

DAFTAR PUSTAKA

- Albu, A., Para, I., & Porojan, M. (2020). Uric acid and arterial stiffness. *Therapeutics and Clinical Risk Management*, 16, 39–54. <https://doi.org/10.2147/TCRM.S232033>
- Ali, N., Rahman, S., Islam, S., Haque, T., Molla, N. H., Sumon, A. H., Kathak, R. R., Asaduzzaman, M., Islam, F., Mohanto, N. C., Hasnat, M. A., Nurunnabi, S. M., & Ahmed, S. (2019). The relationship between serum uric acid and lipid profile in Bangladeshi adults. *BMC Cardiovascular Disorders*, 19(1), 1–7. <https://doi.org/10.1186/s12872-019-1026-2>
- Aroor, A. R., DeMarco, V. G., Jia, G., Sun, Z., Nistala, R., Meininger, G. A., & Sowers, J. R. (2013). The Role of Tissue Renin-Angiotensin-Aldosterone System in the Development of Endothelial Dysfunction and Arterial Stiffness. *Frontiers in Endocrinology*, 4(October), 1–8. <https://doi.org/10.3389/fendo.2013.00161>
- Aznam, N., & Atun, S. (2016). Pharmacological Test of Herbal Products from Temulawak (*Curcuma Xanthorrhiza*) As Antihypercholesterol by In Vivo. *International Journal of Pharmacognosy and Phytochemical Research*, 8(5), 807–811.
- Battelli, M. G., Bortolotti, M., Polito, L., & Bolognesi, A. (2018). The role of xanthine oxidoreductase and uric acid in metabolic syndrome. *Biochimica et Biophysica Acta - Molecular Basis of Disease*, 1864(8), 2557–2565. <https://doi.org/10.1016/j.bbadis.2018.05.003>
- Borghi, C. (2017). The management of hyperuricemia: back to the pathophysiology of uric acid. In *Current Medical Research and Opinion* (Vol. 33, hal. 1–4). <https://doi.org/10.1080/03007995.2017.1378502>
- Budiarto, A. A., Wibowo, A. P., Putri, S. A., Shabrina, N. N., Ngestiningsih, D., & Tjahjono, K. (2017). Pengaruh Pemberian Ekstrak Rimpang Temulawak (*Curcuma Xanthorrhiza* Roxb.) dan Jintan Hitam (*Nigella Sativa*) terhadap Profil Lipid Tikus Sprague Dawley Dislipidemia. *MKB*, 49(1), 8–14.
- Campbell, M. S., Berrones, A. J., Krishnakumar, I. M., Charnigo, R. J., Westgate, P. M., & Fleenor, B. S. (2017). Responsiveness to curcumin intervention is associated with reduced aortic stiffness in young, obese men with higher initial stiffness. *Journal of Functional Foods*, 29, 154–160. <https://doi.org/10.1016/j.jff.2016.12.013>
- Campbell, M. S., & Fleenor, B. S. (2017). The emerging role of curcumin for improving vascular dysfunction: A review. *Critical Reviews in Food Science and Nutrition*, 58(16), 2790–2799. <https://doi.org/10.1080/10408398.2017.1341865>
- Constantinescu, G. M., & Duffee, N. E. (2017). Comparison of Submental Blood Collection

- with the Retroorbital and Submandibular Methods in Mice (*Mus musculus*). *Journal of the American Association for Laboratory Animal Science*, 56(6), 1–2.
- Corry, D. B., Eslami, P., Yamamoto, K., Nyby, M. D., Makino, H., & Tuck, M. L. (2008). Uric acid stimulates vascular smooth muscle cell proliferation and oxidative stress via the vascular renin-angiotensin system. *Journal of Hypertension*, 26(2), 269–275. <https://doi.org/10.1097/HJH.0b013e3282f240bf>
- Deng, G., Qiu, Z., Li, D., Fang, Y., & Zhang, S. (2016). Effects of allopurinol on arterial stiffness: A meta-analysis of randomized controlled trials. *Medical Science Monitor*, 22, 1389–1397. <https://doi.org/10.12659/MSM.898370>
- DiPiro, J. T., Talbert, R. L., Yee, G. C., Matzke, G. R., Wells, B. G., & Posey, L. M. (2005). *PHARMACOTHERAPY A Pathophysiologic Approach*. The McGraw-Hill Companies.
- DiPiro, J. T., Yee, G. C., Posey, L. M., Heines, S. T., Nolin, T. D., & Ellingrod, V. (2020). *PHARMACOTHERAPY A Pathophysiologic Approach* (11 ed.). McGraw Hill.
- Elka, K., Rotty, M., Winata, J., Pangemanan, J., & Panda, A. L. (2018). The Pulse Wave Velocity is Linearly Correlated with Resting Systolic and Diastolic Blood Pressure in Hypertensive Patients. *Indonesian Journal of Cardiology*, 39(1), 15–21. <https://doi.org/10.30701/ijc.v39i1.791>
- Farida, Y., Rahmat, D., & Amanda, A. G. I. W. (2018). *Uji Aktivitas Antiinflamasi Nanopartikel Ekstrak Etanol Rimpang Temulawak (Curcuma xanthorrhiza Roxb .) dengan Metode Penghambatan Denaturasi Protein*. 16(2), 225–230.
