

BIBLIOGRAPHY

- Adney, W. S., McMillan, J. D., Mielenz, J. R., and Klasson, K. T. 2008. "Applied Biochemistry and Biotechnology". Humana Press, California.
- Ahmad, I., Owais, M., Shahid, M., and Aqil, F. 2010. "Combating Fungal Infections: Problems and Remedy". Springer Science & Business Media, Dordrecht.
- Aisyah, Y., Irwanda, L. P., Haryani, S., and Safriani, N. 2017. Characterization of corn starch-based edible film incorporated with nutmeg oil nanoemulsion. IOP Conf. Series: Materials Science and Engineering 352(1).
- Ali, M. S., Alam, M. S., Alam, N., and Siddiqui, M. R. 2014. Preparation, Characterization and Stability Study of Dutasteride Loaded Nanoemulsion for Treatment of Benign Prostatic Hypertrophy. Iranian Journal of Pharmaceutical 13(4): 1125-1140.
- Amaliya, R. R., and Putri, W. D. R. 2014. Karakterisasi Edible Film dari Pati Jagung dengan Penambahan Filtrat Kunyit sebagai Antibakteri. Jurnal Pangan dan Agroindustri 2(3): 43-53.
- American Society for Testing and Materials (ASTM). 1995. "Standard Test Method for Water Vapor Transmission of Material". ASTM Book of Standard.
- Bahram, S., Rezaei, M., Soltani, M., Abdolghasem, K., Ojagh, S. M., and Abdollahi, M. 2013. Whey Protein Concentrate Edible Film Activated with Cinnamon Essential Oil. Journal of Food Processing and Preservation 38(3): 1251-1258.
- Bajpai, V. K., Sharma, A., and Baek, K. H. 2013. Antibacterial mode of action of *Cudrania tricuspidata* fruit essential oil, affecting membrane permeability and surface characteristics of food-borne pathogens. Food Control 32(2): 582-590.
- Balch, P. A. 2006. "Prescription for Nutritional Healing" 4th ed. Penguin Group, New York.
- Baldwin, E. A., Hagenmaier, R., and Bai, J. 2012. "Edible Coatings and Films to Improve Food Quality". CRC Press, Boca Raton.
- Barceloux, D. G. 2008. "Medical Toxicology of Natural Substances: Foods, Fungi, Medicinal Herbs, Plants, and Venomous Animals". John Wiley & Sons, Hoboken.
- Bartleet, J. D., and Jaanus, S. D. 2008. "Clinical Ocular Pharmacology" 5th ed. Butterworth-Heinemann, Missouri.
- Bautista-Baños, S. 2014. "Postharvest Decay: Control Strategies". Academic Press, San Diego.

- Bhandari, B. R., and Roos, Y. H. 2017. "Non-Equilibrium States and Glass Transitions in Foods: Processing Effects and Product-Specific Implications". Woodhead Publishing, Oxford.
- Bhattacharjee, A., Chakraborty, A., and Mukhopadhyay, G. 2018. Double Emulsions – A Review with Emphasis on Updated Stability Enhancement Perspective. *World Journal of Pharmacy and Pharmaceutical Sciences* 7(6): 475-493.
- Bhunia, A. K. 2018. "Foodborne Microbial Pathogens: Mechanisms and Pathogenesis" 2nd ed. Springer Science & Business Media, New York.
- Block, S. S. 2001. "Disinfection, Sterilization, and Preservation" 5th ed. Lippincott Williams & Wilkins, Philadelphia.
- Bloomfield, S. F. 1991. "Assessing Antimicrobial Activity". Blackwell Scientific Publication, Oxford.
- Carson, C. F., Mee, B. J., and Riley, T. V. 2002. Mechanism of action of *Melaleuca alternifolia* (tea tree) oil on *Staphylococcus aureus* determined by time-kill, lysis, leakage, and salt tolerance assays and electron microscopy. *Antimicrobial Agents and Chemotherapy* 46(1): 1914-1920.
