

## DAFTAR PUSTAKA

- Ahlina, F.N., Nugraheni, N., Salsabila, I.A., Haryanti, S., Da'i, M., dan Meiyanto, E., 2020. Revealing the Reversal Effect of Galangal (*Alpinia galanga* L.) Extract Against Oxidative Stress in Metastatic Breast Cancer Cells and Normal Fibroblast Cells Intended as a Co- Chemotherapeutic and Anti-Ageing Agent. *Asian Pacific Journal of Cancer Prevention*, **21**: 107–117.
- Aliyah, A.N., Lintang Sari, G., Maran, G.G., Hermawan, A., dan Meiyanto, E., 2021. Cinnamon oil as a co-chemotherapy agent through inhibition of cell migration and MMP-9 expression on 4T1 cells. *Journal of Complementary and Integrative Medicine*.
- Ammerman, N.C., Beier-Sexton, M., dan Azad, A.F., 2008. Growth and maintenance of Vero cell lines. *Current Protocols in Microbiology*, **Appendix 4**: Appendix 4E.
- Arpiwi, N.L., MUksin, I.K., dan Kartini, N.L., 2020. Essential oil from *Cymbopogon nardus* and repellent activity against *Aedes aegypti*. *Biodiversitas Journal of Biological Diversity*, **21**.
- ATCC, 2021. 'Vero | ATCC'. URL: <https://www.atcc.org/products/ccl-81#detailed-product-images> (diakses tanggal 28/11/2021).
- Ayla, S., Seckin, I., Tanriverdi, G., Cengiz, M., Eser, M., Soner, B.C., dkk., 2011. Doxorubicin Induced Nephrotoxicity: Protective Effect of Nicotinamide. *International Journal of Cell Biology*, **2011**: e390238.
- Bayala, B., Coulibaly, A.Y., Djigma, F.W., Nagalo, B.M., Baron, S., Figueredo, G., dkk., 2020. Chemical composition, antioxidant, anti-inflammatory and antiproliferative activities of the essential oil of *Cymbopogon nardus*, a plant used in traditional medicine. *Biomolecular Concepts*, **11**: 86–96.
- Cappetta, D., De Angelis, A., Sapio, L., Prezioso, L., Illiano, M., Quaini, F., dkk., 2017. Oxidative Stress and Cellular Response to Doxorubicin: A Common Factor in the Complex Milieu of Anthracycline Cardiotoxicity. *Oxidative Medicine and Cellular Longevity*, **2017**: e1521020.
- Cell Signal, 2019. 'Senescence Signaling', *Cell Signaling Technology*. URL: <https://www.cellsignal.com/pathways/senescence-signaling-pathway> (diakses tanggal 30/11/2021).
- Daina, A., Michielin, O., dan Zoete, V., 2019. SwissTargetPrediction: updated data and new features for efficient prediction of protein targets of small molecules. *Nucleic Acids Research*, **47**: W357–W364.
- Dembic, Z., 2020. Antitumor Drugs and Their Targets. *Molecules*, **25**: 5776.
- Dennis, G., Sherman, B.T., Hosack, D.A., Yang, J., Gao, W., Lane, H.C., dkk., 2003. DAVID: Database for Annotation, Visualization, and Integrated Discovery. *Genome Biology*, **4**: R60.
- Dimri, G.P., Lee, X., Basile, G., Acosta, M., Scott, G., Roskelley, C., dkk., 1995. A biomarker that identifies senescent human cells in culture and in aging

