarta. ISBN : 978-623-6744-86-4.
- Apridamayanti, P., Sanera, F., Robiyanto, R. 2018. Antiinflammatory Activity of Ethanolic Extract from Karas Leaves (*Aquilaria malaccensis* Lamk.). *Pharmaceutical Sciences and Research*. 5(3): 152 – 158.
- Arief, R., Tharir, Z., Kristiana. 2018. Uji Aktivitas Antiinflamasi Sediaan Salep Ekstrak Daun Awar-Awar (*Ficus Septica* Burm. F) terhadap Udem Kulit Punggung Mencit (*Mus Musculus*). *Skripsi*. Akademi Farmasi Yamasi Makassar.
- Arun, C., and Sivashanmugam, P. 2017. Study on Optimization of Process Parameters for Enhancing The Multi-Hydrolytic Enzyme Activity in Garbage Enzyme Produced From Preconsumer Organic Waste. *Bioresource technology*. 226: 200-210.
- Bancroft, J.D., Gamble, M. 2008. *Theory and Practice of Histological Techniques*; Elsevier health sciences, North Hollywood, CA, USA. ISBN 0443102791.
- Boer, M., Duchnik, E., Maleszka, R., Marchlewicz, M. 2016. Structural and Biophysical Characteristics of Human Skin in Maintaining Proper Epidermal Barrier Function. *Postep Dermatol Alergol*. 33:1–5.
- Bosscher, K.D., Vanden, W.B., Haegeman, G. 2003. The Interplay Between the Glucocorticoid Receptor and Nuclear Factor κ B and Steroid Receptor Signaling Pathways. *Endocrine Reviews*. 24(4):488-522.
- Chen, L., Deng, H., Cui H., Fang, J., Zuo, Z., Deng, J., Li, Y., Wang, X., Zhao, L. 2017. Inflammatory Responses and Inflammation-Associated Diseases in Organs. *Oncotarget*. 9 (6): 7204-7218.
- Cologne, Germany: Institute for Quality and Efficiency in Health Care (IQWiG). 2022. What is inflammation?. *InformedHealth.org*. <https://www.ncbi.nlm.nih.gov/books/NBK279298/>. Diakses 14 Januari 2023.

- Coondoo, A., Phiske, M., Verma, S., Lahiri K. 2014. Side-effects of topical steroids: A long overdue revisit. *Indian Dermatol Online Journal*. 5(4):416-25.
- Del Grossi Moura, M., Cruz Lopes, L., Silva, M.T., Barberato-Filho S., Motta, R.H.L., Bergamaschi. C.C. 2018. Use of steroid and nonsteroidal anti-inflammatory in the treatment of rheumatoid arthritis: Systematic review protocol. *Medicine (Baltimore)*. 97 (41): e12658.
- Diehl, B., Hoheisel, U., Mense, S. 1988. Histological and neurophysiological changes induced by carrageenan in skeletal muscle of cat and rat. *Agents Actions*. 25: 210–3.
- Doughari, J. 2012. Phytochemicals: Extraction Methods, Basic Structures and 42 Mode of Action as Potential Chemotherapeutic Agents. Department of Microbiology School of Pure and Applied Sciences. Federal University of Technology Yola. Nigeria.
- Ericson, W.N., Kaye, D. 2014. Steroid Pharmacology, Complications, and Practice Delivery Issues. *The Ochsner Journal*. Vol. 14(2):203-207.
- Fadilaturahmah. 2022. Uji Antiinflamasi dan Toksisitas Sediaan Salep Berbasis Ekstrak Etanol Daun Kacang Miang (*Mucuna pruriens* L. (DC.)) pada Kulit Mencit yang Diinduksi 2,4 Dinitrochlorobenze. *Tesis*. Universitas Andalas
- Fehrenbacher, J.C., Vasko, M.R., Duarte, D.B. 2012. Models of inflammation: Carrageenan- or complete Freund's Adjuvant (CFA)-induced edema and hypersensitivity in the rat. *Curr Protoc Pharmacol*. 5: 5.4.
- Fujiwara, N., Kobayashi, K. 2005. Macrophages in inflammation. *Current Drug Targets Inflamm Allergy*. 4:281–286.
- Ghlichloo, I., Gerriets, V. 2022. Nonsteroidal Anti-inflammatory Drugs (NSAIDs). *Treasure Island (FL): StatPearls Publishing*. <https://www.ncbi.nlm.nih.gov/books/NBK547742/>. Diakses 14 januari 2023.
- Gu, S., Xu, D., Zhou, F., Chen, C., Liu, C., Tian, M., Jiang, A. 2021. The Garbage Enzyme with Chinese Hoenylocust Fruits Showed Better Properties and Application than When Using the Garbage Enzyme Alone. *Foods*. 10(11):2656.

