

DAFTAR PUSTAKA

- Akhtar, M., Israr, B., Bhatti, N., and Ali, A. 2011. Effect of Cooking on Soluble and Insoluble Oxalates in Selected Pakistani Vegetables and Beans. *International Journal of Food Properties* 14: 241 – 249.
- Akubugwo, I. E., N. A. Obasi, G. C. Chinyere, and A. E. Ugbogu. 2007. Nutritional and Chemical Value of *Amaranthus hybridus* L. Leaves from Afikpo, Nigeria. *African Journal of Biotechnology* 6 (24): 2833-2839.
- Alelign, T. and B. Petros. 2018. Kidney Stone Disease: An Update on Current Concepts. *Advances in Urology* 2018 (1):1-12.
- Anitha, R. and Sandhiya, T. 2014. Occurrence of Calcium Oxalate Crystals in the Leaves of Medicinal Plants. *International Journal Pharmacognosy* 1(6): 389-393.
- Asplin, J. R. 2002. Hyperoxaluric Calcium Nephrolithiasis. *Endocrinology Metabolism Clin. North. Am.* 31(4): 927-49.
- Balai Penelitian Tanaman dan Sayuran. 2014. Bayam Varietas Giti Hijau. <http://balitsa.litbang.pertanian.go.id/ind/index.php/varietas/cabai/36halaman/677bayam-varietas-giti-hijau>. [3Desember 2018].
- Balai Penelitian Tanaman dan Sayuran. 2014. Bayam Varietas Giti Merah. <http://balitsa.litbang.pertanian.go.id/ind/index.php/varietas/cabai/36halaman/677bayam-varietas-giti-merah>. [3Desember 2018].
- Bhasin, B., H. M. Ürekli, and M. G. Atta. 2015. Primary and Secondary Hyperoxaluria: Understanding the Enigma. *World Journal Nephrology* 4 (2): 235–244.

- Budyanto, S. 1987. *PAU Pangan dan Gizi*. IPB Press, Bogor.
- Burri, B. J. 1997. Beta-Carotene and Human Health: A Review of Current Research. *Nutrition Research* 17 (3): 547-580.
- Cai, X., C. Ge, C. Xu, X. Wang, S. Wang and Q. Wang. 2018. Expression Analysis of Oxalate Metabolic Pathway Genes Reveals Oxalate Regulation Patterns in Spinach. *Molecules* 23 (1286): 1-15.
- Chandra-Hioe, M.V., H. H. Rahman and J. Arcot. 2017. Lutein and β -Carotene in Selected Asian Leafy Vegetables. *Journal of Food Chemistry and Nanotechnology* 3 (3): 93-97.
- Chandra, B., Zulharmia, dan A. D. H. Handayani. 2017. Analisis Kandungan β -karoten pada Daun Bayam Merah (*Amaranthus hybridus* L.) dengan Metode Spektrofotometri Visibel. *Jurnal Farmasi Higea* 9 (2): 149-153.
- Cho, K. S., M. Shin, S. Kim, and S. B. Lee. 2018. Recent Advances in Studies on The Rapeutic Potential of Dietary Carotenoids in Neurodegenerative Diseases. *Oxidative Medicine and Cellular Longevity* 2018: 1-13.
- Direktorat Jenderal Holtikultura, Kementerian Pertanian. 2015. *Statistik Produksi Holtikultura tahun 2014*. Direktorat Jenderal Holtikultura, Kementerian Pertanian, Jakarta.
- Du, X., X. Ren, L. Wang, K. Yang, G. Xin, G. Jia, X. Ni, and W. Liu. 2018. Calcium Oxalate Degradation is Involved in Aerenchyma Formation in *Typha angustifolia* Leaves. *Functional Plant Biology* 45: 922– 934.
- Elia, A., P. Santamaria, and F. Serio. 1998. Nitrogen Nutrition, Yield and Quality of Spinach. *Journal Sci. Food Agr.* 76:341–346.

