

DAFTAR PUSTAKA

- Amna, O.F., Nooraain, H., Noriham, A., Azizah, A.H., and Husna, R.N. (2013). Acute and oral subacute toxicity study of ethanolic extract of *Cosmos caudatus* leaf in Sprague Dawley rats. *Int J Biosci Biochem Bioinfor.* 2013; 3:301–5.
- Andarwulan, N., Batari, R., Sandrasari, D.A., Bolling, B., dan Wijaya, H. (2010). Flavonoid Content and Antioxidant Activity of Vegetables from Indonesia. *Food Chemistry.* 2010; 121: 1231–1235.
- Andarwulan, N., Kurniasih, D., Apriady, R.A., Rahmat, H., Roto, A.V., and Bolling, B.W. (2012). Polyphenols, carotenoids, and ascorbic acid in Underutilized medicinal Vegetables. *Food Chemistry.* 2010; 121: 1231–1235. *Journal of Functional Foods* 4: 339-347.
- Ardiansyah., Fadilah, R., Handoko, D., Kusbiantoro, B., dan Astuti, R. (2019). Efek Pemanasan Skala Rumah Tangga terhadap Komponen Bioaktif Daun Kenikir (*Cosmos Caudatus*). *Agritech*, 39(3), 207-214.
- Ardiansyah., Nada, A., Rahmawati, N.T.I., Oktriani, A., David, W., Astuti, R.M., Handoko, D., Kusbiantoro, B., Budijanto, S., Shirakawa, H. (2021). Volatil Compounds, Sensory Profile and Phenolic Compounds in Fermented Rice Bran. *Plants*, 10, 1073.
- Armesto, J., Gómez-Limia, L., Carballo, J., and Martínez, S. (2018). Effects of different cooking methods on the antioxidant capacity and flavonoid, organic acid and mineral contents of Galega Kale (*Brassica oleracea* var. *acephala* cv. Galega), *International Journal of Food Sciences and Nutrition*, DOI: 10.1080/09637486.2018.1482530.
- Bañas, N., Bravo, S., García-Alonso, F. J., Gil, J. V., Periago, M. J. (2021). Changes in Volatile Compounds, Flavour-related Enzymes and Lycopene In A Refrigerated Tomato Juice During Processing And Storage. *European Food Research and Technology* (2021) 247:975-984.
- Baihaki A. (2003). Aspek sosial ekonom dalam pemanfaatan dan pelestarian keanekaragaman hayati Jawa Barat. *J. Ekologi dan Biodiversitas Tropika.*

- Belgis, M. (2016). Profil Komponen Volatil dan Deskripsi Sensori Flavor dari Beberapa Kultivar Durian (*Durio zibet hinus* Murr.) dan Lai (*Durio kutejensis* Hassk.). Bogor: Doctoral Dissertation, Progam Studi Ilmu Pangan-Institut Pertanian Bogor.
- Bergh, V.D. (1994). *Cosmos caudatus* Kunth, In: Plant Resoources of South-east Asia 8: Vegetable, Siemonsma, J.S. and P. kasem (Eds.). PROSEA, Bogor, Indonesia.
- Bunawan, H., Baharum, S.N., Bunawan, S.N., Amin, N.M., and Noor, N.M. (2014). *Cosmos Caudatus* Kunth: A Traditional Medicinal Herb. *Global Journal of Pharmacology* 8 (3): 420-426. DOI: 10.5829/idosi.gjp.2014.8.3.8424.
- Burkill, I.H. (1966). A dictionary of the economic products of the Malay Peninsula. A Dictionary of the Economic Products of the Malay Peninsula (2nd edition).
- Borowski, J., Narwojsz, A., Borowska, E. J., Majewska, K. (2015). The Effect of Thermal Processing on Sensory Properties, Texture Attributes and Pectic Changes in Broccoli. *Food Technology and Economy, Engineering and Physical Properties*.
- Chan, E.W.C., Wong, S.K., and Chan, H.T. (2016). Ulam Herbs of *Oenanthe javanica* and *Cosmos caudatus*: An Overview on their Medicinal Properties. *Journal of Natural Remedies*, 2016, 16(4). DOI: 10.18311/jnr/2016/8370.
- Cheng S-H., Barakatun-Nisak MY., Anthony J., and Ismail A. (2015). Potential medicinal benefits of *Cosmos caudatus* (Ulam Raja): A scoping review. *Journal of Research in Medical Sciences* 2015;20:1000-6.
- Copeland, E.B., et al., (1904). Publications-Bureau of Government Laboratories. Bureau of Public Printing.
- Diaz-Maroto, M.C., Palomo, E.S., Castro, L., Vinas, MA.G., Perez-Coello, M.S. (2004). Changes in Produced Aroma Compounds and Structural Integrity (*Ocimum basilicum* L) during Drying. *Journal of The Science of Food and Agriculture* 84: 2070-2076. DOI: 10.1002/jsfa.1921.

