



## DAFTAR PUSTAKA

- Ahn, S.Y., Shin, M.Y., Kim, Y.A., Yoo, J.A., Kwak, D.H., Jung, Y.J., *et al.*, 2008, Magnetic separation: a highly effective method for synchronization of cultured erythrocytic *Plasmodium falciparum*, *Parasitol Res*, 102:1195-1200.
- Alam, G., Soegihardjo C.J., & Sudarsono, 1995, Detection of indole alkaloid in the callus culture of *Brucea javanica* (L) Merr, *Proceding Symposium Medicinal Plants Research VIII*, Bogor, Indonesia, pp: 452-456.
- Al-Adhroey, H.A., Nor, m.Z., Al-Mekhlafi, M.H., & Mahmud, R., 2010, Ethnobotanical study on some Malaysian antimalarial plants: A community based survey, *J Ethnopharmacol*, 132: 362-364.
- Amino, R., Thiberge, S., Shorte, S., Frischnecht, F., & Menerd, R., 2006, Quantitative imaging of *Plasmodium* sporozoites in the mammalian host, *C R Biologies*, 329: 858–862.
- Aley, S.B., Sherwood, J.A., & Howard, R.J., 1984, Knob-positive and knob-negative *Plasmodium falciparum* differ in expression of a strain-specific malarial antigen on the surface of infected erythrocytes. *J Exp Med* 160:1585-1590.
- Alona, P., 2007, *Plasmodium falciparum* Gametocytes: still many secrets of a hidden life, *Mol Microbiol*, 66(2): 291–302.
- Anderson L.A., Harris A., & Phillipson J.D., 1983, Production of cytotoxic canthin-6-one alkaloids by ailanthus altissima, *J Nat Products*, 46(3): 374-378.
- Anonim, 2012, *Plasmodium falciparum*, <http://www.dpd.cdc.gov/dpdx>, diakses tanggal 20 Desember 2012.
- Arnida, Wahyono, Mustofa, & Susidarti, R.A., 2013, *In vitro* antiplasmodial activity of ethanol extracts of Borneo medicinal plants (*Hydrolea spinosa*; *Ampelocissus rubiginosa*; *Uraria crinita*; *Angiopteris evecta*), *Unpublish*.
- Aryanti, Ermayanti, T.M., Prinadi, K.I., & Dewi, R.M., 2006, Uji daya antimalaria *artemisia* sp terhadap *Plasmodium falcifarum*, *MFI*, 17(2): 81-84.
- Auparakkitanon, S., Noonpakdee, W., Ralph, R.K., Denny W.A., & Wilairat, P., 2003, Antimalarial 9-anilinoacridine compounds derected at hematin, *J Antimicrob Chemother*, 47(12): 3708-12.
- Baelmans, R., Deharo, E., Munoz, V., Sauvain, M., & Ginsburg, H., 2000, Experimental conditions for testing the inhibitory activity of chloroquine on the formation of  $\beta$ -hematin, *Exp Parasitol*, 96(4):243-8.
- Baird, J.K., 2013, Evidence and implications of mortality associated with acute *Plasmodium vivax* malaria, *Clin Microbiol Rev*, 26:36–57.



- Baird, J.K., & Hoffman, S.L., 2004, Primaquine therapy for malaria, *Clin Infect Dis*, 39:1336–1345.
- Bakar, N.A., Klonis, N., Hanssen, E., Chan, C., & Tilley, L., 2010, Digestive-vacuole genesis and endocytic processes in the early intraerythrocytic stages of *Plasmodium falciparum*, *J Cell Sci*, 123: 441–450.
- Baldwin, J., Farajallah, A.M., Malmquist, N.A., Rathod, P. K., & Phillips, M. A., 2002, Malarial Dihydroorotate Dehydrogenase Substrate And Inhibitor Specificity, *J Biol Chem*, 277: 41827–41834.
- Bandar, H., Hijazi, A., Rammal, H., Hachem, A., Saad, Z., & Badran, B., 2013, Techniques for the extraction of bioactive compounds from Lebanese *Urtica dioica*, *AJPCT*, 1(6): 507-513.
- Bannister, L.H., & Mitchell, G.H., 2009, The malaria merozoite, forty years on, *Parasitol*, 136: 1435–1444.
- Bannister, L.H., Hopkins, J.M., Fowler, R.E., Krishna, S., & Mitchell, G.H., 2000, Ultrastructure of rhoptry development in *Plasmodium falciparum* erythrocytic schizonts, *J Parasitol*, 121 (3): 273–287.
- Bannister, L.H., Hopkins, J.M., Margos, G., Dluzewski, A.R. & Mitchell, G.H., 2004, Three-dimensional ultrastructure of the ring stage of *Plasmodium falciparum*: evidence for export pathways, *Microsc Microanal*, 10: 551–562.
- Bapela, J.M., Meyer, M., & Kaiser, M., 2014, *In vitro* antiplasmodial screening of ethnopharmacologically selected South African plant species used for the treatment of malaria, *J Ethnopharmacol*, 3: 245-248.
- Basco, LK., 2007, *Field Application of in vitro assays for the sensitivity of human malaria parasites to antimalaria drugs*, WHO Press, Geneva.
- Bassilico, N., Pagani, E., Monti, D., Olliari, P., & Taramelli, D., 1998. A microtitrebased method for measuring the haem polymerization inhibitory activity (HPIA) of antimalarial drugs, *J Antimicrob Chemother*, 42: 55-60.
- BenMamoun, C., Gluzman, I.Y., Hott, C., MacMillan, S.K., Amarakone, A.S., Anderson, D.L., et al., 2001, Co-ordinated programme of gene expression during asexual intraerythrocytic development of the human malaria parasite *Plasmodium falciparum* revealed by microarray analysis, *Mol Microbiol*, 39: 26–36.
- Bennett, T.N., Kosar, A.D., Ursos, L.M.B., Dzekunov, S., Sidhu, A.B.S., Fidock, D.A., et al., 2004, Drug resistance-associated pfCRT mutations confer decreased *Plasmodium falciparum* digestive vacuolar pH, *Mol Biochem Parasitol*, 133: 99–114.
- Bergqvist, Y., & Lindegardh, N., 2007, *Antimalarial drug levels in body fluids*, in Schalgenhauf-Lowlor & Patricia, 2nd Edition, BC Decker Inc, Shelton USA. 248-268.