- Guyton, A.C., Hall, J.E. 1997. Buku Ajar Fisiologi Kedokteran, Edisi 9, Jakarta. EGC. 1212.
- Hapsari H.D., Handajani, J. and Tandelilin, R.T.C. 2006. Efektivitas Ekstrak Etanol Buah Mengkudu sebagai Bahan Anti Inflamasi pada Tikus Wistar. *Majalah Ilmiah Kedokteran Gigi*. 21(2): 60-8.
- Harianto, S.W., Prasetyaningsih, A., Prakasita, V.C. 2021. Uji Efektivitas Salep Kulit Batang Kapuk Randu (*Ceiba pentandra*) Sebagai Obat Anti-Inflamasi. *EduMatSains Jurnal Pendidikan, Matematika dan Sains*. 6(1): 47-60.
- Harirforoosh, S., Asghar, W., Jamali, F. 2013. Adverse Effects of Nonsteroidal Anti-Inflammatory Drugs: An Update of Gastrointestinal, Cardiovascular and Renal Complications. *J Pharm Pharm Sci*. 16(5):821-847.
- Hasanah, Y., Mawarni, L., Hanum, H. 2018. Eco Enzyme and Its Benefits for Organic Rice Production and Disinfectant. *Journal Of Saintech Transfer*. 3 (2): 119-128.
- Ho, A.W., Kupper, T.S. 2019. T cells and the skin: from protective immunity to inflammatory skin disorders. *Nat Rev Immunol*. 19: 490-502.
- Hong, S.K., Han, J.S., Min, S.S., Hwang, J.M., Kim, Y.I., Na, H.S., Yoon, Y.W., Han, H.C. 2002. Local neurokinin-1 receptor in the knee joint contributes to the induction, but not maintenance, of arthritic pain in the rat. *Neurosci Lett*. 322:21-4.
- Infolabmed. 2017. Metode Pengukuran Pada Hematology Analyzer I Elektrikal Impedance, Fotometri, Flowcytometri, dan Histogram/Kalkulsi. diakses pada tanggal 09 Juni 2022, <<http://www.infolabmed.com/2017/04/metodepengukuran-pada-hematologi.html>>.
- Inxigh Drugs. 2022. National Center for Advancing Translational Sciences. <https://drugs.ncats.io/substances?q=%22ALOXIPRIN%22&facet=Substance%20Form%2FPrincipal%20Form>. Diakses pada tanggal 08 Desember 2022.
- Iswati, R. S., Hubaedah, A., Andarwulan, S. 2021. Pelatihan Pembuatan Sabun Cuci Tangan Anti Bakteri Berbasis Eco Enzym dari Limbah Buah-Buahan dan Sayuran. Bantene: *Jurnal Pengabdian Masyarakat*, 3(2), 104-112.

- Jadid, N., Jannah, A. L., Handiar, B. P. W. P., Nurhidayati, T., Purwani, K. I., Ermavitalin, D., and Navastara, A. M. 2022. Aplikasi Eco Enzyme sebagai Bahan Pembuatan Sabun Antiseptik. *Sewagati*. 6(1): 69-75.
- James, W.D., Berger, T.G., Elston, D.M. 2006. Andrews' disease of the skin: clinical dermatology. Edisi ke 10. Philadelphia: Elsevier.
- Jannatan, R., and Satria, R. 2022. Potensi Eco-Enzim dan Asap Cair sebagai Repelen terhadap Semut Hama Rumah Tangga *Monomorium pharaonis* L. *Prosiding Seminar Nasional Sains dan Teknologi Terapan*. Vol. 5: 490-496
- Kate, R.J., Perez, R.M., Mazumdar, D., Pasupathy, K.S., Nilakantan, V. 2016. Prediction and Detection Models for Acute Kidney Injury in Hospitalized Older Adults. *BMC Med Inform Decis Mak*. Vol. 16: 39.
- Katzung, B.G. 2006. Basic and Clinical Pharmacology: 10th Edition. McGraw Hill Lange.
- Kumar, B., and Swee, M.L. 2015. Nonsteroidal Antiinflammatory Drug Use in a Patient with Hypertension: A Teachable Moment. *JAMA Intern Med*. 175: 892-893.
- Kumar, K.P., Nicholls, A.J., Wong, C.H.Y. 2018. Partners in crime: neutrophils and monocytes/macrophages in inflammation and disease. *Cell Tissue Res*. 371(3):551-565.
- Lawand, N.B., McNearney, T., Westlund, K.N. 2000. Amino acid release into the knee joint: key role in nociception and inflammation. *Pain*. 86:69-74.
- Leick, M., Azcutia, V., Newton, G., Luscinskas, F.W. 2014. Leukocyte recruitment in inflammation: basic concepts and new mechanistic insights based on new models and microscopic imaging technologies. *Cell Tissue Res*. 355(3):647-56.
- Lopes, A.H., Silva, R.L., Fonseca, M.D., Gomes, F.I., Maganin, A.G., Ribeiro, L.S., Marques, L.M.M., Cunha, F.G., Alves-Filho, J.C., Zamboni, D.S., Lopes, N.P., Franklin, B.S., Gombault, A., Ramalho, F.S., Quesniaux, V.F.J., Couillin, I., Ryffel, B., and Cunha, T.M. 2020. Molecular basis of carrageenan-induced cytokines production in macrophages. *Cell Commun Signal*. 18: 141.
- Lubis, B., Saputri, I., Ajartha, R., Bangun, S., Pranata, C., Purba, N. Turnip, N. 2019. Anti-inflammatory Activity Test for Ethanol Extract Moon Flower

