

DAFTAR PUSTAKA

- Acharya, B. N., Saraswat, D., Tiwari, M., Shrivastava, A. K., Ghorpad, R., Bapna, S., and Kaushik, M. P., 2010, Synthesis and Antimalarial Evaluation of 1, 3, 5-Trisubstituted Pyrazolines, *Eur. J. Med.Chem.*, 45(2), 430–438
- Alam, M. M., Marella, A., Akhter, M., Shaquiquzzaman, M., Husain, A., Akhter, W., and Verma, G., 2014, Synthesis and In-vitro Antimalarial Evaluation of Pyrazoline: A New Antimalarial Scaffold, *J. Pharm. Res.*, 8(1),77-80
- Aldo, T., Sumi, S., Kawate, T., Ichihara, J., and Hanafusa, T., 1984, Sonochemical Switching of Reaction Pathways in Solid-Liquid Two-phase Reactions, *J. Chem. Soc. Chem. Commun.*, 7, 439-440.
- Alzahra, K. N., 2019, Sintesis Senyawa Kalkon dan N-fenilpirazolina Berbahan Dasar 4-aminoasetofenon serta Uji Aktivitasnya Sebagai Antimalaria, *Skripsi*, Jurusan Kimia FMIPA UGM, Yogyakarta
- Anonim, 2014, *Informatorium Obat Nasional Indonesia (IONI)*, Badan Pengawas Obat dan Makanan, Jakarta
- Anonim, 2017, *Buku Saku Kasus Pelaksanaan Malaria*, Kementerian Kesehatan Republik Indonesia, Jakarta.
- Anonim, 2018, *World Malaria Report 2019*, World Health Organization, Geneva.
- Avila, H. P., Smania, E. F. A., Monache, F. D., and Smania, A., 2008, Structure–Activity Relationship of Antibacterial Chalcones, *Bio.Med.Chem.*, 16(22), 9790–9794.
- Basco, L.K., and Elisabet, H., 2007, *Field Application of In Vitro Assays for the Sensitivity of Human Malaria Parasites to Antimalarial Drugs*, WHO, 5-11., Geneva
- Batista, R., Júnior, A.J.S., and Oliveira, A.B., 2009, Plant-Derived Antimalarial Agents: New Leads and Efficient Phytomedicines. Part II. Non-Alkaloidal Natural Products, *Molecules*, 14, 3037–3072.
- Chinappi, M., Via, A., Marcatili, P., and Tramontano, A., 2010, On the Mechanism of Chloroquine Resistance in Plasmodium falciparum, *PLoS One*, 5(11), 14064.
- Clayden, J., Greeves, N. and Warren, S., 2012, *Organic Chemistry*, Oxford University Press Inc., New York.
- Congpuong, 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-46 Resistant Plasmodium Falciparum Infection in Thailand, *Trans. R. Soc. Trop. Med. Hyg.*, 92, 84–86

- Egan, T. J., Hunter, R., Kaschula, C. H., Marques, H. M., Miplon, A., and Walden, J., 2000, Structure-Function Relationships in Aminoquinolines: Effect of Amino and Chloro Groups on Quinoline-Hematin Complex Formation, Inhibition of β -Hematin Formation, and Antiplasmodial Activity, *J. Med. Chem.*, 43, 283-291.
- Fadilah, N. N., 2018, Sintesis Senyawa Turunan Kalkon dan Pirazolina Berbahan Dasar P-Anisaldehyda dan 4-Aminoasetofenon serta Uji Aktivitasnya sebagai Antioksidan dan Tabir Surya, *Skripsi*, Jurusan Kimia FMIPA UGM, Yogyakarta
- Gacche, R. N., Dhole, N. A., Kamble, S. G., and Bandgar, B. P., 2008, In-Vitro Evaluation of Selected Chalcones for Antioxidant Activity, *J. Enzyme. Inhib. Med. Chem.*, 23(1), 28–31
- Gomes, M. N., Muratov, E. N., Pereira, M., Peixoto, J. C., Rosseto, L. P., Cravo, P., Andrade, C. H., and Neves, B. J., 2017, Chalcone Derivatives: Promising Starting Points for Drug Design, *Molecules*, 22(8), 1210 - 1235.
- Gaonkar, S. L., and Vignesh, U., 2017, Synthesis and Pharmacological Properties of Chalcones: a Review, *Res. Chem. Intermed*, 35(43), 6043–6077
- Gildenhuis, J., le Roex, T., Egan, T.J., and de Villiers, K.A, 2013, The Single Crystal X-ray Structure of β -hematin DMSO Solvate Grown in the Presence of Chloroquine, α - β -hematin Growth-rate Inhibitor. *J. Am. Chem. Soc.*, 135(3), 1037-1047.
- Guo, Z., 2016, Artemisinin Anti-Malarial Drugs in China, *Acta. Pharm. Sin. B.*, 6(2), 115–124
- Gupta, R., Gupta, N. and Jain, A., 2010, Improved Synthesis of Chalcones and Pyrazolines under Ultrasonic Irradiation, *ChemInform*, 41(30), 351–355
- Ivers, L. C., and Ryan, E. T., 2012, *Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy*, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia.
- Jarag K. J., Pinjari D. V., Pandit A. B., and Shankarling G. S., 2011, Synthesis of Chalcone (3-(4-Fluorophenyl)-1-(4-Methoxyphenyl)Prop-2-En-1-One): Advantage of Sonochemical Method over Conventional Method, *Ultrason. Sonochem.*, 18(2), 617–623.
- Kitawat, B. S., and Singh, M., 2014, Synthesis, Characterization, Antibacterial, Antioxidant, DNA Binding and SAR Study of a Novel Pyrazine Moiety Bearing 2-Pyrazoline Derivatives, *New. J. Chem.*, 38(9), 4290–4299.
- Lin, Z. P., and Li, J. T., 2012, A Convenient and Efficient Protocol for The Synthesis of 1,3,5-Triaryl-2-Pyrazolines in Acetic Acid under Ultrasound Irradiation, *E-J Chem.*, 9(1), 267-271
- Liu, M., Wilairat, P. and Go, M. L., 2001, Antimalarial Alkoxyated and Hydroxylated Chalcones: Structure-Activity Relationship Analysis, *J. Med. Chem.*, 44(25), 4443–4452