- Bertania, S., Houel, E., Jullian, V., Bourdy, G., & Valentin, A., 2012, New findings on Simalikalactone D, an antimalarial compound from *Quassia amara* L. (Simaroubaceae), *J Exp Parasitol*, 130(4): 341–347.
- Bickii, J., Tchouya, G.R.F., Tchouankeu, J.C., & Tsamo, E., 2007, Antimalarial activity in crude extracts of some cameroonian medicinal plants, *Afr J Trad CAM.*, 4 (1): 107-111
- Biot, C., Nosten, F., Fraisse,L., Terminassian D., Khalife, J., & Dive D., 2011, The Antimalarial Ferroquine: From Bench To Clinic, *Parasite*, 18: 207-214.
- Boselli, E., Velazco, V., Caboni, M.F., & Lercker, G., 2001, Pressurized liquid extraction of lipids for the determination of oxysterols in egg-containing food, *J Chromatogr A*, 917: 239-244.
- Bozdech, Z., Llina, M., Lee Pulliam B., Wong, ED, Zhu J., & DeRisi JL., 2003, The Transcriptome of the Intraerythrocytic Developmental Cycle of *Plasmodium falciparum*, *PLoS Biol*, 1(1): 085-100.
- Bruce, M.C., Carter, R.N., Nakamura, K., Aikawa, M., & Carter, R., 1994, Cellular location and temporal expression of the *Plasmodium falciparum* sexual stage antigen Pfs16, *Mol Biochem Parasitol*, 65: 11–22.
- Bunnik, E.M., Polishko, A., Prudhomme, J., Ponts, N., Gill, S.S., Stefano Lonardi, S., & Le Roch, K.R., 2014, DNA-encoded nucleosome occupancy is associated with transcription levels in the human malaria parasite *Plasmodium falciparum*, *BMC*, 15:347.
- Carter, R., Graves, P.M., Creasey, A., Byrne, K., Read, D., Alano, P., & Fenton, B., 1989, *Plasmodium falciparum*: an abundant stage-specific protein expressed during early gametocyte development, *Exp Parasitol*, 69: 140–149.
- Christenhusz, Maarten, J. M., Toivonen, & Tuuli, K., 2008, Giants invading the tropics: the oriental vessel fern, *Angiopteris evecta* (Marattiaceae), *Biol Invasi*, 10(8): 1215-1228.
- Cox, F.E., 2010, History of the discovery of the malaria parasites and their vectors, *Parasit Vectors*, 3:5.
- Dahl, E.L., & Rosenthal, P.J., 2008, Apicoplast translation, transcription and genome replication: targets for antimalarial antibiotics, *Trends Parasitol*, 24(6): 279-284.
- Depkes, 2000, *Parameter Standar Umum Ekstrak Tumbuhan Obat*, Departemen Kesehatan RI, Jakarta.
- Depkes, 2001, *Standar pengawasan program bidang kesehatan, pemberantasan penyakit malaria*, Inspektorat Jenderal Departemen Kesehatan RI, Jakarta



Depkes, 2006, *Pedoman Penatalaksanaan Kasus Malaria di Indonesia*, Jakarta: Direktorat Jendral Pengendalian Penyakit dan Penyehatan Lingkungan, Jakarta.

Depkes, 2008, *Pedoman Penatalaksanaan Kasus Malaria di Indonesia: Gebrak Malaria*, Dirjen Pengendalian Penyakit dan Penyehatan Lingkungan, Departemen Kesehatan RI, Jakarta.

de Castro, M.D.L. & Garcia-Ayuso, L.E., 1998, Soxhlet extraction of solid materials: An outdated technique with a promising innovative future, *Anal Chem Acta*, 369(1):1-2.

de Souza, W., 2005, Microscopy and cytochemistry of the biogenesis of the parasitophorous vacuole, *Histochem Cell Biol*, 123: 1–18.

Dluzewski, A.R., Ling, I.T., Hopkins, J.M., Grainger, M., Margos, G., Mitchell, G.H., et al., 2008. Formation of the food vacuole in *Plasmodium falciparum*: a potential role for the 19 kDa fragment of merozoite surface protein 1 (MSP1(19)), *PLoS One*, 3: e3085.

