

Daftar Pustaka

- Akbar, F.F., 2014. Efek Sitotoksik Fraksi Etil Asetat Komponen Larut Etanol dari Ekstrak Etanolik Daun Awar-awar (*Ficus septica* Burm. f.) terhadap Sel Kanker Payudara T47D dan Profil Senyawa Alkaloidnya. *Skripsi*. Universitas Gadjah Mada, Yogyakarta.
- Alfasandi, H.I., 2015. Standarisasi Simplisia Daun Awar-awar (*Ficus septica* Burm. f) sebagai Bahan Baku Obat Tradisional. *Skripsi*. Fakultas Farmasi UGM, Yogyakarta.
- Asres, K., Sporer, F., dan Wink, M., 2004. Patterns of Pyrrolizidine Alkaloids in 12 Ethiopian Crotalaria species. *Biochemical Systematics and Ecology*, **32**: 915–930.
- Ammerman, N.C., Beier-Sexton, M., dan Azad, A.F., 2008. Growth and maintenance of Vero cell lines. *Current Protocols in Microbiology*, Appendix 4: Appendix 4E.
- Baumgartner, B., Erdelmeier, C.A.J., Wright, A.D., Rali, T., dan Sticher, O., 1990. An Antimicrobial Alkaloid from *Ficus septica*. *Phytochemistry*, **29**: 3327–3330.
- Berridge, M.V., Herst, P.M., dan Tan, A.S., 2005. Tetrazolium Dyes as Tools in Cell Biology: New Insights Into Their Cellular Reduction. *Biotechnology Annual Review*, **11**: 127–152.
- Bezivin, C., Tomasi, S., Lohezic, L.D., dan Boustie, J., 2003. Cytotoxic Activity of Some Lichen Extracts on Murine and Human Cancer Cell Lines. *J. Phytomedicine*, **10**: 499–503.
- Bray, F., Ren, J.-S., Masuyer, E., dan Ferlay, J., 2013. Global Estimates of Cancer Prevalence for 27 Sites in the Adult Population in 2008. *International Journal of Cancer: Journal International Du Cancer*, **132**: 1133–1145.
- Chemler, R.S., 2009, Phenanthroindolizidines and Phenanthroquinolizidines: Promising Alkaloids for Anti-Cancer Therapy, *Current Bioactive Compounds*, **5**(1), 2-19.
- Damu, A.G., Kuo, P.-C., Shi, L.-S., Li, C.-Y., Kuoh, C.-S., Wu, P.-L., dkk., 2005. Phenanthroindolizidine Alkaloids from The Stems of *Ficus septica*. *Journal of natural products*, **68**: 1071–1075.
- Davis, J.M., Navolanic, P.M., Weinstein-Oppenheimer, C.R., Steelman, L.S., Hu, W., Konopleva, M., dkk., 2003. Raf-1 and Bel-2 Induce Distinct and Common Pathways That Contribute to Breast Cancer Drug Resistance.

Clinical Cancer Research: An Official Journal of the American Association for Cancer Research, **9**: 1161–1170.

Dolinsky, C. dan Hill-Kayser, C., 2002. *Breast Cancer: The Basics*. URL: <http://www.oncolink.org/> (diakses tanggal 1/1/2015).

Doyle, A. dan Griffiths, J.B., 2000. *Cell and Tissue Culture for Medical Research*. Florence Production Ltd, Devon, UK.

Gandjar, I.G. dan Rohman, A., 2007. *Kimia Farmasi Analisis*. Pustaka Pelajar, Yogyakarta.

Gellert, E., 1982. The Indolizidine Alkaloids. *Journal of Natural Products*, **45**: 50–73.

Guarneri, V. dan Conte, P., 2009. Metastatic Breast Cancer: Therapeutic Options According To Molecular Subtypes And Prior Adjuvant Therapy. *The Oncologist*, **14**: 645–656.

Hanahan, D. dan Weinberg, R.A., 2000. The Hallmarks of Cancer. *Cell*, **100**: 57–70.

Harwood, L.M. dan Moody, C.J., 1989. *Experimental Organic Chemistry: Principles and Practice*. Blackwell Scientific Publications, Oxford England ; Boston.

Hegnauer, R., 1969. *Chemotaxonomie Der Pflanzen*. Birkhäuser Verlag, Basel.

Heyne, K., 1987. *Tumbuhan Berguna Indonesia, Jilid II*. Badan Litbang Departemen Kehutanan Indonesia, Jakarta.

Holliday, D.L. dan Speirs, V., 2011. Choosing the Right Cell Line for Breast Cancer Research. *Breast cancer research: BCR*, **13**: 215.

