

DAFTAR PUSTAKA

- Adalina, Y. 2017. Kualitas Madu Putih Asal Provinsi Nusa Tenggara Barat. *Prosiding Seminar Nasional Masyarakat Biodiversitas Indonesia* 3(2): 189-193.
- Ahmad, R. S., Hussain, M. B., Saeed, F., Waheed, M., & Tufail, T. 2017. Phytochemistry, Metabolism, and Etnomedical Scenario of Hoey: A Concurrent Review. *International Journal of Food Properties* 2(1) 254-269
- Alkadi, H. 2018. A Review On Free Radicals and Antioxidants. *Infectious Disorders Drug Targets* 18(1): 1-10.
- Almasaudi, S. B., El-Shitany, N. A., Abbas, A. T., Abdel-dyem, U. A., Ali, S. S., Al Jaouni, S. K. & Harakeh, S. 2016. Antioxidant, Anti-inflammatory, and Antiulcer Potential of Manuka Honey against Gastric Ulcer in Rats. *Oxidative Medicine and Cellular Longevity* 2016: 1-10.
- Alotibi, I. A., Harakeh, S M., Al-Mamary, M., Mariod, A. A., Al-Jaouni, S. K., Al-Masaud, S., Alharbi, M. G., & Al-Hindi, R. R. 2018. Floral Markers and Biological Actvity of Saudi Honey. *Saudi Journal of Biological Sciences* 25: 1369-1374.
- Alvarez, M. A. 2014. *Plant Biotechnology for Health: From Secondary Metabolites to Molecular Farming*. Springer. Switzerland. pp. 15.
- Alvarez-Suarez, J. M., Tulipani, S., Diaz, D., Estevez, Y., Romandin, S., Giampieri, F., Damiani, E., Astolfi, P., Bomparde, S., Battino, M. 2010. *Food and Chemical Toxicology* 48(8): 2490-2499.
- Alzahrani, H. A., Boukraa, L., Bellik, Y., Abdellah, F., Bakhotmah, B. A., Kolayli, S., & Sahin, H. 2012. Evaluation of the Antioxidant Activity of Three Varieties of Honey from Different Botanical and Geographical Origins. *Global Journal of Health Science* 4(6): 191-195.
- Asih, I. A. R. A., Ratnayanti, K., Swardana I. B. 2012. Isolasi dan Identifikasi Senyawa Golongan Flavonoid dari Madu Kelengkeng (*Nephelium longata* L.). *Jurnal Kimia* 6(1): 72-83.
- Baker, H. G. 1977. Non-Sugar Chemical Constituents of Nectar. *Apidologie* 8(4): 349-356
- Bastidas, O. 2013. *Cell Counting with Neubauer Chamber; Basic Hemocytometer Usagen 1-6*. (<http://www.celeromics.com/en/resources/docs/Articles/Cell-counting-Neubauer-chamber.pdf>). Diakses pada tanggal 25 November 2018.
- Blazenovic, I., Kind, T., Ji, J., & Fiehn, O. 2018. Software Tools and Approaches for Compound Identification of LC_MS/MS Data in Metabolomics. *Metabolites* 8(31): 1-23.
- Blois, M. S. 1958. Antioxidant Determinations by the Use of a Stable Free Radical. *Nature* 181: 1199-1200.
- Bryant, V. M. 2001. Pollen Content of Honey. *CAP Newsletter* 24(1): 10-24.
- Byeong Mo, K. 2018. The Role of Saikosaponins in Therapeutic Strategies for Age-Related Diseases. *Oxidative Medicine and Cellular Longevity* 2018:1-10.

- Campbell, N. A., J. B. Reece, L. A. Urry, M. L. Cain, S. A. Wasserman, P. V. Minorsky, & R. B. Jackson. 2010. *Biologi*. Edisi 8. Jilid 2. Erlangga. Jakarta. pp. 386-389.