Dondorp, A.M., Nosten, F., Yi, P., Das, D., Phyo, A.P., Tarning, J., et al., Artemisinin resistance in *Plasmodium falciparum* malaria, 2009, *N Engl J Med*, 361:455–467.

Duraisingh, M.T., & Cowman, A.F., 2005, Contribution of the pfmdr1 gene to antimalarial drug-resistance, *Acta Tropica*, 94 (3): 181-190.

Edwards, C., & Stillman, P., 2006, *Minor Illness or Major Disease?, The clinical pharmacist in the community*, 4<sup>th</sup> Edition, Pharmaceutical Press, London, 262.

Ekland, E.H., & Fidock, D.A., 2008, *In vitro* evaluations of antimalarial drugs and their relevance to clinical outcomes, *Int J Parasitol*, 38(7): 743–747.

Enoh S.A, Seudieu C, Davidson E, Dritschilo A, & Jung M., 2009, Novel Inhibitor Plasmodium Histon Deasetilase Itu Mice Cures *P. berghei*, *Antimicrob Agents Chemother*, 53(5): 1727–1734.

Falade, M.O., Akinboye, D.O., Gbotosho, G.O., Ajaiyeoba, E.O., Happi, T.C., Abiodun, O.O., et al., 2014, *In vitro* and *in vivo* antimalarial activity of *Ficus thonningii* Blume (Moraceae) and *Lophira alata* Banks (Ochnaceae), identified from the ethnomedicine of the Nigerian Middle Belt, *J Parasitol Res*, 2014: 1-6

Farooq, U., & Mahajan, R.C., 2004, Drug resistance in malaria, *J Vect Borne Dis*, 41: 45-53.

Fidock, D.A., T. Nomura, A. K. Talley, R. A. Cooper, S. M. Dzekunov, M.T., Ferdig, et al., 2000, Mutations in the *P. falciparum* digestive vacuole trans membrane protein PfCRT and evidence for their role in chloroquine resistance, *Mol Cell*, 6:861-71.



- Fidock, D.A., Rosenthal, P.J., Croft, S.L., Brun, R., & Nwaka, S., 2004, Antimalarial drug discovery: Efficacy models for compound screening, *Nat Rev Drug Disc*, 3(6): 509-520.
- Fidock, D.A., Eastman, R.T., Ward, S.A., & Meshnick, S.R., 2008, Recent highlights in antimalarial drug resistance and chemotherapy research, *Trends in Parasitol*, 24 (12): 537-544.
- Florens, L., Washburn, M.P., Raine, J.D., Anthony, R.M., & Grainger, M., 2002, A Proteomic view of the *Plasmodium falciparum* life cycle, *Nature*, 419: 520–526.
- Garcia, C.R., de Azevedo, M.F., Wunderlich, G., Budu, A., Young, J.A., & Bannister, L., 2008, Plasmodium in the postgenomic era: new insights into the molecular cell biology of malaria parasites, *Cell Mol Biol*, 266: 85–156.
- Geislinger, T.M., Chan, S., Moll, K., Wixforth, A., Wahlgren, M., & Franke, T., 2014, Label-free microfluidic enrichment of ring-stage *Plasmodium falciparum*-infected red blood cells using non-inertial hydrodynamic lift, *Malar J*, 13:375
- Gessler, M.C., Nkunya, M.H.H., Mwasumbi, L.B., Heinrich, M., & Tanner, M., 1997, Screening Tanzanian medicinal plants for antimalarial activity, *Acta Tropica*, 56(1): 65-77.
- Grimberg, B.T., & Mehlotra, R.K., 2011, Expanding the antimalarial drug now, but how, *Pharmaceutical*, 4: 681-712.
- Hadi, S., 2003. Tanaman obat pulau Lombok : agen anti malaria dari *Alstonia scholaris* R. Br. *J Obat Bahan Alam.*, 3(2): 28-33.
- Hanssen, E., McMillan, P.J., & Tilley, L., 2010, Cellula architecture of *Plasmodium falciparum*-infected erythrocytes, *Int J Parasitol*, 40: 1127-1135.
- Hanssen, E., Dekiwadia, C., Riglar, D.T., Rug, M., & Lemgruber, L, 2013, Electron tomography of *Plasmodium falciparum* merozoites reveals core cellular events that underpin erythrocyte invasion, *Cell Microbiol*, 15: 1457–1472.
- Harbone, J.B., 1987, *Metode Fitokimia, Penuntun cara modern menganalisis tumbuhan*, Penerbit ITB, Bandung.
- Hasnawati & Prawita, E., 2010, Isolasi dan identifikasi senyawa antibakteri dari daun *Eupatorium odoratum* L. Terhadap bakteri *Staphylococcus aureus* ATCC 25923 dan *Escherichia coli* ATCC 25922, *MFI*, 15(1): 41-50.
- Hay, S.I., & Snow, R.W., 2006, The malaria atlas project: developing global maps of malaria risk, *PLoS Med*, 3(12): e473.



