

เอกสารอ้างอิง

- กรมวิทยาศาสตร์การแพทย์. 2536. เอกสารแนบท้ายประกาศ เรื่อง เกณฑ์คุณภาพทางจุลชีววิทยาของอาหารและภาชนะสัมผัสอาหารสำหรับอาหารพร้อมบริโภค (ออนไลน์). สืบค้นจาก: <http://www.dmsc.moph.go.th/webroot/BQSF/file/useful.htm> (1 ธันวาคม 2552)
- กฤติกา นรจิตร. 2548. คุณสมบัติของสารสกัดจากพืชวงศ์ขิง: อิทธิพลของวิธีการสกัดต่อการยับยั้งการเจริญเติบโตของเชื้อแบคทีเรียและการเป็นสารต้านอนุมูลอิสระ. วิทยานิพนธ์ วิทยาศาสตร์มหาบัณฑิต มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี.
- กองสุขาภิบาลอาหาร สำนักอนามัย. 2552. เครื่องปรุงรสของไทย: คุณค่าต้องมาพร้อมความปลอดภัย (ออนไลน์). สืบค้นจาก: http://www.foodsafety.bangkok.go.th/new2/read_article.php?cat_id=4&txt_id=160 (11 กรกฎาคม 2552)
- เกียรติคุณ สุทธจิตต์และไมตรี สุทธจิตต์. 2548. มหัศจรรย์แห่งพืชผักและผลไม้. สำนักวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยนเรศวร วิทยาเขตสารสนเทศพะเยา.
- คณาจารย์ภาควิชาวิทยาศาสตร์และเทคโนโลยีการอาหาร คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเกษตรศาสตร์. 2539. วิทยาศาสตร์และเทคโนโลยีการอาหาร. สำนักพิมพ์มหาวิทยาลัยเกษตรศาสตร์.
- เคล็ดลับสุขภาพ. 2550. ต้มข่าไก่ (ออนไลน์). สืบค้นจาก: <http://www.healthnet.in.th/text/forum2/food/food-new%5B14%5D.htm> (16 มิถุนายน 2550).
- จรรย์ แก้วประสิทธิ์. 2552. פרקตอนที่ 3. สาขาเคมีสายวิทยาศาสตร์ คณะศิลปศาสตร์และวิทยาศาสตร์ มหาวิทยาลัยเกษตรศาสตร์.
- จันทนา เวสพันธ์. 2552. การปนเปื้อนจุลินทรีย์ในสารสกัดและผลิตภัณฑ์จากธรรมชาติ (ออนไลน์). สืบค้นจาก: <http://202.129.59.198/rdi/Present7.ppt> (20 พฤศจิกายน 2552)
- ชลลดา กุลสถาพร และอมรทิพย์ สมสุข. 2545. การศึกษาฤทธิ์ต้านเซลล์มะเร็งและฤทธิ์ต้านอนุมูลอิสระของตะไคร้. ภาควิชาเภสัชเวทและเภสัชพฤกษศาสตร์ คณะเภสัชศาสตร์ มหาวิทยาลัยสงขลานครินทร์.