- Ferreira, T. da S., Fernandes, J. F. R., Araújo, L. da S., Nogueira, L. de P., Leal, P. M., Antunes, V. P., Rodrigues, M. de L. G., Valença, D. C. T., Kaiser, S. E., & Klein, M. R. S. T. (2018). Serum uric acid levels are associated with cardiometabolic risk factors in healthy young and middle-aged adults. *Arquivos Brasileiros de Cardiologia*, 111(6), 833–840. <https://doi.org/10.5935/abc.20180197>
- Fikriah, I. (2007). EFFECT OF CURCUMIN ON THE LEVELS OF TOTAL CHOLESTEROL, LDL- CHOLESTEROL, THE AMOUNT OF F2-ISOPROSTAN AND FOAM CELL IN AORTIC WALL OF RATS WITH ATHEROGENIC DIET. *Folia Medica Indonesiana*, 43(3), 136–140.
- Fleenor, B. S., Carlini, N. A., & Campbell, M. S. (2019). Curcumin and arterial function in health and disease: Impact on oxidative stress and inflammation. *Current Opinion in Clinical Nutrition and Metabolic Care*, 22(6), 459–464. <https://doi.org/10.1097/MCO.0000000000000598>
- Fleenor, B. S., Sindler, A. L., Marvi, N. K., Howell, K. L., Zigler, M. L., Yoshizawa, M., &

- Seals, D. R. (2013). Curcumin ameliorates arterial dysfunction and oxidative stress with aging. *Experimental Gerontology*, 48(2), 269–276. <https://doi.org/10.1016/j.exger.2012.10.008>
- Gunawan, H. (2018). Pengaruh Pemberian Ekstrak Etanol Herba Poguntano (*Picria FelTerrae* Lour.) Terhadap Profil Lipid Tikus Putih Jantan Dislipidemia. *TALENTA Conference Series*, 1(1), 230–236.
- Hamilton, P. K., Lockhart, C. J., Quinn, C. E., & McVeigh, G. E. (2007). Arterial stiffness: Clinical relevance, measurement and treatment. *Clinical Science*, 113(3–4), 157–170. <https://doi.org/10.1042/CS20070080>
- Hartini, S., & Suryani, M. E. (2016). UJI KUALITAS SERUM SIMPANAN TERHADAP KADAR KOLESTEROLDALAM DARAH DI POLTEKKES KEMENKES KALTIM. *JURNAL ILMIAH MANUNTUNG*, 2(1), 65–69.
- Hasimun, P., Mulyani, Y., Rehulina, E., & Zakaria, H. (2020). Impact of Black Garlic on Biomarkers of Arterial Stiffness and Frontal QRS-T Angle on Hypertensive Animal Model. *Journal of Young Pharmacists*, 12(4), 338–342. <https://doi.org/10.5530/jyp.2020.12.88>
- Hasimun, P., Mulyani, Y., & Setiawan, A. R. (2021). Influences of Centella Asiatica and Curcuma Longa on Arterial Stiffness in a Hypertensive Animal Model. *Indonesian Journal of Pharmacy*, 32(4), 484–492. <https://doi.org/10.22146/ijp.2313>
- Hasimun, P., Mulyani, Y., Sulaeman, A., & Embas Sara, D. A. (2019). Prevention of Hypertension and Arterial Stiffness by Combination of Centella asiatica and Curcuma longa in Rats. *Asian Journal of Biological Sciences*, 12(2), 173–179. <https://doi.org/10.3923/ajbs.2019.173.179>
- Hidayah, N., Hasanah, F., & Gunawan, M. (2018). UJI EFEKTIVITAS ANTIHIPERURISEMIA EKSTRAK AIR DAUN SALAM (*Syzygium polyanthum* Wight) TERHADAP MENCIT JANTAN (*Mus musculus*) YANG DIINDUKSI JUS HATI AYAM DAN KALIUM OKSONAT. *Jurnal Saintika*, 18(1), 24–31.
- Hijriani, N., Yusetyani, L., & Hasmono, D. (2020). The effect of curcuma (*Curcuma xanthorrhiza* roxb.) extract as an adjuvant of captopril therapy on cardiac histopathology of male mice (*Mus musculus*) with hypertension. *Journal of Basic and Clinical Physiology and Pharmacology*, 30(6), 1–7. <https://doi.org/10.1515/jbcpp-2019-0280>
- Imbar, A. C., Queljoe, E. de, & Rotinsulu, H. (2019). UJI AKTIVITAS ANTIHIPERURISEMIA EKSTRAK ETANOL TUMBUHAN SURUHAN (*Peperomia pellucida* L.Kunth) TERHADAP TIKUS PUTIH JANTAN (*Gallur wistar*) YANG DI

- INDUKSI KAFEIN. *PHARMACON*, 8(November), 953–960.