- Hay, S.I, Okiro, E.A., Gething, P.W., Patil, A.P., Tatem, A.J., Guerra, C.A., *et al.*, 2010, Estimating the global clinical burden of *Plasmodium falciparum* malaria in 2007, *PLoS Med*, 7(6): e1000290.
- Haynes, J.D., & Moch, J.K., 2002, Automated synchronization of *Plasmodium falciparum* parasites by culture in a temperature-cycling incubator, *Methods Mol Med*, 72:489-497.
- Hayward, R.E., DeRisi, J.L., Alfadhli, S., Kaslow, D.C., & Brown, P.O., 2000, Hotgun DNA microarrays and stage-specific gene expression in *Plasmodium falciparum* malaria, *Mol Microbiol*, 35: 6–14.
- Hertiani, T., & Purwantini, 2002, Minyak atsiri hasil destilasi etanol daun sirih (*Piper betle* L) dari beberapa daerah di Yogyakarta dan aktivitas antijamur terhadap *Candida albicans* anti-fungal activity of essential oil distilled from ethanol, *MFI*, 8 (4) 132-137.
- Hoa, N.K., Phan, D.N., Thuan, N.D., & Ostenson, C.G., 2009, Screening of the hypoglycemic effect of eight Vietnamese herbal drugs, *Methods Find Exp Clin Pharmacol*, 31(3):165-169.
- Hoppe, H.C., Verschoor, J.A., & Louw, A.I., 1991, *Plasmodium falciparum*: a comparison of synchronisation methods for in vitro cultures, *Exp Parasitol* 72:464-467.
- Hseu, T. H., (1981), Structure of Angiopteridine (4-O-β-D-glucopyranosyl-L-threo-2hexen-5-olide) Monohydrate, a fern glycoside from *Angiopteris lygodiifolia* Ros, *Acta Crystallographica*, B37(11): 2095–2098.
- Huy, N.T., Maeda, A., Uyen, D.T., Trang, D.T.X., Sasai, M., Shiono, T. *et al.*, 2007, Alcohols induce beta-hematin formation via the dissociation of aggregated hem and reduction in interfacial tension of the solution, *Acta Tropica*, 101: 130–138.
- Jawetz, Melnick, & Adelberg's, 2001, *Medical Microbiology*, 22<sup>nd</sup> Edition, Lange Medical Books-McGraw Hill, New York, 576-580.
- Kavishe, R.A., van den Heuvel, J.M.W., van de Vegte-Bolmer, M., Luty, A.J.F., Russel, F..G.M., & Koenderink, J.B., 2009, Localization of the ATP-binding cassette (ABC) transport proteins PfMRP1, PfMRP2, and PfMDR5 at the *Plasmodium falciparum* plasma membrane, *Malar J*, 8:205.
- Karov, D., Dicko, M.H., Sanon, S., Simpore, J., & Traore, A.S., 2003, Antimalarial activity of *Sida acuta* Burm.f (Malvaceae) and *Pterocarpus erinaceus* Poir (Fabaceae), *J Ethnopharmacol*, 89: 291-294.
- Kemenkes, 2011, Epidemiologi malaria di Indonesia, *Buletin Jendela Data dan Informasi Kesehatan*, Kementerian Kesehatan RI, 1: 2-4.
- Khan, M.R., & Omoloso, A.D., 2008, Antibacterial and antifungal activities of *Angiopteris evecta*, *Fitoterapia*, 79(5):366-369.



- Kita, K., Miyadera, H., Saruta, F., & Miyyoshi, H., 2001, Parasite Mitochondria as a Target for Chemotherapy, *J Health Sci*, 47(3): 219–239.
- Kumar, S., Guha, M., Choubey, V., Maity, P., & Bandyopaddhay, U., 2007, Antimalarial drugs inhibiting hemozoin ( $\beta$ -hematin) formation : A mechanistic update, *Life Sciences*, 80, 813-828.
- Lanzer, M., Wickert, H., Krohne, G., Vincensini, L. & Braun Breton, C., 2006, Maurer's clefts: A novel multi-functional organelle in the cytoplasm of *Plasmodium falciparum*-infected erythrocytes, *Int J Parasitol*, 36: 23-36.
- Lambros, C., & Vanderberg, J.P., 1979, Synchronization of *Plasmodium falciparum* Erythrocytic Stages in Culture, *J Parasitol*, 65:418-420.
- Lasonder, E., Ishihama, Y., Andersen, J.S., Vermunt, A.M., & Pain, A., 2002, Analysis of the *Plasmodium falciparum* proteome by high-accuracy mass spectrometry, *Nature*, 419: 537–542.
- Le Roch, K.G., Zhou, Y., Batalov, S., & Winzeler, E.A., 2002, Monitoring the chromosome 2 intraerythrocytic transcriptome of *Plasmodium falciparum* using oligonucleotide arrays, *Am J Trop Med Hyg*, 67: 233–243.
- Lew, V.L., Tiffert, T., & Ginsburg, H., 2003, Excess hemoglobin digestion and the osmotic stability of *Plasmodium falciparum*-infected red blood cells, *Blood* 101, 4189-4194.
- Limantani, A.I., & Triratnawati, A., 2003, Ramuan jamu cekok sebagai penyembuhan kurang nafsu makan pada anak, suatu kajian etnomedisin, *Makara Kesehatan* 7(1): 12
- Liu, K.C.S., Lin, Y.S., Roberts, M.F & Phillipson, J.D., 1990, Canthin-6-one alkaloids from cell suspension cultures of *Brucea javanica*, *J Phytochem*, 29(1): 141-143.
- Ljungström, I., Perlmann, H., Schlichtherle, M., Scherf, A., & Wahlgren, M., 2004, *Methods in Malaria Research*, Fourth Edition, University Boulevard, Manassas.
- Lozhkin, A.V., & Sakanyan, E.I., 2006, Structure of chemical compounds, methods of analysis and process control, natural coumarins: methods of isolation and analysis, *Pharm Chem J*, 40(6): 337-346.
- Macreadie, I., Ginsburg, H., Sirawaraporn, W., & Tilley, L., 2000, Antimalarial drug development and new targets, *Parasitol Today*, 16(10): 438-44.
- Mahapatra, S.K., Chakraborty, S.P., Das, S., Hati, A.K., & Roy, S., 2011, Prevalence of severe chloroquine resistance associates the point mutation in *pfcrt* and *pfmdr1* gene in eastern India, *Asian Pacific J Trop Dis*, 1(4): 263–269.
- Mang'era C.M., Mbai, F.N., Omedo, I.A., Mireji, P.O., & Omar, S.A., 2012, Changes in genotypes of *Plasmodium falciparum* human malaria parasite