- El – Shabrawi, H. M., B. A Bakry, M. A. Ahmed, and M. A. El – Lail. 2015. Humic and Oxalic Acid Stimulates Grain Yield and Induces Accumulation of Plastidial Carbohydrate Metabolism Enzymes in Wheat Grown under Sandy Soil Conditions. *Agricultural Sciences* 6: 175–185.
- Fatimah, S. 2009. Studi Kadar Klorofil dan Zat Besi (Fe) pada Beberapa Jenis Bayam terhadap Jumlah Eritrosit Tikus Putih (*Ratus norvegicus*) Anemia. *Skripsi*. Program Studi Biologi Fakultas Sain dan Teknologi Universitas Islam Negeri Maulana Malik Ibrahim Malang, Malang.
- Fiedor, J. and K. Burda. 2014. Potential Role of Carotenoids as Antioxidants in Human Health and Disease. *Nutrients* 6: 466-488.
- Franceschi, V. R., and H. T. Horner. 1980. Calcium Oxalate Crystals in Plants. *Bot. Rev.* 46 (6): 361- 416.
- Franceschi, V. R. and P. A. Nakata. 2005. Calcium Oxalate in Plants: Formation and Function. *Annu. Rev. Plant Biol.* 56:41–71.
- Ghaly, F.M., G. A. Baddour and H. M. El-Azazy. 2017. Nitrate Accumulation and Oxalate Formation in Spinach Plants (*Spinacia oleracea* L.) as Affected by Nitrogen Fertilization levels and Iron Foliar Application. *J. Soil Sci. and Agric. Eng., Mansoura Univ.* 8 (11): 571 – 576.
- Grune, T. G. Lietz, A. Palou, A. C. Ross, W. Stahl, G. Tang, D. Thurnham, S. Yin, and H. K. Biesalski. 2010. β -Carotene Is an Important Vitamin A Source for Humans. *Journal of Nutrition* 140 (12): 2268–2285.

- Guil, J. L., M. E. Torija, J. J. Gimenez, I. R. Garcia, and A. Gimenez. 1996. Oxalic Acid and Calcium Determination in Wild Edible Plants. *Journal Agri. Food Chem.* 44 (7):1821-1823.
- Gul, Z. and M. Monga. 2014. Medical and Dietary Therapy for Kidney Stone Prevention. *Korean Journal of Urology* 55: 775-779.
- Gupta, S., A. J. Lakshmi, M. N. Manjunath, and J. Prakash. 2005. Analysis of Nutrient and Antinutrient Content of Underutilized Green Leavy Vegetable. *LWT.* 38: 339- 345.
- Hanson, P., Y. Ray-Yu, C. Lien-chunget, L. Ledesma, and D. Ledesma. 2009. Contents of Carotenoids, Ascorbic Acid, Minerals and Total Glucosinolates in Leafy Brassica Pakchoi (*Brassica rapa L. chinensis*) as Affected by Season and Variety. *Journal of the Science of Food and Agriculture* 89 (5): 906-914.
- Harun, H. 2019. Hiperoksaluria Primer. *Medika Tadulako, Jurnal Ilmiah Kedokteran* 6(2): 1-19.
- Hodgkinson, A. 1977. *Oxalic Acid in Biology and Medicine*. Academic Press, London.
- Horner, H. T., A. P. Kausch, and B. L. Wagner. 2000. Ascorbic Acid: a Precursor of Oxalate in Crystal Idioblasts of *Yucca Torreyi* in Liquid Rot Culture. *International Journal Plant Science* 161: 861-868.
- Islam, M. N. and M. Kawasaki. 2014. Morphological Changes and Function of Calcium Oxalate Crystals in Eddo Roots in Hydroponic Solution

- Containing Calcium at Various Concentrations. *Plant Production Science* 17(1): 13-19.
- Jiang, Z. L, M. X. Zhao, and L. X. Liao. 1996. Catalytic Spectrophotometric Methods for Determination of Oxalic Acid. *Analytical Chemical Acta* 320: 139-143.
- Kanabur, V. and R. P. L. Reddy. 2014. Bioactive Components of Spinach and Their Effect on Some Patho Physiological Condition: A Review. *International Journal Cur. Res. Rev.* 6(9): 156-166.
- Kaminishi, A. and N. Kita. 2006. Seasonal Change of Nitrate and Oxalate Concentration in Relation to The Growth Rate of Spinach Cultivars. *Hort-Science* 41:1589–1595.
- Keates, S. E., N. M. Tarlyn, F. A. Loewus, and V. R. Franceschi. 2000. L-Ascorbic Acid and L-Galactose are Sources for Oxalic Acid and Calcium Oxalate in *Pistia Stratoites*. *Phytochemistry* 53: 433-440.
- Khandaker, L., A.S.M. G. M. Akond, S. Oba. 2009. Air Temperature and Sunlight Intensity of Different Growing Period Affect the Biomass, Leaf Color and Betacyanin Pigment Accumulation in Red Amaranth (*Amaranthus tricolor* L.). *Journal Central European Agriculture* 10 (4): 439-448.
- Libert, B. and V. R. Franceschi. 1987. Oxalate in Crop Plants. *Journal Agr. Food Chem.* 35: 926-938.
- Modi, A. T. 2007. Growth Temperature and Plant Age Influence on Nutritional Quality of *Amaranthus* Leaves and Seed Germination. *Water SA* 33(3): 369-375.