- skin in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **92**: 9363–9367.
- Djordjevic, D., Cercaci, L., Alamed, J., McClements, D.J., dan Decker, E.A., 2007. Chemical and Physical Stability of Citral and Limonene in Sodium Dodecyl Sulfate–Chitosan and Gum Arabic-Stabilized Oil-in-Water Emulsions. *Journal of Agricultural and Food Chemistry*, **55**: 3585–3591.
- Docherty, M.H., Baird, D.P., Hughes, J., dan Ferenbach, D.A., 2020. Cellular Senescence and Senotherapies in the Kidney: Current Evidence and Future Directions. *Frontiers in Pharmacology*, **11**: 755.
- Doncheva, N.T., Morris, J.H., Gorodkin, J., dan Jensen, L.J., 2019. Cytoscape StringApp: Network Analysis and Visualization of Proteomics Data. *Journal of Proteome Research*, **18**: 623–632.
- Farhath, M.S.S. dan Vimal, P.P.V. and M., 2013. Antioxidant activity of Geraniol, Geranial acetate, Gingerol and Eugenol. *Research in Pharmacy*, **3**.
- Fikriansyah, F., Widiastuti, M., Wulandari, N., Tirtanirmala, P., dan Murwanti, R., 2015. Cardioprotective Effect of Kelor (*Moringa oleifera*) Leaf Ethanolic Extract against Doxorubicin-Induced Cardiotoxicity in Rats. *Indonesian Journal of Cancer Chemoprevention*, **6**: 53–57.
- Gelen, V., Şengül, E., Yıldırım, S., Senturk, E., Tekin, S., dan Kükürt, A., 2021. The protective effects of hesperidin and curcumin on 5-fluorouracil-induced nephrotoxicity in mice. *Environmental Science and Pollution Research*, **28**: 47046–47055.
- Haryanti, S., Zulfin, U., Salsabila, I., Wulandari, F., dan Meiyanto, E., 2022. The Cytotoxic and Anti-Migratory Properties of *Caesalpinia sappan* and *Ficus septica*, in Combination with Doxorubicin on 4T1 TNBC Cells with Nephroprotective Potential. *Asian Pacific Journal of Cancer Prevention*, **23**: 743–752.
- Henninger, C. dan Fritz, G., 2018. Statins in anthracycline-induced cardiotoxicity: Rac and Rho, and the heartbreakers. *Cell Death & Disease*, **8**: e2564–e2564.
- Hermawan, A. dan Putri, H., 2021. Use of integrative bioinformatics to identify targets of sinensetin and its mechanisms to overcome colorectal cancer resistance. *Journal of Applied Pharmaceutical Science*, **11**.
- Hussain, M.A., Abogresha, N.M., AbdelKader, G., Hassan, R., Abdelaziz, E.Z., dan Greish, S.M., 2021. Antioxidant and Anti-Inflammatory Effects of Crocin Ameliorate Doxorubicin-Induced Nephrotoxicity in Rats. *Oxidative Medicine and Cellular Longevity*, **2021**: e8841726.
- Ikawati, M., Jenie, R.I., Utomo, R.Y., Amalina, N.D., Ilmawati, G.P.N., Kawaichi, M., dkk., 2020. Genistein enhances cytotoxic and antimigratory activities of doxorubicin on 4T1 breast cancer cells through cell cycle arrest and ROS generation. *Journal of Applied Pharmaceutical Science*, **10**,: 095–104.
- Jagdale, A.D., Kamble, S.P., Nalawade, M.L., dan Arvindekar, A.U., 2015. CITRONELLOL: A POTENTIAL ANTIOXIDANT AND ALDOSE

# REDUCTASE INHIBITOR FROM CYMBOPOGON CITRATUS.

*International Journal of Pharmacy and Pharmaceutical Sciences*, 203–209.

