

## BIBLIOGRAPHY

- Agustini, Vina, Burhan, and Askur Rahman. 2014. "Optimasi suhu dan waktu pengeringan kopra putih dengan pemanasan tidak langsung (indirect drying)". *AGROINTEK*, Vol. 8, No. 2, page 85-95.
- Ahmed, Naseer, Jagmohan Singh, Harmeet Chauhan, Prerna Gupta Anisa Anjum, and Harleen Kour. 2013. "Different drying methods: Their applications and recent advances". *International Journal of Food Nutrition and Safety*. 4(1):34-42.
- Ali, Badreldin H., Gerald Blunden, Musbah O. Tanira, and Abderrahim Nemmar. 2007. "Some Phytochemical, Pharmacological, and Toxicological Properties of Ginger (*Zingiber officinale Roscoe*). *Food and Chemical Toxicology* 46, P. 409-420.
- Amin, M. 2012. "Optimasi Variabel Proses Terhadap Produksi Etanol dari Biji Sorghum (*Sorghum Bicolor L.*) [skripsi]. Jurusan Teknologi Industri Pertanian. Fakultas Pertanian. Bangkalan: Universitas Trunojoyo Madura.
- Anderson, M. J. and P. J. Whitcomb. 2005. "RSM: Simplified: Optimizing Process Using Response Surface Methods for Design of Experiments". New York: Productivity Press.
- AOAC. 2005. "Official Methods of Analysis". Association of Official Analytical Chemists. Benjamin Franklin Station, Washington.
- AOAC. 2012. "Official Methods of Analysis of The Association Agricultural Chemist". 10<sup>th</sup> Edition, Washington DC.
- Apriyana, Wuri, Vita Taufika Rosyida, Septi Nur Hayati, Cici Darsih, and Crescentiana Dewi Poeloengasih. 2017. "Comparative Study of Powdered Ginger Drink Processed by Different Method: Traditional and using Evaporation Machine". *IOP Conf. Series: Earth and Environmental Science*.
- Azima, Fauzan, Tuty Anggraini, Daimon Syukri, and Ryan Andri Septia. 2017. "Effect of Sodium Bisulfite Soaking on the Quality of Durian Seed Flour and its Application to Dakak-dakak Production (West Sumatra's Traditional Snack)". *Pakistan Journal of Nutrition*, 16:175-178.
- Balakrishnan, K.V. 2005. "Postharvest and industrial processing of ginger". *Ginger-The genus Zingiber*. CRC Press: Massachusetts.

- Bekhta, Pavlo and Peter Niemz. 2003. "Effect of High Temperature on Change in Color, Dimensional Stability, and Mechanical Properties of Spruce Wood". *Holzforschung* 57:539-546.
- Belessiotis, V. and E. Delyannis. 2011. "Solar Energy". Elsevier, Vol. 85, Issue 8, Pages 1665-1691.
- Bimantara, F. 2015. "Modifikasi dan Pengujian Alat Pengasapan ikan system cabinet". [skripsi]. Inderalaya: Fakultas Pertanian, Universitas Sriwijaya.
- Chaethong, Kwanhathai and Rungnaphar Pongsawatmanit. 2015. "Influence of Sodium Metabisulfite and Citric Acid in Soaking Process after Blancing on Quality and Storage Stability of Dried Chili". *Journal of Food Processing and Preservation*, Vol. 39, Issue 6.
- Chen, Chung-Yi, Kuo-Chen Cheng, Andy Y. Chang, Ying-Ting Lin, You-Cheng Hseu, and Hui Min Wang. 2012. "10-Shogaol, an antioxidant from *Zingiber officinale* for Skin Cell Proliferation and Migration Enhancer". *Int. J. Mol. Sci.* 13(2):1762-1777.
- Dewi, Ayu Ketut Surya, I. Made Kardana, and Ketut Suarta. 2016. "Phototherapy Effectiveness of Reduce Total Bilirubin Level in Hyperbilirubinemia Neonates at Sanglah Hospital". *Sari Pediatri*, Vol. 18, No. 2.
- Ding, S. H., K. J. An, C. P. Zhao, Y. Li, Y. H. Guo, and Z.F. Wang. 2012. "Effect of drying methods on volatiles of chinese ginger (*Zingiber officinale*). *Food and bioproducts processing* 90:515-524.
- Dugasani, S., M. Rao Pichika, V. Devi NAdarajah, M. K. Balijepali, S. Tandra, J.N. Korlakunta. 2010. "Comparative antioxidant and anti-inflammatory effect of [6]-gingerol, [8]-gingerol, [10]-gingerol, and [6]-shogaol". *Journal of Ethnopharmacology*, 127, 515-520.
- Erkmen, Osman and T. Faruk Bozoglu. 2016. "Food Microbiology, 2 Volume Set: Principles into practice". Joh Wiley and Sons, Turkey.
- Fathonah, Difa and C. Hanny Wijaya. 2011. "Kandungan gingerol dan shogaol, intensitas kepedasan dan penerimaan panelis terhadap oleoresin jahe gajah (*Zingiber officinale* var. Roscoe), jahe emprit (*Zingiber officinale* var. Amarum), dan jahe merah (*Zingiber officinale* var. Rubrum) [skripsi]. Department of Food Science and Technology, Faculty of Agricultural Technology, Bogor Agricultural University, Bogor, Indonesia.
- Fitriani, Shanti, Akhyar Ali, and Widiastuti. 2013. "Pengaruh suhu dan lama pengeringan terhadap mutu manisan kering jahe (*Zingiber officinale* Rosc.) dan kandungan antioksidannya". *SAGU*, Vol. 12, No. 2:1-8.