- Cauvain, S. 2015. "Technology of Breadmaking" 3rd ed. Springer International Publishing, Dordrecht.
- Chougale, R., Kasai, D., Masti, S., and Dubey, P. 2015. Effect of Guar Gum on Mechanical and Morphological Behavior of Chitosan Films. *Research Journal of Material Sciences* 3(1): 1-6.
- Christensen, M. 2006. "Waterborne Pathogens" 2nd ed. American Water Works Association, Denver.
- Dashipour, A., Khaksar, R., Hosseini, H., Shojae-Aliabadi, S., and Ghaanati, K. 2014. Physical, antioxidant and antimicrobial characteristics of carboxymethyl cellulose edible film cooperated with clove essential oil. *Zahedan Journal of Research in Medical Sciences* 16(8): 34-42.
- Embuscado, M. E., and Huber, K. C. 2009. "Edible Film and Coatings for Food Applications". Springer Science & Business Media, Dordrecht.
- Erkmen, O., and Ozcan, M. 2014. Antimicrobial effects of essential oils on growth of bacteria, yeasts and molds. *Journal of Essential Oil Bearing Plants* 7(3): 279-287.
- Flanagan, J., and Singh, H. 2006. Microemulsions: A Potential Delivery System for Bioactives in Food. *Critical Reviews in Food Science and Nutrition* 46(3): 221-237.
- Frascareli, E. C., Silva, V. M., Tonon, R. V., and Hubinger, M. D. 2011. Physicochemical Properties of Coffee Oil Microcapsules Produced by Spray Drying. III Jornadas Internacionais.

- Fratamico, P. M., Bhunia, A. K., and Smith, J. L. 2005. "Foodborne Pathogens: Microbiology and Molecular Biology". Caister Academic Press, Wymondham.
- Fuquay, J. W., Fox, P. F., and McSweeney, P. L. H. 2011. "Encyclopedia of Dairy Sciences". Elsevier, San Diego.
- Gahlawat, S. K., Salar, R. K., Siwach, P., Duhan, J. S., Kumar, S., and Kaur, P. 2017. "Plant Biotechnology: Recent Advancements and Developments". Springer Nature, Singapore.
- Galus, S., and Kadzińska, J. 2016. Moisture Sensitivity, Optical, Mechanical and Structural Properties of Whey Protein-Based Edible Films Incorporated with Rapeseed Oil. *Food Technol. Biotechnol.* 54(1): 78-89.
- Garcia, M. P. M., Gómez-Guillén, M. C., López-Caballero, M. E., and Barbosa-Cánovas, G. V. 2016. "Edible Films and Coatings: Fundamentals and Applications". CRC Press, Boca Raton.
- Garti, N., and Leser, M. E. 2001. Emulsification Properties of Hydrocolloids. *Polym. Adv. Technol.* 12(1): 123-135.
- Ghannam, M. T. 2013. Water-in-Crude Oil Emulsion Stability Investigation. *Petroleum Science and Technology* 23(5): 649-667.
- Gomez-Lopez, V. M. 2012. "Decontamination of Fresh and Minimally Processed Produce". John Wiley & Sons, Iowa.
- Gupta, A. P., and Arora, G. 2012. Preparation and Characterization of Cross-linked Guar-Gum Poly(vinylalcohol) Green Films. *Der Chemica Sinica* 3(5): 1191-1197.
- Hadnadev, T. D., Dokic, P., Krstonosic, V., and Hadnadev, M. 2013. Influence of oil phase concentration on droplet size distribution and stability of oil-in-water emulsions. *Eur. J. Lipid Sci. Technol.* 115(1): 313-321.
- Han, J. H. 2014. "Innovations in Food Packaging" 2nd ed. Academic Press, California.
- Hargreaves, T. 2003. "Chemical Formulation: An Overview of Surfactant-based Preparations Used in Everyday Life". Royal Society of Chemistry, Cambridge.