- Jenie, R., Santoso, R., Salsabila, I., Nugraheni, N., dan Meiyanto, E., 2021. *Alpinia galanga* extract induces senescence in HER2-overexpressing breast cancer cells. *Thai Journal of Pharmaceutical Sciences (TJPS)*, **45**.
- Jia, Z., Zhang, Y., Ding, G., Heiney, K.M., Huang, S., dan Zhang, A., 2015. Role of COX-2/mPGES-1/Prostaglandin E2 Cascade in Kidney Injury. *Mediators of Inflammation*, **2015**: 1–8.
- Kačániová, M., Terentjeva, M., Vukovic, N., Puchalski, C., Roychoudhury, S., Kunová, S., dkk., 2017. The antioxidant and antimicrobial activity of essential oils against *Pseudomonas* spp. isolated from fish. *Saudi Pharmaceutical Journal*, **25**: 1108–1116.
- Kamari, F.E., Taroq, A., Atki, Y.E., Aouam, I., Oumokhtar, B., Lyoussi, B., dkk., 2018. *Cymbopogon Nardus* L. Essential Oil: Phytochemical Screening and its Antibacterial Activity against Clinical Bacteria Responsible for Nosocomial Infections in Neonatal Intensive Care 4. *International Journal of Pharmaceutical Sciences Review and Research*.
- Kumoro Andri C., Wardhani Dyah H., Retnowati Diah S., Haryani Kristinah, Yustika Sri, dan Fajar Tri A., 2021. Extraction of Essential Oil from Ultrasound Pre-treated Citronella Grass (*cymbopogon Nardus*) Leaves by Hydro-distillation Method. *Chemical Engineering Transactions*, **87**: 643–648.
- Lahoti, T.S., Patel, D., Thekkemadom, V., Beckett, R., dan Ray, S.D., 2012. Doxorubicin-induced in vivo nephrotoxicity involves oxidative stress-mediated multiple pro- and anti-apoptotic signaling pathways. *Current Neurovascular Research*, **9**: 282–295.
- Lestari, B., Nakamae, I., Yoneda-Kato, N., Morimoto, T., Kanaya, S., Yokoyama, T., dkk., 2019. Pentagamavunon-1 (PGV-1) inhibits ROS metabolic enzymes and suppresses tumor cell growth by inducing M phase (prometaphase) arrest and cell senescence. *Scientific Reports*, **9**: 14867.
- Lu, Y., Shipton, F., Khoo, T.-J., dan Wiart, C., 2014. Antioxidant Activity Determination of Citronellal and Crude Extracts of *Cymbopogon citratus* by 3 Different Methods. *Pharmacology & Pharmacy*, **05**: 395–400.
- M, B., Aa, B., dan N, B., 2015. The antioxidant and antigenotoxic properties of citrus phenolics limonene and naringin. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*, **81**.
- Małyszko, Jolanta, Kozłowska, K., Kozłowski, L., dan Małyszko, Jacek, 2017. Nephrotoxicity of anticancer treatment. *Nephrology Dialysis Transplantation*, **32**: 924–936.
- Meiyanto, E., Nugraheni, N., Ahlina, F.N., Salsabila, I.A., dan Haryanti, S., 2021. Anti-senescence Activity of Indonesian Black Pepper Essential Oil (Piper

- nigrum L.) on ovarian CHO-K1 and fibroblast NIH-3T3 Cells:(TJPS-2020-0224.R1). *Thai Journal of Pharmaceutical Sciences (TJPS)*, **45**.
- Miller, R.P., Tadagavadi, R.K., Ramesh, G., dan Reeves, W.B., 2010. Mechanisms of Cisplatin Nephrotoxicity. *Toxins*, **2**: 2490–2518.
- Molehin, O.R., Adeyanju, A.A., Adefegha, S.A., Oyeyemi, A.O., dan Idowu, K.A., 2019. Protective mechanisms of protocatechuic acid against doxorubicin-induced nephrotoxicity in rat model. *Journal of Basic and Clinical Physiology and Pharmacology*, **30**.
- Nakamura, Y., Miyamoto, M., Murakami, A., Ohigashi, H., Osawa, T., dan Uchida, K., 2003. A phase II detoxification enzyme inducer from lemongrass: identification of citral and involvement of electrophilic reaction in the enzyme induction. *Biochemical and Biophysical Research Communications*, **302**: 593–600.
- New Directions Aromatics, 2020. 'An Easy-To-Understand Guide To GCMS Testing For Essential Oils'. URL: <https://www.newdirectionsaromatics.com/blog/articles/an-easytounderstand-guide-to-gcms-testing.html> (diakses tanggal 1/12/2021).
- Nura, A., 2017. (*Cymbopogon nardus* L. Rendle) DENGAN METODE Brine Shrimp Lethality Test (BSLT). *Skripsi*, 71.
- Rabah, S.O., 2010. Acute Taxol nephrotoxicity: Histological and ultrastructural studies of mice kidney parenchyma. *Saudi Journal of Biological Sciences*, **17**: 105–114.
- Rashid, S., Ali, N., Nafees, S., Hasan, S.K., dan Sultana, S., 2014. Mitigation of 5-Fluorouracil induced renal toxicity by chrysin via targeting oxidative stress and apoptosis in wistar rats. *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association*, **66**: 185–193.
- Ratliff, B.B., Abdulmahdi, W., Pawar, R., dan Wolin, M.S., 2016. Oxidant Mechanisms in Renal Injury and Disease. *Antioxidants & Redox Signaling*, **25**: 119–146.
- Ray, P.D., Huang, B.-W., dan Tsuji, Y., 2012. Reactive oxygen species (ROS) homeostasis and redox regulation in cellular signaling. *Cellular Signalling*, **24**: 981–990.
- Salsabila, I.A., Nugraheni, N., Ahlina, F.N., Haryanti, S., dan Meiyanto, E., 2021. Synergistic Cotreatment Potential of Soursop (*Annona muricata* L.) Leaves Extract with Doxorubicin on 4T1 Cells with Antisenescence and Anti-reactive-oxygen-species Properties. *Iranian Journal of Pharmaceutical Research: IJPR*, **20**: 57–67.
- Santos, M.L.C., de Brito, B.B., da Silva, F.A.F., Botelho, A.C. dos S., dan de Melo, F.F., 2020. Nephrotoxicity in cancer treatment: An overview. *World Journal of Clinical Oncology*, **11**: 190–204.
- Shati, A.A., 2019. Sub-Chronic Administration of Vincristine Sulfate Induces Renal Damage and Apoptosis in Rats via Induction of Oxidative Stress and

