

BIBLIOGRAPHY

- Aadil, R. M., Zeng, X. A., Han, Z., & Sun, D. W., 2013. Effects of ultrasound Treatments on Quality of Grapefruit Juice. *Food Chemistry*, 141(3), 3201–3206.
- Abdel-Aal, E.M., Young, J.C., & Rabalski, I. 2006. Anthocyanin Composition in Black, Blue, Pink, Purple, and Red Cereal Grains. *Agriculture and Food Chemistry*, 54, 4696–4704.
- Andersen, O.M. & Jordheim, M. 2006. The Anthocyanins. In: Andersen, O.M. and Markham, K.R., Eds., *Flavonoids Chemistry, Biochemistry and Applications*, CRC Press, Taylor and Francis, Boca Raton, 471-551
- Anonim, 2009. The United States Pharmacopeia, 32nd E-Book PC, General chapter information <1225. United States Pharmacopeia Convention, Inc., New York.
- Anonim. 2007. United State Pharmacopeia, XXX Edition, Rockville, USA
- AOAC. 2002. Guidelines for Single Laboratory Validation of Chemical Methods for Dietary Supplements and Botanicals, AOAC International.
- Asem, I. D., Imotomba, R. K., Mazumder, P. B., & Laishram, J. M. 2015. Anthocyanin Content in the Black Scented Rice (Chakhao): Its Impact on Human Health and Plant Defense. *Symbiosis*, 66(1), 47–54.
- Bae, I.Y., An, J.S., Oh, I.K., & Lee, H.G. 2017. Optimized Preparation of Anthocyanin-Rich Extract from Black Rice and its Effects on *in vitro* Digestibility. *Food Science and Biotechnology*, 26(5), 1415–1422.
- Bordonaba, J.G., Crespo, P., & Terry, L.A. 2011. A New Acetonitrile-free Mobile Phase for HPLC-DAD Determination of Individual Anthocyanins in Blackcurrant and Strawberry Fruits: A Comparison and Validation Study. *Food Chemistry*, 129, 1265–1273
- Brachet, A., Rudaz, S., Mateus, L., & Christen, P. 2001. Optimisation of Accelerated Solvent Extraction of Cocaine and Benzoylcegonine from Coca Leaves. *Journal of Sep. Sci.* 24. 865–873.
- Carrera, C., Ruiz-Rodriguez, A., Palma, M., & Barroso, C. G., 2012. Ultrasound Assisted Extraction of Phenolic Compounds from Grapes. *Analytica Chimica Acta*, 732, 100–104
- Castañeda-Ovando, A., Pacheco-Hernández, M. de L., Páez-Hernández, M. E., Rodríguez, J. A., & Galán-Vidal, C. A. 2009. Chemical Studies of Anthocyanins: A review. *Food Chemistry*, 113(4), 859–871.
- Chemat, F. & Khan, M. K. 2011. Ultrasonics Sonochemistry Applications of Ultrasound in Food Technology: Processing, Preservation and Extraction. *Ultrasonics - Sonochemistry*, 18(4), 813–835.