- Loffe, B. V., 1968, Characteristic Frequencies in the Infrared Spectra of Pyrazolines, *Chem. Heterocycl. Compd.*, 4, 791–793
- Mahapatra, D. K., Bharti, S. K., and Asati, V., 2015, Anti-Cancer Chalcones: Structural and Molecular Target Perspectives, *Eur. J. Med. Chem.*, 98, 69–114
- Meshnick, S. R., 1998, Artemisinin Antimalarials: Mechanisms of Action and Resistance, *Med. Trop.*, 58, 13-17
- Mason, T. J., 1997, Ultrasound in Synthetic Organic Chemistry, *Chem. Soc. Rev.*, 26, 443-451.
- Mason, T., 1991, *Practical Sonochemistry, a Users Guide to Applications in Chemistry and Chemical Engineering*, Ellis Horwood Publishers, Chichester
- Moore, L.R., Fujioka, H., and Williams, P.S., 2006, Hemoglobin Degradation in Malaria-infected Erythrocytes Determined from Live Cell Magnetophoresis, *FASEB J*, 20(6),747-749
- Patel, N. B., Shaikh, F. M., Patel, H. R., and Rajani, D., 2016, Synthesis of 2-Pyrazolines from Pyridine Based Chalcone by Conventional and Microwave Techniques: Their Comparison and Antimicrobial Studies, *J. Saudi Chem. Soc.*, 20, S451-S456.
- Pise, A. S., Jadhav, S. D., Burungale, A. S., Devkate, S. S., and Gawade, R. B., 2018, Ultrasound Assisted Synthesis of 1,5-Diaryl and 1,3,5-Triaryl-2-Pyrazolines by Using KOH/EtOH System with Cu(I) Catalyst, *Asian J. Chem.*, 4(30), 894-896
- Prasad, Y. R., Rao, A. S., and Rambabu, R., 2009, Synthesis of New 4-Amino Chalcones and Their Anti-Inflammatory and Antimicrobial Activity, *Asian J. Chem.*, 2(21), 907-914.
- Putra, T. R. I., 2011, Malaria dan Permasalahannya. *J. Kedokt. Syiah Kuala*, 11(2), 103 – 114
- Riza, N.F., 2019, Turunan Kalkon Ddan N-Fenilpirazolina Berbahan Dasar 4-Aminoasetofenon dan Benzaldehida; Sintesis dan Assay Antimalaria, *Skripsi*, Jurusan Kimia FMIPA UGM, Yogyakarta
- 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
- Robert, A., Cabaret, O. D., Cazelles, J., and Meunier, B., 2002, From Mechanistic Studies on Artemisinin Derivatives to New Modular Antimalarial Drugs, *Acc. Chem. Res.*, 35(3), 167–174
- Ruiz, A., 2015, *Sonochemistry New Opportunities for Green Chemistry*, World Scientific Publishing Europe, Singapore.

- 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, *Rayasan J. Chem*, 2(12), 502-510
- Suwito, H., Jumina, Mustofa, Pudjiastuti, P., Fanani, M. Z., Ariga, Y. K, Katahira, R., Kawakami, T., Fujiwara, T., 2014, Design and Synthesis of Chalcone Derivatives as Inhibitors of the Ferredoxin-Ferredoxin-NADP⁺ Reductase Interaction of Plasmodium falciparum: Pursuing New Antimalarial Agents, *Molecules*, 19, 21473-21488
- Soltani, M., Memarian, H. R., and Sabzyan, H., 2018, Spectroscopic Studies of Aryl Substituted 1-Phenyl-2-Pyrazolines: Steric and Electronic Substitution Effects, *J. Mol. Struct.*, 1173, 903-917
- Talapko, J., Skelec, I., Aleic, T., Jukic, M., and Vcev, A., 2019, Malaria: The Past and the Present. *Microorganisms*, 7(6), 179-196
- Utomo, T. B., 2018, Sintesis Senyawa Turunan Kalkon dan N- Hidrogenpirazolina Berbahan Dasar Veratraldehida dan 4-Aminoasetofenon Serta Uji Aktivitas Kalkon sebagai Agen Antioksidan dan Tabir Surya, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta
- Zahrani, M. A. H., Salama, H. F., and Abdin, Y. G., 2010, Efficient Microwave Irradiation Enhanced Stereoselective Synthesis and Antitumor Activity of Indolylchalcones and Their Pyrazoline Analogs, *J. Chem. Sci.*, 122, 587–595