

DAFTAR PUSTAKA

- Abdin, M.Z., Israr, M., Rehmin, R.U., Jain, S.K. 2003, Artemisinin, a Novel Antimalarial Drug: Biochemical and Molecular Approaches for Enhanced Production, *Planta Medica*, **69**(4):289-299
- Allison, D., dan Gilbert, P. 2004, Bacteria, dalam Denyer, S.P., Hodges, N.A., Gorman, S.P., (Eds.) 1977, *Hugo and Russell's Pharmaceutical Microbiology*, 23-27, Blackwell Science, Ltd., Oxford
- Alves, T.M., Nagem, T.J., de Carvalho, L.H., Krettli, A.U., Zani, C.L. 1997, Antiplasmodial triterpene from *Vernonia brasiliiana*. *Planta Medica*, **63**:554-5.
- Arnida, 2015, Isolasi dan Uji Aktivitas Antiplasmodium in vitro Senyawa Aktif dari Umbi Hati Tanah (*Angiopteris evecta*), *Disertasi*, Universitas Gadjah Mada, Yogyakarta
- Ascenzi, J.M. 1996. *Handbook of Disinfectants and Antiseptics*, Marcel Dekker, New York
- Awad, H.M., Kamal, Y., El-Shahed, Aziz, R., Sarmidi, M.R., Hesham, dkk. 2012, Antibiotics as Microbial Secondary Metabolites and Application, *Jurnal Teknologi*, **59**: 101-111
- Baelsman, R., Deharo, E., Munoz, V., Sauvin, M., Ginsburg, H. 2000, Experimental Conditions for Testing The Inhibitory Activity of Chloroquin on The Formation of β -hematin, *Journal of Experimental Parasitology*, **96**(4):243-248
- Basilico, N., Pagani, E., Monti, D., Olliaro, P., Taramelli, D. 1998, A Microtitrebased Method for Measuring the Haem Polymerization Inhibitory Activity (HPIA) of Antimalarial Drugs, *Journal of Antimicrobial and Chemotherapy*, **42**:55-60
- Berteau, C.M., Freije, J. R., van der Woude, H., Verstappen, F.W.A., Perk, L., Marquez, V., dkk. 2005, Identification of Intermediates and Enzymes Involved in Early Steps of Artemisinin Biosynthesis in *Artemisia annua*. *Planta Medica*, **71**:40-47.
- Bhakuni, R.S., Jain, D.C., Sharma, R.P., Kumar, S. 2001, Secondary Metabolites of *Artemisia annua* and Their Biological Activity, *Current Science*, **80**(1):35-48

- Bickii, J., Tchouya, G.R.F., Tchouankeu, J.C., Tsamo, E. 2007, Antimalarial Activity in Crude Extracts of Some Cameroonian Medicinal Plants, *African Journal of Traditional, Complementary and Alternative Medicine*, **4**(1):107-111
- Bloiland, P.B. 2001, *Drug Resistance in Malaria*, WHO
- Boucher, Y., dan Doolittle, W.F. 2000, The Role of Lateral Gene Transfer in the Evolution of Isoprenoid Biosynthesis Pathways, *Molecular Microbiology*, **37**:703–716
- Brown, G.D. 2010, The Biosynthesis of Artemisinin (Qinghaosu) and The Phytochemistry of *Artemisia annua* L. (Qinghao), *Molecules*, **15**(11):7603-7698
- Brown, G.D. dan Sy, L.K. 2004^a, Synthesis of Labelled Dihydroartemisinic Acid, *Tetrahedron*, **60**:1125-1138
- Brown, G.D. dan Sy, L.K. 2004^b, *In vivo* transformations of Dihydroartemisinic Acid in *Artemisia annua* Plants, *Tetrahedron*, **60**:1139-1159
- Brown, G.D. dan Sy, L.K. 2007, *In vivo* Transformations of Dihydro-*epi*-deoxyarteannuin B in *Artemisia annua* Plants, *Tetrahedron*, **63**:9548-9566
- Buller, R., Peterson, M.L., Almarsson, Ö., Leiserowitz, L. 2002, Quinoline Binding Site on Malaria Pigment Crystal: A Rational Pathway for Antimalaria Drug Design, *Crystal Growth & Design*, **2**(6): 553–562
- Calcul, L., Waterman, C., Ma, W.S., Lebar, M.D., Harter, C., Mutka, T., dkk. 2013, Screening Mangrove Endophytic Fungi for Antimalarial Natural Products, *Marine Drugs*, **11**:5036-5050
- Campanale, N., Nickel, C., Daubenberger, C.A., Wehlan, D.A., Gorman, J.J., Klonis, N., dkk. 2003, Identification and Characterization of Heme-interacting Proteins in The Malaria Parasite *Plasmodium falciparum*, *The Journal of Biology Chemistry*, **278**(30):27354-27361
- Cann, A. 1996, Introduction : History of *Plasmodium* Parasites, diakses April 2009, <http://www-micro.msb.le.ac.uk/Bradley/Bradley.html>.
- Castillo, U.F., Strobel, G.A., Ford, J., Hess, W.M., Porter, H., Jensen, J.B., dkk. 2002, Munumbicins, Wide Spectrum Antibiotics Produced by *Streptomyces* NRRL 30562, Endophytic on *Kennedia nigricans*, *Microbiology*, **148**:2675-2685
- Chisti, Y. dan Moo-Young, M. 1993, Clean-in-place Systems Bioreactor: Design, Validation and Operation, *ASME Bioengineering*, **27**:5–12

