

## BIBLIOGRAPHY

- Abbasi, A.M., Guo, X., Fu, X., Zhou, L., Chen, Y., Zhu, Y., Yan, H., Liu, R.H. 2015. Comparative assessment of phenolic content and in vitro antioxidant capacity in the pulp and peel of mango cultivars. *International Journal of Molecular Sciences*, 16(6): 13507–13527.
- Abdalla, A. E. M., Darwish, S. M., Ayad, E. H. E., El-Hamahmy, R. M. 2007. Egyptian mango by-product 2: Antioxidant and antimicrobial activities of extract and oil from mango seed kernel. *Food Chemistry*, 103(4): 1141–1152.
- Abdalla, A. E. M., Darwish, S. M., Ayad, E. H. E., El-Hamahmy, R. M. 2007. Egyptian mango by-product 1. Compositional quality of mango seed kernel. *Food Chemistry*, 103(4): 1134–1140.
- Abdillah, D., Siswoyo, T. A., Soedradjad, R. 2015. Pengaruh cekaman kekeringan terhadap kandungan fenolik dan antioksidan tanaman sorgum (*Sorghum bicolor* L. Moench) pada fase awal vegetatif. *Berkala Ilmiah Pertanian* 1(1).
- Ahmad, A. F., Youssef, M. S. H. 2015. Chemical composition and bioactive properties of *Illicium verum* (star-anise) extracts prepared by different methods. *Journal of Sciences J. Chem. Bio.Phy. Sci. Sec. A*, 55(22), 1160–1170.
- August, J. T., Murad, F., Anders, M. W., Coyle, J. T., Packer, L. 1996. *Antioxidants in Disease Mechanisms and Therapy*. Elsevier Science, Amsterdam.
- Araujo, L, Bispo, W.M.S., Rios, J.A., Fernandes, S.A., Rodrigues, F.A. 2016. Alkaloids and phenolics biosynthesis increases mango resistance to infection by *Ceratocystis fimbriata*. *Bragantia* 75 (2):199–211.
- Baloch, M. K., F. Bibi. 2012. Effect of harvesting and storage conditions on the post-harvest quality and shelf life of mango (*Mangifera indica* L.) Fruit. *South African Journal of Botany* 83:109–16.
- Berardini, N., Carle, R., Schieber, A. 2004. Characterization of gallotannins and benzophenone derivatives from mango (*Mangifera indica* L. cv. “Tommy Atkins”) peels, pulp and kernels by high-performance liquid chromatography/electrospray ionization mass spectrometry. *Rapid Communications in Mass Spectrometry*, 18 (19), 2208–2216.
- Berardini, N., Fezer, R., Conrad, J., Beifuss, U., Carl, R., Schieber, A. 2005. Screening of mango (*Mangifera indica* L.) cultivars for their contents of flavonol O- and xanthone C-glycosides, anthocyanins, and pectin. *Journal of Agricultural and Food Chemistry*, 53(5), 1563–1570.

- Berardini, N., Knödler, M., Schieber, A., & Carle, R. 2005. Utilization of mango peels as a source of pectin and polyphenolics. *Innovative Food Science and Emerging Technologies*, 6(4), 442–452.
- Bompard, J.M. and Schnell, R.J. 1997. Taxonomy and Systematics. In: Litz, R.E., Ed., “The Mango: Botany, Production and Uses”, CAB Intl., Wallingford.
- Bourvellec, C. Le, S. Guyot, C. M.G.C. Renard. 2009. Interactions between apple (*Malus X Domestica Borkh.*) polyphenols and cell walls modulate the extractability of polysaccharides. *Carbohydrate Polymers* 75 (2):251–61.
- Birben, E., Sahiner, U. M., Sackesen, C., Erzurum, S., Kalayci, O. 2012. Oxidative stress and antioxidant defense. *The World Allergy Organization Journal*, 5 (1), 9–19.