(*Tithonia diversifolia*) Leaves to Male White Mice. *ICHIMAT*. pages 551-557.

Madigan, M.T., Martinko, J.M., Stahl, D.A., Clark, D.P. 2012. *Biology of Microorganisms*. Benjamin Cummings, San Fransisco.

Malina, A. C., Suhasman, S., Muchtar, A., Sulfahri, S. 2017. Kajian Lingkungan Tempat Pemilahan Sampah di Kota Makassar. *Jurnal Inovasi dan Pelayanan Publik Makassar*. 1(1): 14-27.

Mansuri, M.T., Hemmati, A.A., Naghizadeh, B., Mard, S.A., Rezaie, A., Ghorbanzadeh, B. 2015. A study of the mechanisms underlying the anti-inflammatory effect of ellagic acid in carrageenan-induced paw edema in rats. *Indian J Pharmacol*. 47(3): 292-8.

Martino, J. V., Van Limbergen, J., Cahill, L. E. 2017. The Role of Carrageenan and Carboxymethylcellulose in the Development of Intestinal Inflammation. *Frontiers in Pediatrics*. Vol 5.

Mavani, H.A.K., Tew, I.M., Wong L., Yew H.Z., Mahyuddin A., Ghazali R.A. Pow E.H.N. 2020. Antimicrobial Efficacy of Fruit Peels Eco-Enzyme 10 against *Enterococcus Faecalis*: An In Vitro Study. *International Journal of Environmental Research and Public Health*. 5107: 1-12.

Mohanty, S., Maurya, A.K., Jyotshna, S.A., Shanker, K., Pal, A., Bawankule, D.U. 2015. Flavonoids rich fraction of Citrus limetta fruit peels reduces proinflammatory cytokine production and attenuates malaria pathogenesis. *Curr Pharm Biotechnol*. 16(6): 544-52.

Mondal, A., Banerjee, S., Bose, S., Das, P.P., Sandberg, E.N., Atanasov, A.G., Bishayee, A. 2021. Cancer Preventive and Therapeutic Potential of Banana and Its Bioactive Constituents: A Systematic, Comprehensive, and Mechanistic Review. *Front Oncol*. 7(11):697143.

Nathan, C. 2006. Neutrophils and immunity: challenges and opportunities. *Nat Rev Immunol*. 6:173–182.

Necas, J. and Bartosikova, L. 2013. Carrageenan: a review. *Review Article 187 J Veterinarni Medicina*. 58 (4): 187–205.

Neupane, K, and Khadka, R. 2019. Production of Garbage Enzyme from Different Fruit and Vegetable Wastes and Evaluation of Its Enzymatic and Antimicrobial Efficacy. *TUJM*, 6 (1) : 113-118.