- Chong, C.R. dan Sullivan, Jr.D.J. 2003, Inhibition of Heme Crystal Growth by Antimalarials and Other Compounds: Implication for Drug Discovery, *Biochemical Pharmacology*, **60**(11):2201-2212
- Coll, J.C. dan Bowden, B.F. 1986, The Application of Vacuum Liquid Chromatography to the Separation of Terpene Mixtures, *Journal of Natural Product*, **49**(5):934-936
- Cox-Singh, J., David, T.M., Lee, K.S., Shamsul, S.S., Matusop, A., Ratnam, S., dkk. 2008, *Plasmodium knowlesi* Malarian in Humans in Widely Distributed and Potentially Life Threatening, *Clinical Infectious Disease*, **46**:165-171
- Croteau, R., Kutchan, T.M., Lewis, N.G. 2000, *Natural products Secondary Metabolites*, dalam Buchanan, B., Grisse, W., Jones, R. (eds.), *Biochemistry and Molecular Biology of Plants*, American Society of Plant Biologists, Rockville, MD, 1250-1268
- Daneshvar, C., Davis, T.M., Cox-Singh, J., Rafa'ee, M.Z., Zakaria, S.K., Divis, P.C., dkk. 2009, Clinical and Laboratory Features of Human *Plasmodium knowlesi* Infection, *Clinical Infectious Disease*, **49**:852-860
- Dreyfuss, M.M., dan Chapela, I.H. 1994, *In The Discovery of Natural Products with Therapeutic Potential*, Gullo, V.P., Ed.49-79, Butterworth-Heinemann, Boston
- Egan, T.J. 2001, Structure-Function Relationship in Chloroquine and Related 4-Aminoquinoline Antimalarials, *Mini Reviews in Medical Chemistry*, **1**(1):113-123
- Egan, T.J. 2002, Physico-chemical Aspects of Hemozoin (malaria pigment) Structure and Formation, *Journal of Inorganic Biochemistry*, **91**(1):19-26
- Egan, T.J. 2004, Hemozoin Formation as a Target for The Rational Design of New Antimalarials, *Drug Design Reviews*, **1**(1):93-110
- Elfita, Muharni, Munawar, Legasar, L., Darwati. 2010, Antimalarial Compounds from Endophytic Fungi of Brotowali (*Tinaspora crispa* L.), *Majalah Farmasi Indonesia*, **11**(1)53-58
- El-naggar, E. B., Azazi, M., Svajdlenka, E, Zemlicka, M. 2013, Artemisinin from Minor to Major Ingredient in *Artemisia annua* Cultivated in Egypt, *Journal of Applied Pharmaceutical Science*, **3**(08):116-123
- Ellis, D., Davis, S., Alexiou, H., Handke, R., Bartley, R. 2007, *Description of Medical Fungi*, Nexus Print Solution, Adelaide

- Estrela, C., Estrela, C.R., Barbin, E.L., Spanó, J.C., Marchesan, M.A., Pécora, J.D. 2002, Mechanism of Action of Sodium Hypochlorite, *Brazilian Dental Journal*, **13**(2):113-7
- Ezra, D., Castillo, U.F., Strobel, G.A., Hess, W.M., Porter, H., Jensen, J.B., dkk. 2004, Coronamycins, Peptide Antibiotics Produced by a Verticillate *Streptomyces* sp. (MSU-2110) Endophytic on *Monstera* sp., *Microbiology*, **150**:785–793
- Ferreira, J.F.S. dan Janick, J. 1995, Production and Detection of artemisinin from *Artemisia annua*, *Acta Horticultura*, **390**: 41-50
- Fidock, D.A., Rosenthal, P.J., Croft, S.L., Brun, R., Nwaka, S. 2004, Antimalarial Drug Discovery: Efficacy Modes for Compound Screening, *Nature Reviews*, **3**:509-520
- Figtree, M., Lee, R., Bain, L., Kennedy, T., Mackertin, S., Urban, M., dkk. 2010, *Plasmodium knowlesi* in Human, Indonesian Borneo, *Emerging Infectious Diseases*, **16**(4):672-674
- Fitch, C.D., Chen, Y.F., Cai, G.Z. 2003, Chloroquine-induced Masking of a Lipid that Promotes Ferriprotoporphyrin IX Dimerization in Malaria, *Journal of Biological Chemistry*, **278**(25):22596-22599
- Foth, B.J., Ralph, S.A., Tonkin, C.J., Struck, N.S., Fraunholz, M., Roos D.S., dkk. 2003, Dissecting Apicoplast Targeting in The Malaria Parasite *Plasmodium falciparum*, *Science*, **299**:705-708
- Frisvad, J.C., Smedsgaard, J., Larsen, T.O., Samson, R. A. 2004, Mycotoxins, Drugs and Other Extrolites Produced by Species in *Penicillium* subgenus *Penicillium*, *Studies in Mycology*, **49**:201-241
- Fujioka, H., dan Aikawa, M. 2002, Structure and Life Cycle, *Chemical Immunology*, **80**: 1-26
- Gandjar, I.G. dan Rohman, A. 2007, *Kimia Farmasi Analisis*, 355-356; 368, Pustaka Pelajar, Yogyakarta
- Ganiswara, 1995, Farmakologi dan Terapan, Edisi IV, Bagian Farmakologi. Fakultas Kedokteran Universitas Indonesia, Jakarta
- Ge, H.M., Shen, Y., Zhu, C.H., Tan, S.H., Ding, H., Song, Y.C., dkk. 2008, Penicidones A—C, Three Cytotoxic Alkaloidal Metabolites of an Endophytic *Penicillium* sp., *Natural Product*, **69**(2):571-576
- Gelb, M.H. 2007, Drug Discovery for Malaria: A very Challenging and Timely Endeavour, *Current Opinion in Chemical Biology*, **11**(4):440-445