- Harun, N. 2010. Karakteristik Minyak Kayu Manis (*Cinnamomum burmannii* Blume) berdasarkan Letak Kulit pada Batang dan Ukuran Bahan pada Proses Penyulingan. *Agricultural Science and Technology Journal* 16(2): 28-32.
- Hostettmann, K. 2014. "Handbook of Chemical and Biological Plant Analytical Methods". John Wiley & Sons, Hoboken.
- Johny, A. K., Darre, M. J., Donoghue, A. M., Donoghue, D. J., and Venkitanarayanan, K. 2010. Antibacterial effect of trans-cinnamaldehyde, eugenol, carvacrol, and thymol on *Salmonella enteritidis* and *Campylobacter*

- jejuni* in chicken cecal contents in vitro. The Journal of Applied Poultry Research.
- Kasim, N. N., Ismail, S. N. A. S., Masdar, N. D., Hamid, F. A., and Nawawi, W. I. 2014. Extraction and Potential of Cinnamon Essential Oil towards Repellency and Insecticidal Activity. International Journal of Scientific and Research Publications 4(7): 1-6.
- Kauffman, C. A., Pappas, P. G., Sobel, J. D., and Dismukes, W. E. 2011. "Essentials of Clinical Mycology" 2nd ed. Springer Science & Business Media, Dordrecht.
- Koike, S. T., Gladders, P., and Paulus, A. O. 2007. "Vegetable Diseases: A Color Handbook". Academic Press, San Diego.
- Krishnan, K. R., Babuskin, S., Rakhavan, K. R., Tharavin, R., Babu, P. A. S., Sivanrajan, M., and Sukumar, M. 2015. Potential application of corn starch edible films with spice essential oils for the shelf life extension of red meat. Journal of Applied Microbiology 119(1): 1613-1623.
- Labbé, R. G., and García, S. 2013. "Guide to Foodborne Pathogens" 2nd ed. John Wiley & Sons, Hoboken.
- Li, Y., Nie, Y., Zhou, L., Li, S., Tang, X., Ding, Y., and Li, S. 2014. The possible mechanism of antifungal activity of cinnamon oil against *Rhizopus nigricans*. Journal of Chemical and Pharmaceutical Research 6(5): 12-20.
- Liu, D. 2014. "Manual of Security Sensitive Microbes and Toxins". CRC Press, Boca Raton.
- Long, S. S., Prober, C. G., and Fischer, M. 2018. "Principles and Practice of Pediatric Infectious Diseases" 5th ed. Elsevier, Philadelphia.
- Mousavi, F., Bojko, B., Bessonneau, V., and Pawliszyn, J. 2016. Cinnamaldehyde Characterization as an Antibacterial Agent towards *E. coli* Metabolic Profile Using 96-blade Solid Phase Microextraction Coupled to Liquid Chromatography-Mass Spectrometry. Journal of Proteome Research.
- Mudgil, D., Barak, S., and Khatkar, B. S. 2014. Guar gum: processing, properties and food applications. Journal of Food Science and Technology 51(3): 409-418.
- Muschiolik, G., and Dickinson, E. 2017. Double Emulsions Relevant to Food Systems: Preparation, Stability, and Applications. Comprehensive Reviews in Food Science and Food Safety 16(1): 532-555.
- Nazzaro, F., Fratianni, F., Martino, L. D., Coppola, R., and Feo, V. D. 2013. Effect of Essential Oils on Pathogenic Bacteria. Multidisciplinary Digital Publishing Institute 6(12): 1451-1474.
- Nikolovski, B. G., Ilić, J. D., and Sovilj, M. N. 2016. How to Formulate a Stable and Monodisperse Water-in-Oil-in-Water Nanoemulsion Containing

- Pumpkin Seed Oil: The Use of Multiobjective Optimization. *Brazilian Journal of Chemical Engineering* 33(4): 919-931.
- Nollet, L. M. L., and Rathore, H. S. 2017. "Green Pesticides Handbook: Essential Oils for Pest Control". CRC Press, Boca Raton.