- Caballero, B., Finglas, P., Toldra, F. 2015. “Encyclopedia of Food and Health”. Elsevier Science, Amsterdam.
- Carelli, A. A., Franco, I. C., Crapiste, G. H. 2005. Effectiveness of added natural antioxidants in sunflower oil. *Grasas Y Aceites*, 56(4), 303–310.
- Chen, L., Zhang, H. Y. 2007. Cancer preventive mechanisms of the green tea polyphenol (-)-epigallocatechin-3-gallate. *Molecules*. 12 (5): 946-957.
- Cheynier, V. 2012. Phenolic compounds: From plants to foods. *Phytochem. Rev.* 11: 153-177.
- Dai, F., Chen, W. F., & Zhou, B. 2008. Antioxidant synergism of green tea polyphenols with  $\alpha$ -tocopherol and l-ascorbic acid in SDS micelles. *Biochimie*, 90(10), 1499–1505.
- Dar, A., Faizi, S., Naqvi, S., Roome, T., Zikr-ur-Rehman, S., Ali, M., Firdous, S., Moin, S.T. 2005. Analgesic and antioxidant activity of mangiferin and its derivatives: the structure activity relationship. *Biological & Pharmaceutical Bulletin*, 28(4), 596–600.
- Fitmawati, H. A., Purwoko, B.S. 2009. Taksonomi mangga budidaya Indonesia dalam praktik. *J. Agron. Indonesia* 37 (2), 130-37.
- Floegel, A., Kim, D. O., Chung, S. J., Koo, S. I., Chun, O. K. 2011. Comparison of ABTS/DPPH assays to measure antioxidant capacity in popular antioxidant-rich US foods. *Journal of Food Composition and Analysis*, 24 (7), 1043–1048.
- Franke, A. A., Custer, L. J., Arakaki, C., Murphy, S. P. 2004. Vitamin C and flavonoid levels of fruits and vegetables consumed in Hawaii. *Journal of Food Composition and Analysis*, 17 (1), 1-35.
- Giese, J. 1996. Antioxidants: tools for preventing lipid oxidation. *Food Technology*, 50(11), 73–80.
- Godoy, H. T., Rodriguez-Amaya, D. B. 1989. Carotenoid composition of commercial mangoes from Brazil. *Lebensmittel - Wissenschaft + Technologie*, 22(3), 100–103.

- Handayani, R. 2012. Keragaman mangga cengkir di Kabupaten Indramayu. Tesis S1, Departemen Biologi, Fakultas Matematika dan Ilmu Pengetahuan Alam Institut Pertanian Bogor, Bogor.
- Hewavitharana, A. K., Tan, Z. W., Shimada, R., Shaw, P. N., Flanagan, B. M. 2013. Between fruit variability of the bioactive compounds,  $\beta$ -carotene and mangiferin, in mango (*Mangifera indica*). *Nutrition and Dietetics*, 70(2), 158–163.
- Hoang, V. L. T., Innes, D. J., Shaw, P. N., Monteith, G. R., Gidley, M. J., Dietzgen, R. G. 2015. Sequence diversity and differential expression of major phenylpropanoid-flavonoid biosynthetic genes among three mango varieties. *BMC Genomics*, 16(1), 561.
- Hui, Y. H., Chen, F., Nollet, L.M.L., Guiné, R.P.F., Quéré, J.L.L., Martín-Belloso, O., Mínguez-Mosquera, M.I. 2010. *Handbook of Fruit and Vegetable Flavors*. John Wiley and Sons, New Jersey.
- Hutchings, J. B. 1999. *Food Color and Appearance*. Aspen Publishers, Gaithersburg.
- Jothy, S. L., Zuraini, Z., Sasidharan, S. 2011. Phytochemicals screening, DPPH free radical scavenging and xanthine oxidase inhibitory activities of *Cassia fistula* seeds extract. *Journal of Medicinal Plants Research*, 5(10), 1941–1947.