- Gessler, M.C., Nkunya, M.H.H., Mwasumbi, L.B., Heinrich, M., Tanner, M. 1994, Screening Tanzanian Medicinal Plants for Antimalarial Activity, *Acta Tropica*, **56**:65-77
- Goldsmith, R.S. 1994, Obat-obat Antiprotozoa, Dalam: *Farmakologi Dasar dan Klinik*, ed VI. Bertram G, Katzung, Penerbit Buku Kedokteran EGC, Jakarta
- Gluzman, I.Y., Francis, S.E., Oksman, A., Smith, C.E., Duffin, K.L., Goldberg, D.E. 1994, Order and Specificity of the *Plasmodium falciparum* Hemoglobin Degradation pathway, *Journal of Clinical Investigation*, **93**:602-608
- Gritter, R.J., Bobbit, J.M., Schwarting, A.E. 1991., *Pengantar Kromatografi*, diterjemahkan oleh Kosasih, P., edisi kedua, 107-126; 160-165, ITB, Bandung
- Gu, W., Ge, H.M., Song, Y.C., Ding, H., Zhu, H.L., Zhao, X.A., dkk. 2007, Cytotoxic Benzo[j]fluoranthene Metabolites from *Hypoxylon truncatum* IFB-18, an Endophyte of *Artemisia annua*, *Journal of Natural Product*, **70**: 114-117
- Gunawan, D., dan Mulyani, S. 2004, *Ilmu Obat Alam (Farmakognosi) Jilid I*, Cetakan Pertama, Penebar Swadaya, Jakarta
- Guo L., Hyde K., Liew, E. 1998, A Method to Promote Sporulation in Palm Endophytic Fungi, *Fungal Diversity*, **1**:109-13
- Guo, B.,Y. Wang, X., Sun, K., Tan, K. 2008, Bioactive Natural Products from Endophytes: A Review, *Applied Biochemistry and Microbiology*, **44**(2):136-142
- Harper, J.K., Ford, E. J., Strobel, G. A., Arif, A., Grant, D. M., Porco, J., dkk. 2003, Pestacin: a 1,3-dihydro isobenzofuran from *Pestalotiopsis microspora* Possessing Antioxidant and Antimycotic Activities, *Tetrahedron*, **59**:2471-2476
- Harvey, L.M., McNeil, B. 2009, The Design and Preparation of Media for Bioprocesses, dalam Mc Neil, B., Harvey, L., (Eds.), *Practical Fermentation Technology*, John Wiley and Son Ltd., New Jersey
- Harwaldt, P., Rahlfs, S., Becker, K. 2002, Glutathione S-transferase of The Malarial Parasite *Plasmodium falciparum*: Characterization of a Potential Drug Target, *Biological Chemistry*, **383**(5):821-830
- Hawley, S.R., Bray, P.G., Mungthin, M., Atkinson, J.D., O'Neill, P.M, Ward, S.A. 1998, Relationship between Antimalarial Drug Activity, Accumulation, and Inhibition of Heme Polymerization in *Plasmodium falciparum* in vitro, *Antimicrobial Agents and Chemotherapy*, **42**(3):682-686

- Hempelmann, E., dan Egan, T.J. 2002, Pigment Biocrystallization in *Plasmodium falciparum*, *Trends in Parasitology*, **18**(1):11
- Hogg, S. 2005, *Essential Microbiology*, John Wiley & Sons Ltd., England.
- Huang, W.Y., Cai, Y.Z. Suryeswaran, S., Hyde, K. D., Corke, H., Sun, M., 2009, Molecular Phylogenetic Identification of Endophytic Fungi Isolated from three *Artemisia* Species, *Fungal Diversity*, **36**: 69-88
- Hundley, N.J. 2005, Structure Elucidation Of Bioactive Compounds Isolated from Endophytes of *Alstonia scholaris* and *Acmena graveolens*, *Thesis*, Brigham Young University
- Hyde, J.E. 2007, Drug-Resistant Malaria-an Insight, *FEBS Journal*, **274**(18):4688-4698
- Hyde, K.D. dan Soyong, K. 2008, The Fungal Endophyte Dilemma, *Fungal Diversity*, **33**:163-173
- Jenett-Siems, K., Mockenhaupt, F. P., Bienzle, U., Gupta, M. P., Eich, E. 1999, *In Vitro* Antiplasmodial Activity of Central American Medicinal Plants, *Tropical Medicine & International Health*, **4**(9):611-615
- Jian-wen, W., Zhong-hao, X., Ren-xiang, T. 2002, Elicitation on Artemisinin Biosynthesis in *Artemisia annua* Hairy Roots by the Oligosaccharide Extract from Endophytic *Colletotrichum* sp B501, *Acta Botanica Sinica*, **44**(10):1233-1238
- Jongwutiwes, S., Putaporntip, C., Takuya, I., Tetsuko, S., Hiroji, K. 2004, Naturally Acquired *Plasmodium knowlesi* Malaria in Human, Thailand, *Emerging Infectious Disease*, **10**:2211-2213
- Judoamidjojo, M., Darwis, A.A., & Sa'id, E.G. 1992, *Teknologi Fermentasi*, 118, 79-82, 95-97, Rajawali Pers, Jakarta
- Kakkilaya, B.S. 2011, Malaria Site : Life Cycle, diakses November 2011, <http://www.malariasite.com>.
- Kayembe, J.S., Taba, K.M., Ntumba, K., Kazadi, T.K. 2012, In vitro Antimalarial Activity of 11 Terpenes Isolated from *Ocimum gratissimum* and *Cassia alata* Leaves, Screening of Their Binding Affinity with Haemin, *Journal of Plant Studies*, **1**(2):168-172
- Kementrian Kesehatan, 2013, Permenkes RI No 5 tahun 2013 tentang Pedoman Tata Laksana Malaria