- Diaz-Maroto, M.C., Perez-Coello, M.S., and Cabezudo, M.D. (2002a). Effect of Drying Method on The Volatil in *bay leaf* (*Laurus nobilis L.*). *Journal of Agricultural and Food Chemistry*, 50: 4520-4524.
- Diaz-Maroto, M.C., Perez-Coello, M.S., and Cabezudo, M.D. (2002b). Effect of Drying Method on The Volatil of Parsley (*Petroselinum crispum L.*). *European Food Research and Technology* 215: 227-230.
- Flamini, G., Cioni, P. L., Morelli, I. (2003). Differences In The Fragrances of Pollen, Leaves, and Floral Parts of Garland (*Chrysanthemum coronarium*) and Composition of The Essential Oils from Flowerheads and Leaves. *Journaal Of Agricultural And Food Chemistry 2003*, 51, 2267-2271.
- Gasmalla, M.A.A., Tessema, H.A., Alahmed, K., Hua. X., Liao, X., and Ruijin, Yang. (2017). Effect of different drying techniques on the volatil compounds, morphological characteristics and thermal stability of Stevia rebaudiana Bertoni leaf. *Tropical Journal of Pharmaceutical Research June 2017*; 16 (6): 1399-1406.
- Gaur S, Shihhare US, Ahmed J. 2006. Degradation of chlorophyll during processing of green vegetables: a review. *Stewart Postharv Rev*.
- Giacomuzzi, V., Cappellin, L., Khomenko, I., Biasioli, F., Schutz, S., Tasin, M., Knight, A. L., Angeli, S. (2016). Emissions of Volatile Compounds from Apple Plants Infested with *Pandemis heparana* Larvae, Antennal Response of Conspecific Adults, and Preliminary Field Trial. *Journal of Chemical Ecology*.
- Goodner, K. (2007). Practical Retention Index Models of OV-101, DB-1, DB-5, and DB-Wax for Flavor and Fragrance compounds. *LWT*, 951-958.
- Guo, S., Jom, K. N., Ge, Y. (2019). Influence of Roasting Condition on Flavor Profile of Sunflower Seeds: A Flavoromics Approach. *Scientific Reports*.
- Hu, Y., Zhou, Y. J., Bao, J., Huang, L., Nielsen, J., Krivoruchko, A. (2017). Metabolic Engineering of *Saccharomyces cerevisiae* for Production of Germacrene A, A Prekursor for beta-elemene. *Journal Industrial Microbiology and Biotechnology*.