- Kamal-Eldin, A., Appelqvist, L.-Å. 1996. The chemistry and antioxidant properties of tocopherols and tocotrienols. *Lipids*, 31(7), 671–701.
- Kanisius. 1991. *Budi Daya Tanaman Mangga*. Deresan, Yogyakarta: Kanisius.
- Kaur, C., Kapoor, H. C. 2008. Antioxidants in fruits and vegetables - the millennium's health. *International Journal of Food Science & Technology*, 36(7), 703–725.
- Kencanaputra, R. 2014. *Outlook Komoditi Mangga*. Pusat Data dan Sistem Informasi Pertanian: Sekretaris Jenderal Kementerian Pertanian, Jakarta.
- Khoo, H. E., Prasad, K. N., Kong, K. W., Jiang, Y., Ismail, A. 2011. Carotenoids and their isomers: Color pigments in fruits and vegetables. *Molecules*.
- Kim, J. D., Liu, L., Guo, W., Meydani, M. 2006. Chemical structure of flavonols in relation to modulation of angiogenesis and immune-endothelial cell adhesion. *Journal of Nutritional Biochemistry*, 17(3), 165–176.
- Kim, Y., Brecht, J. K., Talcott, S. T. 2007. Antioxidant phytochemical and fruit quality changes in mango (*Mangifera indica* L.) following hot water immersion and controlled atmosphere storage. *Food Chemistry*, 105(4), 1327–1334.
- Luo, F., Lv, Q., Zhao, Y., Hu, G., Huang, G., Zhang, J., Chen, K. 2012. Quantification and purification of mangiferin from Chinese mango (*Mangifera indica* L.) cultivars and its protective effect on human

- umbilical vein endothelial cells under H<sub>2</sub>O<sub>2</sub>-induced stress. *International Journal of Molecular Sciences*, 13(9), 11260–11274.
- Ma, X., Wu, H., Liu, L., Yao, Q., Wang, S., Zhan, R., Zhou, Y. 2011. Polyphenolic compounds and antioxidant properties in mango fruits. *Scientia Horticulturae*, 129(1), 102–107.
- Malundo, T. M. M., Shewfelt, R. L., Ware, G. O., Baldwin, E. A. 2001. Sugars and Acids Influence Flavor Properties of Mango (*Mangifera indica*). *J. Amer. Soc. Hort. Sci.*, 126(1), 115–121.
- Manach, C., Williamson, G., Morand, C., Scalbert, A., Rémésy, C. 2005. Bioavailability and bioefficacy of polyphenols in humans. I. Review of 97 bioavailability studies. *The American Journal of Clinical Nutrition*. 81(1): 230-242.
- Mancini, R. A., M. C. Hunt, M. Seyfert, D. H. Kropf, K. A. Hachmeister, T. J. Herald, D. E. Johnson. 2007. Effects of ascorbic and citric acid on beef lumbar vertebrae marrow colour. *Meat Science* 76 (3):568–73.
- Manthey, J. A., Penelope, P. V. 2009. Influences of harvest date and location on the levels of  $\beta$ -carotene, ascorbic acid, total phenols, the in vitro antioxidant capacity, and phenolic profiles of five commercial varieties of mango (*Mangifera indica* L.). *Journal of Agricultural and Food Chemistry*, 57(22): 10825–10830.
- Maršić, K., Gašperlin, N. L., Abram, V., Budič, M., Vidrih, R. 2011. Quality parameters and total phenolic content in tomato fruits regarding cultivar and microclimatic conditions. *Turkish Journal of Agriculture and Forestry* 35 (2):185–94.
- Korzybski, T., Kowszyk-Gindifer, Z., Kurylowicz, W. 2013. *Antibiotics: Origin, Nature and Properties*. Elsevier Science, Amsterdam.