Hutapea, J. dan Syamsuhidayat, S., 2000. *Inventaris Tanaman Obat, Jilid 1*. Balitbang Depkes RI, Jakarta.

Kamuhabwa, A., Nshimo, C., dan de Witte, P., 2000. Cytotoxicity of Some Medicinal Plant Extracts Used in Tanzanian Traditional Medicine. *Journal of Ethnopharmacology*, **70**: 143–149.

Kanduc, D., Mittelman, A., Serpico, R., Sinigaglia, E., Sinha, A.A., Natale, C., dkk., 2002. Cell death: Apoptosis Versus Necrosis (Review). *International Journal of Oncology*, **21**: 165–170.

- Keydar, I., Chen, L., Karby, S., Weiss, F.R., Delarea, J., Radu, M., dkk., 1979. Establishment and Characterization of a Cell Line of Human Breast Carcinoma Origin. *European Journal of Cancer* (1965), **15**: 659–670.
- Krebs, H.C., Carl, T., dan Habermehl, G.G., 1996. Pyrrolizidine Alkaloid Composition in Six Brazilian Senecio species. *Phytochemistry*, **43**: 1227–1229 Lansky, E.P. dan Paavilainen, H.M., 2011. *FIGS: The Genus Ficus*. CRC Press, London.
- Lansky, E.P., Paavilainen, H.M., Pawlus, A.D., dan Newman, R.A., 2008. *Ficus* Spp. (fig): Ethnobotany and potential as anticancer and anti-inflammatory agents. *Journal of Ethnopharmacology*, **119**: 195–213.
- Lansky, E.P. & Paavilainen, H.M., 2010, *FIGS: The Genus Ficus*, CRC Press, London.
- Lee, S.K., Nam, K.-A., dan Heo, Y.-H., 2003. Cytotoxic Activity and G2/M Cell Cycle Arrest Mediated by Antofine, a Phenanthroindolizidine Alkaloid Isolated from *Cynanchum paniculatum*. *Planta Medica*, **69**: 21–25.
- Legler, J., Brink, C.E. van den, Brouwer, A., Murk, A.J., Saag, P.T. van der, Vethaak, A.D., dkk., 1999. Development of a stably transfected estrogen receptor-mediated luciferase reporter gene assay in the human T47D breast cancer cell line. *Toxicological Sciences*, **48**: 55–66.
- Levenson, A.S. dan Jordan, V.C., 1997. MCF-7: The First Hormone-Responsive Breast Cancer Cell Line. *Cancer Research*, **57**: 3071–3078.
- Lippman, M.E., Dickson, R.B., Gelmann, E.P., Rosen, N., Knabbe, C., Bates, S., dkk., 1987. Growth Regulation of Human Breast Carcinoma Occurs Through Regulated Growth Factor Secretion. *Journal of Cellular Biochemistry*, **35**: 1–16.
- McGuffin, V.L., 2004. Chapter 1 Theory of chromatography, dalam: Heftmann, E. (Ed.), *Journal of Chromatography Library, Chromatography 6th Edition Fundamentals and Applications of Chromatography and Related Differential Migration Methods*. Elsevier, hal. 1–93.
- Mosmann, T., 1983. Rapid Colorimetric Assay for Cellular Growth and Survival: Application to Proliferation and Cytotoxicity Assays. *Journal of Immunological Methods*, **65**: 55–63.
- Mubarok, M.F., 2009. Upaya Peningkatan Aktivitas Sitotoksik Doxorubicin pada Sel Kanker Payudara MCF-7 Menggunakan Ekstrak Etanol Daun Awar-awar (*Ficus septica* Burm. F.). *Skripsi*. Universitas Gadjah Mada, Yogyakarta.