- Gaikwad, Sucheta A., Gayatri S. Kamble, Swati Devare, Nirmala. R. Deshpande and Jyoti P. Salvekar. 2011. "In vitro evaluation of free radical scavenging potential of *Cassia auriculata* L." Journal of Chemical and Pharmaceutical Research. 3(4):766-772.
- Galanakis, Charis M. 2018. "Polyphenols: Properties, Recovery, and Applications". Woodhead Publishing, Cambridge.
- Gong, Fan, Ying-Sing Fung, and Yi-Zeng Liang. 2005. "Determination of volatile components in ginger using gas chromatography-mass spectrometry with Resolution improved by data processing techniques". Journal of Agricultural and Food Chemistry, 52: 6378-6383.
- Gopi, Sreeraj, Karthik Varma, and Shintu Jude. 2016. "Study on temperature dependent conversion of active components of ginger". International Journal of Pharma Sciences. Vol. 6, No. 1:1344-1347.
- Gracia-Fuentes, Alvaro R., Sabrina Wirtz, Ellen Vos, and Hans Verhagen. 2015. "Short review of sulphites as food additives". European Journal of Nutrition and Food Safety. 5(2):113-112.
- Gupta, Prof. Pravin M., Amit S. Das, Ranjit C. Barai, Sagar C. Pusadkar, and Vishal G. Pawar. 2017. "Design and Construction of Solar Dryer for Drying Agricultural Products". International Research Journal of Engineering and Technology. Vol. 04, Issue 03.
- Havens, Kirk J. and Edward J. Sharp. 2015. "Thermal Imaging Techniques to Survey and Monitor Animals in the Wild:A Methodology" Academic press, New York.
- Horvathova, Jana, Milan Suhaj, and Peter Simko. 2007. "Effect of thermal treatment and storage on antioxidant activity of some spices". Journal of Food and Nutrition Research. Vol. 46, No. 1, Page 20-27.
- Hui, Yiu H. 2006. "Handbook of Food Science, Technology, and Engineering Vol. 3". CRC Press, New York.
- Hutching, J.B. 1999. "Food Color and Appearance". Chapman and Hall Food Science Book. Aspen Publishers, Inc., Gaithersburg, Maryland.
- Ibrahim, Khairu Aizam Bin. "Extraction of Essential Oils from Ginger Rhizome Using Steam Distillation Method" [*skripsi*]. Faculty of Chemical & Natural Resources Engineering University College of Engineering & Technology Malaysia, 2006.
- Indian Standard. 2007. "Spices and Condiments- Ginger, whole and Ground-Specification". FAD9(1801)C.