- Chang, T. S. 2014. Isolation, Bioactivity, and Production of *ortho*-Hydroxydaidzein and *ortho*-Hydroxygenistein. *International Journal of Molecular Sciences* 15: 5699-5716.
- Chen, H., Jin, L., Fan, C., & Wang, W. 2017. Non-targeted Volatile Profiles for the Classification of the Botanical Origin of Chinese Honey by Solid-Phase Microextraction and Gas Chromatography-Mass Spectrophotometry Combined with Chemometrics. *Journal of Separation Science* 40(22): 4377-4384.
- Cholisoh, Z. & Utami, W. 2008. Aktivitas Penangkap Radikal Ekstrak Ethanol 70% Biji Jengkol (*Archidendron jiringa*). *Pharmacon* 9: 33-40.
- Chua, L. S., Rahaman, N. L., Adnan, N. A., & Tan, T. T. E. 2013. Antioxidant Activity of Three Honey Samples in Relation with Biochemical Components. *Journal of Analytical Methods in Chemistry* 2013: 1-8.
- Cienciosi, D., Forbes-Hernandez, T. Y., Afrin, S., Gasparrini, M., Reboredo-Rodriguez, P., Manna, P. P., Zhang, J., Lamas, L. B., Florez, S. M., Toyos, P. A., Quiles, J. L., Giampieri, F., & Battino, M. 2018. Phenolic Compounds in Honey and Their Associated Health Benefits: A Review. *Molecules* 29(3): 1-20.
- Danforth, B. N., Cardinal, S., Praz, C., Almeida, E. A. B., & Michez, D. 2013. The Impact of Molecular Data on Our Understanding of Bee Phylogeny and Evolution. *Annual Reviews Entomology* 58(1): 57-58.
- Danloy, S., Quentin-Leclercq, J., Coucke, P., De Pauw-Gillet, M. C., Elias, R., Balansard, G., Angenot, L., & Bassleer, R. 1994. Effects of a-Hederin, a Saponin Extract from *Hedera helix*, on Cels Cultured *in vitro*. *Planta Medica* 60(1): 45-49.
- Darajati, W., Pratiwi, S., Herwinda, E., Radiansyah, A. D., Nalang, V. S., Nooryanto, B., Rahajoe, J. S., Ubaidillah, R., Maryanto, I., Kurniawan R., Prasetyo, T. A., Rahim, A., Jefferson, J., & Hakim F. 2016. *Indonesian Biodiversity Strategy and Action Plan (IBSAP) 2015-2020*. BAPPENAS. Jakarta. Pp. 83-85.
- Digital museum of Natural History. 2014. *Apis mellifera*. (<https://www.facebook.com/Digital.Museum.of.Natural.History/photos/a.227039040774247/430132203798262/?type=3&theater>). Diakses pada tanggal 25 November 2018.
- Erdtman, G. 1960. The Acetolysis Method. A Revised Description. *Svensk Botanisk Tidskrift* 54: 561-564
- Eteraf-Oskouei, T., & Najafi, M. 2012. Tradisional and Modern Uses of Natural Honey in Human Diseases: A Review. *Iranian Journal of Basic Medical Sciences* 2013 (16): 731-742.
- Fadhmi, Mudatsir, & Syaokani, E. 2015. Perbandingan Daya Hambat Madu Seulawah dengan Madu Trumon Terhadap *Staphylococcus aureus* secara In Vitro. *Jurnal Biotik* 3(1):9-14.

- Fahri, C., Sutarno, Liatyawati, S. 2005. Kadar Glukosa dan Kolesterol Total Darah Tikus Putih (*Rattus norvegicus* L.) Hiperglikemik setelah Pemberian Ekstrak Metanol Akar Meniran (*Phyllanthus niruri* L.). *Biofarmasi* 3(1): 1693-2242.
- Gbashi, S., Njobeh, P., Steenkamp, P., & Madala, N. 2017. Pressurized Hot Water Extraction and Chemometric Fingerprinting of Flavonoids from *Bidens pilosa* by UPLC-Tandem Mass Spectrometry. *CyTA-Journal of Food* 15(2): 171-180.