- Kindermans, J.M., Olliaro, J.P., Gomes, M. 2007, Ensuring Sustained ACT Production and Reliable Artemisinin Supply, *Malaria Journal*, **6**:125, diakses April 2009, <http://www.malariajournal.com/content/6/125>.
- Kohler S., Delwiche, C.F., Denny, P.W., Tilney, L.G., Webster, P., Wilson, J.M., dkk. 1997, A Plastid of Probable Green Algal Origin in Apicomplexan Parasites, *Science*, **275**:1485-1489
- Kongaaree, P. Prabpai, S., Sriubolmas, N., Vongvein, C., Wiyakrutta, S. 2003, Antimalarial Dihydroxycoumarins Produced by *Geotrichum* sp., an Endophytic Fungus of *Crassosephalum crepidioides*, *Journal of Natural Product*, **66**(5):709-11
- Krishna, S., Uhlemanna, A.C., Haynes, R.K. 2004, Artemisinins: Mechanisms of Action and Potential for Resistance, *Drug Resistance*, 233-244
- Kumaran, R.S., Kim, H.J., Hur, B.K. 2010, Taxol-producing fungal endophyte, *Pestalotiopsis* species isolated from *Taxus cuspidata*, *Journal of Bioscience and Bioengineering*, **110**(5):541-6
- Kumar, S., Gupta, S. K., Singh, P., Bajpai, P., Gupta, M. M., Singh D., dkk. 2004, High Yields of Artemisinin by Multi-harvest of *Artemisia annua* Crops, *Industrial Crops and Products*, **19**:77-90
- Kurosawa, Y., Dorn, A., Kitsuji-Shirane, M., Shimada, H., Satoh, T., Matile, M., dkk. 2003, Hematin Polymerization Assay as a High-throughput Screening for Identification of New Antimalarial Pharmacophores, *Antimicrobial Agents and Chemotherapy*, **44**(10):2638-2644
- Lacap, D.C., Hyde, K., Liew, E.C.Y. 2003, An Evaluation of the Fungal “morphotype” Concepts Based on Ribosomal DNA Sequence, *Fungal Diversity*, **12**: 53–66
- Lambros, C., dan Vanderberg, J.P. 1979, Synchronisation of *Plasmodium falciparum* Erythrocytic Stages in Culture, *Journal of Parasitology*, **65**(3):418-420
- Li, J., Li, P., Liu, F. 2007, Production of Theanine by *Xerocomus badius* (Mushroom) Using Submerged Fermentation, *LWT-Food Science Technology*, **41**:883-889
- Liu, C.H., Zou, W.X., Lu, H., Tan, R.X. 2001, Antifungal Activity of *Artemisia annua* Endophyte Cultures Against Phytopathogenic Fungi, *Journal of Biotechnology*, **88**(3):277-282

- Liu, J.Y., Liu, C.H., Zou, W.X., Tan, R.X. 2003, Leptosphaeric Acid, a Metabolite with a Novel Carbon Skeleton from *Leptosphaeria* sp. IV403, an Endophytic Fungus in *Artemisia annua*, *Helvetica Chimica Acta*, **86**:657-660
- Llorens A, Matco R, Hinojo MJ, Logrieco A, Jimenez M. 2004, Influence of The Interactions Among Ecological Variables in the Characterization of Zearalenone Producing Isolates of *Fusarium* spp., *Systematic and Applied Microbiology*, **27**:253–260
- Lu, H., Zou, W. X., Meng, J. C., Hu, J., Tan, R. X. 2000, New Bioactive Metabolites Produced by *Colletotrichum* sp. an Endophytic Fungus in *Artemisia annua*, *Plant Science*, **151**:67-73
- Luchaves, J., Espino, F., Curameng, P., Espina, R., Bell, D., Chiodini, P., dkk. 2008, Human infections with *Plasmodium knowlesi*, the Phillipines, *Emerging Infectious Disease*, **14**:811-813
- Maheshwari, R. 2006, What is an Endophytic Fungus?, *Current Science*, **90**(10):1309
- Margono, T., Suryati, D., Hartinah, S. 2000, *Buku Panduan Teknologi Pangan , Pusat Informasi Wanita dalam Pembangunan*, PDII-LIPI
- Massiha, A., Pahlaviani, M. J. K., Issazadeh, K., Bidarigh, S., Zarrabi, S. 2013, Antibacterial Activity of Essential Oils and Plant Extracts of *Artemisia annua* L. in vitro, *Zahedan Journal of Research in Medical Sciences*, **15**(6): 14-18
- Metwaly, A.M., Kadry, H.A., El-Hela, A.A., Mohammad, A.I., Cutler, S.J., Ross, S.A. 2013, Antimalarial Screening for Different Endophytic Fungi Isolated from Two Egyptian Plants, *Planta Medica*, **79**:53
- Miao, Y.L., Wang, D.P., Wang, X-C., Chen, J., Miao, C. 2006, An Arabidopsis Glutathione Peroxidase Functions as Both a Redox Transducer and a Scavenger in Abscisic Acid and Drought Stress Responses, *Plant Cell*, **18**:2749–66
- Moldenhauer, J.R. 2008, Preservation of Cultures for Fermentation Processes dalam Mc Neil, B., Harvey, L., (Eds.), *Practical Fermentation Technology*, John Wiley and Son Ltd., New Jersey
- Moran, L. 2007, *Plasmodium falciparum* Causes Malaria, diakses April 2009, <http://www.sandwalk.com>
- Munghtin, M., Bray, P.G., Ridley, R.G., Ward, S.A. 1998, Central Role of Hemoglobin Degradation in Mechanism of Action of 4-aminoquinolines, Quinoline Methanols, and Phenantene Methanols, *Antimicrobial Agent Chemotherapy*, **42**(11):2973-2977