- following withdrawal of chloroquine in Tiwi, Kenya, *Acta Trop.*, 123: 202–207
- Marechal, E., & Cesbron-Delauw, M.F., 2001, The apicoplast: a new member of the plastid family, *Trends Plant Sci*, 6: 200–205.
- Margos, G., Bannister, L.H., Dluzewski, A.R., Hopkins, J., Williams, I.T., & Mitchell, G.H., 2004, Correlation of structural development and differential expression of invasion-related molecules in schizonts of *Plasmodium falciparum*, *J Parasitol*, 129: 273–287.
- McElroy, A., 2002, *Medical Anthropology, Encyclopedia of Cultural Anthropology*, New York, 33-41.
- Mehta, S.R. & Das, S., 2006, Management of malaria: resent trends, *J Commun Dis*, 38(2): 130-133.
- Miller, L.H., Baruch, D.I., Marsh, K., & Doumbo, O.K., 2002, The pathogenic basis of malaria, *Nature*, 415: 673–679.
- Mohamad, S., Zin, N. M., Wahab, H. A., Ibrahim, P., Sulaiman, S.F., Zahariluddin, A.S.M., et al., 2011, Antituberculosis potential of some ethnobotanically selected malaysian plants, *J Ethnopharmacol*, 113 (3): 1021-1026.
- Moll, K., Ljungstrom, I., Perlmann, H., Scherf, A., & Wahlgren, M., 2008, *Methods in Malaria Research*, University Boulevard, Manassas, 1-55.
- Mouatcho, J.C., & Goldring, J.P.D., 2013, Malaria rapid diagnostic tests: challenges and prospects, *J Med Microbiol*, 62: 1491–1505.
- Muktiningsih, S.R., Muhammad, H.S., Warsana, I.W., Budhi, M., & Panjaitan, P., 2005, Review tanaman obat yang digunakan oleh pengobat tradisional di sumatra utara, sumatra selatan, bali dan sulawesi selatan, *Media Litbang Kesehatan XI*, 4: 25-36.
- Munoz, V., Sauvain, M., Bourdy, G, Callapa, J., Bergeron, S., Rojas, I., et al., 1999, A search for natural bioavtive compounds in Bolivia through a multidisciplinary approach part I. evaluation of the antimalarial activity of plants used by the Chocobo Indians, *J Ethnopharmacol.*, 000: 1-11.
- Mustofa, 2008, Stage specificity of pasak bumi root ( *Eurycoma longifolia* jack) isolate on *Plasmodium falciparum* cycles, *The Medic J Malaysia*, 63 Spl A: 98-99
- Mustofa, 2009, Obat Antimalaria Baru Antara Harapan dan Kenyataan, Pidato Pengukuhan Jabatan Guru Besar pada Fakultas Kedokteran Universitas Gadjah Mada Yogyakarta.
- Mycek, M.J., Harvey, R.A., Champe, P.C., & Fisher, B.D., Hartanto, H., & Widya, M., 2001, *Farmakologi Ulasan Bergambar*, Edisi II, diterjemahkan dari Bahasa Inggris oleh Agoes, A., Jakarta, 353-354.