- Gismondi, A., de Rossi, S., Canuti, L., Novelli, S., di Marco, G., Fattorini, L., & Canini, A. 2018. From *Robinia pseudoacacia* L. Nectar to Acacia Monofloral Honey: Biochemical Changes and Variation of Biological Properties. *Journal of the Science of Food and Agriculture* 98(11): 4312-4322.
- Google Earth. 2018. Sulawesi (Celebes). (<https://www.google.com/maps/@-1.28809,121.65776,751110m/data=!3m1!1e3>). Diakses 5 November 2018.
- Google Earth. 2019. Sulawesi (Celebes). (<https://www.google.com/maps/@-1.28809,121.65776,751110m/data=!3m1!1e3>). Diakses 10 Agustus 2019.
- Gupta, R. K., Reybroeck, W., van Veen, J. W., Gupta, A. 2014. *Beekeeping to Poverty Alleviation and Livelihood Security*. Springer. Dordrecht. pp. 63-100.
- Hadisoesilo, S. 2001. Keanekaragaman Spesies Lebah Madu Asli Indonesia. *Biodiversitas*. 2(1): 123-128.
- Halbritter, H., Ulrich, S., Grimsson, F., Weber, Zetter, R., Hesse, M., Buchner, R., Svojtka, M., & Frosch-Radivo, A. 2018. *Illustrated Pollen Terminology 2nd Edition*. Springer Wien. New York. pp. 4-61.
- Hanani, E. 2014. *Analisis Fitokimia*. EGC. Jakarta. 1-6, 9, 17, 65, 79, 103, 133, 191
- Hepburn, H. R. & Radloff, S. E. 2011. *Honeybees of Asia*. Springer. London. 1-257
- Hesse, M., H. Halbritter, R. Zetter, M. Weber, R. Buchner, A. Frosch-Radivo, & S. Ulrich. 2009. *Pollen Terminology An Illustrated Handbook*. Springer Wien. New York. pp. 11-13, 51-52.
- Hyde, H. A., & William. 1955. *Oncus*, A New Term in Pollen morphology. *New Phytol* 54: 255 in Halbritter, H., Ulrich, S., Grimsson, F., Weber, Zetter, R., Hesse, M., Buchner, R., Svojtka, M., & Frosch-Radivo, A. 2018. *Illustrated Pollen Terminology 2nd Edition*. Springer Wien. New York. 4 p.
- Ibrahim, I. F., S. K. Balasundram, N. A. P. Abdullah, M. S. Alias, M. Mardani. 2012. Morphological Characterization of Pollen Collected by *Apis dorsata* from Tropical Rainforest. *International Journal of Botany* 8(3): 96-106.
- Jesus, M. C. D., Hungerford, N. L., Carter, S. J., Anuj, S. R., Blanchfield, J. T., Voss, J. J. D., & Fletcher, M. T. 2019. Pyrrolizidine Alkaloids of Blue Heliotrope (*Heliotropium amplexicaule*) and Their Presence in Australian Honey. *Journal of Agricultural and Food Chemistry* 67(28): 7995-8006.
- Johnson, S. R., & Lange, B. M. 2015. Open-Access Metabolomics Databases for Natural Product Research: Present Capabilities and Future Potential. *Frontiers in Bioengineering and Biotechnology* 3(22): 1-10.
- Kessler, P. J. A., Bos, M. M., Sierra Daza, S. E. C., Kop, A., Willemse, L. P. M., Pitopang, R., & Gradstein, S. R. 2002. Checklist of Woody Plants of

- Sulawesi, Indonesia. *Blumea Journal of Plant Taxonomy and Plant Geography* 14: 1-160.
- Khalil, M. I., Sulaiman, S. A., & Boukraa, L. 2010. Antioxidant Properties of Honey and Its Role in reventing Health Disorder. *The Open Nutraceuticals Journal* 3: 6-16.