- ครุณี ชนะนันท์กุล. 2543. เทคโนโลยีในการผลิตอาหาร. มหาวิทยาลัยรามคำแหง. กรุงเทพฯ.
- ธีวรินทร์ นฤนาท. 2548. เสน่ห์เครื่องแกงไทยสดใสในต่างแดน. ว. สถาบันอาหาร 8(45): 55-59.
- นงลักษณ์ สุวรรณพินิจ และปรีชา สุวรรณพินิจ. 2544. จุลชีววิทยาทั่วไป. พิมพ์ครั้งที่ 3. สำนักพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย. กรุงเทพฯ.
- นิจศิริ เรืองรังษี. 2545. เครื่องเทศ. โรงพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย. กรุงเทพฯ.
- นิธิยา รัตนานนท์. 2549. เคมีอาหาร. พิมพ์ครั้งที่ 2. โอ. เอส. พรินติ้ง เฮ้าส์. กรุงเทพฯ.
- นุชรี ชาดิวงศ์สกุล. 2552. เครื่องดื่มขำส้มแขกสำเร็จรูป: ผลของชนิดของบรรจุภัณฑ์และเทคนิคการบรรจุต่อการเปลี่ยนแปลงคุณภาพระหว่างการเก็บรักษา. วิทยานิพนธ์ วิทยาศาสตร์มหาบัณฑิต. มหาวิทยาลัยสงขลานครินทร์.
- บรรจบ ชุณหสวัตติกุล. 2544. ป้องกันความเสื่อมโทรม เสริมสร้างความอ่อนเยาว์วิตามิน เอ.ซี.อี. สารต้านอนุมูลอิสระ. ถนนหนทาง. 58-60.
- บรรณาธิการอุตสาหกรรมสาร. 2545a. บรรจุภัณฑ์พลาสติก. อุตสาหกรรม. 45: 46-51.
- บรรณาธิการอุตสาหกรรมสาร. 2545b. บรรจุภัณฑ์ หัวใจแห่งความปลอดภัยของอาหาร. อุตสาหกรรมสาร. 45: 33-39.
- บัญญัติ สุขศรีงาม. 2527. เครื่องเทศที่ใช้เป็นสมุนไพร เล่ม 2. อมรการพิมพ์. กรุงเทพฯ.
- บุญกร อุดรภิชาดิ. 2545. จุลชีววิทยาทางอาหาร. ภาควิชาชีววิทยา คณะวิทยาศาสตร์ มหาวิทยาลัยทักษิณ.
- ปกิต กำบุญมา, นันทิยา มะโนศิลป์, สิรินันท์ คมขำ, ชนกพร เผ่าศิริ และฉวี เย็นใจ. ไม่ระบุปี. องค์ประกอบทางเคมีฤทธิ์ทางชีวภาพและการปรับเปลี่ยนโครงสร้างของสารแคพไซซินและไดไฮโดรแคพไซซินจากพริก. คณะวิทยาศาสตร์ มหาวิทยาลัยขอนแก่น.
- ปณัฐฐา ไชยมุติ. 2546. การทดสอบฤทธิ์ต้านอนุมูลอิสระของพืชสมุนไพร 7 ชนิด. วิทยานิพนธ์ วิทยาศาสตร์มหาบัณฑิต. มหาวิทยาลัยสงขลานครินทร์.
- ประสิทธิ์ อติวีระกุล. 2527. เทคโนโลยีของผลไม้และผัก. ภาควิชาอุตสาหกรรมเกษตร คณะทรัพยากรธรรมชาติ มหาวิทยาลัยสงขลานครินทร์.

- ประเสริฐ ประภานภสินธุ์. 2544. เปรียบเทียบเทคนิคการสกัดสารแคปไซซินในพริกพันธุ์ต่างๆ. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต. มหาวิทยาลัยเกษตรศาสตร์.
- ปราณี อ่านเปรื่อง. 2543. เอ็นไซม์ทางอาหาร. พิมพ์ครั้งที่ 3. โรงพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย. กรุงเทพฯ.
- พงศ์ดี ทรงพระนาม. 2547. อาหารไทย. บริษัท ซีเอ็ดดูเคชั่น จำกัด. กรุงเทพฯ.
- มนัสวี เกียรติเจริญวงศ์, ษรุษ นนทรักษ์ และ อรุณศรี ลีจิระจำเนียร. 2546. ผลของการบรรจุแบบปรับสภาพบรรยากาศและแบบสุญญากาศต่อการเจริญของแบคทีเรียบางชนิดที่ปนเปื้อนในอาหาร. คณะวิศวกรรมศาสตร์และเทคโนโลยีอุตสาหกรรม. มหาวิทยาลัยศิลปากร.
- มยุรี ภาคลำเจียก. 2544. เทคนิคการบรรจุหีบห่อ “เนื้อแดง”. สถาบันวิจัยวิทยาศาสตร์และเทคโนโลยีแห่งประเทศไทย. กระทรวงวิทยาศาสตร์และเทคโนโลยี. ค้นจาก <http://www.tistr.or.th>. (7 กันยายน 2550).
- รัตนา อินทรานุปกรณ์. 2545. การตรวจสอบและสกัดแยกสารสำคัญจากพืชสมุนไพร. คณะเภสัชศาสตร์ มหาวิทยาลัยหัวเฉียวเฉลิมพระเกียรติ.
- วราวุฒิ ครุส่ง. 2538. จุลชีววิทยาในกระบวนการแปรรูปอาหาร. โอ. เอส. พรินต์ติ้ง เฮาส์. กรุงเทพฯ.
- วัชรีย์ หาญยิ่ง. 2549. อนุมูลอิสระและสารต้านอนุมูลอิสระในกลไกของการเกิดมะเร็ง. ว. วิทยาศาสตร์ มข. 34: 199-208.
- วัลยา เนาวรัตน์วัฒนาและพัชรี บุญศิริ. 2542. โปรออกซิแดนซ์: อีกโฉมหน้าของแอนติออกซิแดนซ์. ว. วิทยาศาสตร์. 53(3): 196-198.
- วิวัฒน์ หวังเจริญ. 2545. บทบาทของสารประกอบฟีนอลต่อสุขภาพ. อาหาร 32 (4): 245-253.
- วิลาวัลย์ เจริญตระกูล. 2537. การเน่าเสียของอาหารเนื่องจากจุลินทรีย์. พิมพ์ครั้งที่ 1. คณะวิทยาศาสตร์ มหาวิทยาลัยสงขลานครินทร์.
- วิไล รังสาดทอง. 2543. เทคโนโลยีการแปรรูปอาหาร. บริษัท แท็กซี่ แอนด์ เจอร์นัล พับลิเคชั่น จำกัด. กรุงเทพฯ.
- วิไลลักษณ์ อิศระมงคลพันธุ์. 2549. อาหารไทยครบรส. บริษัท สำนักพิมพ์แม่บ้าน จำกัด. กรุงเทพฯ.

