

DAFTAR PUSTAKA

- Acharya, B.N., Saraswati, D., Tiwari, M., Shrivasta, A.K., Ghorpade, R., Bapna, S., and Kaushik, M.P., 2010, Synthesis and Antimalarial Evaluation of 1,3,5-Trisubstituted Pyrazolines, *Eur. J. Med. Chem.*, 45, 430-438.
- Amalia, A., 2020, Synthesis of Chalcone and Pyrazoline Derivatives from 4-metoxyacetophenone and 2,4-dimetoxyacetophenone and Their Activities Assay as Antimalarial Agents, *Undergraduate Thesis*, Department of Chemistry FMIPA UGM, Yogyakarta.
- Basco, L.K., 2007, *Field Application of In Vitro Assays for The Sensitivity of Human Malaria Parasites to Antimalarial Drugs*, World Health Organization, Geneva.
- Basco, L.K., Mitaku, S., Skaltsounis, A.L., Ravelomanantsoa, N., Tillequin, F., Koch, M., and Bras, J.I., 1994, *In Vitro* Activities of Furoquinoline and Acridone Alkaloids Against *Plasmodium Falciparum*, *Antimicrob. Agents Chemother.*, 38, 1169-1171.
- Batista, R., Junior, A.J.S., and Oliviera, A.B., 209, Plant-Derived Antimalarial Agents: New Leads and Efficient Phytomedicines Part II Natural Product, *Molecules*, 14, 3037-3072.
- Bukhari, S.N.A., Jasaman, M., Jantan, I., and Ahmad, W., 2013, Review of Methods and Various Catalyst Used for Chalcone Synthesis, *Mini Rev. Org. Chem.*, 10, 73-83.
- Chen, M., Theander, T.G., Cristensen, S.B., Hviid, L., Zhui, L., and Kharazmi, A., 1994, Licochalcone A, A New Antimalarial Agents Inhibits *In Vitro* Growth of The Human malaria Parasite *Plasmodium falciparum* and Protects Mice from *Plasmodium yeolii* Infection, *Antimicrob Agents Chemother.*, 38(7), 1470-1475.
- Congpoung, K., Sirtichaisinthop, J., Tippawangkosol, P., Suprakrob, K., Na-Bangchang, K., Tan-Ariya, P., and Karbwang, J., 1998, Incidence of Antimalarial Pretreatment and Drug Sensitivity *In Vitro* in Multidrug Resistant *Plasmodium Falciparum* Infection in Thailand, *Trans R. Soc. Trop. Med. Hyg.*, 92, 84-86.
- Cowman, A.F, Galatis, D., and Thompson, J.K., 1994, Selection for Mefloquine Resistance in *Plasmodium falciparum* is linked to Amplification of the pfmdr1 Gene and Cross-Resistance to Halofantrine and Quinine, *USA: Proc. Natl. Acad. Sci.*, 91, 1143-1147.

- Desti, A., Majdalani, M., Kontogiorgis, C.A., Hadjipavlou-Litina, D., and Kefalas, P., 2009, Natural and Synthetic 2'-hydroxy-chalcones and aurones: Synthesis, Characterization and Evaluation of The Antioxidant and Soybean Lipoxygenase Inhibitory Activity, *Bioorg. Med. Chem.*, 17(23), 8077-8085.
- Elyazar, I.R.F., Gething P.W., Patil, A.P., Rogayah, H., Kusriastuti, R., Wismarini, D.M., Tarmizi, S.N., Baird, K.J., and Hay, S.I., 2011, *Plasmodium Falciparum* Malaria Endemicity in Indonesia in 2010, *PLoS ONE*, 6(6), 1-16.
- Eryanti, Y., Zamri, A., dan Rahmita, J., 2010, Sintesis Turunan 2'-Hidroksi Kalkon melalui Kondensasi Claisen-Schmidt dan Uji Aktivitasnya sebagai Antimikroba, *J. Natur Indones.*, 12, 223-227.
- Go, M., Wu, X., and Liu, X., 2005, Chalcones: An Update on Cytotoxic and Chemoprotective Properties, *Current. Med. Chem.*, 12(4), 483-499.
- Hermantoono, F., Yun, Y.F., Aisyah, L.S., Saputra, T.R., Hakim, A.R., Ningsih, A.K., Herlina, T., Julaeha, E., Zainuddin, A., dan Supratman, U., 2014, Uji Aktivitas Antimalaria Ekstrak Etanol Daun Cocor Bebek (*Kalanchoe blossfeldiana* Poelln.), *Kartika Jurnal Ilmiah Farmasi*, 2(2), 54-58.
- Jadhav, S.B., Shastri, R.A., Gaikwad, K.V., and Gaikwad, S.V., 2009, Synthesis and Antimicrobial Studies of Some Novel Pyrazoline an Isoxazoline Derivatives, *E-journal.net*, 6(1), 183-188.
- Kalaria, P.N., Karad, S.C., and Raval, D.K., 2018, A Review on Diverse Heterocyclic Compounds as The Privileged Scaffolds in Antimalarial Drug Discovery, *Eur. J. Med. Chem.*, 158, 917-936.
- Kharatmol, G.M., and Jagdale, D.M., 2017, Eco-friendly Synthesis of Pyrazoline Derivatives, *J. Pharm. Clin. Res.*, 9(4), 302-308.
- Kishor, P.B.K., Kumari, P.H., Sunita, M.S.L., and Sreenivasulu, N., 2015, Role of Proline in Cell Wall Synthesis and Plant Development and its Implications in Plant Ontogeny, *Front. Plant Sci.*, 6(554), 1-17.
- Kumar, R., Mohanakrishnan, D., Sharma, A., Kaushik, N.K., Kalia, K., Sinha, A.K., and Sahal, D., 2010, Reinvestigation of Structure-Activity Relationship of Methoxylated Chalcones as Antimalarials: Synthesis and Evaluation of 2,4,5-Trimethoxy Substituted Patterns as Lead Candidates Derived from Abundantly Available Natural β -Asarone, *Eur. J. Med. Chem.*, 45, 5292-5301.