- Khan, M. K., Huma, Z. E., & Dangles, O. 2013. A Comprehensive Review on Flavonones, the Major *Citrus* Polyphenols. *Journal of Food Composition and Analysis* 33(2014): 85-104.
- Kretschmar, J. A. & Baumann, T. W. 1999. Caffeine in *Citrus* Flowers. *Phytochemistry* 52(1999) 19-23
- Lachman, J., Hejtmankova, A., Sykora, J., Karban, J., Orsak, M., & Rygerova, B. 2010. Contents of Major Phenolic and Flavonoid Antioxidants in Selected Czech Honey. *Czech Journal Food Science* 28(5): 412-426.
- Lobo, V., Patil, A., Phatak, A., & Chandra, N. 2010. Free Radicals, Antioxidants and Fuctional Foods: Impact on Human Health. *Pharmacognosy Review*. 4(8): 118-126.
- Louveaux, J., Maurizio, A., & Vorwohl, G. 1978. Methods of Melissopalynology. *Bee World* 59 (4): 139-157.
- Mandal, M. D. & Mandal, S. 2011. Honey: Its Medical Property and Antibacterial Activity. *Asian Pasific Journal of Tropical Biomedicine* 1(2): 154-160.
- Martins, D. & Nunez, C. V. 2015. Secondary Metabolites from Rubiaceae Species. *Molecules* 20: 13422-13495.
- Matschke, V., Theiss, C., & Matschke, J. 2019. Oxidative Stress: The Lowest Common Denominator of Multiple Diseases. *Neural. Regen. Res.* 14(2): 238-241.
- Meo, S. A., Al-Asiri, S. A., Mahesar, A. B., & Ansari, M. J. 2016. Role Honey in Modern Medicine. *Saudi Journal of Biological Sciences* 24 (2017): 975-978.
- Michener, C. D. 2007. *Bee of the World 2nd Edition*. The John Hopkins University Press. Baltimore. 831 p.
- Miura, T., Takagi, S., & Ishida, T. 2012. Management of Diabetes and Its Complications with Banaba (*Lagerstroemia speciosa* L.) and Corosolic Acid. *Evidence-based Complementary and Alternatve Medicine*. 2012: 1-8
- Mradu, G., Saumyakanti, S., Sohini, M, & Arup, M. 2012. HPLC Profiles of Standard Phenolic Compouds Present in Medical Plants. *International Journal of Pharmacognosy and Phytochemical Research* 4(3): 162-167.
- Muhammad, A., Odunola, O. A., Ibrahim, M. A., Sallau, A. B., Erukainure, O. L., Aimola, I. A., & Malami, I. 2016. Potential Biological Activity of Acacia Honey. *Frontiers in Bioscience* 8: 351-357.
- Nagir, M. T., Atmowidi, T., & Kahono, S. 2016. The Distribution and Nest-Site Preference of *Apis dorsata binghami* at Maros Forest, South Sulawesi, Indonesia. *Journal of Insect Biodiversity* 4(23): 1-14.
- Nair, S., Meddah, B., & Aoues, A. 2013. Melissopalynological Characterization of North Algerian Honeys. *Foods* 2: 83-89.
- NCBI Taxonomy Browser. 2018. *Apis dorsata binghami*. (<https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?mode=In>)

- [fo&id=288810&lvl=3&keep=1&srchmode=1&unlock&mod=1&log_op=modifier_toggle#modif](#)). Diakses pada tanggal 25 November 2018.
- Neumann, K.-H., Ashwani, K., Jatargholi, I. 2009. *Plant Cell and Tissue Cultures: A Tool in Biotechnology, Principles, and Practice*. Springer. Berlin. pp. 182-225.
- Noor, M. J., Ahmad, M., Ashraf, M. A., Zafar, M., & Sultana, S. 2015. A Review of the Pollen Analysis of South Asian Honey to Identify the Bee Flora of the Region. *Palynology* 40(1): 54-65.