- Norn, V. 2015. "Emulsifiers in Food Technology". 2nd ed. John Wiley & Sons, Oxford.
- Norton, I. T., Spyropoulos, F., and Cox, P. 2011. "Practical Food Rheology: An Interpretive Approach". John Wiley & Sons, Chichester.
- Noshirvani, N., Ghanbarzadeh, B., Gardat, C., Rezaei, M. R., Hashemi, M., Coz, C. L., and Coma, V. 2017. Cinnamon and ginger essential oils to improve antifungal, physical and mechanical properties of chitosan-carboxymethyl cellulose films. *Laboratoire de Chimie des Polymères Organiques (LCPO)*.
- Nugroho, A. A., Basito, and Katri, A. R. B. 2013. Kajian Pembuatan Edible Film Tapioka dengan Pengaruh Penambahan Pektin Beberapa Jenis Kulit Pisang terhadap Karakteristik Fisik dan Mekanik. *Jurnal Teknosains Pangan* 2(1): 73-79.
- Ownagh, A., Hasani, A., Mardani, K., and Ebrahimzadeh, S. 2010. Antifungal effects of thyme, agastache and satureja essential oils on *Aspergillus fumigatus*, *Aspergillus flavus* and *Fusarium solani*. *Veterinary Research Forum* 1(1): 99-105.
- Parthasarathy, V. A., Chempakam, B., and Zachariah, T. J. 2008. "Chemistry of Spices". CAB International Publishing, Wallingford.
- Passos, M. L., and Ribeiro, C. P. 2010. "Innovation in Food Engineering: New Techniques and Products". CRC Press, Boca Raton.
- Paula, D. A., Oliveira, E. B., Teixeira, A. V. N. C., Soares, A. S., and Ramos, A. M. 2017. Double emulsions (W/O/W): physical characteristics and perceived intensity of salty taste. *International Journal of Food Science and Technology*.
- Peredo-Luna, A. H., Lopez-Malo, A., Palou, E., and Jimenez-Munguia, M. T. 2016. Stability of Mexican Oregano Essential Oil Double Emulsions Obtained by Ultrasound Formulated with Whey Protein Concentrate and Tween 80. *Journal of Food Research* 6(1): 32-40.
- Peter, K. V. 2001. "Handbook of Herbs and Spices". Woodhead Publishing Limited, Boca Raton.
- Petsev, D. N. 2004. "Emulsions: Structure, Stability and Interactions". Elsevier, Oxford.
- Pitt, J. I., and Hocking, A. D. 2009. "Fungi and Food Spoilage" 3rd ed. Springer Science & Business Media, Dordrecht.
- Pletney, V. N. 2007. "Focus on Food Engineering Research and Developments". Nova Science Publishers, New York.

- Preedy, V. R. 2016. "Essential Oils in Food Preservation, Flavor and Safety". Academic Press, Oxford.
- Pulatsü, E. T., Sahin, S., and Sumnu, G. 2017. Characterization of different double emulsion formulations based on food grade emulsifiers and stabilizers. *Journal of Dispersion Science and Technology*.
- Puskarova, A., Buckova, M., Krakova, L., Pangallo, D., and Kozics, K. 2017. The antibacterial and antifungal activity of six essential oils and their cyto/genotoxicity to human HEL 12469 cells. *Scientific Reports* 7(8211).
- Rachmayanti, W. P. 2015. Karakterisasi Antimicrobial Film dari Ekstrak Kedelai dan Tapioka sebagai Bahan Pengemas Makanan. Thesis, Universitas Negeri Semarang, Semarang.
- Raeisi, M., Tajik, H., Yarahmadi, A., and Sanginabadi, S. 2015. Antimicrobial Effect of Cinnamon Essential Oil against *Escherichia coli* and *Staphylococcus aureus*. *Health Scope* 4(4).