- Activation of Raf1-MEK1/2-Erk1/2 Signal Transduction. *International Journal of Morphology*, **37**: 273–283.
- Silva, C.F., Moura, F.C., Mendes, M.F., dan Pessoa, F.L.P., 2011. Extraction of citronella (*Cymbopogon nardus*) essential oil using supercritical co<sub>2</sub>: experimental data and mathematical modeling. *Brazilian Journal of Chemical Engineering*, **28**: 343–350.
- Stelzer, G., Rosen, N., Plaschkes, I., Zimmerman, S., Twik, M., Fishilevich, S., dkk., 2016. The GeneCards Suite: From Gene Data Mining to Disease Genome Sequence Analyses. *Current Protocols in Bioinformatics*, **54**: .
- Sulaswatty, A. (Editor), 2019. *Quo vadis minyak serai wangi dan produk turunannya*, Cetakan pertama. ed. LIPI Press, Jakarta.
- Suwarni, Munisih, S., dan Hesti, A., 2017. PEMANFAATAN MINYAK SEREH MENJADI BERMACAM-MACAM PRODUK | Media Farmasi Indonesia **12**.
- Weng, D.C.J., Latip, J., Hasbullah, S.A., dan Sastrohamidjojo, H., 2015. OPTIMAL EXTRACTION AND EVALUATION ON THE OIL CONTENT OF CITRONELLA OIL EXTRACTED FROM CYMBOPOGON NARDUS **19**: 6.
- Wibowo, D.P., Febriani, Y., Riasari, H., dan Aulifa, D.L., 2018. Chemical composition, antioxidant and antibacterial activities of the essential oils of medicinal plant *Cymbopogon nardus* from Lembang West Java. *Research Journal of Chemistry and Environment*, **4**.
- Wulandari, F., Ikawati, M., Kiriata, M., Kato, J.-Y., dan Meiyanto, E., 2021. A new curcumin analog, CCA-1.1, induces cell death and cell cycle arrest in WiDr colon cancer cells via ROS generation. *Journal of Applied Pharmaceutical Science*, **11**: 099–105.
- Zhou, D., Shao, L., dan Spitz, D.R., 2014. Reactive Oxygen Species in Normal and Tumor Stem Cells. *Advances in cancer research*, **122**: 1–67.
- Zulfin, U.M., Rahman, A., Hanifa, M., Utomo, R.Y., Haryanti, S., dan Meiyanto, E., 2021. Reactive oxygen species and senescence modulatory effects of rice bran extract on 4T1 and NIH-3T3 cells co-treatment with doxorubicin. *Asian Pacific Journal of Tropical Biomedicine*, **11**: 174.