- Muchtar, R., Y. Fudiasta, Sukrido, dan D. Windaryanti. 2017. Analisis Pengaruh Waktu Pemanasan terhadap Kadar Oksalat dalam Bayam Hijau (*Amarantus hybridus*) dengan Menggunakan Metode Spektrofotometri UV- Vis. *Jurnal Sains dan Kesehatan* 1 (8): 415- 421.
- Mwanri A. W., T. F. Mamboleo, J. M. Msuya, and V. F. Gowele. 2017. Oxalate, Phytate and Nitrate Content in African Nightshade, Spider plant and Amaranths at Different Stages of Maturity. *Academic Journal* 12 (11): 316-322.
- Nakata, P. A. 2015. An Assessment of Engineered Calcium Oxalate Crystal Formation on Plant Growth and Development as a Step toward Evaluating Its Use to Enhance Plant Defense. *Plos One* 10(10): 1-15.
- Nakata, P. A. 2012. Plant Calcium Oxalate Crystal Formation, Function, and its Impact on Human Health. *Front. Biol.* 7(3): 254–266.
- Norton, S. K. 2018. Lost Seasonality and Overconsumption of Plants: Risking Oxalate Toxicity. *Journal of Evolution and Health* 2 (3): 5-13.
- Nisa, N., L. Li, S. Lu, N. C. Khin, and B. J. Pogson. 2015. Carotenoid Metabolism in Plants. *Mol. Plant* 8: 68–82.
- Nuari, N. A., dan D. Widayati. 2017. *Gangguan pada Sistem Perkemihan dan Penatalaksana Keperawatan*. Depublish, Yogyakarta.
- Nyonje, W. A. 2015. Nutrient, Anti-nutrients and Phytochemical Evaluation of Ten Amaranth (*Amaranthus spp.*) Varieties at Two Stage of Growth. *Thesis*. Food Science and Nutrition Jomo Kenyatta University of Agriculture and Technology, Kenya.

- Ogawa, Y., Takahashi, S., and R. Kitagawa. 1984. Oxalate Content in Common Japanese Foods. *Acta Urology Jpn.* 30 (3): 305- 310.
- Othman, R. F. A.M. Zaifuddin, and N. M.Hassan.2014. Carotenoid Biosynthesis Regulation Mechanisms in Plants. *Journal of Oleo Science* 63(8): 753-760.
- Parker, R. S. 1989. Carotenoids in Human Blood and Tissues. *Journal of Nutrition* 119: 101–104.
- Pebrianti, C., R. B. Ainurrasyid, dan S. L. Purnamaningsih. 2015. Uji Kadar Antosianin dan Hasil Varietas Enam Tanaman Bayam Merah (*Althenanthera amoena* L.) pada Musim Hujan. *Jurnal Produksi Tanaman* 3 (1): 27-33.
- Plant List. 2012. *Amaranthus tricolor* L. <http://www.theplantlist.org/tpl1.1/record/kew-2633132>. [25 November 2018].
- Pritwani, R. and P. Mathur. 2017. β -carotene Content of Some Commonly Consumed Vegetables and Fruits Available in Delhi, India. *Journal Nutr. Food Sci.* 625: 1-7.
- Radex, M. and G. P. Savage. 2008. Oxalates in Some Indian Green Leafy Vegetables. *International Journal of Food Sciences and Nutrition* 59 (3): 246-260.
- Robertson, D. S. 2011. The Function of Oxalic Acid in the Human Metabolism. *Journal Clin. Chem. Lab. Med.* 49 (9):1405–1412.
- Robijn, S., B. Hoppe, B. A. Vervae, P. C. D'Haese, and A. Verhulst. 2011. Hyperoxaluria: a Gut-Kidney Axis? *Kidney International* 80 (11):1146-1158.