- Naughton, J.A., & Bell, A., 2007, Studies on cell-cycle synchronization in the asexual erythrocytic stages of *Plasmodium falciparum*, *J Parasitol*, 134:331-337.
- Olszewski, K.L., Morrisey, J.M., Wilinski, D., Burns, J.M., Vaidya, A.B., Rabinowitz, J.D., & Llina, M., 2009, Host-Parasite Interactions Revealed by *Plasmodium falciparum* metabolomics, *Cell Host & Microbe*, 191–199.
- Omar, F & Mahajan, R.C., 2004, Drug resistance in malaria, *J vec Borneo Disease*, 41: 45-53.
- O'Neill, P.M., Barton, V.E., Ward, S.A., & Chadwick, J., 2012, '4-Aminoquinolines: Chloroquine, Amodiaquine and Next-Generation Analogues' in Stanes, H.M., & Krishna, S., *Treatment and Prevention of Malaria*, Springer Basel, Liverpool, 19-44.
- Painter, H.J., Morrisey, J.M., Mather, M.W., & Vaidya, A.B., 2007, Specific Role of Mitochondrial Electron Transport in Blood-Stage *Plasmodium falciparum*, *Nature*, 446, 88–91.
- Pavanand, K., Nutakul, W., Dechatiwongse, T., Yoshihira, K., Yongvanitchit, K., Scovill, J.P., et al., 1986. *In vitro* antimalarial activity of *Brucea javanica* against multi-drug resistant *Plasmodium falciparum*, *Planta Med*, 52: 108–111.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., & Vyvyan, J.R., 2001, *Introduction to Spectroscopy*, Fourth Edition, Department of Chemistry, Western Washington University Bellingham, Washington.
- Patankar, S., Munasinghe, A., Shoaibi, A., Cummings, L.M., & Wirth, D.F., 2001, Serial Analysis of Gene Expression in *Plasmodium falciparum* Reveals the Global Expression Profile of Erythrocytic Stages and The Presence of Anti-sense Transcripts in The Malarial Parasite, *Mol Biol Cell*, 12: 3114–3125.
- Pouplin, J.N., Tran, T.H., Phan, T.A., Dolecek, C., Farrar, J., Caron, P., et al., 2007, Antimalarial and cytotoxic activities of ethnopharmacologically selected medicinal plants from south Vietnam, *J Ethnopharmacol*, 109: 417-427.
- Praptiwi, Harapini, M., & Chairul, 2007, Pengaruh pemberian ekstrak pauh kijang (*Irvingia malayana* oliv ex. a.benn) terhadap tingkat penurunan parasitemia pada mencit yang diinfeksi *P. berghei*, *Biodiversitas* 8(2): 96-98.
- Prozesky, E.A., Meyer, J.J.M., & Louw, A.I., 2001, *In vitro* antiplasmodial activity and cytotoxicity of ethnobotanically selected South African plants, *J Ethnopharmacol*, 76: 239–245.



- Ravikumar, S., Inbaneson, S.J., & Suganthy, P., 2012, *In vitro* antiplasmodial activity of chosen terrestrial medicinal plants against *P. falciparum*, *Asian Pacific J Trop Biomed*, 2(1): S252–S256.
- Ralph, S.A., van Dooren, G.G., Waller, R.F., Crawford, M.J., Fraunholz, M.J., Foth, B.J., et al., 2004, Tropical Infectious diseases: metabolic maps and functions of the *P. falciparum* apicoplast, *Nat Rev Microbiol*, 2: 203–216.
- Rang, H.P., Dale, M.M., Ritter, J.M., & Moore, P.K., 2003. *Pharmacology*, 5<sup>th</sup>ed., Churchill Livingstone, London.
- Razavi, S.M., Zahri, S., Motamed, Z., & Ghasemi, G., 2010, Bioscreening of oxypeucedanin, a known furanocoumarin, *Iranian J Basic Med Sci*, 13(3): 133-138.
- Renford-Cartwright, L.C., Sinha A., Humphereys G.S., & Mwang, J.M., 2010, New synchronization method for *Plasmodium falciparum*, *J Malaria*, 9:170.
- Richier, E., Biagini, G.A., Wein, S., Boudou, F., Bray, P.G., Ward, S.A., et al., 2006, Potent antihematozoan activity of novel bithiazolium drug T16: evidence for inhibition of phosphatidylcholine metabolism in erythrocytes infected with *Babesia* and *Plasmodium* spp, *Antimicrob Agents Chemother*, 50: 3381–3388.
- Rieckmann, K.H., 1987, Visual in vitro test for determining the drug sensitivity of *Plasmodium falciparum*, *The Lancet* 12:1333-35.
- Ridley, R.G., 2002, Medical need, scientific opportunity and the drive for antimalarial drugs, *Nature*, 415: 686-693.
- Rosenthal, J.P., 2003, Antimalarial drug discovery: old and new approaches, *J experiment Biol*, 206: 3735-3744
- Rowe, J.A., Claessens, A., Corrigan, R.A., & Arman, M., 2009, Adhesion of *Plasmodium falciparum*-infected erythrocytes to human cells: molecular mechanisms and therapeutic implications, *Mol Med*, 11:e16.
- Saim, N., Dean, J.R., Abdullah, Md.P., & Zakaria, Z., 1997, *J Chromatogr A*. 791, 361.
- Saleh, I., Handayani, D., & Anwar, C., 2014, Polymorphisms in the *pfcrt* and *pfmdr1* genes in *Plasmodium falciparum* isolates from South Sumatera, Indonesia, *Med J Indonesia*, 23: 1.
- Salinas, J.L., Kissinger, J.C., Jones, D.P., & Galanski, M.R., 2014, Metabolomics in the fight against malaria, *Mem Inst Oswaldo Cruz*, 109(5): 589–597.
- Sanchez, C.P., Dave, A., Stein, W.D., & Lanzer, M., 2010, Transporters as mediators of drug resistance in *Plasmodium falciparum*, *Int J Parasitol*, 40 (10): 1109–1118.
- Satimai, W., Sudathip, P., Vijakadge, S., Khamsiriwatchara, A., & Sawang, S., 2012, Artemisinin resistance containment project in Thailand, responses to



