

DAFTAR PUSTAKA

- Ahmad, N., Hasan, N., Ahmad, Z., Zishan, M., Zohrameena, S. 2016. *Momordica charantia*: For Traditional Uses and Pharmacological Actions. *Journal of Drug Delivery & Therapeutics*, 6 (2), pp. 40-44.
- Ahmed, I., Adeghate, E., Sharma, A. K., Pallot, D. J., and Singh, J. 1998. Effects of *Momordica charantia* Fruit Juice on Islet Morphology in The Pancreas of The Streptozotocin-Diabetic Rat. *Diabetes Research and Clinical Practice* 40, pp. 145-151.
- Afif, S. 2013. Uji Toksisitas dengan metode BSLT (Brine Shrimp Lethality Test) dan Identifikasi Golongan Senyawa Aktif Ekstrak Alga Merah *Euclima cottonii* dari Perairan Sumenep Madura. Skripsi, Universitas Islam Negeri Maulana Malik Ibrahim, Malang.
- Ajibove, B. O., Ibukun, E. O. Edobor, G, Ojo, A. O, and Onikanni, S. A. 2013. Qualitative and Quantitative Analysis of Phytochemicals In *Senecio Biafrae* Leaf. *Internasional Journal of Inventio in Pharmaceuticals Sciences*, 1(5), pp. 428-432.
- Alarcon-Aguilar, F., Vega-Avila, E., Alamanza-Perez, J., ValescoLezama, R., Vazquez-Carrilo, L., Ramon-Ramos, R. 2006. Hypoglycemic Effect of *Plantago mayor L.* Seeds in Healthy and Alloxan Diabetic Mice. *Proceedings West. Pharmacol. Soc.* pp. 51-54.
- Ali, L., Khan, A. K., Mamun, M. I., Mosihuzzaman, M., Nahar, N., Nur-e-Alam, M., and Rokeya, B., 1993. Studies on hypoglycemic effects of fruit pulp, seed, and whole plant of *Momordica charantia* on normal and diabetic model rats. *Planta Medicine*, 59, pp. 408-412.
- Agrawal, R.C., and Beohar, T. 2010. Chemopreventive and anticarcinogenic effects of *Momordica charantia* extract. *Asian Pac. J. Cancer Prev*, 11, pp. 371-375.
- American Diabetes Assosiation. 2018. Standart of Medical Care in Diabetes -2019 Abridged for Primary Care Providers. *Clinical Diabetes*, 42, pp. 1-24.
- Bina Kefarmasian dan Alat Kesehatan. 2005. *Pharmaceutical untuk Penyakit Diabetes Melitus*. Jakarta. Departemen Kesehatan RI.
- BH, E., Alghanmdy, AN., EL, A. A., and Elsayed, E. 2016. Histopatologi Evaluation of The Pancreas Following Administration of Paricalcitol in Alloxan-Induced Diabetic Wistar Rats. *World Journal of Pharmacy and Pharmaceutical Sciences*.

