

DAFTAR PUSTAKA

- Abbas, A.K., Lichtman, A.H. & Pillai, S., 2012, *Cellular and Molecular Immunology*, 7th Edition, Saunders Elsevier, Philadelphia.
- Aldi, Y., Ogiana & Dian, 2014, Uji Imunomodulator Beberapa Subfraksi Ekstrak Etil Asetat Meniran (*Phyllanthus niruri* L) pada Mencit Putih Jantan dengan Metode *Carbon Clearance*, *Jurnal Pelayanan Kefarmasian dan Herbal Medicine*, Fakultas Farmasi, Universitas Andalas.
- Anonim, 2007, *Dimethyl Sulfoxide* (DMSO) Health and Safety Information, Gaylord Chemical Company, L.L.C., USA.
- Apriyanto, S., 2011, Uji Aktivitas Imunomodulator Ekstrak Etanolik Daun Sirih Merah (*Piper crocatum* Lamk) terhadap Proliferasi Sel Limfosit dan Fagositosis Makrofag pada Tikus yang diinduksi Vaksin Hepatitis B, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Backer, C.A. & Van Den Brink, R.C.B., 1965, *Flora of Java*, 165, Noordhoff, Netherlands.
- Badan POM RI, 2008, *Taksonomi Koleksi Tanaman Obat Kebun Tanaman Obat Citeurep* Edisi I, Badan POM RI, Jakarta.
- Barbour, E.K., Sagherian, V.K., Talhouk, R.S., Harakh, S. & Talhouk, S.N., 2004, Cell Immunomodulation against *Salmonella enteritidis* in Herbal Extract-treated Broilers, *Journal of Applied Research in Veterinary Medicine*, **2** : 67-73.
- Berridge, M.V., Tan, A.S., McCoy, K.D. & Wang, A.R., 1996, *The Biochemical and Cellular Basic of Cell Proliferation Assays That Use Tetrazolium Salts*, *Biochemica*, **4** : 14-19.
- Burmester, G.R. & Pezzutto. A., 2003, *Color Atlas of Immunology*, Stuttgart, New York.
- Burns, R., 2005, *Immunochemical Protocols : Methods in Molecular Biology* Volume 295, pp 127-130, Humana Press inc., Totowa, NJ.
- Christever, 2001, Pengaruh Meniran dan Jombang dalam Mengurangi Reaksi Peradangan secara Makroskopis serta Menekan Jumlah Eosinofil dalam Darah pada Dermatitis, *Badan Litbang Kesehatan*, Jakarta.

- Coico, R., Sunshine, G. & Benjamini, E., 2009, *Immunology*, 6th Edition, Wiley Liss Publication, Unites States of America.
- Colligan, J.E., 2008, *Current Protocol in Immunology*, Supplement 83, John Wiley & Sons, Inc., Baltimore.
- Couper, K.N., Blount, D.G. & Riley, E.M., 2008, IL-10 : The Master Regulator of Immunity to Infection, *Journal of Immunology*, **180** : 5771-5777.
- Darlina, Kisananto, T. & Mailani, W., 2012, Proliferasi Limfosit Mencit yang diimunisasi dengan *Plasmodium berghei* Radiasi 175 Gy, Pusat Teknologi Akselerator dan Proses Bahan, BATAN.
- Diarini, N.N., 2014, Aktivitas Immunostimulan Kombinasi Ekstrak Etanolik Umbi Keladi Tikus (*Thyponium flagelli forme* (Iodd.) Blume), Herba Meniran (*Phyllanthus niruri* Linn.) dan Daun Sirih Merah (*Piper crocatum*) terhadap Proliferasi Limfosit pada Mencit Balb/c yang diinduksi Vaksin Hepatitis B, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Doyle, A. & Griffiths, J.B., 1998, *Cell and Tissue Culture : Laboratory Procedures in Biotechnology*, John Wiley & Sons Inc, Chichester.
- Gella, F.J., Serra, J. & Gener, J., 1991, Latex Agglutination Procedure in Immunodiagnosis, *Pure & Applied Chemistry*, **63** (8) : 1131-1134
- Hamza, T, Barnett, J.B. & Li, B., 2010, Interleukin 12 a Key Immunoregulatory Cytokine in Infection Applications, *International Journal of Molecular Sciences*, **11** : 789-849.
- Hartini, Y.S., 2014, Efek Immunomodulator Dua Senyawa Neolignan Hasil Isolasi dari Ekstrak Metanol Daun Sirih Merah (*Piper crocatum* Ruiz & Pav.): Kajian Imunitas Seluler dan Humoral, *Disertasi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Hay, F.C. & Westwood, O.M.R., 2002, *Practical Immunology* 4th Edition, Blackwell Science, United Kingdom.
- Ibnul, 2012, Uji Komparasi Aktivitas Fagositosis Makrofag dan Produksi Nitrit Oksida pada Mencit Balb/c Akibat Perlakuan Ekstrak Meniran Hijau (*Phyllanthus niruri*) dan Meniran Merah (*Phyllanthus urinaria*) yang diinfeksi Bakteri *Salmonella thypi*, *Tesis*, Pascasarjana Biosains, Universitas Sebelas Maret, Surakarta.

