

REFERENCES

- Achmad, M.F. and Sutanto, I., 2003, Peran gen *pfindr-1* pada mekanisme resistensi *Plasmodium falciparum* terhadap klorokuin, *Majalah Kedokteran Indonesia*, 53 (2), 72.
- Amanatie, Jumina, Mustofa, Hanafi and Armunanto, R., 2010, QSAR Study of Xanthone Derivatives as Anti Plasmodials Agents, *Indo. J. Chem.*, 10 (3), 357-362.
- Ashley, E., McGready, R., Proux, S. and Nosten, F., 2006, Malaria, *Travel medicine and Infectious Disease*, 4, 159-173.
- Baelsmans, R., Deharo, E., Munoz, V., Sauvain, M., and Ginsburg, H., 2000, Experimental conditions for testing the inhibitory activity of chloroquine on the formation of β -hematin, *Exp. Parasitol*, 42, 55-60.
- Basilico, N., Pagani, E., Monti, D., Olliaro, P., and Taramelli, D., 1998, A microtitrebased method for measuring the haem polymerization inhibitory activity (HPIA) of antimalarial drugs, *J. Antimicrob. Chemother.*, 42, 55-60.
- Baumann, K. and N. Stiefl, 2004, Validation tools for variable subset regression, *J.of Comp.-Aided Mol.Design*, 18 (7-9), 549-562.
- Bazaraa, R.M., 1993, *NonLinear Programming, Theory and Algorithms*, John Willey and Sons Inc., NewYork.
- Black, R.H., Canfield, C.J., Clide, D.F., Peters, W. and Wernsdorfer, W.H., 1968, Fundamental Aspects, in Bruce-Chwatt,L.J.,(Ed) *Chemotherapy of Malaria*, 36-37, WHO, Geneva.
- Bruce-Chwatt, L.J., 1980, *Essensial Malariology*, John Willey and Sons, New York
- Cramer R.D., Patterson D.E., and Bunce J.D., 1988, *J. Am. Chem. Soc.*, 110, 5959.
- Daily, J.P., 2006. Antimalarial drug therapy: the role of parasite biology and drug resistance. *J. Clin. Pharmacol.* 46, 1487–97.
- Eaton, P. E., Carlson, G. R. and Lee, J. T., 1973. Phosphorus pentoxidemethanesulfonic acid. Convenient alternative to polyphosphoric acid. *Journal Organic Chemistry*, 38 (23), 4071–4073.

- Esteves, C. I., Santos, C. M. M., Brito, M. C., Silva, A. M. S. and Caveleiro, J. A. S., 2011. Synthesis of novel 1-aryl-9H-xanthone-9-ones. *SYNLETT*, 10, 1403-1406.
- Fotie, J., Nkkengfack, A.E., Rukunga, G., Tolo, F., Peter, M.G., Heydenreich, M., and Fomum, Z.T., 2003. In vivo antimalarial activity of some oxygenated xanthenes. *Annals of Tropical Medicine and Parasitology*, 97 (7), 683–688.
- Golbraikh A. and Tropsha A., 2003, *J. Chem. Inf. Comp. Sci.* (43), 144.
- Grover, P. I., Shah, G. D. and Shah, R. C., 1955. Xanthenes. Part IV. A new synthesis of hydroxyxanthenes and hydroxybenzophenones. *National Chemical Laboratory of India*, 3982-3985.
- Hadanu, R., Idris, S., Sutapa, I.W., 2015. QSAR Analysis of Benzothiazole Derivatives of Antimalarial Compounds Based On AM1 Semi-Empirical Method. *Indo. J. Chem.*15(1), 86-92
- Hasanein, A.A. and Evans, 1996, Content of potentially anticarcinogenic flavonoids of 28 Vegetables and 9 fruits commonly consumed in the Netherlands, *J.Agric. Food Chem*, 40, 2379-2383.
- Hay, A.-E., Hélesbeux, J.-J., Duval, O., Labaïed, M., Grellier, P., Richomme, P., 2004. Antimalarial xanthenes from *Calophyllum caledonicum* and *Garcinia vieillardii*. *Life Sci.* 75, 3077–3085.
- He'lesbeux, J.J., Duval, O., Dartiguelongue, C., Se ´raphin, D., Oger, J.M., and Richomme, P., 2004. Synthesis of 2-hydroxy-3- methylbut-3-enyl substituted coumarins and xanthenes as natural products. Application of the Schenck ene reaction of singlet oxygen with ortho-prenylphenol precursors. *Tetrahedron*, 60 (10), 2293–2300.
- Ignatushchenko, M. V, Winter, R.W., Bächinger, H.P., Hinrichs, D.J., Riscoe, M.K., 1997. Xanthenes as antimalarial agents; studies of a possible mode of action. *FEBS Lett.* 409, 67–73.
- Ito, C., Itoigawa, M., Furukawa, H., Rao, K.S., Enjo, F., Bu, P., Takayasu, J., Tokuda, H., Nishino, H., 1998. Xanthenes as inhibitors of Epstein-Barr virus activation. *Cancer Lett.* 132, 113–7.
- Krostad, D.J., 1996. Malaria as a reemerging disease. *Epidemiol. Rev.* 18, 77–89.
- Kubinyl, H., 1993, *QSAR: Hansch analisys and related approaches*, VCH Verlagsgesellschaft, Weinkein.