- Mustofa, Sholikhah, E.N., Wahyuono, S. 2007, *In vitro* and *in vivo* Antiplasmodial Activity and Cytotoxicity of Extracts of *Phyllanthus niruri* L., Herbs Traditionally Used to Threat Malaria in Indonesia, *South East Asian Journal of Tropical Medicine Public Health*, **38**(4):609-615
- Ncokazi, K.K., dan Egan, T.J. 2005, A Colorimetric High-throughput beta-Hematin Inhibition Screening Assay for Use in the Search for Antimalarial Compounds, *Analytical Biochemistry*, **338**:306-319
- Ng, O.T., Ooi, E.E., Lee, C.C., Lee, P.J., Ng, L.C., Wong, P.S., dkk. 2008, Naturally Acquired Human *Plasmodium knowlesi* Infection, Singapore, *Emerging Infectious Disease*, **14**:814-816
- Ningsih, R., Mukarlina, Linda, R. 2012, Isolasi Dan Identifikasi Jamur Dari Organ Bergejala Sakit Pada Tanaman Jeruk Siam (*Citrus nobilis* var. *microcarpa*), *Protobiont*, **1**(1):1 – 7
- Nogueira, F., dan do Rosario, V.E. 2010, Methods for assessment of antimalarial activity in the different phases of the Plasmodium life cycle, *Revista Pan-Amazonica de Saude*, **1**(3):109-124
- O'Brien, H.E., Parrent, J.L., Jackson, J.A., Moncalvo, J.M., Vilgalys, R. 2005, Fungal Community Analysis by Large-scale Sequencing of Environmental Samples, *Applied Environmental Microbiology*, **71**:5544–5550
- O'Neill, P.M., 2004, A Worthy Adversary for Malaria, *Nature*, **430**:838-839
- Otovina, D.M. dan Said, E.G. 2004, Isolasi dan Identifikasi Artemisinin dari Hasil Kultivasi Mikroba Endofit dari Tanaman *Artemisia annua* : Studi Mikroba Endofitik Tanaman *Artemisia spp.*, *Majalah Farmasi Indonesia*, **15**(2):68-74
- Pagola, S., Stephens, P.W., Bohle, D.S., Kosar, A.D., Madsen, S.K. 2000, The Structure of Malaria Pigment beta-Haematin, *Nature*, **404**(6775):307-310
- Paitayatat, S., Tarnchompoo, B., Thebtaranonth, Y., Yuthavong, Y. 1997, Correlation of Antimalarial Activity of Artemisinin Derivatives with Binding Affinity with Ferroprotoporphyrin IX. *Journal of Medicinal Chemistry*, **40**(5):633-638
- Patrick, S.M. dan Finn, B. 2009, Modes of Fermenter Operation, dalam McNeil, B., Harvey, L.M., (Eds), *Practical Fermentation Technology*, 70-85, 103, John Wiley & Son, Ltd., England.
- Palaniswamy, M., Pradeep, B.V., Sathya, R., Amgayarkanni, J. 2010, *In vitro* Anti-Plasmodial Activity of *Trigonella foenum-graecum* L., *Evidence-Based Complementary and Alternative Medicine*, **7**(4): 441-445