- Indonesia, K. K. R. (2017). *HERBAL INDONESIA HERBAL* (Edisi II).
- Indonesia, P. R. (2018). *Pedoman Diagnosis dan Pengelolaan Gout*.
- Jia, G., Habibi, J., Bostick, B. P., Ma, L., Demarco, V. G., Aroor, A. R., Hayden, M. R., Whaley-Connell, A. T., & Sowers, J. R. (2015). Uric acid promotes left ventricular diastolic dysfunction in mice fed a western diet. *Hypertension*, 65(3), 531–539. <https://doi.org/10.1161/HYPERTENSIONAHA.114.04737>
- Johnson, R. J., Choi, H. K., Yeo, A. E., & Lipsky, P. E. (2019). Pegloticase Treatment Significantly Decreases Blood Pressure in Patients with Chronic Gout. *Hypertension*, 74(1), 95–101. <https://doi.org/10.1161/HYPERTENSIONAHA.119.12727>
- Kato, S., Kawase, T., Alderman, J., Inatomi, N., & Lieber, C. S. (1990). Role of xanthine oxidase in ethanol-induced lipid peroxidation in rats. *Gastroenterology*, 98(1), 203–210. [https://doi.org/10.1016/0016-5085\(90\)91311-S](https://doi.org/10.1016/0016-5085(90)91311-S)
- Katsiki, N., & Mikhailidis, D. P. (2015). Hyperuricaemia in cardiovascular diseases: A passive or an active player? *Medical Principles and Practice*, 24(3), 269–270. <https://doi.org/10.1159/000381398>
- Kayce Bell, P. D. C., June Twiggs, P. ., & Bernie R. Olin, P. . (2018). Hypertension : The Silent Killer : Updated JNC-8 Guideline Recommendations. *AIAbAmA phArmAcY ASSOCIATION*.
- Kim, M. B., Kim, C., Song, Y., & Hwang, J. K. (2014). Antihyperglycemic and anti-inflammatory effects of standardized Curcuma xanthorrhiza Roxb. Extract and its active compound xanthorrhizol in high-fat diet-induced obese mice. *Evidence-based Complementary and Alternative Medicine*, 2014. <https://doi.org/10.1155/2014/205915>
- Kim, S. K., Choe, J. Y., & Park, K. Y. (2019). Anti-inflammatory effect of artemisinin on uric acid-induced NLRP3 inflammasome activation through blocking interaction between NLRP3 and NEK7. *Biochemical and Biophysical Research Communications*, 517(2), 338–345. <https://doi.org/10.1016/j.bbrc.2019.07.087>
- Kim, S., Kook, K. E., Kim, C., & Hwang, J.-K. (2018). Inhibitory Effects of Curcuma xanthorrhiza Supercritical Extract and Xanthorrhizol on LPS-Induced Inflammation in HGF-1 Cells and RANKL-Induced Osteoclastogenesis in RAW264.7 Cells. *J. Microbiol. Biotechnol*, 28(8), 1270–1281.
- Kimura, Y., Yanagida, T., Onda, A., Tsukui, D., Hosoyamada, M., & Kono, H. (2020). Soluble uric acid promotes atherosclerosis via AMPK (AMP-activated protein kinase)-mediated inflammation. *Arteriosclerosis, Thrombosis, and Vascular Biology*, March, 570–582.

- <https://doi.org/10.1161/ATVBAHA.119.313224>
- Klein, A. V., & Kiat, H. (2015). Detox diets for toxin elimination and weight management: A critical review of the evidence. *Journal of Human Nutrition and Dietetics*, 28(6), 675–686. <https://doi.org/10.1111/jhn.12286>
- Kostić, D. A., Dimitrijević, D. S., Stojanović, G. S., Palić, I. R., Dordević, A. S., & Ickovski, J. D. (2015). Xanthine oxidase: Isolation, assays of activity, and inhibition. *Journal of Chemistry*, 2015. <https://doi.org/10.1155/2015/294858>
- Kuntorini, E. M., Astuti, M. D., & Milina, N. (2011). STRUKTUR ANATOMI DAN KERAPATAN SEL SEKRESI SERTA AKTIVITAS ANTIOKSIDAN EKSTRAK ETANOL DARI RIMPANG TEMULAWAK (*Curcuma xanthorrhiza* Roxb) ASAL KECAMATAN PENGARON KABUPATEN BANJAR KALIMANTAN SELATAN. *BIOSCIENTIAE*, 8(1), 28–37.