- Nguyen, A.V., and Soulika, A.M. 2019. The Dynamics of The Skin's Immune System. *Int J Mol Sci*. Vol. 20:1–53.
- Nifinluri, C. M. B., Datu, O. S. Potalangi, N. O., Pareta, D. N. 2019. Uji Aktivitas Anti-inflamasi Ekstrak Etanol Kulit Buah Pisang Kepok (*Musa balbisiana*) terhadap Kaki Tikus Putih (*Rattus novergicu*). *Jurnal Biofarmasetikal Tropis*. 2(2): 15 - 22.
- Nurlatifah, I., Dine Agustine, D., Puspasari, E.A. 2021. Production and Characterization of Eco-Enzyme from Fruit Peel Waste. *Proceedings of the 1st International Conference on Social, Science, and Technology (ICSST)*. DOI 10.4108/eai.25-11-2021.2318816
- Pasparakis, M., Haase, I. Nestle, F. 2014. Mechanisms regulating skin immunity and inflammation. *Nat Rev Immunol*. 14 : 289–301.
- Pandey, A.K., Chauhan, O.P., Semwal, A.D. 2020. Seaweeds -A Potential Source for Functional Foods. *Defence Life Science Journal*. 5 (4) : 315-322.
- Paul, W., Sharma, C. P. 2015. The Anatomy and Functions of Skin. *Advances in Wound Healing Materials: Science and Skin Engineering*. United Kingdom: Smithers.
- Paul, A.T., Gohil, V.M., Bhutani, K.K. 2006. Modulating TNF- α Signaling with Natural Products. *Drug Discovery Today*. 11(15):725-732.
- Penmatsa, B., Sekhar, C.D., Diwakar, S.B., NAgalakshmi. 2019. Effect of Bio-Enzyme in The Treatment of Frest Water Bodies. *International Journal of Recent Technology ang Engineering (IJRTE)*. 8:308-3010.
- Prasetyaningrum, N., and Adiningdyah, A.F. 2021. Aplikasi Topikal Nanotransfersom Ekstrak Kulit Jeruk Nipis (*Citrus aurantifolia* Swingle) Terhadap Makrofag Pada Proses Penyembuhan Luka Mukosa Tikus Wistar. *E-Prodenta Journal of Dentistry*. 2021. 5(2): 480-489.
- Pratiwi, D. 2016. Uji Efek Antiinflamasi Topikal Ekstrak Etanol Daun Jambu Biji (*Psidium guajava* Linn.) pada Edema Kulit Punggung Mencit Galur Swiss Terinduksi Karagenan. Skripsi. Universitas Sanata Dharma. Yogyakarta.
- Rahayu, M.R., Muliarta, I.N, Situmeang, Y.P. 2021. Acceleration of Production Natural Disinfectants from the Combination of Eco-Enzyme Domestic Organic Waste and Frangipani Flowers (*Plumeria alba*). *SEAS (Sustainable Environment Agricultural Science)*. 5 (1): 15-21.

- Ramadani, A.H., Karima, R., Ningrum, R.S. 2022. Antibacterial Activity of Pineapple Peel (*Ananas comosus*) Eco-enzyme Against Acne Bacteria (*Staphylococcus aureus* and *Prapionibacterium acnes*). *Indonesian Journal of Chemical Research*. 9(3): 201-207.
- Rankainen, J., Huusko, T.J., Soininen, R., Mondini, E., Cinti, F., Makela, K.A., Kovalainen, M., Herzig, K.H., Ja rvelin, M.R., Sebert, S., Savolainen, M.J., Salonurmi, T. 2015. Fat mass- and obesity-associated gene *Fto* affects the dietary response in mouse white adipose tissue. *Scie. Report*. 5: 9233.
- Rijal, M., Surati, Amir, I., Abdollah, A., Lessy, A.B., Ytatroman, A.S., Nafsia Tanama, N. 2021. Eco-Enzyme dari Limbah Tanaman Maluku. Lp2m Iain Ambon. ISBN: 978-623-6830-51-2.
- Robb, C.T., Regan, K.H., Dorward, D.A., Rossi, A.G. 2016. Key mechanisms governing resolution of lung inflammation. *Semin Immunopathol*. 38:425–448.
- Rochyani, N., Utpalasari, R.L, Dahliana, I. 2020. Analisis Hasil Konversi Eco Enzyme Menggunakan Nanas (*Ananas comosus*) dan Pepaya (*Carica papaya L.*). *Jurnal Universitas PGRI Palembang*. 5 (2): 116-134.
- Rusdianasari, Syakdani, A., Zaman M., Sari, F.F., Nabila Putri Nasyta, N.P., Amalia, R. 2021. Utilization of Eco-Enzymes from Fruit Skin Waste as Hand Sanitizer. *Asian Journal of Applied Research for Community Development and Empowerment*. Vol 5: 3. ISSN 2581-0405
- Sabzwari, S.R., Qidwai, W., Bhanji, S. 2013. Polypharmacy in Elderly: A Cautious Trail to Tread. *J Pak Med Assoc*. 63: 624-627.
- Sandby, M.J., Poulsen, T., Wulf, H.C. 2003. Epidermal Thickness at Different Body Sites: Relationship to Age, Gender, Pigmentation, Blood Content, Skin Type and Smoking Habits. *Acta Derm Venereol*. 83:410–3.
- Saramanda, G., and Kaparapu, J. 2017. Antimicrobial Activity of Fermented Citrus Fruit Peel Extract. *Journal of Engineering Research and Application*. 7(11): 25-28.
- Shirshin, E.A., Gurfinkel, Y.I., Priezzhev, A.V., Fedeev, V.V., LAdemann, J., Darwin, M.E. 2017. Two-photon Autofluorescence Lifetime Imaging of Human Skin Papillary Dermis in Vivo: Assessment of Blood Capillaries and Structural Proteins Localization. *Sci Rep*. Vol. 7:1-10.