- Phillips, R.S. 2001. Current Status of Malaria and Potential for Control, *Clinical Microbiology Review*, **14**(1):208-226
- Phongpaichit, S., Nikom, J., Rungjindamai, N., Sakayaroj, J., Hutadilok-towatana, N., Rukachaisirikul, V., Kirtikara, K. 2007, Biological Activities of Extracts from Endophytic Fungi Isolated from *Garcinia* Plants, *FEMS Immunology and Microbiology*, **51**:517-525
- Pina, C., António, J., Hogg, T. 2005, Inferring Ethanol Tolerance of *Saccharomyces* and Non-*Saccharomyces* Yeasts by Progressive Inactivation, *Biotechnology Letters*, **26**(19):1521-1527
- Pitt, 1979, *The Genus Penicillium and Its Teleomorphic States Eupenicillium and Talaromyces*, Academic Press Inc. London
- Pittayakhajonwut, P., Dramaee, A., Intaraudom, C., Boonyuen, N., Nithithanasilp, S., Rachtawee, P., dkk. 2011, Two New Drimane Sesquiterpenes, Fudecadienes A and B, from the Soil Fungus *Penicillium* sp. BCC 17468, *Planta Medica*, **77**(1):74-6
- Pongcharoen, W., Rukachaisirikul, V., Phongpaichit, S., Kühn, T., Pelzing, M., Sakayaroj, J., dkk. 2008, Metabolites from Endophytic Fungus *Xylaria* sp. PSU-D14, *Phytochemistry*, **69**:1900-1902
- Posner, G.H., Parker, M.H., Northrop, J., Elias, J. S., Ploypradith, P., Xie, S., dkk. 1999, Orally Active, Hydrolytically Stable, Semisynthetic, Antimalarial Trioxanes in the Artemisinin Family, *Journal of Medicinal Chemistry*, **42**(2): 300-304
- Potawale, S.E., Waseem, Md., Sadiq, Md., Mehta, U.K., Dhalawat, H. J., Luniya, K. P., dkk. 2008, Research and Medicinal Potential of *Artemisia annua*: Review, *Pharmacologyonline*, **2**: 220-235
- Priti, V., Ramesha, B.T., Singh, S., Ravikanthi, G., Ganeshaiyah, K.N., Suryanarayanan, T.S., dkk. 2009, How Promising are Endophytic Fungi as Alternative Sources of Plant Secondary Metabolites?, *Current Science* **97**(4):477-478
- Radji, M. 2005, Peranan Bioteknologi dan Mikroba Endofit dalam Pengembangan Obat Herbal, *Majalah Ilmu Kefarmasian*, **11**(3):113 – 126
- Ralph, S.A., D’Ombrain, M.C., Mc Fadden, G.I. 2001, The Apicoplast as an Antimalarial Drug Target, *Drug Resistance Update*, **4**:145-151
- Ramakrishn, A., dan Ravishankar, G.A. 2011, Influence of Abiotic Stress Signals on Secondary Metabolites in Plants, *Plant Signal Behaviour*, **6**(11):1720-31

- Redell, P. dan Gordon, V. 2000, Biodiversity: New Leads for Pharmaceutical and Agrochemical Industries, 205-212, Wrigley, S.K., Hayes, M.A., Thomas, R., Chryal, E.J.T. dan Nicholson, N., Eds.; The Royal Society of Chemistry: Cambridge, UK, *cit* Strobel, G.A., Daisy, B., Castillo, U.J., dan Harper, J., 2004, Natural Products from Endophytic Microorganisms, *Journal of Natural Product*, **67**, 257-268
- Reynolds, J. 2011, Bacterial Colony Morphology, diakses 3 Maret 2012, http://delrio.dcccd.edu/jreynolds/microbiology/2421/lab_manual/colony_morph.pdf
- Ro, D., Paradise, E.M., Ouellet, M., Fisher, K.J., Newman, K.L., Ndungu, J.M. 2006, Production of The Antimalarial Drug Precursor Artemisinic Acid in Engineered Yeast, *Nature*, **440**:940-943
- Robert, A., Benoit-Vical, F., Dechy-Cabaret, O., Meunier, B. 2001, From Classical Antimalarial Drugs to New Compounds Based on The Mechanism of Action of Artemisinin, *Pure and Applied Chemistry*, **73**(7):1173-1188
- Romero, C.J., Barr'ia, E.O., Arnold, A.E., Cubilla-Rios, L. 2008, Activity Against *Plasmodium falciparum* of Lactones Isolated from the Endophytic Fungus *Xylaria sp.*, *Pharmaceutical Biology*, **46**(10-11):1-4
- Roos, D.S., Crawford, M.J., Donald, R.G.K., Fraunholz, M., Harb, O.S., He, C.Y., dkk. 2002, Mining The Plasmodium Genome Database to Define Organellar Function: What does The Apicoplast Do?, *Philosophical Transaction of The Royal Society of London B. Biological Science*, **357**:35-46
- Rosenthal, P.J. 1998, Proteases of Malaria Parasites: New Targets for Chemotherapy, *Emerging Infectious Disease*, **4**(1):49-57
- Rosenthal, P.J. 2003, Review Antimalarial Drug Discovery : Old and New Approaches, *The Journal of Experimental Biology*, **206**:3735-3744
- Row, L., Sankara, R., Ramaiah, T. 1966, Chemical examination of *Diospyros* species. IV. Triterpenes of the leaves of *D. sylvatica* and *D. melanoxydon*. *Current Science*, 35:485.
- Rush, M.A., Baniecki, M.L., Mazitschek, R., Cortese, J.F., Wiegand, R., Clardy, J., Wirth, D.F. 2009, Colorimetric High-throughput Screen for Detection of Heme Crystallization Inhibitors, *Antimalarial Agents and Chemotherapy*, **53**(6):2564-2568
- Saikkonen, K., Wäli, P., Helander, M., Faeth, S.H. 2004, Evolution of endophyte-plant symbioses, *Trends in Plant Science*, **9**(6):275-280