- Kuwabara, M., Hisatome, I., Niwa, K., Hara, S., Roncal-Jimenez, C. A., Bjornstad, P., Nakagawa, T., Andres-Hernando, A., Sato, Y., Jensen, T., Garcia, G., Rodriguez-Iturbe, B., Ohno, M., Lanaspá, M. A., & Johnson, R. J. (2018). Uric Acid Is a Strong Risk Marker for Developing Hypertension from Prehypertension: A 5-Year Japanese Cohort Study. *Hypertension*, 71(1), 78–86. <https://doi.org/10.1161/HYPERTENSIONAHA.117.10370>
- Laili, N. F., & Savitri, L. (2021). Potensi Daun Tempuyung (*Sochus arvensis* L) Sebagai Antihiperurisemia pada Mencit Putih Jantan. *Jurnal Ilmiah Universitas Batanghari Jambi*, 21(2), 609–611. <https://doi.org/10.33087/jiubj.v21i2.1434>
- Lallo, S., Mirwan, M., Palino, A., Nursamsiar, & Hardianti, B. (2018). AKTIFITAS EKSTRAK JAHE MERAH DALAM MENURUNKAN ASAM URAT PADA KELINCI SERTA ISOLASI DAN IDENTIFIKASI SENYAWA BIOAKTIFNYA. *JFFI*, 5(1), 271–278.
- Lanaspá, M. A., Andres-Hernando, A., & Kuwabara, M. (2020). Uric acid and hypertension. *Hypertension Research*, 43(8), 832–834. <https://doi.org/10.1038/s41440-020-0481-6>
- Lee, M. J., Park, J. T., Han, S. H., Kim, Y., Kim, Y. S., Yang, W., Kim, N., Kang, S., Kim, H. J., & Yoo, T. (2017). The atherogenic index of plasma and the risk of mortality in incident dialysis patients : Results from a nationwide prospective cohort in Korea. *PLOS ONE*, 3, 1–15.
- Lee, S. J., Oh, B. K., & Sung, K.-C. (2020). Uric acid and cardiometabolic diseases. *Clinical Hypertension*, 26(1), 1–7. <https://doi.org/10.1186/s40885-020-00146-y>
- Li, L., Zhang, Y., & Zeng, C. (2020). Update on the epidemiology , genetics , and therapeutic options of hyperuricemia. *Am J Transl Res*, 12(7), 3167–3181.
- Li, Y., Kao, T., Chang, P., Chen, W., & Li-Wei. (2021). Atherogenic index of plasma as

- predictors for metabolic syndrome, hypertension and diabetes mellitus in Taiwan citizens: a 9-year longitudinal study. *Scientific Reports*.
- Lu, J., Sun, M., Wu, X., Yuan, X., Liu, Z., Qu, X., Ji, X., Merriman, T. R., & Li, C. (2019). Urate-lowering therapy alleviates atherosclerosis inflammatory response factors and neointimal lesions in a mouse model of induced carotid atherosclerosis. *FEBS Journal*, 286(7), 1346–1359. <https://doi.org/10.1111/febs.14768>
- Lung, J. K. S., & Destiani, D. P. (2018). Uji Aktivitas Antioksidan Vitamin A, C, E dengan Metode DPPH. *Farmaka*, 15(1), 53–62.
- Malaya, A. N., & Wicaksono, I. A. (2018). Potensi Ekstrak Tanaman Terhadap Pengujian Xantin Oksidase Secara In Vitro. *Farmaka Suplemen*, 15(1), 11–19.
- Maruhashi, T., Nakashima, A., Soga, J., Fujimura, N., Idei, N., Mikami, S., Iwamoto, Y., Kajikawa, M., Matsumoto, T., Hidaka, T., Kihara, Y., Chayama, K., Goto, C., Noma, K., Tomiyama, H., Takase, B., Yamashina, A., & Higashi, Y. (2013). Hyperuricemia is independently associated with endothelial dysfunction in postmenopausal women but not in premenopausal women. *BMJ Open*, 3(11). <https://doi.org/10.1136/bmjopen-2013-003659>
- Megawati, A., & Yuliana, S. (2019). UJI EFEK EKSTRAK ETANOL RIMPANG TEMULAWAK (*Curcuma xanthorrhiza* Roxb.) TERHADAP PENURUNAN KADAR ASAM URAT TIKUS WISTAR YANG DIINDUKSI POTASIMUM OKSONAT SECARA IN VIVO. *Cendekia Journal of Pharmacy STIKES Cendekia Utama Kudus*, 3(2), 85–95.
- Megawati, S., Rangkuti, S. N., & Novianti, S. (2021). Effectiveness of Anting-Anting Leaves (*Acalypha indica* L.) in Reducing Uric Acid Levels in Hyperuricemic Male White Rats (*Rattus norvegicus*). *Advances in Health Sciences Research*, 33, 534–537.
- Melannisa, R., Da'i, M., & Rahmi, R. T. (2011). UJI AKTIVITAS PENANGKAP RADIKAL BEBAS DAN PENETAPAN KADAR FENOLIK TOTAL EKSTRAK ETANOL TIGA RIMPANG GENUS CURCUMA DAN RIMPANG TEMU KUNCI (*Boesenbergia pandurata*). *PHARMACON*, 12(1), 40–43.