- Biswas, A.R., Ramaswamy, S., and Bapna, J.S., 1991. Analgesic effect of Momordica charantiaseed extract in mice and rats. *Journal of Ethnopharmacology*, 31, pp. 115–118.
- Bourinbaiar, A. S., and Lee-Huang, S. 1995. Potentiation of Anti-HIV Activity of The Anti-Inflammatory Drugs Dexamethasone and Indomethacin by MAP30, The Antiviral Agent from Bitter Melon. *Biochemistry and Biophysics Research Communications*, 208(2), pp. 779.
- Bhushan, RAO C., OJHA S., Vijayakumar M. and Verma A., 2010, An analytical review of plants for anti diabetic activity with their phytoconstituent & mechanism of action. *Internasional Journal of Pharmaceutical Sciences and Research* 1 (1), pp. 29–46.
- Choi, J., Lee, K.T., Jung, H., Park, H.S., and Park, H.J. 2002. Anti-Rheumatoid Arthritis Effect of The *Kochia Scoparia* Fruits and Activity Comparison of Momordin Ic, its Prosapogenin and Sapogenin. *Archives of Pharmacological Research*, 25, pp. 336–342.
- Cheng, B.H., Chen, J.C., Liu, J.Q., and Zhou, L. Q. M H. 2013. Cucurbitane-Type Triterpenoids from *Momordica Charantia*. *Helv Chim Acta*, 96, pp. 11–20.
- Dalimartha, S. 2005. *Ramuan Tradisional Untuk Pengobatan Diabetes Mellitus*. Jakarta: Penebar Swadaya.
- Damayanti, S. 2015. *Diabetes Mellitus & Penatalaksanaan Keperawatan*. Yogyakarta: Nuha Medika.
- Daniel, P., Supe, U., Roymon, M. G. 2014. A Review on Phytochemical analysis of *Momordica charantia*. *IJAPBC* 3 (1), pp. 2277-4688.
- Day, C., Cartwright, T., Provost, J., and Bailey, C. 1990. Hypoglycaemic Effect of *Momordica Charantia* Extracts. *Planta Medica*, 56(05), pp. 426–429.
- Departemen Kesehatan Republik Indonesia. 1989. *Materia medika Indonesia* Jilid V. Jakarta: Departemen Kesehatan Republik Indonesia.
- Departemen Kesehatan Republik Indonesia. 1989. *Farmakope Herbal Indonesia* Edisi 1. Jakarta: Departemen Kesehatan Republik Indonesia.
- Departemen Kesehatan Republik Indonesia. 2017. Keputusan Menteri kesehatan Republik Indonesia No.01.07/MENKES/187/2017 Tentang Formularium Ramuan Obat Tradisional Indonesia. Jakarta.
- Culvenor, C. C. J and J. S. Fitzgerald. 1963. A Field Method for Alkaloid Screening of Plant. *Journal of Pharmaceutical Sciences* 52 (3), pp. 303-304.

- Cunnick, J. E., Sakamoto, K., Chapes, S. K., Fortner, G. W., and Takemoio, D. J.1990. Induction of Tumor Cytotoxic Immune Cells Using a Protein from The Bitter Melon t/Aomordica charantia). *Cellular Immunology* 126(2): 278
- Ekun, O. A., Ogunyemi G. A, Azenabor, A. and Akinloye O. 2018. A Comparative Analysis of Glucose Oxidase Method and Three Point-of-Care Measuring Devices for Glucose Determination. *Ife Journal of Science*20 (1): 043-049.
- Fang, E. F., Zhang, C. Z. Y., Ng, T. B., Wong, J. H., Pan, W. L., Ye, X. J., Chan, Y. S., and Fong, W. P. 2012. *Momordica Charantia* Lectin, A Type II Ribosome Inactivating Protein, Exhibits Antitumor Activity Toward Human Nasopharyngeal Carcinoma Cells In Vitro and In Vivo. *Cancer Prevention Research*, 5 (1), pp. 109–121.
- Fawcett, D. W. and Bloom. 2002. *Buku Ajar Histopatologi*. Jakarta, Indonesia: EGC.
- Felig, P., Lawrence C. A. S. 2001. *Endocrinology and Metabolism*. 4th ed. New York: Mc. Graw Hill.
- Fitri, A. S dan Fitriana, Y. A. N. 2020. *Analisis Senyawa Kimia pada Karbohidrat*. Sainteks 17 (1): 45-52.
- Gill, N. S., S. Kaur, R. A. and M. B. 2011. Screening of antioxidant and antiulcer potential of *Citrullus colocynthis* methanolic seed extract. *Res. J. Phytochem* 2: 98-106.
- Guevara, A. P., Lim-Sylianco, C.Y., Dayrit, F.M., and Finch, P. 1989. Acylglucosyl sterols from *Momordica charantia*. *Phytochemistry* 28, pp. 1721–1724.
- Haixia, Z., Xiaozuo, Z., Yawei, W., Mancanq, L., and Zhide, H. 2004. Analysis of Vicine in Bitter Melon Samples by Polyglycol-C8 Solid Phase with High Performance Liquid Chromatography. *Chinese Journal of Analytical Chemistry*3: 408-108.
- Ham, C., and Wang, J. 2009. Optimization of Conditions for Carantin Extraction in PEG/Salt Aqueous Two-Phase Systems Using Response Surface Methodology. *Open Complementary Medicine Journal*1: 46-50.
- Han, C., Hui, Q., Wang, Y. 2008. Hypoglycaemic activity of saponin fraction extracted from *Momordica charantia* in PEG/salt aqueous two-phase systems. *Nat. Prod. Res.* 22, pp. 1112–1119.
- Han, C., Zuo, J., Wang, Q., Xu, L., Wang, Z., Dong, H., and Gao, L. 2015. Effects of 1-MCP on Postharvest Physiology and Quality of Bitter Melon (*Momordica Charantia* L.). *Scientia Horticulturae* 182, pp. 86–91