- Rassem, H. H. A., Nour, A. H., and Yunus, R. M. 2016. Techniques for Extraction of Essential Oils from Plants: A Review. *Australian Journal of Basic and Applied Sciences* 10(16): 117-127.
- Ravindran, P. N. 2017. "The Encyclopedia of Herbs and Spices". CAB International Publishing, Wallingford.
- Raybaudi-Massilia, R. M., Rojas-Grau, M. A., Mosqueda-Melgar, J., and Martin-Belloso, O. 2008. Comparative Study on Essential Oils Incorporated into an Alginate-Based Edible Coating to Assure the Safety and Quality of Fresh-Cut Fuji Apples. *Journal of Food Protection* 71(6): 1150-1161.
- Rodge, A. B., Sonkamble, S. M., Salve, R. V., and Hashmi, S. I. 2012. Effect of Hydrocolloid (Guar Gum) Incorporation on the Quality Characteristics of Bread. *Journal of Food Processing and Technology* 3(2).
- Rojas-Grau, M. A., Avena-Bustillos, R. J., Olsen, C., Friedman, M., Henika, P. R., Martin-Belloso, O., Pan, Z., and McHugh, T. H. 2007. Effects of plant essential oils and oil compounds on mechanical, barrier and antimicrobial properties of alginate-apple puree edible films. *Journal of Food Engineering* 81(1): 634-641.
- Rojas-Grau, M. A., Soliva-Fortuny, R., and Martin-Belloso, O. 2009. Edible coatings to incorporate active ingredients to freshcut fruits: a review. *Trends in Food Science & Technology* 20(1): 438-447.
- Saberi, B., Thakur, R., Bhuyan, D. J., Vuong, Q. V., Chockchaisawasdee, S., Golding, J. B., Scarlett, C. J., and Stathopoulos, C. E. 2017. Development of the edible blend films with good mechanical and barrier properties from pea starch and guar gum. *Starch-Based Films and Reviews* 69(1).
- Sadgrove, N., and Jones, G. 2015. A Contemporary Introduction to Essential Oils: Chemistry, Bioactivity and Prospects for Australian Agriculture.

- Multidisciplinary Digital Publishing Institute Agriculture Journal 5(1): 48-102.
- Saeidy, S., Keramat, J., and Nasirpour, A. 2013. Microencapsulation of Calcium Using Water-in-Oil-in-Water Double Emulsion Method. *Journal of Dispersion Science and Technology* 35(3): 370-379.
- Samaranayake, L. 2012. "Essential Microbiology for Dentistry" 4th ed. Churchill Livingstone Elsevier, China.
- Sanla-Ead, N., Jangchud, A., Chonhenchob, V., and Suppakul, P. 2011. Antimicrobial Activity of Cinnamaldehyde and Eugenol and Their Activity after Incorporation into Cellulose-based Packaging Films. *Packaging Technology and Science*. 25(1): 7-17.
- Sawamura, M. 2010. "Citrus Essential Oils: Flavor and Fragrance". John Wiley & Sons, Hoboken.
- Shan, B., Cai, Y., Brooks, J. D., and Corke, H. 2007. Antibacterial Properties and Major Bioactive Components of Cinnamon Stick (*Cinnamomum burmannii*): Activity against Foodborne Pathogenic Bacteria. *Journal of Agricultural and Food Chemistry* 55(1): 5484-5490.
- Sheeladevi, A., and Ramanathan, N. 2012. Antibacterial Activity of Plant Essential Oils against Food Borne Bacteria. *International Journal of Pharmaceutical & Biological Archives* 3(5): 1106-1109.
- Singh, J., and Kaur, L. 2016. "Advances in Potato Chemistry and Technology" 2nd ed. Academic Press, Cambridge.
- Souza, E. L., Lima, E. O., Freire, K. R. L., and Sousa, C. P. 2005. Inhibitory action of some essential oils and phytochemicals on the growth of various moulds isolated from foods. *Brazilian Archives of Biology and Technology* 48(2): 245-250.