- mefloquine-artesunate combination therapy among *falciparum* malaria patients in provinces bordering Cambodia, *J Malaria*, 11(1): 300-303.
- Setyiasi, M., Ardiningsih, P., & Nofiani, R., 2013, Analisis organoleptik produk bubuk penyedap rasa alami dari ekstrak daun sansakng (*Pycnarrhena cauliflora* Diels), *JKK*, 2(1) 63-68.
- Sherman & Irwin, W., 2011, *Magic Bullet to conquer malaria: from quinine to Qinghaosu*, ASM Press, US., p. 225
- Sholikhah, EN., Wijayanti, I.T., & Mustofa, 2014, *In vivo* antiplasmodial activity and acute toxicity of standardized extract of *Eurycoma longifolia* jack. Root traditionally used to treat malaria, *AJPT*, 9 (1): 24-28
- Silverstain, R. M., Bassler, G. C., & Morrill, T.C., 2002, *Spectrometric Identification of Organic Compounds*, 4th ed., a.b. Hartono, A. J., et al., Erlangga, Jakarta
- Singh, S., Plassmeyer, M., Gaur, D., & Miller, L.H., 2007, Mononeme: a new secretory organelle in *Plasmodium falciparum* merozoites identified by localization of rhomboid-1 protease, *Proc Natl Acad Sci USA*, 104: 20043–20048
- Sirinivas, S.D., & Puri, S.K., 2002, Time course of in vitro maturation of intraerythrocytic malaria parasite, a comparison between *Plasmodium falciparum* and *Plasmodium knowlesi*, *Mem Inst Oswaldo Cruz*, 97(6): 901-903.
- Slater, Barney. L., War, & Disease, 2009, *Biomedical Research on Malaria in the Twentieth Century*, Rutgers University Press, US., p 53
- Smith, D.G.G., & Aronson, J.K., 2002, *Oxford Textbook of Clinical Pharmacology and Drug Therapy*, 3<sup>th</sup> Edition, Oxford University Press, New York.
- Smith, R.C., Vega-Rodriguez, J., & Jacobs-Lorena, M., 2014, The Plasmodium bottleneck: malaria parasite losses in the mosquito vector, *Mem Inst Oswaldo Cruz*, 109 (5): 644-6661.
- Solomon, L., Okeere, H.C., & Daminabo, V., 2014, Understanding human malaria: further review on the literature, pathogenesis and disease control, *MVI*, 1-2.
- Stangeland, T., Alele, P.E., Katuura, E., & Lye, K.A., 2011, Plants used to treat malaria in Nyakayojo sub-county, western Uganda, *J Ethnopharmacol*, 137: 154-166.
- Steele, J.C.P., Phelps, R.J., Simmonds, M.S.J., Warhurst, D.C., & Meyer, D.J., 2002, Two Novel Assays for the Detection of Haemin-Binding Properties of Antimalarial Compounds Isolated from Medical Plants, *J Antimicrob Chemother*, 50: 25-31.



- Syamsudin, Tjokrosonto, S., Wahyuono, S., & Mustofa, 2007, Aktivitas antiplasmodium dari dua fraksi ekstrak n-hexan kulit batang asam kandis (*Garcinia parvifolia* Miq), *MFI*, 18(4): 210-215.
- Tambunan, R.M., & Simanjuntak, P., 2006, Penentuan struktur kimia antioksidan benzofenon glikosida dari ekstrak n-butanol buah mahkota dewa (*Phaleria macrocarpa* (Scheff) Boerl.), *MFI*, 17 (4) 184-189.
- Taveepanich, S., Kamthong, N., Sawasdipuksa, N., & Roengsumran, S., 2005, Chemical constituents and biological activity of *Angiopteris evecta* Hoffm, *J Sci Res Chula Univ*, 30(2):187-192.
- Thomas, K., & Ying, W., 2008, Artemisinin - An innovative cornerstone for anti-malaria therapy, *Progress in Drug Research*, 66: 383-422.
- Tilley, L., McFadden, G., Cowman, A., & Klonis, N., 2007, Illuminating *Plasmodium falciparum*-infected red blood cells, *Trends in Parasitol*, 23 (6): 268-278.
- Tilley, L., Sougrat, R., Lithgow, T. & Hanssen, E., 2008, The twists and turns of Maurer's cleft trafficking in *P. falciparum*-infected erythrocytes, *Traffic*, 9:187-197.
- Tjay, T. H., & Raharja, K., 2002, Obat-obat Penting, Alex Media Komputindo, Jakarta.
- Tonkin, C.J., Pearce, J.A., McFadden, G.I., & Cowman, A.F., 2006, Protein targeting to destinations of the secretory pathway in the malaria parasite *Plasmodium falciparum*, *Microbiol*, 9:381-387.
- Tosun, F., Kizilay, C.A., Erol, K., Kilic, F.S., Kurkcuglu, M., & Baser, K.H.C. 2008, Anticonvulsant activity of furanocoumarins and the essential oil obtained from the fruits of *Heracleum crenatifolium*, *Food Chem*, 107: 990-993.
- Trager, W., & Jensen, J.B., 1976, Human malaria parasites in continuous culture, *Science*, 193: 673-676.
- van Dooren, G.G., Marti, M., Tonkin, C.J., Stimmller, L.M., Cowman, A.F., & McFadden, G.I., 2005, Development of the endoplasmic reticulum, mitochondrion and apicoplast during the asexual life cycle of *Plasmodium falciparum*, *Mol Microb*, 57 (2): 405–419.
- von Itzstein, M., Plebanski, M., Cooke, B.M., & Coppel, R.L., 2008, Hot, sweet and sticky: the glycobiology of *Plasmodium falciparum*, *Trends Parasitol*, 24: 210–218
- Wagih, M.E., G. Alam, S. Wiryowidagdo, & K. Attia, 2008, Improve production of the indole alkaloid canthin-6-one from cell suspension culture of *Brucea javanica* (L.) Merr, *Indian J Sci Tec*, 7: 1-6.
- Waksmundzka-Hajnos, M., Petruczynik, A., Hajnos, M.Ł., Tuzimski, T., Hawrył, M., Bogucka-Kocka, A., 2006, Two-dimensional thin-layer