- Lahsanni, S.A., Al-Korbi, F.H., and Aljaber, N.A.A., 2014, Sythesis, Characterization and Evaluation of Antioxidant Activities of Some Novel Chalcone Analogues, *Chem. Cent. J.*, 8, 1-10.
- Lahtchev, K.L., Batovska, D.I., Parushev, S.P., Ubiyvovk, V.M. and Sibirny, A.A., 2008, Antifungal Activity of Chalcones : A mechanistic Study Using Various Yeast Strains, *Eur. J. of Med. Chem.*, 43, 2220-2228.
- Lim, S.S., Kim, H.S., and Lee D.U., 2007, *In Vitro* Antimalaria Activity of Flavonoids and Chalcone, *Bull. Korean Chem. Soc.*, 28, 2495-2497.
- Liu, M., Wilairat, P., Croft, S.L., Tan, A.L., and Go, M.L., 2003, Structure-Activity Relationship of Antileshmanial and Antimalarial Chalcones, *Bioorg. Med. Chem.*, 11(13), 2729-2738.
- Marella, A., Shaquiquzzaman, M., Verna, G., Faraz, M., and Alm, M.M., 2018, Three-Dimensional Quantitative Structure Activity Relationship Studies of Amino Pyrazolines and Their Schiff Vase Derivatives, *J. Pharm. Res.*, 12, 346-350.
- Mishra, N., Arora, P., Kumar, B., Mishra, L.C., Bhattacharya, A., Awasthi, S.K., and Bhasin, V.K., 2008, Synthesis of Novel Substituted 1,3-diaryl Propenone Derivatives and Their Antimalarial Activity *in Vitro*, *Eur. J. Med. Chem.*, 43(7), 1530-1535.
- Muti'ah, R., 2013, Penyakit Malaria Dan Mekanisme Kerja Obat-Obat Antimalaria, *Alchemy*, 2(1), 80-91.
- Nowakowska, Z., 2007, A Review of Anti-infective and Anti-inflammatory Chalcones. *Eur. J. Med. Chem.*, 42(2), 125-137.
- Patil, A.P., Patil, V.V., and Patil, V.R., 2009, *In-Vitro* Free Radicals Scavenging Activity of *Madhuca Indica* Gmel, *Pharmacologyonline*, 2, 1344-1352.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., and Vyvyan, J.R., 2015, *Introduction to Spectroscopy*, 5th Ed., Cengage Learning, Boston.
- Rahmawati, E., Hadi, U.K., dan Soviana, S., 2014, Keanekaragaman Jenis Dan Perilaku Menggigit Vektor Malaria (Anopheles Spp.) Di Desa Lifuleo, Kecamatan Kupang Barat, Kabupaten Kupang, Nusa Tenggara Timur, *Jurnal Entomologi Indonesia*, 11(2), 53-64.
- Rieckmann, K.H., Campbell, G.H., Sax L.J., and Mrema, J.E., 1978, Drug Sensitivity of *Plasmodium falciparum* An *In Vitro* Microtechnique, *Lancet*, 1(8054), 22-23.