- Su, Jiahong. 2008. Formation and Stability of Food-Grade Water-in-Oil-inWater Emulsions. Thesis. Massey University, Palmerston North.
- Sukatta, U., Haruthaithanasan, V., Chantarapanont, W., Dilokkunanant, U., and Suppakul, P. 2008. Antifungal Activity of Clove and Cinnamon Oil and Their Synergistic against Postharvest Decay Fungi of Grape in vitro. *Kasetsart Journal* 42(5): 169-174.
- Suput, D., Lazic, V., Pezo, L., Markov, S., Vastag, Z., Popovic, L., Radulovic, A., Ostojic, S., Zlatanovic, S., and Popovic, S. 2016. Characterization of Starch Edible Films with Different Essential Oils Addition. *Polish Journal of Food and Nutrition Sciences* 66(4): 277-285.
- Tadros, T. T. 2013 "Emulsion Formation and Stability". Wiley-VCH, Weinheim.
- Tarek, N., Hassan, H. M., Abdelghani, S. M. M., Radwan, I. A., Hammouda, O., and El-Gendy, A. O. 2014. Comparative chemical and antimicrobial study

- of nine essential oils obtained from medicinal plants growing in Egypt. Beni-Suef University Journal of Basic and Applied Sciences 3(2): 149-156.
- Traynor, M., Burke, R., Frias, J. M., Gaston, E., and Barry-Ryan, C. 2013. Formation and Stability of an Oil in Water Emulsion Containing Lecithin, Xanthan Gum and Sunflower Oil. International Food Research Journal 20(5): 2173-2181.
- Ushikubo, F. Y., and Cunha, R. L. 2012. Stability mechanisms of liquid water-in-oil emulsions. Food Hydrocolloids 34(1): 145-153.
- Weiss, E. A. 2002. "Spice Crops". CAB International Publishing, Wallingford.
- Weiss, J., and Muschiolik, G. 2007. Factors Affecting the Droplet Size of Water-in-Oil Emulsions (W/O) and the Oil Globule Size in Water-in-Oil-in-Water Emulsions (W/O/W). Journal of Dispersion Science and Technology 28(5): 703-716.
- Wijayanti, W. A., Zetra, Y., and Burhan, P. 2010. Minyak Atsiri dari Kulit Batang *Cinnamomum burmannii* (Kayu Manis) dari Famili Lauraceae sebagai Insektisida Alami, Antibakteri dan Antioksidan. Thesis, Institut Teknologi Sepuluh Nopember, Surabaya.
- Wong, Y. C., Ahmad-Mudzaqqir, M. Y., and Wan-Nurdiyana, W. A. 2014. Extraction of Essential Oil from Cinnamon (*Cinnamomum zeylanicum*). Oriental Journal of Chemistry 30(1): 37-47.
- World Health Organization (WHO). 2008. "Safety Evaluation of Certain Food Additives and Contaminants". WHO, Geneva.
- Xing, F., Hua, H., Selvaraj, J. N., Zhao, Y., Zhou, L., Liu, X., and Liu, Y. 2014. Growth inhibition and morphological alterations of *Fusarium verticillioides* by cinnamon oil and cinnamaldehyde. Food Control 46(1): 343-350.
- Yildirim, M., Sumnu, G., and Sahin, S. 2017. The effects of emulsifier type, phase ratio, and homogenization methods on stability of the double emulsion. Journal of Dispersion Science and Technology 38(6): 807-814.
- Yousef, A. E., and Carlstrom, C. 2003. "Food Microbiology: A Laboratory Manual". John Wiley & Sons, Hoboken.
- Yuliarto, F. T., Khasanah, L. U., and Anandito, R. B. K. 2012. Pengaruh Ukuran Bahan dan Metode Destilasi (Destilasi Air dan Destilasi Uap-Air) terhadap Kualitas Minyak Atsiri Kayu Manis (*Cinnamomum burmannii*). Jurnal Teknosains Pangan 1(1): 12-23.