- Chemat, F., Rombaut, N., Sicaire, A. G., Meullemiestre, A., Abert-vian, M., Fabiano-Tixier, A. S., & Abert-vian, M., 2017. Ultrasonics Sonochemistry Ultrasound Assisted Extraction of Food and Natural Products. Mechanisms, Techniques, Combinations, Protocols and Applications. A review. *Ultrasonics - Sonochemistry*, 34, 540–560.
- Chemat, F., Zill-E-Huma, & Khan, M. K., 2011. Applications of Ultrasound in Food Technology: Processing, Preservation and Extraction. *Ultrasonics Sonochemistry*, 18(4), 813–835.
- Chen, M., Zhao, Y., & Yu, S. (2015). Optimisation of ultrasonic-assisted extraction of phenolic compounds, antioxidants, and anthocyanins from sugar beet molasses. *Food Chemistry*, 172, 543–550
- Clifford, M. N. 2000. Anthocyanins – Nature, Occurrence and Dietary Burden. *Journal of the Science of Food and Agriculture*, 1072, 176–181.
- Das, A. B., Goud, V.V., & Das, C. 2017. Extraction of phenolic compounds and anthocyanin from black and purple rice bran (*Oryza sativa* L.) using ultrasound: A comparative analysis and phytochemical profiling. *Industrial Crops and Products*, 95, 332-341
- Dranca, F. & Oroian, M., 2016 Optimization of ultrasound-assisted extraction of total monomeric anthocyanin (TMA) and total phenolic content (TPC) from eggplant (*Solanum melongena* L.) Peel. *Ultrasonics Sonochemistry*, 31, 637–646
- Fan, G., Han, Y., Gu, Z., & Chen, D. 2008. Optimizing conditions for anthocyanins extraction from purple sweet potato using response surface methodology (RSM). *LWT*, 41, 155–160
- Ghassempour, A., Heydari, R., Talebpour, Z., Fakhari, A.R., Rassouli, A., Davies, N., & Aboul-Enein, H. Y. 2008. Study of New Extraction Method for Separation of Anthocyanins from Red Grape Skin: Analysis by HPLC and LC-MS/MS. *Liquid Chromatography & Related Technologies*, 31, 2686-2703.
- Gras, C.C., Carle, R., & Schweiggert, R.M., 2015 Determination of anthocyanins from black carrots by UHPLC-PDA after ultrasound-assisted extraction. *Food Composition and Analysis*, 44, 170–177.
- Gritter R.J., Bobbic, J.N., dan Schwarting, A.E., 1991, *Pengantar Kromatografi. Edisi Kedua. Terjemahan* K. Padmawinata, Bandung, ITB
- Hao, J., Zhu, H., Zhang, Z., Yang, S., & Li, H. 2015. Identification of Anthocyanins in Black Rice (*Oryza sativa* L.) by UPLC / Q- TOF-MS and Their *in vitro* and *in vivo* Antioxidant Activities. *Journal of Cereal Science* 64, 92–99.
- Harakotr, B., Suriharn, B., Tangwongchai, R., Paul, M., & Lertrat, K. 2014. Anthocyanin, Phenolics and Antioxidant Activity Changes in Purple Waxy Corn as Affected by Traditional Cooking. *Food Chemistry*, 164, 510–517.



- Harmita. 2004. *Petunjuk Pelaksanaan Validasi Metode dan Cara Perhitungannya. Majalah Ilmu Kefarmasian*, Vol. I, No 3.117-135. *Departemen Farmasi FMIPA Universitas Indonesia*, Jakarta.
- Hiemori, M., Koh, E., & Mitchell, A. E., 2009 Influence of Cooking on Anthocyanin in Black Rice (*Oryza sativa* L. japonica var. SBR). *Agricultural and Food Chemistry*. 57 (5), 1908-1914.
- Hosseinian, F.S., Li, W., & Beta, T., 2008. Measurement of Anthocyanins and Other Phytochemicals in Purple Wheat. *Food Chemistry*, 109, 916–924
- Hou, Z., Qin, P., Zhang, Y., Cui, S., & Ren, G. 2013. Identification of Anthocyanins Isolated from Black Rice (*Oryza sativa* L.) and their Degradation Kinetics. *Food Research International*, 50(2), 691–697.
- Jacques, R.A., Freitas, L.S., Peres, V.F., Dariva, C., de Oliveira J.V., & Caramao, E.B. 2006. Chemical Composition of Mate Tea Leaves (*Ilex paraguariensis*): A study of extraction methods. *Sep. Sci*, 29, 2780–2784.
- Jakobek, L., Boc, M., & Barron, A. R. 2015 Optimization of Ultrasonic-Assisted Extraction of Phenolic Compounds from Apples. *Food Anal. Method*, 8:2612–2625
- Johnson, E.L. & Stevenson, R., 1991, *Dasar Kromatografi Cair Kinerja Tinggi*, Penerbit ITB. Bandung.
- Kang, Y. J., Jung, S. W., & Lee, S. J. 2014. An Optimal Extraction Solvent and Purification Adsorbent to Produce Anthocyanins from Black Rice (*Oryza sativa* cv. Heugjinjubyeo). *Food Science and Biotechnology*, 23(1), 97–106.
- Katsampa, P., Valsamedou, E., Grigorakis, S., & Makris, D. P., 2015. A Green Ultrasound-Assisted Extraction Process for the Recovery of Antioxidant Polyphenols and Pigments from Onion Solid Wastes using Box-Behnken Experimental Design and Kinetics. *Industrial Crops and Products*, 77, 535–543.
- Kennedy, G., Burlingame, B., & Nguyen, N. 2002. Nutrient Impact Assessment of Rice in major Rice-Consuming Countries. *International Rice Commission Newsletter*. 51. 33-42.
- Khan, M. K., Abert-Vian, M., Fabiano-Tixier, A. S., Dangles, O., & Chemat, F., 2010. Ultrasound-Assisted Extraction of Polyphenols (flavanone glycosides) from Orange (*Citrus sinensis* L.) peel. *Food Chemistry*, 119(2), 851–858.
- Konczak, I., & Zhang, W. 2004. *Anthocyanins - More than Nature's Colour*. Hindawi Publishing Corporation, 5, 239–240.
- Kong, J. M., Chia, L. S., Goh, N. K., Chia, T. F., & Brouillard, R. 2003. Analysis and Biological Activities of Anthocyanins. *Phytochemistry*, 64(5), 923–933.