- Mortada, I. (2017). Hyperuricemia, Type 2 Diabetes Mellitus, and Hypertension: an Emerging Association. *Current Hypertension Reports*, 19(9), 1–5. <https://doi.org/10.1007/s11906-017-0770-x>
- Musdja, M. Y., Azter, A. A., & Musir, and A. (2019). The Effect of Ethanol Extract of *Elephantopus scaber* Linn in Decreasing Blood Uric Acid Levels of Hyperuricemic Male Rats. *European Journal of Medicinal Plants*, 28(4), 1–9. <https://doi.org/10.9734/EJMP/2019/v28i430140>

- Novianto, A. (2012). Pengaruh Kombinasi Ekstrak Etanolik Temulawak (*Curcuma canthorizha* Roxb) Rendah Minyak Atsiri dan Ekstrak Etanolik Sambung Nyawa (*Gynura procumbens* (Lour.) Merr) Terhadap Kadar Trigliserida Tikus Putih Jantan Galur Wistar Serta Gambaran Histopatologinya. *Journal of Pharmacy Vol.*, 1(1), 30–37.
- Nuari, D. A., Fatimah, S., & Hasyul, P. (2020). Review : Aktivitas Antihiperurisemia dari Famili Annonaceae. *Jurnal Pharmascience*, 07(02), 12–26.
- Nurfina Aznam, S. A. (2017). The development of temulawak (*Curcuma Xanthorrhiza*) herb production and pharmacological test as anti-hypercholesterolemia. *International Journal of Green Pharmacy*, 11(1), 809–813.
- Nurhidayati, L., Laksmiawati, D. R., & Putri, R. E. (2015). Presisi Uji Antihiperurisemia in Vitro Berdasarkan Pengukuran Serapan Pada Dua Panjang Gelombang. *Kartika Jurnal Ilmiah Farmasi*, 3(2), 28–31. <https://doi.org/10.26874/kjif.v3i2.102>
- Nurul Eka Putri, Rissyyelly, & Mauldina, M. G. (2016). Uji Penghambatan Xantin Oksidase Secara In Vitro Ekstrak Kulit Rambutan. *Pharmaceutical Sciences and Research*, 3(1), 12–20. <https://doi.org/10.7454/psr.v3i1.3222>
- Papežíková, I., Pekarová, M., Kolářová, H., Klinke, A., Lau, D., Baldus, S., Lojek, A., & Kubala, L. (2013). Uric acid modulates vascular endothelial function through the down regulation of nitric oxide production. *Free radical research*, 47(2), 82–88. <https://doi.org/10.3109/10715762.2012.747677>
- Paulis, L., Becker, S. T. R., Lucht, K., Schwengel, K., Slavic, S., Kaschina, E., Thöne-Reineke, C., Dahlöf, B., Baulmann, J., Unger, T., & Steckelings, U. M. (2012). Direct angiotensin II type 2 receptor stimulation in N ω- nitro-L-arginine-methyl ester-induced hypertension: The effect on pulse wave velocity and aortic remodeling. *Hypertension*, 59(2 SUPPL. 1), 485–492. <https://doi.org/10.1161/HYPERTENSIONAHA.111.185496>
- Perumareddi, P. (2019). Prevention of Hypertension Related to Cardiovascular Disease. *Primary Care - Clinics in Office Practice*, 46(1), 27–39. <https://doi.org/10.1016/j.pop.2018.10.005>
- Prasad, M., Matteson, E. L., Herrmann, J., Gulati, R., Rihal, C. S., Lerman, L. O., & Lerman, A. (2017). Uric Acid Is Associated with Inflammation, Coronary Microvascular Dysfunction, and Adverse Outcomes in Postmenopausal Women. *Hypertension*, 69(2), 236–242. <https://doi.org/10.1161/HYPERTENSIONAHA.116.08436>
- Priyanga, K. T. A., Sagita, C. P., & Yuliati, L. (2021). A narrative review of curcuminoids from various *Curcuma* species in Indonesia as potential antidiabetic agents. *Longhua Chinese Medicine*, 4(September), 23–23. <https://doi.org/10.21037/lcm-21-9>

- Rahminiwati, M., Safitri, W., & Noviana, D. (2019). Gabungan Ekstrak Rimpang Temulawak, Daun Tanjung, dan Daun Belimbing Manis Berdasarkan Electrocardiogram Berpotensi Sebagai Antiaritmia pada Kucing. *Jurnal Veteriner*, 20(3), 409. <https://doi.org/10.19087/jveteriner.2019.20.3.409>
- Retno, T., Widyastuti, S., & Suarsana, N. (2012). Pengaruh Pemberian Isoflavon Terhadap Peroksidasi Lipid Pada Hati Tikus Normal. *Indonesia Medicus Veterinus*, 1(4), 483–491.
- Rina, A., Eff, Y., Rahayu, S. T., & Syachfitri, R. D. (2016). Uji Aktivitas Penghambatan Xantin Oksidase secara In-Vitro Glukopiranosida (C 20 H 22 O 10) yang Diisolasi dari Mahkota Dewa (Phaleria macrocarpa (Scheff .) Boerl). *Pharm Sci Res*, 3(1).
- RISKESDAS. (2018). Laporan Nasional Riset Kesehatan Dasar. *Kementerian Kesehatan RI*, 1–582.