- Robinson, C. H., R. L. Marlilyn, L. C. Wanda, and A. E. Garwick. 1986. Analyzed Summer Vegetables for Their Micronutrient Content. *Journal of Nutrition* 45(8): 497-502.
- Rodriguez-Amaya, D. B. 2000. Some Considerations in Generating Carotenoid Data for Food Composition Tables. *Journal Food Compost Anal.* 13 (4): 641-647.
- Rukmana, R. 1994. *Bayam, Bertanam dan Pengolahan Pasca Panen*. Kanisius, Jakarta.
- Saadi, A. I. and A. K. Mondal. 2012. Distribution of Calcium Oxalate Crystal Containing Idioblasts in The Leaves of *Syngonium podophyllum* Schott. *Int. J. Life Sc. Bt. and Pharm. Res.* 1(2): 227- 235.
- Sarker, U. and S. Oba. 2018. Augmentation of Leaf Color Parameters, Pigments, Vitamins, Phenolic Acids, Lavonoids and Antioxidant Activity in Selected *Amaranthus tricolor* under Salinity Stress. *Sci. Reports* 8 (12349): 1-9.
- Savage, G. dan W. Klunklin. 2018. Oxalate are Found in Many Different European and Asian Food Effect of Cooking and Processing. *Journal of Food Research* 7 (3): 76-81.
- Setiawati, W., R. Murtiningsih, G. A. Sopha, dan T. Handayani. 2007. *Petunjuk Teknis Budidaya Tanaman Sayuran*. Balai Penelitian Tanaman Sayuran, Bandung.
- Sharma, S., S. Vaidyanathan, R. Nath, and S. K. Thind. 1991. Advances in Pathophysiology of Calcium Oxalate Stone Disease. *Ind. Journal Urology* 8: 25-37.

- Shi, A., B Mou, and J. C. Correll. 2016. Association Analysis for Oxalate Concentration in Spinach. *Euphytica* 212(1): 17-28.
- Srivastava, R. 2017. An Updated Review on Phyto-Pharmacological and Pharmacognostical Profile of *Amaranthus tricolor*: A Herb of Nutraceutical Potentials. *The Pharma Innovation Journal* 6 (6): 124-129.
- Sticher, L., C. Penel, and H. Greppin. 1981. Calcium Requirement for the Secretion of Peroxidases by Plant Cell Suspensions. *Journal Cell Sci.* 48: 345-353.
- Sun, T. H. Yuan, H. Cao, M. Yazdani, Y. Tadmor, and L. Li. 2018. Carotenoid Metabolism in Plants: The Role of Plastids. *Mol. Plant* 11: 58-74.
- Tabitha, K. K., Wilson, T. and P. G. O. Joseph. 2018. Morphological Characteristics of *Amaranthus cruentus* and *Amaranthus tricolor* as Influenced by Integration of Organic and Inorganic Fertilizers in Kiambu County. *Asian Research Journal of Agriculture* 8(1): 1-18.
- Thapa, R. dan M. W. Blair. 2018. Morphological Assesment of Cultivated and Wild Amaranth Species Diversity. *Agronomy* 8 (11): 272-280.
- Tooulakou, G., A. Giannopoulos, D. Nikolopoulos, P. Bresta, E. Dotsika, M. G. Orkoula, C. G. Kontoyannis, C. Fasseas, G. Liakopoulos, M. I. Klapa, and G. Karabourniotis. 2016. Alarm Photosynthesis: Calcium Oxalate Crystals as an Internal CO₂ Source in Plants. *Plant Physiology* 171: 2577-2585.
- Trisnawati, E. dan Jumenah. 2018. Konsumsi Makanan yang Berisiko terhadap Kejadian Batu Saluran Kemih. *Jurnal Vokasi Kesehatan* 4 (1): 46-50.

- Tuan, P. A., J. K. Kim, J. Lee, W. T. Park, D. Y. Kwon, Y. B. Kim, H. R. Kim, and S. U. Park. 2012. *Experimental and Clinical Sciences Journal* 11: 508-516.
- Tuazon-Nartea, J. and G. Savage. 2013. Investigation of Oxalate Levels in Sorrel Plant Parts and Sorrel-Based Products. *Food and Nutrition Sciences* 4: 838-843.
- Uusikua, N.P., A. Oelofsea, K. G. Duodub, M. J. Besterc, and M. Faberd. 2010: Nutritional Value of Leafy Vegetables of Sub-Saharan Africa and Their Potential Contribution to Human Health: A Review. *Journal of Food Composition and Analysis* 23: 499–509.
- Yothsna, R., M. A. Kiran, M. Mustaq, G. Rao, and A. Kumar. 2017. Research on Awareness and Prevention, Identify New Symptoms, Natural Remedie, Treatment, Lifestyle Change, Risk Factors of Kidney Stones (Renal Caluculi) by Involving Role and Patient Councelling of Doctor of Pharmacy. *International Journal of Medical Research and Pharmaceutical Sciences* 4 (1): 7-20.
- Yuan, H., J. Zhang, D. Nageswaran, and L. Li. 2015. Carotenoid Metabolism and Regulation in Horticultural Crops. *Horticultura Reseach* 2: 1-11.