- Jayashree, E, Visvanathan R., and John Zachariah T. 2014. "Quality of dry ginger (*Zingiber officinale*) by different drying methods". J. Food Sci. Technology, 51(11):3190-3198.
- Jemaa, Houda Ben, Amani Ben Jemia, Sarra Khelifi, Halima Ben Ahmed, Fethi Ben Slama, Anis Benzarti, Jalila Elati, and Abdallah Aouidet. 2017. "Antioxidant Activity and A-Amylase Inhibitory Potential of *Rosa Canina* L." Afr J. Tradit Complement Altern Med 14(2):1-8.
- Johnson, M., Kolawole, O. S., and Olufunmilayo, L. D. 2015. "Phytochemical analysis, in vitro evaluation of antioxidant and antimicrobial activity of methanolic leaf extract of *Vermonia amygdalina* (bitter leaf) against *Staphylococcus aureus* and *Pseudomonas aeruginosa*". International Journal of Current Microbiology and Applied Science, 4(5),411-426.
- Jolad, S.D., R.C. Lantz, G.J. Chen, R. B. Bates, and B.N. Timmermann. 2005. "Commercially processed dry ginger (*Zingiber officinale*): composition and effect on LPS-stimulated PGE2-production". Phytochemistry, 66, 1614-1635.
- Kelly, C. Z., O. M. Marcia, A. J. Petenate, M. Angela, A. Meireles. 2002. "Extraction of ginger (*Zingiber officinale* Roscoe) oleoresin with CO<sub>2</sub> and co-solvents: a study of the antioxidant actions of the extracts". Journal of Supercritical Fluids, 24, 57-76.
- Kemp, Sarah E. Tracey Hollywood, and Joanne Hort. 2011. "Sensory Evaluation: A Practical Handbook". John Wiley and Sons, New Jersey.
- Keshani, S., Chuah, A. L., Nourouzi, M. M., Russly, A.R., and Jamilah, B. 2010. "Optimization of concentration process on pomelo fruit juice using response surface methodology (RSM)". International Food research journal 17:733-742.
- Kikuzaki, H. and Nakatami, N. 1993. "Antioxidant Effect of Some Ginger Constituents". J. Food Science. 58 (6):1407-1410.
- Kumoro, Andri and Jefri Hidayat. 2017. "Effect of Soaking Time in Sodium Metabisulfite Solution on the Physicochemical and Funcional Properties of Durian Seed Flour". MATEC Web of Conferences 156, 01028.
- Lawless, Harry T and Hildegarde Heymann. 2010. "Sensory Evaluation of Food, Principles and Practices". Kluwer Academic/Plenum Publisher, New York.
- Lin, Jie, Yi Dai, Ya-nan Guo, Hai-rong Xu, and Xiao Chang Wang. 2012. "Volatile profile analysis and quality prediction of Longjing tea (*Camellia sinensis*) by HS-SPME/GC-MS". J. Zhejiang Univ Scie B 13:972-980.



- Liu, M.I., Mishchenko, and W. P. Arnott. 2008. "A study of radiative properties of fractal soot aggregates using the superposition T-matrix method". *J. Quant. Spectrosc*, 109, 2656-2663.
- Majid, Thariq and Nurkholis. 2003. "Pembuatan the rendah kafein melalui proses ekstraksi dengan pelarut etil asetat". *Buletin Plasma Nutfah*, Vol. 9, No. 2, 19.
- Mationdang, I. 2005. "*Zingiber officinale* L." Pusat penelitian dan Pengembangan Tumbuhan Obat, UNAS.
- Meilgaard, Morten C., B. Thomas Carr, and Gail Vance Civile. 2007. "Sensory Evaluation Techniques, Fourth Edition". CRC Press, Boca Raton.
- Moon, Joon-Kwan and Takayuki Shibamoto. 2009. "Antioxidant Assays for Plant and Food Components". *Journal of Agricultural and Food Chemistry*, 57, 1655-1666.
- Morshedi, Afsaneh and Mina Akbarian. 2014. "Application of Response Surface Methodology: Design of Experiments and Optimization: A Mini Review". *Indian Journal of Fundamental and Applied Life Science*. Vol. 4, P 2434-2439.
- Napitupulu, Farel H. and Putra Mora Tua. 2012. "Perancangan dan pengujian alat pengering kakao dengan tipe cabinet dryer untuk kapasitas 7.5 kg per-siklus". *Jurnal Dinamis*, Vol. II, No. 10.
- Nielsen, S. Suzanne. 2017. "Food Analysis". Springer, Indiana.
- Ni'mah, Khipiatun. 2016. "Modul 6 Radiasi: Pengaruh warna terhadap kecepatan perubahan suhu". Laporan praktikum biofisika, Fakultas matematika dan ilmu pengetahuan alam universitas, Jember.
- Noorafshan, A., Asadi-golshan R., Monjezi S., and Karbalay-Doust S. 2014. "Sodium metabisulphite, a preservative agent, decreases the heart capillary volume and length, and curcumin, the main component of *Curcuma longa*, cannot protect it". *Folia Biol* 60(5):275-80.
- NPCS Board. 2012. "Handbook of Agro Based Industries, second edition". NPCS, New Delhi.
- Octyaningrum, Ayu. 2015. "Karakteristik Pengeringan Rimpang Jahe (*Zingiber officinale Roxb*) Menggunakan Metode Pengeringan Oven dengan Pra proses Perendaman Osmotik" [*skripsi*]. Jurusan Teknik Pertanian Universitas Jember.