- Ritchie, R. H. (2009). Evidence for a Causal Role of Oxidative Stress in the Myocardial Complications of Insulin Resistance. *Heart Lung and Circulation*, 18(1), 11–18. <https://doi.org/10.1016/j.hlc.2008.11.003>
- Rizki, A. U., AR, C., & Amalia, M. (2016). PERBEDAAN EFEKTIVITAS EKSTRAK RIMPANG TEMULAWAK (*Curcuma xanthorrhiza* Roxb.) DENGAN EKSTRAK DAUN SALAM (*Eugenia polyantha* Wight) PADA PENURUNAN KADAR KOLESTEROL TOTAL TIKUS PUTIH JANTAN (*Rattus norvegicus*). *Jurnal Profesi Medika*, 10, 55.
- Rochlani, Y., Pothineni, N. V., Kovelamudi, S., & L.Mehta, J. (2017). Metabolic syndrome : pathophysiology , management , and modulation by natural compounds. *Therapeutic Advances in Cardiovascular Disease Review*, 1–11. <https://doi.org/10.1177/https>
- Rosidi, A. (2020). The difference of Curcumin and Antioxidant activity in *Curcuma Xanthorrhiza* at different regions. *Journal of Advanced Pharmacy Education & Research*, 10(1), 14–18. www.japer.in
- Rosidi, A., Khomsan, A., Setiawan, B., Riyadi, H., & Briawan, D. (2004). *POTENSI TEMULAWAK (Curcuma xanthorrhiza Roxb) SEBAGAI ANTIOKSIDAN*. 1995.
- Rosidi, A., Khomsan, A., Setiawan, B., Riyadi, H., & Briawan, D. (2013). Athletes, Effect of Temulawak (*Curcumin xanthorrhiza* Roxb) Extract on Reduction Of MDA (Malondialdehyde) Levels of Football. *PAKISTAN JOURNAL OF NUTRITION*, 12(9), 842–850.
- S, K. N., & Sumiwi, S. A. (2020). AKTIVITAS BERBAGAI TANAMAN SEBAGAI ANTIHIPERURISEMIA. *Farmaka*, 17, 33–49.
- Sahgal, G., Ramanathan, S., Sasidharan, S., Mordi, M. N., Ismail, S., & Mansor, S. M. (2009). In vitro antioxidant and xanthine oxidase inhibitory activities of methanolic *Swietenia*

- mahagoni seed extracts. *Molecules*, 14(11), 4476–4485. <https://doi.org/10.3390/molecules14114476>
- Schaefer, E. J., Gleason, J. A., & Dansinger, M. L. (2009). Dietary fructose and glucose differentially affect lipid and glucose homeostasis. *Journal of Nutrition*, 139(6), 1257–1262. <https://doi.org/10.3945/jn.108.098186>
- Selvam, R., & Kurien, T. B. (1987). Induction of lipid peroxidation by oxalate in experimental rat urolithiasis. *Journal of Biosciences*, 12(4), 367–373. <https://doi.org/10.1007/BF02898585>
- Setyowati, E., Ikawati, Z., Hertiani, T. dan Pramantara, I. D. P. (2021). HMG-CoA reductase and lipase enzyme inhibition from combination of *Gynura procumbens* and *Curcuma xanthorrhiza* aqueous extract. *Food Research*, 5(April), 386–392.
- Setyowati, E., Ikawati, Z., Hertiani, T., & Pramantara, I. D. P. (2020). Clinical Trial of Herbal Products Combination of Extract *Gynura procumbens* Leaves and *Curcuma xanthorrhiza* Rhizome as Anti-dyslipidemia. *International Journal of Science and Research (IJSR)*, 9(5), 984–994. <https://doi.org/10.21275/SR20515100507>
- Shaffique, S., Ahmed, S., Rehman, T., Mumtaz, W., Anwar, H., & Hussain, G. (2018). Anti-hyperuricemic potential of *Rhododendron tomentosum* Harmaja syn. *Ledum palustre* L. 30c and 1M in potassium oxonate induced rat model. *Indian Journal of Traditional Knowledge*, 17(4), 724–731.
- Silitonga, M. E. R., Nugroho HS, K. H., Tjahjono, K., Widyastiti, N. S., & Afifah, D. N. (2018). Pengaruh pemberian minuman lidah buaya terhadap kadar antioksidan total dan persentase lemak tubuh pada sindrom metabolik. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 7(1), 1–8. <https://doi.org/10.14710/jgi.7.1.1-8>
- Solihah, I., Novita, R. P., & Pratiwi, I. S. (2019). The Effect of Consumption Nata De Cocolawak on Lipid Serum Levels on Healthy Women. *Journal of Food and Nutrition Research*, 7(11), 766–771. <https://doi.org/10.12691/jfnr-7-11-2>
- Sridhar, K., & Charles, A. L. (2018). In vitro antioxidant activity of Kyoho grape extracts in DPPH [rad] and ABTS [rad] assays: Estimation methods for EC 50 using advanced statistical programs. *Food Chemistry*, 275, 41–49. <https://doi.org/10.1016/j.foodchem.2018.09.040>
- Sukandar, E. Y., Kurniati, N. F., & Nurdianti, A. N. (2016). ANTI-OBESITY EFFECT OF ETHANOL EXTRACT OF *ANREDERA CORDIFOLIA* (TEN) STEENIS LEAVES ON OBESE MALE WISTAR RATS INDUCED BY HIGH-CARBOHYDRATE DIET. *International Journal of Pharmacy and Pharmaceutical Sciences*, 8(February 2017).