ศรีวัฒนา ทรงจิตสมบุรณ์, ปาจารย์ อับดุลลาหิม และสุรัตน์ โคมินทร์. 2548. สารต้านอนุมูลอิสระ
จำเป็นต่อร่างกายอย่างไร. หมอชาวบ้าน. 27: 27-31.

ศูนย์วิจัยเพื่ออุตสาหกรรมอาหาร. 2552. อุตสาหกรรมเครื่องเทศเครื่องปรุงรส (ออนไลน์).
สืบค้นจาก: <http://fic.nfi.or.th/th/thaifood/product52-condiment.asp> (11 กรกฎาคม
2552)

สถาบันการแพทย์แผนไทย. 2542. ไม้ริมรั้ว. โรงพิมพ์องค์การสงเคราะห์ทหารผ่านศึก. กรุงเทพฯ.

สมาคมภัตตาคารไทย. 2550. 10 อันดับอาหารไทยที่ต่างชาตินิยม (ออนไลน์). สืบค้นจาก:
<http://www.thairestaurantassociation.com/> (5 มิถุนายน 2550)

สำนักงานประมงจังหวัดสตูล. 2549. สภาวะการเพาะเลี้ยงกุ้งทะเล ปี 2548. ค้นจาก
<http://www.fisheries.go.th> (7 กันยายน 2550).

สุจิรา อายุสุข. 2553. สมบัติการต้านออกซิเดชันและความคงตัวของเครื่องดัมข่า. วิทยานิพนธ์ วิทยา
ศาสตรมหาบัณฑิต. มหาวิทยาลัยสงขลานครินทร์.

สุพร นุชดำรงค์. 2549. อนุมูลอิสระ คุณและโทษต่อมนุษย์. ว. วิทยาศาสตร์ มข. 34: 97-102.

สุทธวัฒน์ เบญจกุลและไพรัตน์ โสภโณดร. 2544. บทปฏิบัติการ: การควบคุมตรวจสอบและปฏิบัติ
เกี่ยวกับสัตว์น้ำ. ภาควิชาเทคโนโลยีอาหาร. คณะอุตสาหกรรมเกษตร.
มหาวิทยาลัยสงขลานครินทร์. หน้า 47-50.

สุทธวัฒน์ เบญจกุล. 2548. เคมีและคุณภาพสัตว์น้ำ. สำนักพิมพ์โอเดียนสโตร์. กรุงเทพฯ.

สุทธวัฒน์ เบญจกุล. 2554. เคมีและคุณภาพสัตว์น้ำ. พิมพ์ครั้งที่ 2. กรุงเทพฯ: สำนักพิมพ์โอเดียน
สโตร์. 146 หน้า.

สุมณฑา วัฒนสินธุ์. 2537. ความรู้เกี่ยวกับอันตรายในอาหาร. ใน ความปลอดภัยของอาหาร (การใช้
ระบบ HACCP) หน้า 90-118. สำนักพิมพ์ ศ.ส.ท. (สมาคมส่งเสริมเทคโนโลยี (ไทย-
ญี่ปุ่น). กรุงเทพฯ.

สุมณฑา วัฒนสินธุ์. 2545. จุลชีววิทยาทางอาหาร. โรงพิมพ์ มหาวิทยาลัยธรรมศาสตร์. กรุงเทพฯ.

สุวิมล กิรติพิบูล. 2546. จุลินทรีย์กับการควบคุมสุขลักษณะการผลิตในโรงงานอุตสาหกรรม
อาหาร. สำนักพิมพ์ ศ.ส.ท. (สมาคมส่งเสริมเทคโนโลยี ไทย-ญี่ปุ่น). กรุงเทพฯ.