- Kumar, S., Mithu, G., Choubey, V., Maity, P., and Bandyopadhyay, U., 2007, Antimalarial drugs inhibiting hemozoin (β -hematin) formation; A mechanistic update, *Life Sci.*, 80, 813-828.
- Leach, A.R., 1996, *Molecular Modelling: Principles and Applications*, Addison Wesley, Longman, Southampton University, Singapore.
- Likhitwitayawuid, K., Phadungcharoen, T., Krungkrai, J., 1998. Antimalarial xanthenes from *Garcinia cowa*. *Planta Med.* 64, 70–2.
- Mengwasser, J. H., 2011. Lead compounds from nature: synthesis of natural xanthenes and chroman aldehydes that inhibit HIV-1. *Thesis*, Iowa State University, United States.
- Mustofa, 2003, Molekul antimalaria alami: Potensi dan tantangan pengembangannya sebagai obat baru malaria, *Majalah Obat Tradisional*, 84 (9), 8-17.
- Naidoo, J. M., 2009. Novel methodology for the synthesis of xanthenes. *Thesis*, University of the Witwatersrand, Johannesburg.
- Oger, J.M., Morel, C., He ´lesbeux, J.J., Litaudon, M., Se ´raphin, D., Dartiguelongue, C., Larcher, G., Richomme, P., and Duval, O., 2003. First 2-hydroxy-3-methylbut-3-enyl substituted xanthenes isolated from plants: structure elucidation, synthesis and antifungal activity. *Natural Product Research*, 17 (3), 195–199.
- Packard, R.M., 2010. *The Making of a Tropical Disease: A Short History of Malaria*. JHU Press.
- Pedro, M., Cerqueira, F., Sousa, M. E., Nascimento, S. J. and Pinto, M., 2002. Xanthenes as inhibitors of growth of human cancer cell. *Bioorganic and Medicinal Chemistry*, 10, 3725–3730.
- Portela, C., Afonso, C.M.M., Pinto, M.M.M., Lopes, D., Nogueira, F., do Rosário, V., 2007. Synthesis and antimalarial properties of new chloro-9H-xanthenes with an aminoalkyl side chain. *Chem. Biodivers.* 4, 1508–19.
- Pranowo, H.D., 2003, *Kimia Komputasi*, PKKIA, Universitas Gadjah Mada, Yogyakarta.
- Purcell, W.P., 1974, Quantitative Structure-Activity Relationship, in Bergmann, E. D., Pullman B., *Molecular and Quantum Pharmacology*, Reidel Publishing Company, Dordrecht.