- Singh, S., Kaur, M., Singh, A., Kumar, B. 2014. Pharmacological Evaluation of Anti-Inflammatory and Anti-Ulcer Potential of Heartwood of Santalum Album in Rats. *Asian Journal of Biochemical and Pharmaceutical Research*. 4. 140-53.
- Sumaiyah, S., Masfria, M., Dalimunthe, A. 2020. Anti-Inflammatory Activity of *Rhaphidophora pinnata* (L.F) Schott Leaf Extract. *Open Access Macedonian Journal of Medical Sciences*. 8 (A) : 487-490.
- Takeuchi, O., and Akira, S. 2010. Pattern Recognition Receptors and Inflammation. *Cell*. Vol 140: 805–820.
- Tjandrawinata, R.R., Medica, D., Djunarko I., Hendra P., Fenry. 2015. Anti-inflammation effects of bioactive fraction DLBS0533 containing phaleria macrocarpa and Nigella sativa on animal model. *Journal of Pharmacy and Pharmaceutical Sciences* 7(1):408-411
- Walle, G.F.D. 2021. Carrageenan: Types, Applications, Safety, and More. *Prospector Knowledge Center*. <https://knowledge.ulprospector.com/11460/fb-carrageenan-types-applications-safety-and-more/>. Di akses 25 Desember 2022.
- Wang, D., Zhu, N.X., Qin, M., Wang, Y.Y. 2019. Betamethasone suppresses the inflammatory response in LPS-stimulated dental pulp cells through inhibition of NF- κ B. *Archives of Oral Biology*. 98: 156–163.
- Wardani, I.G.A.A.K. 2020. Efektivitas Gel Ekstrak Bunga Kecombrang (*Etlingera elatior*) sebagai Antiinflamasi terhadap Mencit yang Diinduksi Karagenan. *Jurnal Ilmiah Medicamento*. 6(1): 66-71.
- Way2Drugs. 2022. Understanding Chemical-Biological Interaction. <http://way2drug.com/passonline/predict.php>. Diakses pada tanggal 07 Desember 2022.
- Widyastuti,. 2007. Pengaruh Pemberian Beta-Karoten terhadap Daya Antiinflamasi Natrium Diklofenak pada Mencit Putih Jantan. Skripsi. Universitas Sanata Dharma. Yogyakarta.
- Wong, R., Geyer, S., Weninger, W., Guimberteau, J.C., Wong, J.K. 2016. The Dynamic Anatomy and Patterning of Skin. *Exp Dermatol*. 25:92–98.
- Yanti, D., and Awalina, R. 2021. Sosialisasi dan Pelatihan Pengolahan Sampah Organik Menjadi Eco-Enzyme. *Warta Pengabdian Andalas*, 28(2): 84–90.

- Yatoo, M.I., Gopalakrishnan, A., Saxena, A., Parray, O.R., Tufani, N.A., Chakraborty, S., Tiwari, R., Dhama, K., Iqbal, H.M.N. 2018. Anti-Inflammatory Drugs and Herbs with Special Emphasis on Herbal Medicines for Countering Inflammatory Diseases and Disorders - A Review. *Recent Pat Inflamm Allergy Drug Discov.* 12 (1): 39-58.
- Yusuf, M., Sari, P.I., Wijaya, A. 2021. Efek Antiinflamasi Ekstrak Etanol Daun Lamun (*Enhalus acoroides*) terhadap Mencit (*Mus musculus*) Jantan yang Diinduksi Karagen. *Jurnal Ilmiah Manuntung.* Vol. 7(2): 165-174.
- Yousef, H., Alhaji, M., Sharma, S. 2022. Anatomy, Skin (Integument), Epidermis. Treasure Island (FL): StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK470464/>.
- Zayac, O., and Adam, O. 2020. Burkitt lymphoma: bridging the gap between advances in molecular biology and therapy. *Leukemia & Lymphoma.* Vol. 61:1-13.