- Masibo, M., He, Q. 2009. Mango bioactive compounds and related nutraceutical properties-A review. *Food Reviews International*. 7, 309-319.
- Matkowski, A., Kus, P., Goralska, E., Wozniak, D. 2013. Mangiferin - a bioactive xanthonoid, not only from mango and not just antioxidant. *Mini Reviews in Medicinal Chemistry*, 13(3), 439–455.
- Nobel, Park S. 2009. *Physicochemical and Environmental Plant Physiology*. Academic Press, California.
- Noratto, G. D., Bertoldi, M. C., Krenek, K., Talcott, S. T., Stringheta, P. C., Mertens-Talcott, S. U. 2010. Anticarcinogenic effects of polyphenolics from mango (*Mangifera indica*) varieties. *Journal of Agricultural and Food Chemistry*, 58(7), 4104–4112.
- Ornelas-Paz, J. D. J., Yahia, E. M., Gardea-Bejar, A. 2007. Identification and quantification of xanthophyll esters, carotenes, and tocopherols in the fruit of seven Mexican mango cultivars by liquid chromatography-atmospheric pressure chemical ionization-time-of-flight mass spectrometry [LC-



- (APcI+)-MS]. *Journal of Agricultural and Food Chemistry*, 55(16), 6628–6635.
- Padayachee, A., Netzel, G., Netzel, M., Day, L., Zabaras, D., Mikkelsen, D., Gidley, M. J. 2012. Binding of polyphenols to plant cell wall analogues - part 1: anthocyanins. *Food Chemistry* 134 (1):155–61.
- Padayachee, A., Netzel, G., Netzel, M., Day, L., Zabaras, D., Mikkelsen, D., Gidley, M. J. 2012. Binding of polyphenols to plant cell wall analogues - part 2: phenolic acids. *Food Chemistry* 135 (4):2287–92.
- Pękal, A., Pyrzynska, K. 2014. Evaluation of aluminium complexation reaction for flavonoid content assay. *Food Analytical Methods* 7 (9):1776–82.
- Perkins-Veazie, P. 2007. Carotenoids in watermelon and mango. In *Acta Horticulturae* (Vol. 746, pp. 259–264).
- Philippine Council for Agriculture and Natural Resources Research and Development, Los Banos, Laguna (Philippines). Dept. of Science and Technology, Forestry. 2007. “Banana, Mango, and Pineapple, Leading Fruit Produced and Traded Worldwide.” PCARRD Highlights 2006 (Philippines).
- Pracaya, I. 2001. *Bertanam Mangga*. Cimanggis, Depok: Penerbit Swadaya.
- Proctor, J. T.A., Creasy, L. L. 1969. The anthocyanin of the mango fruit. *Phytochemistry*, 8, 2108.
- PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. <http://www.proseanet.org/> Accessed from Internet: 27-Jun-2017
- Rao, K. S., Keshar, N. K., Kumar, R. 2012. A comparative study of polyphenolic composition and In-vitro antioxidant activity of *Illicium verum* extracted by microwave and soxhlet extraction techniques. *Indian Journal of Pharmaceutical Education and Research*, 46(3), 228–234.
- Ribeiro, S. Rastraelli, L., Selles, A.J.N., Castro, H.T.V., Aguero J., Gonzalez J., Naddeo, F., Simone, F.D. 2002. Isolation and quantitative analysis of phenolic antioxidants, free sugars, and polyols from mango (*Mangifera indica* L.) stem bark aqueous decoction used in Cuba as a nutritional Supplement. *J Agric Food Chem* 50:762–6.
- M. R., Barbosa, L. C. A., Queiroz, J. H., Knödler, M., Schieber, A. 2008. Phenolic compounds and antioxidant capacity of Brazilian mango (*Mangifera indica* L.) varieties. *Food Chemistry*, 110(3), 620–626.