- Pakrashi, Styesh Chandra. 2003. "Ginger: A Versatile Healing Herb". Vedams, New York.
- Parlina, S., Pokatong, W. D., and Wijaya, J. R. 2012. "Study of Antioxidant Characteristics of Cider Prepared from Pomegranate (*Punica granatum L.*) Fruit Peels". Thesis, Universitas Pelita Harapan.
- Parthasarathy V. A., Bhageerathy C., T. John Z. 2008. "Chemistry of Spices". CABI, India.
- Pomeranz, Yeshajahu and Clifton E. Meloan. 2000. "Food Analysis: Theory and Practice". Springer Science & Business Media, New York.
- Prasetya, Y.T. 2003. "Instant: Jahe, Kunyit, Kencur, Temulawak". Jogjakarta: Kanisius.
- Primasari, M. 2006. "Antipyretic effect of red ginger's root ethanol extract on mice strain swiss-webster". Cited from [http://repository.maranatha.edu/1496/1/0210121\\_Abstract\\_TOC.pdf](http://repository.maranatha.edu/1496/1/0210121_Abstract_TOC.pdf) cited on July 20<sup>th</sup>, 2018.
- Puengphian, C. and Sirichote, A. 2007. (6)-gingerol Content and Bioactive Properties of Ginger (*Zingiber officinale Roscoe*) Extract from Supercritical CO<sub>2</sub> Extraction. Report of Agro-Industry scholarship. Thailand: Department of Food Technology, Faculty of Agro-Industry, Prince of Songkla University.
- Purnomo, H., Jaya, F. and Widjanarko, S. B. 2010. "The effects of type and time of thermal processing on ginger (*Zingiber officinale Rosc.*) rhizome antioxidant compounds and its quality". International Food Research Journal 17:335-347.
- Putri, HSI. 2011. "Pengaruh penambahan ekstrak jahe (*Zingiber officinale Rosc.*) terhadap aktivitas antioksidan, total fenol, and karakteristik sensor pada telur asin". [skripsi]. Surakarta, Fakultas Pertanian, Universitas Sebelas Maret.
- Raghavan, Susheela. 2006. "Handbook of Spices, Seasonings, and Flavorings". CRC Press, New York.
- Ratti, Cristina. 2008. "Advances in Food Dehydration". CRC Press, New York.
- Ravindran, P. N. 2017. "The Encyclopedia of Herbs and Spices". CABI, India.
- Ravindran, P. N. and K. Nirmal Babu. 2005. "Ginger: The Genus Zingiber". CRC Press, Boca Raton.
- Rehman, R., M. Akram, N. Akhtar, Q. Jabeen, T. Saced, S.M.A. Shah, K. Ahmed, G. Shaheen and H.M. Asif. 2011. "*Zingiber officinale Roscoe* (pharmacological activity)". Journal of Medicinal Plants Researc. 5:344-348.