- Jensch-Junior, B. E., Pressinotil, N., Borges, J. C. S. & Cunha da Silva, J. R. M., 2006, Characterization of Macrophage Phagocytosis of the Tropical Fish *Prochilodus scrofa* (Steindachner, 1881), *Aquaculture*, **251** : 509-515.
- Johnson, A. G., Ziegler, R.J. & Hawley, L., 2010, *Microbiology and Immunology* 5th Edition, Wolters Kluwer Health, Lippincott Williams & Wilkins.
- Juliantina, F., Citra D.A., Nirwani, B., Nurmasitoh, T. & Bowo, E.T., 2008, Manfaat Sirih Merah (*Piper crocatum*) sebagai Agen Anti Bakterial Terhadap Bakteri Gram Positif & Gram Negatif, *Jurnal Kedokteran dan Kesehatan Indonesia*, **1** : 1-7.
- Kanjwani, D.G., Marathe, T.P., Chipunkar, S.V. & Fan Sathaye, S.S., 2008, Evaluation of Immunomodulatory Activity of Methanolic Extract of *Piper betel*, Scandinavian, *Journal of Immunology*, **65** : 589-593.
- Kresno, S.B., 1996, *Imunologi : Diagnosis dan Prosedur Laboratorium*, Edisi ketiga, Balai Penerbit Fakultas Kedokteran Universitas Indonesia, Jakarta.
- Kresno, S.B., 2001, *Imunologi : Diagnosis dan Prosedur Laboratorium*, Edisi keempat, Balai Penerbit Fakultas Kedokteran Universitas Indonesia, Jakarta.
- Kumar S., Dhankhar S., Arya, P.V., Yadav, S. & Yadav, J.P., 2012, Antimicrobial Activity of *Salvadora oleoides* Decne Against Some Microorganisms, *Journal of Medicinal Plants Research*, **6** (14) : 2754-2760.
- Kustiawan, P.M., 2012, Isolasi dan Identifikasi Senyawa Immunostimulan Spesifik in vitro dari Daun Sirih Merah (*Piper Crocatum* Ruiz. & Pav.), *Tesis*, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.
- Laurence, D.R. & Bacharach, A.L., 1964, *Evaluation of Drug Activities*, Academic Press, London.
- Maat., S, 1996, *Phyllanthus niruri* Linn sebagai Immunostimulator pada Mencit, *Rangkuman Disertasi*, Program Pasca Sarjana Universitas Airlangga.
- Mangunwardoyo, W.E. & Cahyaningsih, T., 2009, Ekstraksi dan Identifikasi Senyawa Antimikroba Herba Meniran (*Phyllanthus niruri* L), *Jurnal Ilmu Kefarmasian Indonesia*, **7** (2) : 57-63.
- Male, D., Brostoff, J., Roth, D.B. & Roitt, I.M., 2006, *Immunology*, 7th edition, Elsevier Ltd, pp.128,163-170, 221.

- Manoi, F., 2007, Sirih Merah sebagai Tanaman Obat Multifungsi, *Warta puslitbangun*, **13** : 1-2.
- Mellinger, C.G., Thales R.C., Guilhermina R.N., Elaine R.C., Maria B., Philip A.J. & Gorin, M.I., 2008, Chemical and Immunological Modifications of an Arabinogalactan Present in Tea Reparations of *Phyllanthus niruri* After Treatment with Gastric Fluid, *International Journal of Biological Macromolecules* **43**.
- Mosmann, T., 1983, Rapid Colorimetric Assays for Celluler Growth and Survival: Application to Proliferation and Citotoxicity Assays, *Journal of Immunological Methods*, **16** (65) : 55-63.
- Murwanti, R., Yuswanto, A. & Astuti, P., 2014, Pengembangan Produk Herbal Unggulan Berbasis Kearifan Lokal Gama Imun dan Gama Live, Sebagai Obat Herbal Terstandar (OHT) Imunomodulator dan Hepatoprotektif, *Laporan Penelitian*, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.
- Nworu, C.S., Akah, P.A., Okoye, F.B., Proksch, P. & Esimone, C.O., 2010, The effect of *Phyllanthus niruri* Aqueous Extract on The Activation of Murine Lymphocytes and Bone-Derived Macrophages, *Immunol Invest.*, **39** (3) : 46-47.
- Paithankar, V. V., Raut, K. S., Charde, R. M. & Vyas, J. V., 2011, Review Article, *Phyllanthus niruri* : A Magic Herb, *Research in Pharmacy* **1** (4) : 1-9.
- Parslow, T.G., Stites, D.P., Terr, A.I. & Imboden, J.B., 2003, *Medical Immunology* 10th edition, McGraw-Hill, Singapore.
- Reagan-Shaw, S., Nihal, M. & Ahmad, N., 2007, Dose Translation From Animal To Human Studies Revisited, *The FASEB Journal*, **3** : 660.
- Sheehan, C., 1997, *Clinical Immunology Principle and Laboratory Diagnosis*, 2nd Edition, Lippincot, Philadelphia.
- Subowo, 1993, *Imunobiologi*, Penerbit Angkasa, Bandung.
- Sudewo, B., 2005, Basmi Penyakit dengan Sirih Merah, Agromedia Pustaka, Jakarta.