- Nugroho, A.E., Ikawati, M., Hermawan, A., Putri, D.D.P., dan Meiyanto, E., 2011. Cytotoxic Effect of Ethanolic Extract Fractions of Indonesia Plant *Ficus septica* Burm. f. on Human Breast Cancer T47D cell lines. *International Journal of Phytomedicine*, **3**: 216–226.
- Nugroho, A.E., Hermawan, A., Nastiti, K., Suven, null, Elisa, P., Hadibarata, T., dkk., 2012. Immunomodulatory effects of hexane insoluble fraction of *Ficus septica* Burm. F. in doxorubicin-treated rats. *Asian Pacific journal of cancer prevention: APJCP*, **13**: 5785–5790.
- Nugroho, A.E., Hermawan, A., Putri, D.D.P., Novika, A., dan Meiyanto, E., 2013. Combinational Effects of Hexane Insoluble Fraction of *Ficus septica* Burm. f. and Doxorubicin Chemotherapy on T47D Breast Cancer Cells. *Asian Pacific Journal of Tropical Biomedicine*, **3**: 297–302.
- O'Connor, P.M., Jackman, J., Bae, I., Myers, T.G., Fan, S., Mutoh, M., dkk., 1997. Characterization of the p53 Tumor Suppressor Pathway in Cell Lines of the National Cancer Institute Anticancer Drug Screen and Correlations with the Growth-Inhibitory Potency of 123 Anticancer Agents. *Cancer Research*, **57**: 4285–4300.
- Onuki, R., Kawasaki, H., Baba, T., dan Taira, K., 2003. Analysis of a Mitochondrial Apoptotic Pathway Using Bid-Targeted Ribozymes in Human MCF7 Cells in The Absence of a Caspase-3-Dependent Pathway. *Antisense & Nucleic Acid Drug Development*, **13**: 75–82.
- Osborne, C.K. & Arteaga, C.L., 1990, Autocrine and Paracrine Growth Regulation of Breast Cancer: Clinical Implications, *Breast Cancer Research and Treatment*, **15**(1), 3-11.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., dan Vyvyan, J.R., 2009. *Introduction to Spectroscopy*, Fourth Edition. ed. Cengage Learning by Nelson Education, Ltd.
- Pavia, D., Lampman, G., Kriz, G., dan Vyvyan, J., 2014. *Introduction to Spectroscopy*. Cengage Learning.
- Pratama, R.H., Ikhtiarisyah, Y.G., Anindyajati, Fitriyari, A., Ikawati, M., dan Meiyanto, E., 2011. Ekstrak Etanolik Daun Awar-Awar (*Ficus septica* Burm F.) secara Sinergis Meningkatkan Efektivitas Doxorubicin terhadap Sel Kanker Payudara T47D (Awar-Awar Leaves Ethanolic Extract Sinergistically Enhances Cytotoxic Effect of Doxorubicin on T47D Breast Cancer Cells). *Jurnal Ilmu Kefarmasian Indonesia*, , Cancer Chemopreventive Research Center **9**: 67–71.

- Raynie, D.E., 2004. Modern Extraction Techniques. *Analytical Chemistry*, **76**: 4659–4664.
- Rode, H.J., 2008. *Apoptosis, Cytotoxicity and Cell Proliferation*, 4th ed. Roche Diagnostics GmbH.
- Sang, K.L., Kyung-Ae, N. & Yoen-Hoi, H., 2003, Cytotoxic Activity and G2/M Cell Cycle Arrest Mediated by Antofine A Phenanthroindolizidine Alkaloid Isolated from *Cynanchum paniculatum*, *Planta Medica*, **69**(1), 21-25
- Sarker, S.D., Latif, Z., dan Gray, A.I., 2005. *Natural Products Isolation*. Springer Science & Business Media.
- Sastrohamidjojo, H., 2001. *Spektroskopi*, Kedua. ed. Liberty, Yogyakarta.
- Sekti, D., Mubarak, M.F., Armandani, I., Junedy, S., dan Meiyanto, E., 2010. Ekstrak Rtanolik Daun Awar-awar (*Ficus septica* Burm. f.) Memacu Apoptosis Sel Kanker Payudara T47D Melalui Penekanan Ekspresi Bcl-2. *Majalah Obat Tradisional*, **15**.
- Septhea, D.B., Anindyajati, Darma, A.P., Nurzijah, I., dan Nugroho, A.E., 2011. *Ficus septica* Burm. f. Leaves Ethanolic Extract Induces Apoptosis in 7,12-Dimethylbenz[α]anthracene-induced Rat Liver Cancer Quantitatively. Universitas Gadjah Mada. Fakultas Farmasi, *Indonesian Journal of Cancer Chemoprevention* **2**: 254–260.
- Silverstein, R.M. dan Webster, F.X., 1996. *Spectrometric Identification of Organic Compound*, Sixth. ed. John Wiley & Sons, Inc, Canada.
- Siwon, J., 1982. A Pharmacognostical Study of Some Indonesia Medicinal Plants of The Family Menispermaceae. *Disertasi*. Drukkerijjh, Gravenhage.
- Soule, H.D., Vazquez, J., Long, A., Albert, S., dan Brennan, M., 1973. A Human cell Line from a Pleural Effusion Derived from a Breast Carcinoma. *Journal of the National Cancer Institute*, **51**: 1409–1416.
- Staerk, D., Lykkeberg, A.K., Christensen, J., Budnik, B.A., Abe, F., dan Jaroszewski, J.W., 2002. In Vitro Cytotoxic Activity of Phenanthroindolizidine Alkaloids from *Cynanchum vincetoxicum* and *Tylophora tanakae* against Drug-Sensitive and Multidrug-Resistant Cancer Cells. *Journal of Natural Products*, **65**: 1299–1302.
- Strumfa, I., Vanags, A., Abolins, A., dan Gardovskis, J., 2013. Pathology of Breast Cancer: from Classic Concepts to Molecular Pathology and Pathogenesis. *Acta Chirurgica Latviensis*, **12**: 59–66.