- Sumarya, I. M. (2019). HIPERURISEMIA SEBAGAI FAKTOR RISIKO PENYAKIT KARDIOVASKULAR MELALUI MEKANISME STRES OKSIDATIF. *WIDYA BIOLOGI*, 10, 87–98.
- Susilawati, E., Sukmawati, I. K., & Abdullah, R. (2019). AKTIVITAS ANTIHIPERURISEMIA EKSTRAK ETANOL DAUN PEPAYA (*Carica papaya* L.) PADA TIKUS PUTIH JANTAN GALUR WISTAR. *Jurnal Sains dan Teknologi Farmasi Indonesia*, 8(1).
- Syamsudin, R. A. M. R., Perdana, F., Mutiaz, F. S., Galuh, V., Rina, A. P. A., Novia Dwi Cahyani, S. A., Yanti, R., & Khendri, F. (2019). REVIEW: TANAMAN TEMULAWAK (*Curcuma xanthorrhiza* Roxb) SEBAGAI OBAT TRADISIONAL. *Farmako Bahari*, 10(1), 51–65.
- Tadic, M., Cuspidi, C., & Grassi, G. (2018). *Heart rate as a predictor of cardiovascular risk Marijana*. <https://doi.org/10.1111/ijlh.12426>
- Takir, M., Kostek, O., Ozkok, A., Elcioglu, O. C., Bakan, A., Erek, A., Mutlu, H. H., Telci, O., Semerci, A., Odabas, A. R., Afsar, B., Smits, G., Alanaspa, M., Sharma, S., Johnson, R. J., & Kanbay, M. (2015). Lowering uric acid with allopurinol improves insulin resistance and systemic inflammation in asymptomatic hyperuricemia. *Journal of Investigative Medicine*, 63(8), 924–929. <https://doi.org/10.1097/JIM.0000000000000242>
- Tania, P. O. A., Misuari, P. A., Yudhayana, S., & Prayoga, K. A. E. (2021). Liver Histopathological Change and Malondialdehyde Level of *Rattus Norvegicus* on Administration of *Curcuma Zedoaria* and Paracetamol Toxic Dose. *Indonesian Journal of Medical Laboratory Science and Technology*, 3(1), 38–46. <https://doi.org/10.33086/ijmlst.v3i1.1927>
- Turab, M., Hasan, S. S., Zaidi, S. A., Khalid, S., Shaikh, F., & Zehra, D. (2022). The Allopurinol and Febuxostat in the Treatment of Hyperuricemic Patients and Their Impact on Lipid Fractions (Cholesterol, LDL, HDL). *Journal of Hunan University Natural Sciences*, 49(1), 282–289. <https://doi.org/10.55463/issn.1674-2974.49.1.34>
- Veryanti, P. R., & Kusuma, I. M. (2020). UJI EFEKTIVITAS EKSTRAK BUAH KAWISTA (*Limonia acidissima*) TERHADAP PENURUNAN KADAR ASAM URAT DARAH PADA MENCIT JANTAN. *Media Farmasi*, 17(2), 105–114.
- Wahyuni, T., Widuri, A., Mun'im, A., & Katrin. (2016). Uji Aktivitas Penghambatan Xantin Oksidase Ekstrak Etanol 80% Dari Tanaman Famili Combretaceae, Lauraceae, Lythraceae, Oxalidaceae, Piperaceae, Plumbaginaceae, Dan Smilacaceae. *FITOFARMAKA | Jurnal Ilmiah Farmasi*, Vol 6, No 2 (2016): *Fitofarmaka Jurnal Ilmiah*

- Farmasi*, 77–87. <https://journal.unpak.ac.id/index.php/fitofarmaka/article/view/757>
- WHO. (2017). WHO methods and data sources for global burden of disease estimates. *World Health Organization, December*.