- Sunila, E.S. & Kuttan, G., 2004, Immunomodulatory and Antitumor Activity of *Piper longum* Linn. and *Piperine*, *Journal of Ethnopharmacology*, **90** : 339-346.
- Syamsuhidayat, S.S. & Hutapea, J.R., 1991, *Inventaris Tanaman Obat Indonesia*, Departemen Kesehatan RI, Jakarta.
- Tan, H.T. & Rahardja, K., 2007, *Obat-Obat Penting, Khasiat, Penggunaan dan Efek-Efek Sampingnya*, Edisi Kelima, Penerbit PT. Elex Media Komputindo, Jakarta.
- Tjahajati, I., Prodjoharjono, S., Subono, H., Asmara, W. & Harada, N., 2004, Aktivitas Sekresi *Reactive Oxygen Intermediet* (ROI) pada Makrofag Peritoneum Kucing yang diinfeksi dengan *M.Tuberculosis*, *Jurnal Sain Veteriner* **XXII** (1) : 46-53.
- Tjandrawinata, R.R., S. Maat & D. Noviarny, 2005, Effect of Standardized *Phyllanthus niruri* Extract on Changes in Immunologic Parameters: Correlation Between Pre-clinical and Clinical Studies. *Medika* **XXXI** (6) : 367-371.
- Wagner, H. & Prosch, A., 1985, Immunostimulatory Drugs of Fungi and Higher Plants, *Economic and Medicinal Plant Research*, London, **1** : 83-85.
- Wagner, H., Kraus, S. & Jurcic, K., 1999, *Bioassay Methods in Natural Product Research and Drug Development*, **43** : 113-118
- Wahyudhi, Y., 2010, Uji Aktivitas Imunomodulator Ekstrak n-heksana Daun Sirih Merah (*Piper crocatum*) terhadap Peningkatan Titer Immunoglobulin G pada Tikus terinduksi Vaksin Hepatitis B dan Uji Histopatologisnya, *Skripsi*, Program Studi Farmasi, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.
- Werdyani, S., 2012, Pengaruh Fraksi n-heksana Ekstrak Etanolik Daun Sirih Merah (*Piper crocatum* Ruiz & Pav.) secara in vivo terhadap Fagositosis Makrofag, Proliferasi sel TCD₄⁺ dan TCD₈⁺ serta Titer Antibodi Tikus yang diinduksi *Phytohemagglutinin*, *Skripsi*, Fakultas Farmasi UGM, Yogyakarta.
- Williams, J.E., 2001, Review of Antiviral and Immunomodulating Properties of Plants of The Peruvian Rainforest with a Particular Emphasis on Uña de Gato and Sangre de Grado, *Alternative Medicine Review*, **6** : 567-79.

Wiweko, O.D., 2010, Uji Aktivitas Imunomodulator Ekstrak Etanol Daun Sirih Merah (*Piper crocatum* Lmk) terhadap Peningkatan Titer Immunoglobulin G dan Histopatologis Tikus yang diinduksi Vaksin Hepatitis B, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.

Yuristiyani, D.D., 2012, Potensi Fraksi Tak Larut n-Heksana Ekstrak Etanol Daun Sirih Merah (*Piper Crocatum* Ruiz & Pav.) secara *in vitro* sebagai Imunomodulator terhadap Fagositosis Makrofag dan Proliferasi Sel Limfosit Tikus yang diinduksi *Phytohemagglutinin*, *Skripsi*, Program Studi Farmasi, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.

Zalizar, L., 2013, Flavonoids of *Phyllanthus niruri* as Immunomodulators : A Prospect to Animal Disease Control, *ARNP Journal Of Science And Technology*, **3** (5) : 529.