- Lapornik, B., Pros, M., Wondra, A. G., 2005. Comparison of extracts prepared from plant by-products using different solvents and extraction time. *Food Engineering*, 71, 214–222
- Lee, J. H. 2010. Identification and Quantification of Anthocyanins from the Grains of Black Rice (*Oryza sativa L.*) Varieties. *Food Science and Biotechnology*, 19(2), 391–397.
- Luque de Castro, M.D., & Jimenez-Carmona, M.M. 2000. Where is Supercritical Fluid Extraction Going? *Trends in Analytical Chemistry*. 19(4), 223–228.
- Martendal, E., Budziak, D., & Carasek, E. 2007. Application of Fractional Factorial Experimental and Box-Behnken Designs for Optimization of Single-drop Microextraction of 2,4,6-trichloroanisole and 2,4,6-tribromoanisole from Wine Samples. *Journal of Chromatography A*, 1148(2), 131–136.
- Miller, J.N., & Miller, J.C. 2010. *Statistics and Chemometrics for Analytical Chemistry Sixth Edition*. Pearson Education Limited. England
- Nakayama, T., Yonekura-Sakakibara, K., & Sato, T. 2000. Aureusidin Synthase: A Polyphenol Oxidase Homolog Responsible for Flower Coloration. *Science*, 290, 1163–1166
- Oancea, S., Grosu, C., Ketney, O., & Stoia, M., 2013. Conventional and Ultrasound Assisted Extraction of Anthocyanins from Blackberry and Sweet Cherry Cultivars. *Acta Chimica Slovenica*, 60(2), 383–389.
- Ono, E., Fukuchi-Mizutani, M., Nakamura, N., Fukui, Y., Yonekura-Sakakibara, K., Yamaguchi, M., Nakayama, T., Tanaka, T., Kusumi, T. & Tanaka, Y. 2006. Yellow Flowers Generated by Expression of the Aurone Biosynthetic Pathway. *Proc. Natl Acad. Sci. USA*, 103, 11075–11080
- Pan, X., Niu, G., & Liu, H. 2003. Microwave-Assisted Extraction of Tea Polyphenols and Tea Caffeine from Green Tea Leaves. *Chemical Engineering and Processing* 42, 129–133.
- Pedro, A. C., Granato, D., & Rosso, N. D. 2016. Extraction of anthocyanins and polyphenols from black rice (*Oryza sativa L.*) by modeling and assessing their reversibility and stability. *Food Chemistry*, 191, 12–20.
- Pinelo, M., Del Fabbro, P., Manzocco, L., Nuñez, M. J., & Nicoli, M. C. 2005. Optimization of continuous phenol extraction from *Vitis vinifera* byproducts. *Food Chemistry*, 92(1), 109–117.
- Pingret, F. D., Fabiano-Tixier, A. S., & Chemat, F., 2013. Ultrasound-Assisted Extraction. In J. P. M. Rostagno (Ed.), *Natural Product Extraction: Principles and Applications* (pp. 89–112). Cambridge (UK): RSC Publishing.
- Pourmortazavi, S. M., & Hajimirsadeghi, S. S. 2007. Supercritical fluid extraction in plant essential and volatile oil analysis, 1163, 2–24.



