

REFERENCES

- Acharya, B.N., Saraswat, D., Tiwari, M., Shrivastava, 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(2), 430–438.
- Alidmat, M.M., Khairuddean, M., Norman N.M., Asri A.N.M., Hisyam M., Suhaimi M., Garima Sharma., 2021, Synthesis, characterization, docking study and biological evaluation of new chalcone, pyrazoline, and pyrimidine derivatives as potent antimalarial compounds, *Arab. J. Chem.*, 14(9), 1878-5352
- Asif, M., 2016, A review on recent advances and potential pharmacological activities of versatile chalcone molecule, *Int. J. Chem.* 2(1), 1-18.
- 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(8), 3037–3072.
- Chinchilla, M., Valerio, I., Sánchez, R., Mora, V., Bagnarello, V., Martínez, L., Gonzalez, A., Vanegas, J.C., and Apestegui, Á., 2012, *In vitro* antimalarial activity of extracts of some plants from a biological reserve in Costa Rica, *Rev. Biol. Trop.*, 60(2), 881–891.
- De Oliveira, M.E., Cenzi, G., Nunes, R.R., Andrighetti, C.R., De Sousa Valadao, D.M., Dos Reis, C., Simoes, C.M.O., Nunes, R.J., Júnior, M.C., Taranto, A.G., Sanchez, B.A.M., Viana, G.H.R., and De Pilla Varotti, F., 2013, Antimalarial activity of 4-metoxychalcones: Docking studies as falcipain/plasmepsin inhibitors, ADMET and lipophilic efficiency analysis to identify a putative oral lead candidate, *Molecules*, 18(12), 15276–15287.
- Dong, F., Jian, C., Zhenghao, F., Kai, G., and Zuliang, L., 2008, Synthesis of chalcones via Claisen–Schmidt condensation reaction catalyzed by acyclic acidic ionic liquids. *Catal. Commun.*, 9(9), 1924–1927.
- Go, M., Wu, X., and Liu, X., 2005, Chalcones: An update on cytotoxic and chemoprotective properties, *Current. Med. Chem.*, 12(4), 483-499.
- Hapsari, M., Windarti, T., Purbowatiningrum, Ngadiwiyan, and Ismiyarto, 2018, Synthesis of 4-hydroxy-3-methylchalcone from Reimer-Tiemann reaction product and its antibacterial activity test, *IOP Conf. Ser. Mater. Sci. Eng.*, 349, 1–7.

- Hughes, J.P., Rees, S.S., Kalindjian, S.B., and Philpott, K.L., 2011, Principles of early drug discovery, *Br. J. Pharmacol.*, 162, 1239–1249.
- Kumar, R., Mohanakrishnan, D., Sharma, A., Kaushik, N.K., Kalia, K., Sinha, A.K., and Sahal, D., 2010, Reinvestigation of the 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(11), 5292–5301.
- Meanwell, N.A., 2011, Synopsis of some recent tactical application of bioisosteres in drug design, *J. Med. Chem.* 54(8), 2529-2591
- Monroe, A., Williams N.A., Ogoma S., Karema C., and Fredros O., 2022, Reflections on the 2021 World Malaria Report and the future of malaria control, *Malar. J.*, 21(1), 154-160.
- Nowakowska, Z., 2007, A review of anti-infective and anti-inflammatory chalcones. *Eur. J. Med. Chem.*, 42(2), 125–137.
- Okolo, C., Eban, L., Amazu, L., Chukwu, L., Ohadoma, S., and Osuala, F., 2020, *In-vitro* antimalarial activity of Chikadoma plant from the rainforest of Southern Nigeria, *J. Drug Deliv. Ther.*, 10(5), 251–254.
- Omodara, N.B., Olarinoye, N.O., Oloyede, H.O., and Oyebade, A., 2017, Malaria a silent killer disease: causes, prevention and curative action of drugs and herbs, *Int. J. adv. res. sci. eng. technol.*, 4(1), 3202-3208.
- Rammohan, A., Reddy, J.S., Sravya, G., Rao, C.N., and Zyryanov, G.V., 2020, Chalcone synthesis, properties and medicinal applications: a review. *Environ. Chem. Lett.*, 18, 433-458.
- Rocha e Silva, L.F., de Magalhães, P.M., Costa, M.R.F., Alecrim, M. das G.C., Chaves, F.C.M., Hidalgo, A. de F., Pohlitz, A.M., and Vieira, P.P.R., 2012, *In vitro* susceptibility of *Plasmodium falciparum* Welch field isolates to infusions prepared from *Artemisia annua* L. cultivated in the Brazilian Amazon, *Mem. Inst. Oswaldo Cruz.*, 107(7), 859–866.
- 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), 1-14.
- Sivakumar, P.M., Ganesan, S., Veluchamy, P., and Doble, M., 2010, Novel chalcones and 1,3,5-triphenyl-2-pyrazoline derivatives as antibacterial agents., *Chem. Biol. Drug.*, 76(5), 407-411.

- 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(2), 502–510.
- Syahri, J., Yuanita, E., Nurohmah, B.A., Armunanto, R., and Purwono, B., 2017, Chalcone analogue as potent anti-malarial compounds against *Plasmodium falciparum*: A synthesis, biological evaluation, and docking simulation study, *Asian Pac. J. Trop. Biomed.*, 7(8), 675–679.
- Syed, N.A.B., Manila J., Ibrahim J., and Waqas A., 2013, Review of methods and various catalysts used for chalcone synthesis, *Mini Rev. Org. Chem.*, 10(1), 73-83.
- Thu, A.M., Phyto, A.P., Landier, J., Parker, D.M., and Nosten, F.H., 2017, Combating multidrug-resistant *Plasmodium falciparum* malaria. *The FEBS journal*, 284(16), 2569–2578.
- Tukur, A.R., Habila, J.D., Ayo, R.G.O., and Lyun, O.R.A., 2022, Synthesis, reactions and pharmacological applications of chalcones and their derivatives- a mini-review, *J. Chem. Rev.*, 4(2), 100-119.
- Vestergaard, L.S., and Ringwald, P., 2007, Responding to the challenge of antimalarial drug resistance by routine monitoring to update national malaria treatment policies. *Am. J. Trop. Med. Hyg.*, 77(6), 153-159.
- Zhang, X., Abraham, 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.