- chromatography of selected coumarins, *J Chromatogr Sci*, 44(8): 510-517.
- Wang, P., Wang, Q., Sims, P.F., & Hyde, J.E., 2002, Rapid positive selection of stable integrants following transfection of *Plasmodium falciparum*, *Mol Biochem Parasitol*, 123: 1–10.
- Warhurst, D.C., 2007, ‘The Parasite’ in Schalgenhauf-Lowlor & Patricia, *Travelers Malaria*, 2nd Edition, BC Decker Inc, Shelton USA. 70-79.
- Wellems, T.S., & Plowe, C.V., 2001, Chloroquine Resistant Malaria, *J Infect Dis* 184:770-6.
- White, N.J., Pukrittayakamee, S., Hien, T.T., Faiz, M.A., Mokuolu, O.A., & Dondorp, A.M., 2013, Malaria, *Lancet*, 383:723–735.
- WHO, 2006, *Guidelines for The Treatment of Malaria*, WHO Press, Geneva, 25.
- WHO, 2008, *Word Malaria Report*, WHO Press, Geneva, 30
- WHO, 2010<sup>a</sup>, *Guidelines for The Treatment of Malaria* -- 2nd edition, WHO Press, Geneva, 1-22.
- WHO, 2010<sup>b</sup>, *Global Report on Antimalarial Drug Efficacy and Drug Resistance: 2000-2010*, WHO Press, Geneva, 11-27.
- WHO, 2010<sup>c</sup>, *Basic Malaria Microscopy*, WHO Press, Geneva, 53-56.
- WHO, 2011<sup>a</sup>, *Global Plan for Artemisinin Resistance Containment (GPARC)*, WHO Press, Geneva, 19.
- WHO, 2011<sup>b</sup>, *Word Malaria Report*, WHO Press, Geneva
- WHO, 2011<sup>c</sup>, *Universal Access To Malaria Diagnostic Testing*, Geneva
- WHO, 2012, *Word Malaria Report*, WHO Press, Geneva, 29
- WHO, 2013, *Word Malaria Report*, WHO Press, Geneva
- Widyowati, R., Santa, I.G.P., Rahman, A., Tantular, I., & Widyawaruyanti, A., 2003, Uji *in-vitro* aktivitas antimalaria isolat dari *Andrographis paniculata* terhadap *Plasmodium falciparum* pada stadium gametosit, *MFI*, 3(3): 99-102.
- Williams, D.H., & Fleming, I., 1995, *Spectroscopic Methods in Organic Chemistry*, Fifth Ed. McGraw-Hill, Berkshire, 17.
- Wilson, D.W., Langer, C., Goodman, C.D., McFadden, G.I., & Beeson, J.G., 2013, Defining the Timing of Action of Antimalarial Drugs against *Plasmodium falciparum*, *Antimicrob Agents Chemother*, 57 (3): 1455–1467.
- Wiesner, J. & Jomaa, H., 2007, Isoprenoid biosynthesis of the apicoplast as drug target, *Curr Drug Targets*, 8: 3–13.
- Willcox, M., Bodeker, G., & Rasoanaivo, P., 2004, *Traditional Medicinal Plants And Malaria*, CRC Press, Boca Raton, 30, 260.



- Widodo, & Rahayu, 2010, Aktivitas antimalaria ekstrak etil asetat kulit batang mundu (*Garcinia dulcis* Kurz), *MFI*, 21(4), 238-242.
- Wongsrichanalai, C., Pickard, A.L., Wernsdorfer, W.H., & Meshnick, S.R., 2002, Epidemiology of drug-resistant malaria, *Lancet Infect Dis*, 2: 209–218.
- Woodrow, C.J., & Krishna, S., 2006, Antimalarial drugs: recent advances in molecular determinants of resistance and their clinical significance, *Cell Mol Life Sci*, 63:1586–1596.
- Wright, G.J., & Rayner, J. C., 2014, *Plasmodium falciparum* erythrocyte invasion: Combining function with immune evasion, *PLoS Pathogens*, 10 (3): e1003943.
- Yen, G.C., Lai, H.H., & Chou, H.S., 2001, Nitric oxide-scavenging and antioxidant effects of *Uraria crinita* root, *J Food Chem*, 74 (4): 471-478.
- Zirihi, G.H., Yao, D.J., Ka-adou, K.M., & Philippe, G., 2005, Phytochemical and pharmacological studies of alcoholic extract of *Fagara macrophylla* (Oliv Engl) (Rutaceae); chemical structure of active compound inducing antimalarial activity, *J Chin Clin Med*, 2(4): 205-210.