- Pragalyaashree, M. M., Tirouchelvame, D., & Sashikumar, S. 2018. Degradation kinetics of anthocyanin extracted from roselle calyces (*Hibiscus sabdariffa*), 8(11), 57–63.
- Riera, E., Gol, Y., Blanco, A., Gallego, J. A., Blasco, M., & Mulet, A. 2004. Mass transfer enhancement in supercritical fluids extraction by means of power ultrasound, 11, 241–244.
- Rohman, A., & Gandjar, I. G. 2007. *Kimia Farmasi Analisis*. Pustaka Pelajar. Yogyakarta.
- Sahena, F., Zaidul, I. S. M., Jinap, S., Karim, A. A., Abbas, K. A., Norulaini, N. A. N., & Omar, A. K. M. 2009. Application of Supercritical CO₂ in Lipid Extraction – A Review. *Journal of Food Engineering*, 95(2), 240–253.
- Saito, N., Tatsuzawa, F., Miyoshi, K., & Honda, T. 2003. The First Isolation of C - Glycosylanthocyanin from the Flowers of *Tricyrtis formosana*, 44, 6821–6823.
- Salinas-Moreno, Y., Salas-Sánchez, G., Rubio-Hernández, D., & Ramos-Lobato, N. 2005. Characterization of Anthocyanin Extracts from Maize Kernels. *Journal of Chromatographic Science*, 43(9), 483–487.
- Setyaningsih, W., Hidayah, N., Saputro, I.E., Palma, M., Barroso, C.G., 2016. Profile of Phenolic Compounds in Indonesian Rice (*Oryza sativa*) Varieties throughout Post-Harvest Practices. *Journal of Food Composition and Analysis* 54, 55–62.
- Setyaningsih, W., Saputro, I.E., Palma, M., Barroso, C.G. 2015. Optimisation and Validation of the Microwave-Assisted Extraction of Phenolic Compounds from Rice Grains. *Journal of Food Chemistry*. 169,141–149
- Snyder, L.R., Kirkland, J.J., & Glajch, J.L. 1998. *Practical HPLC Method Development* 2nd Edition. John Wiley & Sons, Inc., New York.
- Tao, Y., Wu, D., Zhang, Q-A., & Sun, D-W. 2014 Ultrasound-Assisted extraction of Phenolics from Wine Lees: Modeling, Optimization, and Stability of Extracts during Storage. *Ultrasonic Sonochemistry*, 21, 706-715
- Taverniers, I., De Loose, M., Van Bockstaele, E. 2004. Trends in Quality in the Analytical Laboratory. II. Analytical Method Validation and Quality Assurance. *Trends in Analytical Chemistry*, Vol. 23, No.8.
- Teng, H., Lee, W. Y., & Choi, Y. H., 2013. Optimization of Microwave-Assisted Extraction for Anthocyanins, Polyphenols, and Antioxidants from Raspberry (*Rubus Coreanus* Miq.) using Response Surface Methodology. *Journal of Separation Science*, 36(18), 3107–3114.
- Tiwari, B. K., Albu, S., Joyce, E., Paniwnyk, L., Lorimer, J.P., & Mason, T.J., 2015. Potential for the use of ultrasound in the extraction of antioxidants from



Rosmarinus officinalis for the food and pharmaceutical industry, *Ultrason. Sonochem.*, 11 (3–4), 261–265.

Yawadio, R., Tanimori, S., & Morita, N. 2007. Identification of phenolic compounds isolated from pigmented rices and their aldose reductase inhibitory activities. *Food Chemistry*, 101(4), 1616–1625. Soria, A.C.; Villamiel, M. 2010. Effect of ultrasound on the technological properties and bioactivity of food: A review. *Trends Food Sci. Technol.* 2010, 21, 323–331