- Hanani, E. 2017. Analisis Fitokimia. Jakarta: Buku Kedokteran EGC.
- Harbone, J. B. 1996. *Metode Fitokimia Penuntun Cara Modern Menganalisis Tumbuhan diterjemahkan oleh Kosasih Padmawinata dan Imam Soediro*. Bandung: ITB
- Hasdianah, 2012. *Mengenal Diabetes Mellitus pada orang dewasa dan anak-anak dengan solusi herbal*. Yogyakarta: Nuha Medika.
- Hoftiezer, V and Carpenter, A. M. 1973. Comparison of Streptozotocin and Alloxan-Induced Diabetes in the Rat, Including Volumetric Quantitation of the Pancreatic Islets. *Diabetologia* 9 (3), pp 178-184.
- Internasional Diabetes Federation. 2017. IDF Diabetes Atlas Eight Edition 2017. Internasional Diabetes Federation.
- Jabeen, U., and Khanum, A. 2017. Isolation and Characterization of Potential Food Preservative Peptide from *Momordica Charantia* L. *Arabian Journal Chemistry* 10: S3982–S3989.
- Joseph, B and D. Jini. 2013. Antidiabetic Effect of *Momordica Charantia* (Bitter Melon) and its Medicinal Potency. *Asian Pacific Journal of Tropical Disease* 3 (2): 93-102.
- Ke, L. J., Lu, W., Chang, J. L., Yuan, F. Y., Rao, P. F., and Zhou, J. W. 2010. Effects of Heat Drying Process on Amino Acid Content of *Momordica Charantia* L. *Amino Acids Biol. Resour* 32, pp. 14–16.
- Kementerian Kesehatan Republik Indonesia. 2017. *Acuan Bahan Baku Obat Tradisional dari Tumbuhan Obat di Indonesia*. Jakarta: Direktorat Jenderal Kefarmasian dan Alat Kesehatan.
- Kementerian Kesehatan Republik Indonesia. 2018. *Riset Kesehatan Dasar*. Jakarta: Badan Penelitian dan Pengembangan Kesehatan.
- Kenny, O., Smyth, T. J., Hewage, C. M., and Brunton, N. P. 2013. Antioxidant Properties and Quantitative UPLC-MS Analysis of Phenolic Compounds from Extracts of Fenugreek (*Trigonella foenum-graecum*) Seeds and Bitter Melon (*Momordica charantia*) Fruit. *Food Chemistry* 141(4), pp. 4295–4302.
- Kumar, R., Balaji, S., SriPriya, R., Nithya, N., Uma, T. S., Sehgal, P. K. 2010. In Vitro Evaluation of Antioxidants of Fruit Extract of *Momordica Charantia* L. on Fibroblasts and Keratinocytes. *Journal. Agricultural and Food Chemistry* 58(3), pp. 1518–1522.