- Javadi, N., Abas, F., Hamid, A. A., Simoh, S., Shaari, K., Ismail, I. S., Mediani, A., Khatib, A. (2014). GC-MS-Based Metabolite Profiling of *Cosmos caudatus* Leaves Possessing Alpha-Glucosidase Inhibitory Activity. *Journal Food and Science*.
- Javadi, N., Abas, F., Mediani, A., Hamid, A. A., Khatib, A., Sanimah, S., Shaari, K. (2015). Effect of Storage Time on Metabolite Profile and Alpha-glucosidase Inhibitory Activity of *Cosmos caudatus* Leaves – GCMS Based Metabolomics Approach. *Journal of Food and Drug Analysis*.
- Koesoemawardani, D. (2007). Analisis Sensori Rusip dari Sungailiat-Bangka. *Jurnal Teknologi dan Industri Hasil Pertanian Volume 12, No.2*.
- Koltun, S. J., MacIntosh, A. J., Goodrich-Schneider, R. M., Klee, H. J., Hutton, S. F., Junoy, L. J., Sarnoski, P. J. (2021). Effects of Thermal Processing on Flavor and Consumer Perception Using Tomato Juice Produced from Florida Grown Fresh Market Cultivars. *Journal of Food Processing and Preservation*.
- Kunishima, M., Yamauchi, Y., Mizutani, M., Kuse, M., Takikawa, H., Sugimoto, Y. (2016). Identification of (Z)-3:(E)-2-Hexenal Isomerases Essential to Production of the Leaf Aldehyde in Plants. *The Journal of Biological Chemistry*.
- Lago, J. H. G., Soares, M. G., Batista-Pereira, L. G., Silva, M. F. G. F., Correa, A. G., Fernandes, J. B., Vieira, P. C., Roque, N. F. (2006). Volatile Oil from *Guarea macrophylla* ssp. *Tuberculate*: Seasonal Variation and Electroantennographic Detection by *Hypsipyla grandella*. *Journal of Phytochemistry*.
- Lasekan, O., and Azeez, S. (2014). Chemo-preventive Activities of Common Vegetables' Volatil Organic Compounds (VOCs). *Pharmaceutica Analytica Acta* 2014, 5:7 DOI: 10.4172/2153-2435.1000306.
- Latiff, N. A., Abdullah, L. C., Ong, P. Y., Embi, K., Malek, S. A. (2020). The Influence of Drying Temperature on The Quality, Morphology and Drying Characteristics of *Cosmos caudatus*. IOP Conference Series: Materials Science and Engineering. IOP Publishing.

- Lawrence, S. J. (2006). Descriptions, Properties, and Degradation of Selected Volatile Organic Compounds Detected in Ground Water: A Review of Selected Literature. U.S. Geological Survey, Reston, Virginia.
- Lee, T.K., and Vairappan, C.S. (2011). Antioxidant, antibacterial and cytotoxic activities of essential oils and ethanol extracts of selected South East Asian herbs. *Journal of Medicinal Plants Research* Vol. 5(21), pp. 5284-5290.
- Lima, A., Pereira, J. A., Baraldi, I., Malheiro, R. (2017). Cooking Impact in Color, Pigments and Volatile Composition of Grapevine Leaves (*Vitis vinifera* L. var Malvasia Fina and Touriga Franca). *Food Chemistry* (2021) 1197-1205.
- Lopes-Lutz, D., Alviano, D. S., Alviano, C. S., Kolodziejczyk, P. P. (2008). Screening of Chemical Composition, Antimicrobial and Antioxidant Activities of *Artemisia* essential Oils. *Elsevier Phytochemistry*.
- Lorjaroenphon, Y., Chaiseri, S., Jirapakkul, W. (2016). Vegetable Flavors and Sensory Characteristics. *Handbook of Vegetable Preservation and Processing* 2nd Edition. *Taylor & Francis Group*. New York.
- Luaces, P., Sanz, C., Perez, A. G. (2007). Thermal Stability of Lipoxygenase and Hydroperoxide Lyase from Olive Fruit and Repercussion on Olive Oil Aroma Biosynthesis. *Journal of Agricultural and Food Chemistry*, Vol. 55, No. 15, 2007.
- Mahanta, B. P., Bora, P. K., Kemprai, P., Borah, G., Lal, M., Haldar, S. (2021). Thermolabile Essential Oils, Aromas and Flavours: Degradation Pathways, Effect of Thermal Processing and Alteration of Sensory Quality. *Food Research International* 145 (2021) 110404.
- Masriany., Sari, A., dan Armita, D. (2020). Diversitas Senyawa Volatil dari Berbagai Jenis Tanaman Dan Potensinya Sebagai Pengendali Hama yang Ramah Lingkungan. ISBN: 978-602-72245-5-1.
- Moon, S-Y., Cliff, M. A., Li-Chan, E. C. Y. (2006). Odour-active Components of Simulated Beef Flavour Analysed by Solid Phase Microextraction and Gas Chromatography-mass Spectrometry and Olfactometry. *Food Research International*.