- Samson, R.A., Houbraeken, J., Thrane, U. 2010, *Food and Indoor Fungi*, CBS KNAW Biodiversity Center, Utrecht
- Sangwan, N.S., Sangwan, R. S., Kumar, S. 1998, Isolation of Genomic DNA from the Antimalarial Plant *Artemisia annua*, *Plant Molecular Biology Report*, **16**(4):365-365
- Schmidt, G. dan Holfheinz, W. 1983, Total Synthesis of Qinghaosu, *Journal of American Chemical Society*, **105**(3):624-625
- Schramek, N., Wang, H., Romisch-Margl, W., Keil, B., Radykewicz, T., Winzenhorlein, B., Beerhues, L., dkk. 2010, Artemisinin biosynthesis in growing plants of *Artemisia annua*. A $^{13}\text{CO}_2$ study, *Phytochemical*, **71**:179–187
- Schugerl, K. 1995, Foam Formation, Foam Suppression and The Effect of Foam on Growth, dalam Stanbury, P. F., Whitaker, A., Hall, S. J. (Eds.), *Principles of Fermentation Technology*, 2nd edition, 109, Butterworth-Heinemann, Oxford
- Shao, C., Wang, C., Gu, Y., Wei, M., Pan, J., Deng, D., dkk. 2010, Penicinoiline, a New Pyrrolyl 4-quinolinone Alkaloid with an Unprecedented Ring System from an Endophytic Fungus *Penicillium* sp., *Bioorganic & Medicinal Chemistry Letters*, **20**(11):3284–3286
- Sherma, J. 2003, *Handbook of Thin Layer Chromatography*, Marcel Dekker Inc., New York
- Sherma, J. dan Fried, B. 1996, *Handbook of Thin-layer Chromatography*, Marcel Dekker Inc., New York
- Silvie, O., Mota, M.M., Matuschewski, K., Prudêncio, M. 2008, Interactions of the Malaria Parasite and Its Mammalian Host, *Current Opinion in Microbiology*, **11**:352–359
- Sinaga, R.S.A. dan Affandi, B. 2009, Efektivitas *Insecticide Treated Nets* (ITNs) dan *Intermittent Preventive Treatment* (IPT) Pada Pencegahan Malaria dalam Kehamilan, *Majalah Obsteri Ginekologi Indonesia*, **33**(1):28-34
- Slater, A. F. dan Cerami, A. 1992, Inhibition by Chloroquine of a Novel Haem Polymerase Enzym Activity in Malaria Trophozoites, *Nature*, **355**(6356):167-169
- Snow, R.W., Guerra, C.A., Noor, A.M., Myinth, H.Y., Hay, S.I. 2005, Global Distribution of Clinical Episodes of *Plasmodium falciparum* Malaria, *Nature* **434**:214-217

- Stanbury, P.F., Whitaker, A., Hall, S.J. 1995, *Principles of Fermentation Technology*, 2nd edition, 1, 13, 93, 97-116, Butterworth-Heinemann, Oxford.
- Steele, J.C.P., Phelps, R.J., Simmonds, M.S.J., Warhurst, D.C., Meyer, D.J. 2002, Two Novel Assay for the Detection of Haemin-binding Properties of Antimalarial Evaluated with Compounds Isolated from Medicinal Plants, *Journal of Antimicrobial and Chemotherapy*, **50**:25-31
- Strobel, G.A., dan Daisy, B., 2004, Bioprospecting for Microbial Endophytes and Their Natural Products, *Microbiology and Molecular Biology Reviews*, **67**(4):491-502
- Strobel, G.A., Daisy, B., Castillo, U.J., Harper, J. 2004, Natural Products from Endophytic Microorganisms, *Journal of Natural Product*, **67**:257-268
- Strobel, G.A., Li, J.Y., Sugawara, F., Koshino, H., Harper, J., Hess, W.M. 1999, Oocydin A, a Chlorinated Macrocyclic Lactone with Potent Anti-oomycete Activity from *Serratia marcescens*, *Microbiology*, **145**:3557-3564
- Sullivan, Jr., D.J., Gluzman, I.Y., Goldberg, D.E. 1996, Plasmodium Hemozoin Formation Mediated by Histidine-rich Proteins, *Science*, **271**(5246):219-222
- Sy, L.K. dan Brown, G.D. 2002, The mechanism of The Spontaneous Autoxidation of Dihydroartemisinin Acid, *Tetrahedron*, **58**:897-908
- Tan, R.X. dan Zou, W.X. 2001, Endophytes: a Rich Source of Functional Metabolites, *Natural Product Report*, **18**:448-459
- Targett, N.M., Kilcoyne, J.P., Green, B. 1979, *Vacuum Liquid Chromatography: an Alternative to Common Chromatographic Methods*, *Journal of Organic Chemistry*, **44**(26): 4962-4964
- Taylor, J.E., Hyde, K.D., Jones, E.G. 1999, Endophytic Fungi Associated with The Temperate Palm, *Trachycarpus fortunei*, within and Outside its Natural Geographic Range, *New Phytologist*, **142**(2):335-346
- Tejesvi, M.V., Kajula, M., Mattila, S., Pirttilä, A.M. 2011, Bioactivity and Genetic Diversity of Endophytic Fungi in *Rhododendron tomentosum* Harmaja, *Fungal Diversity*, **47**(1):97-107
- Tekwani, B.L. dan Walker, L.A. 2005, Targeting the Hemozoin Synthesis Pathway for New Antimalarial Drug Discovery: Technologies for in vitro beta-Haematin Formation Assay, *Combinatorial Chemistry & High Throughput Screening*, **8**(1):63-79
- Tjitra, E. 1993, Obat-obat Antimalaria Baru, *Cermin Dunia Kedokteran*, 83:58-61