- Kumar, S., M, Kabi., and M, Kumari. 2010. Study on Phytochemical Analysis from Leaves of *Bixa orellana* (Kumkum). *Emerging Science* 2(5): 16-19.
- Keputusan Menteri Pertanian Republik Indonesia Nomor : 2072/Kpts/SR.120/5/2010 tentang Deskripsi Paria Varietas Asoka.
- Lenzen, S. 2008. The Mechanisms of Alloxan and Streptozotocin Induced Diabetes. *Diabetologia* 51 (2): 216–226.
- Lee-Huang, S., Huang, P.L., Chen, H.C., Huang, P.L., Bourinbaiar, A., Huang, H.I., and Kung, H.F., 1995. Anti-HIV and anti-tumor activities of recombinant MAP30 from bitter melon. *Gene* 61: 151–156.
- Leung, S.O., Yeung, H. W., and Leung, K. N. 1987. The immunosuppressive activities of Two Abortifacient Proteins Isolated from The Seeds of Bitter Melon (*Momordica charantia*). *Immunopharmacology* 13(3): 159–171.
- Malik, S. K., Ahmad, M., and Khan, F. 2017. Qualitative and Quantitative Estimation of Terpenid Contents in Some Important Plants of Punjab. *Pakistan journal of Science* 69 (2), pp.150-154.
- Maryani, H dan Suharmiati. 2003. *Tanaman Obat Untuk Mengatasi Penyakit Pada Usia Lanjut*. Jakarta: AgroMedia Pustaka..
- Menteri Kesehatan Republik Indonesia. 2017. *Formularium Ramuan Obat Tradisional Indonesia*. Jakarta
- Mescher, A. L. 2010. *Junqueira's Basic Histology Text and Atlas*. Singapore: McGrawHill.
- Ministry of Health Republic of Indonesia .2010 .*Guidelines for The Use of Herbal Medicines in Family Health Care*. Jakarta: Ministy of Health Republic of Indonesia.
- Musumeci, G. 2014. Past, Present and Future: Overview on Histology and Histopathology. *Journal of Histology and histopathology*.
- Naseem, M., Patil, S., Patil, S., et al. 1998. Antispermatic and androgenic activities of *Momordica charantia* (Karela) in albino rats. *Journal Ethnopharmacology* 61: 9-16.
- Nandhagopal, K., Kanniyakumari, M., Anbu, J., and Velpandian, V. 2013. Antidiabetic Activity of Karchure Chooranam on Alloxan Induced Diabetic Rats. *Internasional Journal of Pharma and Bio Sciences*: 434-439.

- Nkambo W, N. G. Anyama and B. Onegi. 2013. In Vivo Hypoglycemic Effect of Methalic Fruit Extract of *Momordica Charantia* L. *African Health Sciences* 13 (4): 933-939.
- Nuraini, D. N. 2002. *Aneka Manfaat Biji-bijian*. Yogyakarta: Gaya Media.
- Oishi, Y., Saakamoto, T., Udagawa, H., Taniguchi, H., Kobayashi-Hattori, K., Ozawa, Y., & Takita, T. 2007. Inhibition of Increases in Blood Glucose and Serum Neutral Fat by *Momordica charantia* Saponin Fraction. *Bioscience, Biotechnology, and Biochemistry* 71(3), pp. 735–740.
- Panigrahy, S. K. , Bhatt, R. Kumar, A. 2020. Targeting Type II Diabetes with Plant Terpens: The New and Promising Antidiabetic. *Therapeutics. Institute of Molecular Biology*.
- Pitipanapong, J., S. Chitprasert., M. Goto., W. Jiratchariyakul., M. Sasaki., and A. Shotipruk. 2007. New Approach for Extraction of Charantin from *Momordica Charantia* with Pressurized Liquid Extraction. *Separation and Purification Technology* 52 (3), pp. 416–422.
- Poonam, T., Prakash, P. G., and Kumar, V. L. 2013. Interaction of *Momordica charantia* with metformin in diabetic rats. *American Journal of Pharmacology and Toxicology*, 8 (3), pp. 102-106.
- Patel, T., Parmar, K., Bhatt, Y., Patel, Y., Patel, N.M. 2010. Isolation, characterization and antimicrobial activity of charantin from *Momordica charantia* linn. *Fruit. Pharm. Clin. Res.* 2: 629–634.
- PERKENI. 2011. *Konsensus Pengolahan dan Pencegahan Diabetes Mellitus Tipe-2 di Indonesia*. Jakarta: PB PERKENI.
- PERKENI. 2015. *Konsensus Pengolahan dan Pencegahan Diabetes Mellitus Tipe-2 di Indonesia*. Jakarta: PB PERKENI.
- Price, S. A., and Wilson, L. M. 2012. *Patofisiologi Konsep Klinis Proses-Proses Penyakit* Edisi ke-6. Jakarta: EGC.
- Puri, M., Kaur, I., Kanwar, R. K., Gupta, R. C., Chauhan, A., and Kanwar, J. R. 2009. Ribosome Inactivating Proteins (RIPs) from *Momordica Charantia* for Anti Viral Therapy. *Current Molecular Medicine* 9: 1080–1094.
- Rathi, S.S., Grover, J.K., and Vats, V., 2002. The effect of *Momordica charantia* and *Mucuna pruriens* in experimental diabetes and their effect on key metabolic enzymes involved in carbohydrate metabolism. *Phytotherapy Research* 16, pp. 236–243.