- Roshanak, Sahar, Mehdi Rahimmalek, and Sayed Amir Hossein Goli. 2016. "Evaluation of seven different drying treatments in respect to total flavonoid, phenolic, vitamin C content, chlorophyll, antioxidant activity, and color of green tea (*Camellia sinensis* or *C. assamica*) leaves". *J. Food Sci. Technology*, 53(1):721-729.
- Safeena, S. A. and Vishwanath S. Patil. 2013. "Effect of Hot Air Oven and Microwave Oven Drying on Production of Quality Dry Powders of Dutch Roses". *Journal of Agricultural Science*, 5(4):179-189.
- Sazhin, Sergei. 2014. "Droplets and Sprays". Springer, New York.
- Setyawan, AD. 2002. "Keragaman varietas jahe (*Zingiber officinale* Rosc.) berdasarkan kandungan kimia minyak atsiri". *Bio SMART* 4(2):48-54.
- Somogyi, Laszlo and Hosahalli S. 1996. "Processing Fruits: Science and Technology, Vol. 1". CRC Press, New York.
- Stoilova, I, A. Krastanov, A. Stoyanova, P. Denev, and S. Gargova. 2007. "Antioxidant activity of a ginger extract (*Zingiber officinale*)". *Food Chemistry* 102: 764-770.
- Sudarsono, Dyah Mellawati and Ag. Yuswanto. 2010. "Effect of pungent principle containing extract of *Zingiber officinale* Roxb rhizome on macrophage activity of male mice infected with *Listeria monocytogenes*". *Majalah Obat Tradisional* 15(3), 112-120.
- Suryaningrum, D. T. Wikanta and H. Kristiana. 2006. "uji aktivitas antioksidan dari rumput laut *Harveyana* dan *Euchema cottonii*. *Jurnal Pascapanen dan Bioteknologi Kelautan dan Perikanan*. Vol. 1(1):51-63.
- Susanti, Tika Mei Indah and Binar Panunggal. 2015. "Analisis antioksidan, total fenol, dan kadar kolesterol pada kuning telur dengan penambahan ekstrak jahe". *Journal of Nutrition College*, Vol. 4, No. 2, Hal. 636-644.
- Tram, Truong Thi Quynh and Dang Quoc Tuan. 2014. "Optimization of spray drying process of ginger oleoresin using response surface methodology". *Tap chi KHOA HOC DHSP TPHCM*. So 58:27-36.
- USDA. "National Nutrient Database of Standard Reference Legacy Release of Raw Ginger Root". Retrieved from <https://ndb.nal.usda.gov/ndb/foods/show/301862?fgcd=&manu=&facet=&format=&count=&max=25&offset=&sort=default&order=asc>
- Vankar, P. S., Shanker, R., Srivastava, J. and Tiwari, V. 2006. "Change in Antioxidant activity of Spices-Turmeric and Ginger on Heat Treatment".

Electron. Journal Environment of Agriculture and Food Chemistry 5(2):1313-1317.

Wahyuni, Sri, D. H. Xu, N. Bermawie, H. Tsunematsu, and T. Ban. 2004. "Screening ISSR Primer Preliminary Study of The Relationship between Small, Big, and Red Ginger". Bulletin penelitian tanaman rempah dan obat. Vol. 15, No. 1.

Wei, Chien-Kei, Yi Hong Tsai, Michal Korinek, Pei-Hsuan Hung, Mohamed El-Shazly, Yuan-Bin Cheng, Yang-Chang Wu, Tusty—Jiuan Hsieh, and Fang-Rong Chang. 2017. "6-Paradol and 6-Shogaol, the Pungent Compounds of Ginger, Promote Glucose Utilization in Adipocytes and Myotubes, and 6-Paradol Reduces Blood Glucose in High-Fat Diet-Fed Mice". Int. J. Mol. Sci. 18(1):168.

Wiedhayati, Dwi. 2016. "Ginger: superior, hot export commodity for your health". Directorate General of National Export Development, Jakarta.

Yuliani, Sri and Kailaku, Sari Intan. 2009. "Pengembangan produk jahe kering dalam berbagai jenis Industri". Buletin Teknologi Pascapanen Pertanian: Vol 5.

Zakaria, F. R. dan T. M. Rajab. 1999. "Pengaruh ekstrak jahe terhadap produksi radikal bebas makrofag mencit sebagai indikator imnostimulan secara in Vitro". Persatuan Ahli Pangan Indonesia (PATPI). *Prosiding Seminar Nasional Teknologi Pangan*: 707-716.