- Rieckmann, K.H., McNamara, J.V., Frischer, H., Stockert, T.A., Carson, P.E., and Powell, R.D., 1968, Effects of Chloroquine, Quinine, and Cycloguanil upon The Maturation of Asexual Erythrocytic Forms of Two Strains of *Plasmodium Falciparum In Vitro.*, *Am. J. Trop. Med. Hyg.*, 17, 661–671.
- Sarimole, E., Martosupono, M., Semangun, H., dan Mangimbulude, C., Pengobatan Penyakit Malaria dengan Menggunakan Beberapa Jenis Tumbuhan Nabati di Kabupaten Raja Ampat, *Prosiding Seminar Nasional Raja Ampat Waisai*, 12-13 Agustus 2014, Salatiga.
- Sharma, N., Mohanakrishnan, D., and Shard, A., 2012, Stilbene-Chalcone Hybrids: Design, Synthesis, and Evaluation as A New Class of Antimalarial Scaffolds that Trigger Cell Death Through Stage Specific Apoptosis, *J. Med. Chem.*, 55, 297–311.
- Sinha, S., Sarma, P., Sehgal, R., and Medhi, B., 2017, Development in Assay Methods for *In Vitro* Antimalarial Drug Efficacy Testing: A Systematic Review, *Front. Pharmacol.*, 8, 754.
- Snow, R.W., Guerra, C.A., Noor, A.M., Myint, H.Y., and Simon, I., 2011, Europe PMC Funders Group The Global Distribution of Clinical Episodes of *Plasmodium falciparum* Malaria, *Nature*, 434, 214-217.
- Suma, A.A.T., Wahyuningsih, T.D., and Mustofa, 2019, Efficient Synthesis of Chloro Chalcones Under Ultrasound Irradiation, Their Anticancer Activities and Molecular Docking Studies, *Rasayan J. Chem.*, 12, 502–510.
- Susanti, E., Matsjeh, S., Mustofa, and Wahyuningsih, T.D., 2014, Improved Synthesis of 2',6'-Dihydroxy-3,4-Dimethoxy Chalcone by Grinding Technique to Synthesize 5-Hydroxy-3',4'-Dimethoxy Flavone, *Indones. J. Chem.*, 14, 174–178.
- Suwito, W., 2010, Bakteri yang Sering Mencemari Susu: Deteksi, Patogenesis, Epidemiologi dan Cara Pengendaliannya, *Jurnal Litbang Pertanian*, 29, 96100.
- Syahri, J., 2017, Desain dan Sintesis Senyawa Antimalaria dari Turunan Kalkon, *Disertasi*, Departemen Kimia FMIPA UGM, Yogyakarta.
- Talisuna, A.O., Peter, B., and Umberto D., 2004, History, Dynamics, and Public Health Importance of Malaria Parasite Resistance, *Clin. Microbiol. Rev.*, 17(1), 235-254.
- Vanangamudi, G., Subramanian, M., Jayanthi, P., Arulkumaran R., Kamalakkannan, D., and Thirunarayanan, G., 2016, IR and NMR spectral studies of some 2-

hydroxyl-1-naphthyl chalcones: Assessment of substituent effects, *Arabian J. Chem.*, 9(1), S717-S724.

Wahyuningsih, T.D., Suma, A.A.T., and Astuti, E., 2019, Synthesis, Anticancer Activity, and Docking Study of N-acetyl Pyrazolines from Veratraldehyde, *Jour. App. Pharm. Sci.*, 9(3), 14–20.

Wang, H., Zheng, J., Xu, W., Chen, C., Wei, D., Ni, W., and Pan, Y., 2017, A New Series of Cytotoxic Pyrazoline Derivatives as Potential Anticancer Agents that Induce Cell Cycle Arrest and Apoptosis, *Molecules*, 22, 1-14.

Wellem, T.E., and Plowe, C.V., 2001, Chloroquine Resistant Malaria, *J. Infect. Dis.*, 184, 770-776.

White, N.J., 2004, Antimalarial Drug Resistance, *J. Clin. Inves.*, 113(8), 1084-1092.

Zhang, X., Abrahan, C., Colquhoun, T.A., and Liu, C.J., 2017, A Proteolytic Regulator Controlling Chalcone Synthase Stability and Flavonoid Biosynthesis in Arabidopsis, *Plant Cell*, 29(5), 1157–1174.

Zhuang, C., Zhang, W., Sheng, C., Zhang, W., Xing, C., and Miao, Z., 2017, Chalcone: A Privileged Structure in Medical Chemistry, *Chem. Rev.*, 117, 7762-7810.