- Ribeiro, R., Queiroz, J. H., Queiroz, L.R., Campos, F. M., Sant’ana, P. 2007. Antioxidant in mango (*Mangifera indica* L.) pulp. *Plant Foods for Human Nutrition* (Dordrecht, Netherlands), 62(1), 13–7.
- Schieber, A., Berardini, N., & Carle, R. 2003. Identification of flavonol and xanthone glycosides from mango (*Mangifera indica* L. cv. “Tommy Atkins”) peels by high-performance liquid chromatography-electrospray

- ionization mass spectrometry. *Journal of Agricultural and Food Chemistry*, 51(17), 5006–5011.
- Schieber, A., Ullrich, W., Carle, R. 2000. Characterization of polyphenols in mango puree concentrate by HPLC with diode array and mass spectrometric detection. *Innovative Food Science & Emerging Technologies*, 1(2), 161–166.
- Pannala, S., A., Chan, T. S., O'Brien, P. J., Rice-Evans, C. A. 2001. Flavonoid B-ring chemistry and antioxidant activity: fast reaction kinetics. *Biochemical and Biophysical Research Communications*, 282(5), 1161–1168.
- Siatka, T., Kašparová, M. 2010. Seasonal variation in total phenolic and flavonoid contents and DPPH scavenging activity of *Bellis Perennis* L. flowers. *Molecules* 15 (12): 9450–9461.
- Soemarno. 2011. Optimalisasi Sistem Agribisnis Mangga dalam Rangka Memenuhi Ekspor Non-Migas Jawa Timur. Available from: [marno.lecture.ub.ac.id/files/2012/02/optimalisasi-sistem-agribisnis-komoditi-mangga.doc](http://marno.lecture.ub.ac.id/files/2012/02/optimalisasi-sistem-agribisnis-komoditi-mangga.doc). Accessed January 12th, 2018.
- Stahl, W., Sies, H. 2003. Antioxidant activity of carotenoids. *Molecular Aspects of Medicine*, 24: 345-351.
- Sukonthasing, S., Wongrakpanich, M. Verheij, E.W.M., 1991. *Mangifera indica* L. [Internet] Record from Proseabase. Verheij, E.W.M. and Coronel, R.E. (Editors).
- Sudarmaji, S., Haryono, B. 1997. "Prosedur Analisa untuk Bahan Makanan dan Pertanian". Liberty, Yogyakarta.
- Tardif, J. C., Bourassa, M. G. 2012. "Antioxidants and Cardiovascular Disease". Springer, Netherlands.
- US Department of Agriculture, Agricultural Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Release 28. Version Current: September 2015, slightly revised May 2016. Internet: <https://www.ars.usda.gov/nea/bhnrc/ndl/nea/bhnrc/ndl>. Accessed December 12<sup>th</sup>, 2018.
- Van Alfen, N. K. 2014. *Encyclopedia of Agriculture and Food Systems*. Elsevier Science, Amsterdam.
- Vásquez-Caicedo, A. L., Sruamsiri, P., Carle, R., Neidhart, S. 2005. Accumulation of all-trans- $\beta$ -carotene and Its 9-cis and 13-cis stereoisomers during postharvest ripening of nine thai mango cultivars. *Journal of Agricultural and Food Chemistry*, 53 (12): 4827–4835.
- Vermerris, W., & Nicholson, R. 2006. "Phenolic Compound Biochemistry". Springer, Netherlands.

- Wang, Y., Liu, J., Chen, F., Zhao, G. 2013. Effects of molecular structure of polyphenols on their noncovalent interactions with oat  $\beta$ -glucan. *Journal of Agricultural and Food Chemistry* 61 (19):4533–38.
- Yuliani. 2015. Kajian Senyawa Fenolik Dari Tumbuhan *Asteraceae* Pada Berbagai Ketinggian Habitat Sebagai Pengendali *Spodoptera Litura*, Fab. Doctor thesis, Universitas Brawijaya, Jawa Timur.