- Ohe, W. V. D., Oddo, L. P., Piana, M. L., Morlot, M., & Martin, P. 2004. Harmonized Methods of Melissopalynology. *Apidologie* 35(2004): 18-25.
- Ortega, N., Romero, M. P., Macia, A., Reguant, J., Angles, N., Morello, J. R., & Motilva, M. J. 2010. Comparative Study of UPLC-MS/MS and HPLC-MS/MS to Determine Procyanidins and Alkaloids in Cocoa Samples. *Journal of Food Composition and Analysis* 23: 298-305.
- Padmavathy, S. & S. M. Rehel. 2014. Bee Plants of *Apis dorsata* during Winter Season from Coonor Region, Nilgiris, Tamil Nadu, India. *Journal of Academia and Industrial Research*. 2: 570-572.
- Pagare, S., Bhatia, M., Tripathi, N., Pagare, S., & Bansal, Y. K. 2015. Secondary Metabolites of Plants and their Role: Overview. *Current Trends Biotechnology and Pharmacy* 9(3): 293-304
- Pitopang, R., Ihsan, M., & Burhanuddin, I. F. 2014. *Panduan Pengenalan Flora Fauna Endemik Kabupaten Sigi Sulawesi Tengah*. Mitra Prima. Palu. pp. 1-2.
- Ponnuchamy, R., Bonhomme, V., Prasad, S., Das, L., Patel, P., Gaucherel, C., Pragasam, A., & Anupama, K. 2014. Honey Pollen: Using Mellisopalynology to Understand Foraging Preferences of Bees in Tropical South India. *PLoS ONE* 9(7): e101618.
- Pratami, D K., Mun'im, A., Sundowo, A., & Sahlan, M. 2018. Phytochemical Profile and Antioxidant Activity of Propolis Ethanolic Extract from Tetragonula Bee. *Pharmacogn* 10(1): 128-135.
- Raghunandan, K. S. & S. Basavarajappa. 2014. Melissopalynology of Multifloral Honey of Asian Giant Honeybee, *Apis dorsata* Fabricius at Southern Karnataka, India. *Indian Journal of Applied Research*. 4(8): 667-669.
- Rasyiid, M. 2017. *Keragaman Serbuk Sari dan Metabolit Sekunder Pada Madu Hutan Sulawesi Tengah*. Skripsi. Fakultas Biologi, Universitas Gadjah Mada. Yogyakarta pp. 41-45.
- Ratnasari, D., Nazir, F., Toresano, L. O. H. Z., Pawiro, S. A., & Soejoko, D. S. 2016. The Correlation Between Effective Renal Plasma Flow (ERPF) and Glomerular Filtration Rate (GFR) with Renal Scintigraphy ^{99m}Tc-DTPA Study. *Journal of Physics: Conference Series* 694 (012062): 1-6.
- Ratnayani, K., Laksmiwati, A. A. I. A. M., Septiani, Ni. P. I. 2012. Kadar Total Senyawa Fenolat pada Madu Randu dan Madu kelengkeng serta Uji Aktivitas Antiradikal Bebas dengan Metode DPPH (Difenilpicril Hidrazil). *Jurnal Kimia* 6(2): 163-168.

- Rehel, S. M. & Padmavathi, S. 2014. Melittopalynological Analysis of Apis Dorsata Honey of Kotagiri Slopes, Nilgiris, Tamil Nadu. *International Journal of Innovative Research & Development* 3(1): 391-294.
- Se-Gun, K., In-Pyo, H., Soon-Ok, W., Hye-Ri, J., & Sang-Mi, H. Comparison of Anti-oxidant Activity of Ethyl Acetate Extracts of Different Flora Honeys from Korea. *Journal of Apiculture* 30(1): 67-70.
- Shimoyamada, M., Kudo, S., Okubo, K., Yamauchi, F., & Harada, K. 1990. Distributions of Saponin Constituents in Some Varieties of Soybean Plant. *Agricultural and Biological Chemistry* 54: 77-81.