- Stuart, B., 2004. *Infrared Spectroscopy: Fundamentals and Applications*. John Wiley & Sons, Ltd.
- Sudarsono, Gunawan, D., Wahyono, S., Donatus, I.A., dan Purnomo, 2002. *Tumbuhan Obat II: Hasil Penelitian, Sifat-Sifat Dan Penggunaan*. Pusat Studi Obat Tradisional Universitas Gadjah Mada, Yogyakarta.
- Suffness, M. and J.M.Pezzuto, 1990. Assays Related to Cancer Drug Discovery. In: *Methods in Plant Biochemistry: Assays for Bioactivity*, Hostettmann, K. (Ed.) Vol.6. Acad. Press, London, pp:71-133
- Supratman, U., 2010. *Elusidasi Struktur Senyawa Organik*, 1st ed, 1. Widya Padjajaran, Bandung.
- Svandsen, A.B. dan Verpoorte, R., 1983. *Chromatography of Alkaloids, Part A: Thin-Layer Chromatography*. Elsevier Scientific Publishing Company Inc., New York.
- Swami, H.S., Singh, K.S.P., Gennaro, L., dan Dutt, R.D., 2008. *Extraction Technologies for Medicinal and Aromatic Plants*. International Centre for Science and High Technology, UNIDO, Trieste, Italy
- Teixeira, D.M., Patão, R.F., Coelho, A.V., dan da Costa, C.T., 2006. Comparison between sample disruption methods and solid-liquid extraction (SLE) to extract phenolic compounds from *Ficus carica* leaves. *Journal of Chromatography A*, **1103**: 22–28.
- Ueda, J., Takagi, M., dan Shin-ya, K., 2009. Aminocaprophenone- and Pyrrolidine-type Alkaloids from The Leaves of *Ficus septica*. *Journal of Natural Products*, **72**: 2181–2183.
- Vermeulen, K., Van Bockstaele, D.R., dan Berneman, Z.N., 2003. The cell cycle: a review of regulation, deregulation and therapeutic targets in cancer. *Cell Proliferation*, **36**: 131–149.
- Voight, R., 1994. *Buku Pelajaran Teknologi Farmasi*, 5th ed. Gadjah Mada University Press, Yogyakarta.
- Wang, P., Henning, S.M., dan Heber, D., 2010. Limitations of MTT and MTS-Based Assays for Measurement of Antiproliferative Activity of Green Tea Polyphenols. *PloS One*, **5**: e10202.
- Wiyani, A., 2014. Efek Sitotoksik Fraksi Etil Asetat Komponen Larut Air Dari Ekstrak Etanolik Daun Awar-Awar (*Ficus septica* Burm. f.) Terhadap Sel

Kanker PayudaRA T47D dan Profil Senyawa Alkaloidnya. *Skripsi*.
Universitas Gadjah Mada, Yogyakarta.

Wonorahardjo, S., 2013. *Metode - Metode Pemisahan Kimia : Sebuah Pengantar*,
1st ed. @kademia, Jakarta.

Wu, P.-L., Rao, K.V., Su, C.-H., Kuoh, C.-S., dan Wu, T.-S., 2002.
Phenanthroindolizidine Alkaloids and Their Cytotoxicity from The Leaves
of *Ficus septica*. *Heterocycles*, **57**: 2401–2408.

Yang, C.-W., Lee, Y.-Z., Hsu, H.-Y., Wu, C.-M., Chang, H.-Y., Chao, Y.-S., dkk.,
2013. c-Jun-Mediated Anticancer Mechanisms of Tylophorine.
Carcinogenesis, **34**: 1304–1314.

Zampieri, L., Bianchi, P., Ruff, P., dan Arbuthnot, P., 2002. Differential
Modulation by Estradiol of P-glycoprotein Drug Resistance Protein
Expression in Cultured MCF7 and T47D Breast Cancer Cells. *Anticancer
Research*, **22**: 2253–2259.