- Rai, A., C. Eapen., & V. G. Prasanth. 2012. Interaction of Herbs and Glibenclamide: A Review. *ISRN Pharmacology*: 1-5.
- Rohman, A & Sumantri. 2007. *Analisis Makanan*. Yogyakarta: Gajah Mada University Press.
- Robinson, T. 1995. *Kandungan Organik Tumbuhan Tinggi*, Edisi VI, Diterjemahkan oleh Kosasih Padmawinata. Bandung: ITB.
- Rohilla, A and Shahjad, A. 2012. Alloxan Induced Diabetic: Mechanisms and Effects. *International Journal of Research in Pharmaceutical and Biomedical Sciences*.
- Ruhe, R., and McDonald, R. 2001. Use of antioxidant nutrient in the prevention and treatment of type 2 diabetes. *J. Am. Coll. Nutr* 20 (5), pp. 363–369.
- Sankaranarayanan, J and Jolly C. I. 1993. Phytochemical, antibacterial, and pharmacological investigations on *Momordica charantia* Linn., *Emblica officinalis* Gaertn. and *Curcuma longa* Linn. *Indian Journal of Pharmaceutical Science* 55(1): 6.
- Shan, B., Xie, J.H., Zhu, J.H., and Peng, Y. 2012. Ethanol modified supercritical carbon dioxide extraction of flavonoids from *Momordica charantia* L. and its antioxidant activity. *Food Bioprod. Process.* 90, pp. 579–587.
- Sharma, B., M. S. Siddiqui., G. Ram., R. K. Yadav., A. Kumari., G. Sharma., and N. D. Jasuja. 2014. Rejuvenating of Kidney Tissues on Alloxan Induced Diabetic Mice under the Effect of *Momordica charantia*. *Advances in Pharmaceutical*.
- Shetty, A. K., G. Suresh., K. K. Sambaiah., and P. V. Salimath. 2005. Effect of Bitter Gourd (*Momordica Charantia*) on Glycaemic Status in Streptozotocin Induced Diabetic Rats. *Plant Foods for Human Nutrition* 60 (3), pp. 109-112.
- Sherwood, L. 2001. *Fisiologi manusia dari sel ke sistem*. Jakarta, Indonesia: EGC.
- Sherwood, L. 2014. *Fisiologi Manusia dari Sel ke Sistem, Edisi 8*. Jakarta, Indonesia: EGC.
- Simes, J. J. H., J. G. Tracey., L. J. Webb., and W. J. Dunstan. An Australian Phytochemical Survey III. Saponnins in Eastern Australian Flowering Plant. Bulletin No.281. Australia: CSIRO.
- Singh, J., Cumming, E., Manoharan, G., Kalasz, H., & Adeghate, E. 2011. Medicinal Chemistry of the Anti-Diabetic Effects of *Momordica Charantia*: Active

Constituents and Modes of Actions. *The Open Medicinal Chemistry Journal* 5(2), pp. 70–77.