- Ramdja, M., 1997, Mekanisme Resistensi Plasmodium falciparum terhadap Kloloquin, *Medika*, 11, 873-875.
- Ramya, T.N.C., Surolia, N., Surolia, A., 2002. Survival strategies of the malarial parasite Plasmodium falciparum. *Curr. Sci.*, 83(7), 818-825.
- Riley, E.M., Wagner, G.E., Ofori, M.F., Wheeler, J.G., Akanmori, B.D., Tetteh, K., McGuinness, D., Bennett, S., Nkrumah, F.K., Anders, R.F., and Koram, K.A., 2000. Lack of Association between Maternal Antibody and Protection of African Infants from Malaria Infection. *Infect. Immun.* 68, 5856–5863.
- Riscoe, M., Kelly, J., and Winter, R., 2005. Xanthonas as Antimalarial Agents: Discovery, Mode of Action, and Optimization. *Curr. Med. Chem.* 12, 2539–2549.
- Saha, P., Mandal, S., Das, A., Das, P.C., and Das, S., 2004. Evaluation of the anticarcinogenic activity of Swertia chirata Buch.Ham, an Indian medicinal plant, on DMBA-induced mouse skin carcinogenesis model. *Phytother. Res.* 18, 373–8.
- Sahu, N.K., M. Sharma, V. Mourya, and D.V. Kohli, 2012, QSAR Study of Some Substituted 4-Quinoliny and 9-Acridiny Hydrazones as Antimalarial Agents, *Acta Poloniae Pharmaceutica-Drug Research*, 69 (6), 1153-1165.
- Sousa, M. E. and Pinto, M. M. M., 2005, Antifungal Activity of Xanthonas: Evaluation of their Effect on Ergosterol Biosynthesis by High-performance Liquid Chromatography, *Curr. Med. Chem.*, 12, 2447.
- Siswandono and Sukardjo, B., 2008, *Kimia Medisinal*, Airlangga University Press, Surabaya.
- Syamsudin, Soesanto, T., Wahyuono Subagus, and Mustofa, 2008. In vivo Antiplasmodial Activity and Acute Toxicity of the Fraction of the Garcinia parvifolia Miq. Stem Bark. *J. Pharmacol. Toxicol.* 3, 324–329.
- Tropical Diseases Center (TDC), 2004, *Proceeding of the Symposium of Malaria Control in Indonesia*, Surabaya, Universitas Airlangga.
- WHO, 1998, *Roll Back Malaria, A Global Partnership*, Geneva.
- WHO, 1997, The situation of malaria in the world in 1994, *J.Epid.*, 72, 269-292.
- WHO, 2010. Guidelines for the treatment of malaria, 2nd edition. Who 197p.
- Winstanley, P.A., 2000. Chemotherapy for falciparum malaria: the armoury, the problems and the prospects. *Parasitol. Today* 16, 146–53.

- Wood, B.R., Langford, S.J., Cooke, B.M., Glenister, F.K., Lim, J., and Mcnaughton, D., 2003, Raman imaging of hemozoin within the food vacuole of *Plasmodium falciparum* trophozoites, *FEBS Letters*, 554, 247- 252.
- Yang, 2012. Preparation of tetrahydroisoquinoline-3-ones via cyclization of phenyl acetamides using Eaton's reagent', *Organic Syntheses*, 89, 44-54.
- Yapi, A. D., Mustof, M., Valentin, A. Chavignon, O., Teulade, J.C., Mallie, M., Chapat, J.P., and Blache, Y., 2000. New potential antimalarial agents: synthesis and biological activities of original diaza-analogs of phenanthrene. *Chem. Pharm. Bull.* 48, 1886–1889.
- Young, D., 2004. *Computational Chemistry: A Practical Guide for Applying Techniques to Real World Problems*. John Wiley & Sons.
- Yuliana, Pranowo, H.D., Jumina and Tahir, I., 2004, Analisis hubungan kuantitatif struktur elektronik dan aktivitas antimugen senyawa turunan benzalaseton dengan pendekatan pricipal regression, *Indo.J.Chem*, 4 (1), 68-75.
- Zaranz, B., Jaso, A., Lima, L.M., Aldana, I., Monge, A., Maurel, S. and Sauvain, M., 2006, Antiplasmodial activity of –trifluoromethyl-2-carbonylquinoxaline-di-N- oxide derivatives Brazilian, *J. Pharm.Sci*, 42(3), 357-361.
- Zein, U., 2005. Penanganan Terkini Malaria Falciparum.