- Murray, J. M., Delahunty, C. M., and Baxter, I. A. (2001). Descriptive Sensory Analysis: Past, Present, and Future. *Food Research International* 34 (2001) 461–471.
- Niu, Y., Wang, P., Xiao, Q., Xiao, Z., Mao, H., Zhang, J. (2020). Characterization of Odor-Active Volatiles and Odor Contribution Based on Binary Interaction Effects in Mango and Vodka Cocktail. *Molecules Journal*.
- Paciulli, M., Pallermo, M., Chiavaro, E., Pallegrini, N. (2018). Chlorophyll and Color Changes in Cooked Vegetables. *Fruit and Vegetables Phytochemicals: Chemistry and Human Health*, Vol. I, 2nd Edition. *John Wiley & Sons Ltd*.
- Pareek, S., Sagar, N. A., Sharma, S., Kumar, V., Agarwal, T., Gonzalez-Aguilar, G.A., Yahia, E.M. (2018). Chlorophylls: Chemistry and Biological Functions. *Fruit and Vegetables Phytochemicals: Chemistry and Human Health*, Vol. I, 2nd Edition. *John Wiley & Sons Ltd*.
- Pichersky, E., Gershenson, J. (2002). The Formation and Function of Plant Volatils: Perfumes for Pollinator Attraction and Defense. *Elsevier Science Ltd*.
- Pichersky, E., Noel, J. P., Dudareva, N. (2006). Review: Biosynthesis of Plant Volatils: Nature's Diversity and Ingenuity. *Sciencemag.org*.
- Pino, J. A., Marbot, R., Fuentes, V. (2003). Characterization of Volatils in Bullock's Heart (*Annona reticulata* L.) Fruit Cultivars from Cuba. *Journal of Agricultural and Food Chemistry*.
- Pino, J., Fuentes, V., Barrios, O. (2011). Volatile Constituents of Cachucha Peppers (*Capsicum chinense* Jacq.) Grown in Cuba. *Journal of Agricultural and Food Chemistry*.
- Putriani, N., Perdana, J., Meiliana., and Nugrahedi, P.Y. (2020). Effect of Thermal Processing on Key Phytochemical Compounds in Green Leafy Vegetables: A Review. *Food Reviews International*. DOI: 10.1080/87559129.2020.1745826
- Rajan, N.S., and Bhat, R. (2017). Volatil constituents of unripe and ripe kundang fruits (*Bouea macrophylla* Griffith), *International Journal of*

Food Properties, 20:8, 1751-1760, DOI:
10.1080/10942912.2016.1218892

- Reineccius, G. (2005). Flavor Chemistry and Technology. Boca Raton: CRC Press.
- Revianto., Rahayu, A., Mulyaningsih, Y. (2017). Pertumbuhan dan Produksi Tanaman Kenikir (*Cosmos caudatus* Kunth.) pada Berbagai Tingkat Naungan. Jurnal Agronida ISSN 2407-9111 Volume 3 Nomor 2.
- Ridley, H.N. (1923). The Flora Of The Malay Peninsula: Gamopetalae, Volume 2. Vol. 2. 1923: Reeve & Company. 672.
- Schwab, W., Davidovich-Rikanati, R., Lewinsohn, E. (2008). Biosynthesis of Plant-derived Flavor Compounds. *The Plant Journal*.
- Spyropoulou, E. A., Dekker, H. L., Steemers, L., Maarseveen, J. H., Koster, C. G., Haring, M. A., Schuurink, R. C., Allman, S. (2017). Identification and Characterization of (3Z):(2E)-Hexenal Isomerases from Cucumber. *Frontiers in Plant Science*.
- Sporkert, F., Pragst, F. (2000). Use of Headspace Solid-Phase Microextraction (HS-SPME) in hair Analysis for Organic Compounds. *Forensics Science International*.
- Schmidt, K., Podmore, I. (2015). Solid Phase Microextraction (SPME) Method Development in Analysis of Volatile Organic Compounds (VOCs) as Potential Biomarkers of Cancer. *Journal of Molecular Biomarkers*.
- Sultana, B., Anwar, F., and Iqbal, S. (2008). Effect of different cooking methods on the antioxidant activity of some vegetables from Pakistan. *International Journal of Food Science and Technology* 2008, 43, 560–567.
- Sun, H., Mu, T., Xi, L., and Song, Z. (2014). Effects of Domestic Cooking Methods on Polyphenols and Antioxidant Activity of Sweet Potato Leaves. *Journal of Agricultural and Food Chemistry* 2014, 62, 8982–8989. dx.doi.org/10.1021/jf502328d
- Susila, A.D., Syukur, M., Dharma, H.P.K., Gunawan, E., dan Evi. (2012). Koleksi dan Identifikasi: Tanaman Sayuran Indigenous. Pusat Kajian Hortikultura Tropika: Bogor.