- Srivastava, Y., Venkatakrishna-Bhatt, H., Verma, Y., and Venkaiah, K. 1993. Antidiabetic and Adaptogenic Properties of *Momordica Charantia* Extract: an Experimental and Clinical Evaluation. *Phytoter Research* 7(4), pp. 285-289.
- Smeltzer, S. C., & Bare, S. K. 2002. *Buku Ajar Keperawatan Medical Bedah. Alih Bahasa: Agung Waluyo, Edisi 8 Volume 2*. Jakarta: EGC.
- Stefek, M. 2011. Natural flavonoids as potential multifunctional agents in prevention of diabetic cataract. *Interdisciplinary toxicology*, 4(2), p.69.
- Soegono, S., P. Soewondo., and I. Subekti. 2009. *Diagnosa dan Klasifikasi Diabetes Mellitus Terkini*. Jakarta. FKUI.
- Subahar, T. S. S. 2004. *Khasiat dan Manfaat Pare*. Jakarta: Penerbit Agromedia Pustaka.
- Sudoyo, A. W., Setiyohadi, B., Alwi, I., and Setiati, S. 2006. *Buku Ajar Ilmu Penyakit Dalam, Edisi ke-3*. Jakarta: Pusat Penerbitan Departemen Penyakit Dalam FKUI.
- Sugiarto, F. 2006. Perbandingan Kadar Asam Urat dengan Metode Spektrofotometri dan Metode Electrode-Based Biosensor. *Journal of Pharmaceutical and Biomedical Analysis*. 4. Hlm. 1-5.
- Szkudelski, T. 2001. The Mechanism Of Alloxan and Streptozotocin Action In Cells Of The Rat Pancreas. *Physiology Research*, 50 (6), pp. 536-554
- Tan, S. P., Stathopoulos, C., Parks, S., and Roach, P. 2014. An Optimised Aqueous Extract of Phenolic Compounds from Bitter Melon with High Antioxidant Capacity. *Antioxidants*, 3 (4), pp. 814–829.
- Tandi, J. 2017. Effect of Ethanol Extract Gendola Leaf Leaf (*Basella alba* L.) on Decreasing Blood Glucose Condition and Histopatology Pankreas White Rats (*Rattus norvegicus*) Indicated Streptozotocin. *JIMR - Journal of Islamic Medicine Research*, 1(2), pp. 15–25.
- Thompson, H. C and Kelly, W. 1957. *Vegetable Crops*. New York: Mc Graw Hill Book.
- Tortora, G. J and Derrickson, B, H. 2012. *Principles of Anatomy & Physiology 13th Edition*, United State of America: John Wiley & Sons.

- Trinder, P.1966. Determination of Glucose in Blood Using Glucose Oxidase with an Alternative Oxygen Acceptor. *Ann ClinBiochem*6: 24.
- Utami, P. 2013. *Tanaman Obat Untuk Mengatasi Diabetes Mellitus*. Jakarta: Agro Media Pustaka.
- Wells, B. G., J. T. Dipiro., T. L. Schwinghammer., C. V. Dipiro. 2005. *Pharmacotherapy Handbook Ninth Edition*. New York: Mc Grow Hill Education.
- Wulandari. 2016. Uji Efektifitas Antihiperglikemia Kombinasi Jus Pare (*Momordica Charantia* L) pada Tikus Wistar Jantan dengan Metode Toleransi Glukosa. *Pharm Sci Res*, 3 (3), pp. 145-154.
- Xu, X., Shan, B., Liao, C. H., Xie, J. H., Wen, P. W., and Shi, J. Y. 2015. Anti-Diabetic Properties of *Momordica Charantia* L. Polysaccharide in Alloxan-Induced Diabetic Mice. *Internasional Journal Biological Macromolecules*, 81, pp. 538–543.
- Yesilada, E., Gurbuz, I., Shibata, H., 1999. Screening of Turkish antiulcerogenic folk remedies for anti-*Helicobacter pylori* activity. *Journal of Ethnopharmacology*, 66, pp. 289–293.
- Zhang, F., Lin, L., and Xie, J. 2016. A Mini-Review of Chemical and Biological Properties of Polysaccharides from *Momordica Charantia*. *Internasional Journal Biological Macromolecules*, 92, pp. 246–253.
- Zhu, Y., Dong, Y., Qian, X., Cui, F., Guo, Q., Zhou, X., and Xiong, Z. 2012. Effect of Superfine Grinding on Antidiabetic Activity of Bitter Melon Powder. *International Journal of Molecular Sciences*, 13(12),pp. 14203–14218