- Widyastuti, I., Luthfah, H. Z., Hartono, Y. I., Islamadina, R., Can, A. T., & Rohman, A. (2020). Antioxidant Activity of Temulawak (*Curcuma xanthorrhiza* Roxb.) and its Classification with Chemometrics. *Indonesian Journal of Chemometrics and Pharmaceutical Analysis*, 02(1), 29. <https://doi.org/10.22146/ijcpa.507>
- Wientarsih, I., Chakeredza, S., & Meulen, U. (2002). Influence of curcuma (*Curcuma xanthorrhiza* Roxb) on lipid metabolism in rabbits. *Journal of the Science of Food and Agriculture*, 1880(January 2002), 1875–1880. <https://doi.org/10.1002/jsfa.1235>
- Wowor, R., & Wantania, F. (2018). Pengaruh Pemberian Alopurinol terhadap Tekanan Darah Pasien Gagal Jantung. *Jurnal Biomedik (Jbm)*, 10(1). <https://doi.org/10.35790/jbm.10.1.2018.18997>
- Wu, J., Zhang, Y. P., Qu, Y., Jie, L. G., Deng, J. X., & Yu, Q. H. (2019). Efficacy of uric acid-lowering therapy on hypercholesterolemia and hypertriglyceridemia in gouty patients. *International Journal of Rheumatic Diseases*, 22(8), 1445–1451. <https://doi.org/10.1111/1756-185X.13652>
- Yu, W., & Cheng, J. D. (2020). Uric Acid and Cardiovascular Disease: An Update From Molecular Mechanism to Clinical Perspective. *Frontiers in Pharmacology*, 11(November), 1–13. <https://doi.org/10.3389/fphar.2020.582680>
- Yuliani, S., Prasetya, D. Y., & Bachri, M. S. (2018). Effect of Temulawak (*Curcuma xanthorrhiza* Roxb.) Extract on the MDA Levels and GPx Activity in the Brains of Trimethyltin Induced Dementia Model Rats . *Advanced Science Letters*, 23(12), 12451–12454. <https://doi.org/10.1166/asl.2017.10790>
- Yumita, A., Suganda, A. G., & Sukandar, E. Y. (2013). Xanthine oxidase inhibitory activity of some Indonesian medicinal plants and active fraction of selected plants. *International Journal of Pharmacy and Pharmaceutical Sciences*, 5(SUPPL. 2), 293–296.
- Yunarto, N., Aini, N., Sulistyowati, I., & Oktoberia, I. S. (2019). Aktivitas Antioksidan serta Penghambatan HMG CoA dan Lipase dari Kombinasi Ekstrak Daun Binahong-Rimpang Temulawak. *Jurnal Kefarmasian Indonesia*, 9(2), 89–96.
- Zaetun, S., Kusuma Dewi, L. B., & Rai Wiyadna, I. B. (2019). Profil Kadar Mda (Malondialdehyde) Sebagai Penanda Kerusakan Seluler Akibat Radikal Bebas Pada Tikus Yang Diberikan Air Beroksigen. *Jurnal Analis Medika Biosains (JAMBS)*, 5(2), 79. <https://doi.org/10.32807/jambs.v5i2.109>

- Zajączkowski, S., Ziółkowski, W., Badtke, P., Zajączkowski, M. A., Flis, D. J., Figarski, A., Smolińska-Byłańska, M., & Wierzba, T. H. (2018). Promising effects of xanthine oxidase inhibition by allopurinol on autonomic heart regulation estimated by heart rate variability (HRV) analysis in rats exposed to hypoxia and hyperoxia. In *PLoS ONE* (Vol. 13, Nomor 2). <https://doi.org/10.1371/journal.pone.0192781>
- Zakaria, H., & Hasimun, P. (2017). Non-invasive pulse wave velocity measurement in mice. *International Seminar on Sensor, Instrumentation, Measurement and Metrology (ISSIMM), 2017-Janua*, 95–98. <https://doi.org/10.1109/ISSIMM.2017.8124270>
- Zakaria, H., & Hasimun, P. (2019). Frontal QRS-T Angle Measurement in Mice. *Proceeding - 2019 International Symposium on Electronics and Smart Devices, ISESD 2019*, 1–4. <https://doi.org/10.1109/ISESD.2019.8909639>
- Zhi, L., Yuzhang, Z., Tianliang, H., Hisatome, I., Yamamoto, T., & Jidong, C. (2016). High Uric Acid Induces Insulin Resistance in Cardiomyocytes In Vitro and In Vivo. *PLOS ONE*.
- Zhu, X., Yu, L., Zhou, H., Ma, Q., Zhou, X., Lei, T., Hu, J., Xu, W., Yi, N., & Lei, S. (2018). Atherogenic index of plasma is a novel and better biomarker associated with obesity: A population-based cross-sectional study in China. *Lipids in Health and Disease*, 17(1), 1–6. <https://doi.org/10.1186/s12944-018-0686-8>
- Ziga, N., & Becic, F. (2013). Allopurinol Effect on Values of Lipid Profile Fractions in Hyperuricemic Patients Diagnosed with Metabolic Syndrome. *ronounced heart*, 25(3), 167–169.
- Žiga, N., Bečić, F., & Dedić, M. (2018). Effectiveness of allopurinol on triglyceride levels in hyperuricemic patients. *International Journal of Research in Medical Sciences*, 6(8), 2583. <https://doi.org/10.18203/2320-6012.ijrms20183236>
- Zulkarnain, Z., Triyono, A., & Novianto, F. (2018). Jamu formula could reduce plasma cholesterol patients with mild Hypercholesterolemia. *Health Science Journal of Indonesia*, 9(2), 87–92. <https://doi.org/10.22435/hsji.v9i2.808>