- Sihombing, D. 1997. *Ilmu Ternak Lebah Madu*. Gadjah Mada University Press. Yogyakarta. Hal: 23-25.
- Silva., P. M. D., Gauche, c., Gonzaga, L. V., Costa, A. C. O., & Fett, R. 2016. Honey: Chemical Composition, Sability, and Authenticity. *Food Chemistry* 196: 664-672.
- Song, XY., Yao, YF., & Yang, WD. 2012. Pollen Analysis of Natural Honeys from the Central Region of Shanxi, North China. *PLoS ONE* 7(11): e49545.
- Stelbrink, B., Albrecht, C., Hall, R., & von Rintelen, T. 2012. The Biogeography of Sulawesi Revisited: Is There Evidence for A Vicariant Origin of Taxa on Wallace's "Anomalous Island"? *Evolution* 4(2): 2252-2271.
- Takamatsu, S., Saito, K., Ohmiya, S., Ruangrunsi, N., & Murakoshi, I. 1991. Lupin Alkaloids from *Sophora exigua*. *Phytochemistry* 30(11): 3793-3795.
- Thakodee, T., Deowanish, S., & Duangmal, K. 2018. Melissopalynological Analysis of Stingless bee (*Tetragonula pagdeni*) honey in Eastern Thailand. *Journal of Asia-Pacific Entomology* 21: 620-630.
- Tiwari, P., Tiwari, J. K., & Ballabha, R. 2010. Studies on Sources of Bee-forage for Rock Bee (*Apis dorsata* F.) from Garhwal Himalaya, India: A Melissopalynological Approach. *Nature and Science*. 8(6): 5-15.
- Tiwari, R. & Rana, C. S. 2015. Plant Secondary Metabolites: A Review. *International Journal of Engineering Research and General Science* 3(5): 661-670.
- Tweetboard. 2018. *Anatomy of A Bee Leg*. (<http://tweetboard.me/anatomy-of-a-bees-leg/>). Diakses pada tanggal 25 November 2018.
- USDA. 1985. *United States Standards for Grades of Extracted Honey 1-12*. (<https://www.ams.usda.gov/grades-standards/extracted-honey-grades-and-standards>). Diakses Pada Tanggal 15 Juni 2020.
- Wang, T., Frand, H. L., Christiansson, N. R., Rosendal, S. E., Pedersen, M., & Smedsgaard J. 2018. Pyrrolizidine alkaloids in honey: Quantification with and without standards. *Food Control* 98: 227-237
- Widjaja, E. A., Rahayuningsih, Y., Rahajoe, J. S., Ubaidillah, R., Maryanto, I., Walujo, E. B., & Semiadi, G. 2014. *Kekinian Kekaragaman Hayati Indonesia*. LIPI Press. Jakarta. pp. 229-239.
- Wikipedia. 2017. *Haplodiploid Sex Determination in Honey Bees*. (https://en.wikipedia.org/wiki/Honey_bee#/media/File:Haplodiploid_Sex_Determination_in_Honey_Bees.svg). Diakses pada tanggal 25 November 2018.

- Wink, M. 2010. Introduction: Biochemistry, Physiology, and Ecological Functions of Secondary Metabolites. *Annual Plant Reviews* 40: 1-19.
- Xu, Y. K., Yang, L., Liao, S. G., Cao, P., Wu, B., Hu, H. B., Guo, J., & Zhang, P. 2015. Koumine, Humantenine, and Yohimbane Alkaloids from *Gelsemium elegans*. *Journal of Natural Products* 78(7): 1511-1517.
- Zhao, L., Liang, X., Wu, L., Zhang, Z., Cao, W., & Xue, X. 2018. Use Isuquinoline Alkaloids as Markers for identification of Honey and Pollen from *Macleaya cordata* (Willd.) R. Br. *Journal of Food Composition and Analysis* 66: 237-243.
- Zhong, J. J. 2011. *Comprehensive Biotechnology 2nd Edition 3rd Volume*. Academic Press. Cambridge. pp. 299-308.