- Tong, W.Y., Darah, I., Latiffah, Z. 2011, Antimicrobial Activities of Endophytic Fungal Isolates From Medicinal Herb *Orthosiphon stamineus* Benth, *Journal of Medicinal Plants Research*, **5**(5):831-836
- Towler, M. J. dan Weathers, P. J. 2007, Evidence of Artemisinin Production from IPP Stemming from Both the Mevalonate and the Nonmevalonate Pathways, *Plant Cell Reports*, **26**(12): 2129-2136
- Trager, W. dan Jensen, J. 1976, Human Malaria Parasites in Continuous Culture, *Science*, **193**: 673-675
- Verdian-Rizi, M.R., Sadat-Ebrahimi, E., Hadjiakhoondi, A., Fazeli, M.R., Pirali, Hamedani, M. 2008, Chemical composition and antimicrobial activity of *Artemisia annua* L. essential oil from Iran, *Journal of Medicinal Plants*, **7**(4):58-62
- Visagie, C.M., Houbraeken, J., Frisvard, J.C., Hong, S. B., Klaassen, C.H.W., Perrone, G., dkk. 2014, Identification and Nomenclature of The Genus *Penicillium*, *Studies in Mycology* 78:343-371
- Waites, M.J., Morgan, N.L., Rockey, J.S., Higton, G. 2001, *Industrial Microbiology: An Introduction*, T. J. International Ltd, Padstow
- Wallaart, E.T., van Uden, W., Lubberink, H.G.M., Woerdenbag, H.J., Prass, N., Quax, W.J. 1999, Isolation and Identification of Dihydroartemisinic Acid from *Artemisia annua* and Its Possible Role in The Biosynthesis of Artemisinin, *Journal of Natural Product*, **62**:430-433.
- Wang, F.W., Hou, H.M., Wang, C.R. 2008, Bioactive Metabolites from *Penicillium sp.*, an Endophytic Fungus Residing in *Hopea hainanensis*, *World Journal of Microbiology and Biotechnology*, **24**:2143-2147
- Wang, M., Park, C., Wu, Q., Simon, J.E. 2005, Analysis of Artemisinin in *Artemisia annua* L. by LC-MS with Selected Ion Monitoring, *Journal of Agricultural and Food Chemistry*, **53**: 7010-7013
- Wang, Z. dan Liu, X. 2008, Medium Optimization for Antifungal Active Substances Production from a Newly Isolated *Paenibacillus sp.* using Response Surface Methodology, *Bioresource Technology*, **99**(17):8245-8251
- Weathers, P. J., Elkholy, S., Wobbe, K.K. 2006, Invited review: Artemisinin: The Biosynthetic Pathway and Its regulation in *Artemisia annua*, a Terpenoid-rich Species, *In Vitro Cellular and Developmental Biology-Plant*, **42**:309-317
- WHO. 2006, WHO Monograph on GACP for *Artemisia annua* L., Swiss

- WHO. 2010, *World Malaria Report 2010*, WHO, Geneva
- WHO. 2014, *World Malaria Report 2015*, WHO, Geneva
- WHO. 2015, *World Malaria Report 2015*, WHO, Geneva
- Wiser, M.F. 2002, Biochemistry of Plasmodium-Summary of Lecture, diakses 5 Agustus 2010, <http://www.tulane.edu/~wiser/malaria/fv.html>
- Wiser, M.F. 2003, Mechanism of Drug Action and Resistance (Focus on antimalarials), diakses 7 Agustus 2010, <http://www.tulane.edu/~wiser/protozoology/notes/drugs/html>
- Wiser, M.F. 2009, Cellular and Molecular Biology of Plasmodium, diakses 7 Agustus 2010, <http://www.tulane.edu/~wiser/malaria/cmb.html>
- Wiyakrutta, S., Sriubolmas, N., Panphut, W., Thongon, N., Danwiset-kanjana, K., Ruangrungsi, N., Meevootisom, V. 2003, Endophytic Fungi with Antimicrobial, Anti-cancer, and Antimalarial Activities isolated from Thai Medicinal Plants, *World Journal of Microbiology and Biotechnology*, **20**:265-272
- Woerdenbag, H.J., Bos, R., Salomons, M.C., Hendriks, H., Pras, N., Malingre, T.M. 1993, Volatile Constituents of *Artemisia annua* (asteraceae), *Journal of Flavour Fragrance*, **8**:131-137
- Wongsrichanalai, C., Pickard, A.L., Wernsdorfer, W.H., Meshnick, S.R. 2002, Epidemiology of Drug-resistant Malaria, *Lancet Infectious Disease*, **2**:209-218.
- Wubshet, S.G., Nyberg, N.T., Tejesvi, M. V., Pirttila, A.M., Kajula, M., Mattila, S., dkk. 2013, Targetting High-Performance Liquid Chromatography-High-Resolution Mass Spectrometry-Solid-Phase Extraction-Nuclear Magnetic resonance Analysis with High-Resolution Radical Scavenging Profiles-Bioactive Secondary Metabolites from The Endophytic Fungus *Penicillium namyslowskii*, *Journal of Chromatography A*, **1302**:34-39
- Wunderlich, J., Rohrbach, P., Dalton, J.P. 2012, The Malaria Digestive Vacuola, *Frontiers in Bioscience S4*, 1424-1448
- Zhang, Y. dan Sun, H. 2009, Immunosuppressive Effect of Ethanol Extract of *Artemisia annua* on Specific Antibody and Cellular Responses of Mice against Ovalbumin, *Immunopharmacology and Immunotoxicology*, **31**:4, 625-630



Zhu, H.M., Li, J., Zheng, H. 2006, Human Natural Infection of *Plasmodium knowlesi* (in Chinese), *Zhongguo Ji Sheng Chong Xue Ji Sheng Chong Bing Za Zhi*, **24**:70-71