- Tee ES., Mohd. Ismail N., Mohd Nasir A., and Khatijah I. (1997). Nutrient Composition of Malaysian Foods. 4th ed. Kuala Lumpur: Institute for Medical Research.
- Thi, N.D., and Hwang, E. (2015). Effects of Different Cooking Methods on Bioactive Compound Content and Antioxidant Activity of Water Spinach (*Ipomoea aquatica*). *Food Sci. Biotechnol.* 2015, 24(3): 799-806. DOI 10.1007/s10068-015-0104-1.
- Tijskens LMM, Schijvens EPHM, Biekman ES. 2001. Modelling the change in colour of broccoli and green beans during blanching. *Innov Food Sci Emerg Technol*.
- Uzbek, U., and Shahidan, W. (2019). Tasty Herb that Heals: A Review of *Cosmos caudatus* (Ulam Raja) and its Potential Uses in Dentistry. *World Journal of Dentistry, Volume 10 Issue 4*.
- Waldron, K. W., Smith, A. C., Parr, A. J., Ng, A., and Parker, M. L. (1997). New Approaches to Understanding and Controlling Cell Separation in Relation to Fruit and Vegetable Texture. *Trends Food Sci. Technol.* 1997, 8(7), 213–221.
- Wang, Y., Yang, C., Li, S., Yang, L., Wang, Y., Zhao, J., Jiang, Q. (2009). Volatil Characteristics of 50 Peaches and Nectarines Evaluated by HP-SPME with GC-MS. *Elsevier Food Chemistry*.
- Wartini, N., Ina, P., dan Putra, G.P. (2010). Perbedaan Kandungan Senyawa Volatil Daun Salam (*Eugenia polyantha* Wight) pada Beberapa Proses Curing. *Agritech, Vol.30*.
- Wieczorek, M.N., and Jelen, H.H. (2019). Volatil Compounds of Selected Raw and Cooked Brassica Vegetables. *Molecules* 2019, 24, 391. DOI: 10.3390/molecules24030391.
- Yang, W., Lu, X., Zhang, Y., and Qiao Y. (2019). Effect of cooking methods on the health-promoting compounds, antioxidant activity and nitrate of tatsoi (*Brassica rapa* L. ssp. *narinosa*). *Journal of Food Processing and Preservation*. DOI: 10.1111/jfpp.14008.
- Yao, Y., and Ren, G. (2011). Effect of thermal treatment on phenolic composition and antioxidant activities of two celery cultivars. *Food*

Science and Technology 44 (2011) 181-185.

DOI:10.1016/j.lwt.2010.07.001.

Zellner, B. D., Amorim, A. C. L., Miranda, A. L. P., Alves, R. J. V., Barbosa, J. P., Costa, G. L., Rezende, C. M. (2009). Screening of the Odour-Activity and Bioactivity of the Essential Oils of Leaves and Flowers of *Hyptis Passerina* Mart. From the Brazillian Cerrado. *Journal of The Brazillian Chemical Society*.

Zhang, Q., Lin, X., Gai, Y., Ma, Q., Zhao, W., Fang, B., Long, B., Zhang, W. (2018). Kinetic and Mehanistic Study on Gas Phase Reactions of Ozone with a Series of *Cis*-3-Hexenyl Esters.

Zhang, L., Mi, S., Liu, R., Sang, Y., Wang, X. (2020). Evaluation of Volatile Compounds During the Fermentation Process of Yogurts by *Steptococcus thermophiles* Based on Odor Activity Value and Heat Map Analysis. *Hindawi International Journal of Analytical Chemistry*.