- เสก อักษรานุเคราะห์. 2546. อนุมูลอิสระจากการออกกำลังกาย. จุฬาลงกรณ์เวชสาร. 47: 139-148.
- อาทินันท์ ประสมพงศ์. 2546. เทคนิคการเลี้ยงกุ้งขาว หรือ วานาไม. ค้นจาก <http://www.nicaonline.com>. (7 กันยายน 2550).
- อาสินะ หมัดเจริญ. 2547. ผลของสารประกอบฟอสเฟตต่อคุณภาพและสมบัติกล้ามเนื้อของกุ้งกุลาดำ. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต. มหาวิทยาลัยสงขลานครินทร์.
- อบเชย วงศ์ทอง และชนิษฐา พูนผลกุล. 2545. หลักการประกอบอาหาร. ภาควิชาคหกรรมศาสตร์ คณะเกษตร มหาวิทยาลัยเกษตรศาสตร์.
- อรตรี รอดเจริญ. 2542. การแยกเชื้อและลักษณะของเชื้อ *Pediococcus* spp. จากอาหารหมักดองพื้นบ้านภาคใต้ของไทย. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต. มหาวิทยาลัยสงขลานครินทร์.
- Adegoke, G. O. and Odesola, B. A. 1996. Storage of maize and cowpea and inhibition of microbial agents of biodeterioration using the powder and essential oil of lemongrass (*Cymbopogon citratus*). Int. Biodeter. Biodegr. 37: 81-84.
- Adeneye, A. A. and Agbaje, E. O. 2007. Hypoglycemic and hypolipidemic effects of fresh leaf aqueous extract of *Cymbopogon citratus* Stapf. in rats. J. Ethnopharmacol. 112: 440-444.
- Akhtar, M. S., Khan, M. A. and Malik, M. T. 2002. Hypoglycaemic activity of *Alpinia galanga* rhizome and its extracts in rabbits. Fitoterapia. 73: 623-628.
- Alemela, L., Nieto-Snadoval, J. M. and Lopez, F. J. A. 2002. Microbial inactivation of parika by a high temperature short-time treatment. Influence on color properties. J. Agric. Food Chem. 50: 1435-1440.
- Amorati, R., Pedulli, G. F., Cabrini, L., Zamboni, L. and Landi, L. 2006. Solvent and pH effects on the antioxidant activity of caffeic and other phenolic acids. J. Agric. Food Chem. 54: 2932-2937
- A.O.A.C. 1999. Official Analytical Chemists. 16th ed. The Association of Official Analytical Chemists. Inc. Washington, DC.

- Arabshahi-Delouee, S., Devi, D. V. and Urooj, A. 2007. Evaluation of antioxidant activity of some plant extracts and their heat, pH and storage stability. *Food Chem.* 100: 1100-1105.
- Arambewelaa, L. S. R., Pereraa, A. and Wijesunderab, R. L. C. 1999. Antibacterial activity of *Kaempheria galangal*. *Fitoterapia.* 70: 425-427.
- Arias, R., Lee, T. C., Logendra, L. and Janes, H. 2000. Correlation of lycopene measured by HPLC with the L*, a*, b* color readings of a hydroponic tomato and the relationship of maturity with color and lycopene content. *J. Agric. Food Chem.* 48: 1697-1702.
- Arnao, M. B., Cano, A. and Acosta, M. 2001. The hydrophilic and lipophilic contribution to total antioxidant activity. *Food Chem.* 73: 239-244.
- Arritt, F. M. 2004. The Effects of Modified Atmosphere Packaging on Toxin Production by *Clostridium botulinum* in Raw Aquacultured Flounder Fillets and Fully Cooked Breaded and Battered Pollock Portions. Doctor of Philosophy in Food Science and Technology. Virginia.
- Arts, I. C. W. and Hollman, P. C. H. 1998. Optimization of a quantitative method for the determination of catechins in fruits and legumes. *J. Agric. Food Chem.* 46: 5156-5162.
- Axelssona, L. 2004. Lactic Acid Bacteria: Classification and Physiology. *In* Lactic Acid Bacteria Microbiological and Functional Aspects. 3rd ed. (Salminen, S., Wright, A. and Ouwehand, A., eds). p. 1-66. Marcel Dekker. New York.
- Aycicek, H., Oguz, U. and Karci, K. 2006. Determination of total aerobic and indicator bacteria on some raw eaten vegetables from wholesalers in Ankara, Turkey. *Int. J. Hyg. Envir. Heal.* 209: 197-201.
- Babji, A. S., Froning, G. W. and Ngoka, D. A. 1982. The effect of Short-term tumbling and salting on the quality of turkey breast muscle. *Poultry Sci.* 61: 300-303.

- Bacteriological Analytical Manual. 2001. U. S. Department of Health and Human Service. U. S. Food and Drug Administration Center of Food Safety and Applied Nutrition.
- Bahorun, T., Luximon-Ramma, A., Crozier, A. and Aruoma, O. I. 2004. Total phenol, flavonoid, proanthocyanidin and vitamin C levels and antioxidant activities of Mauritian vegetables. *J. Sci. Food Agric.* 84: 1553-1561.
- Banerjee, M and Sarkar, P. K. 2003. Microbiological quality of some retail spices in India. *Food Res. Int.* 36: 469-474.
- Barbut, S. 1993. Colour measurements for evaluating the pale soft educative (PSE) occurrence in turkey meat. *Food Res. Int.* 26: 39-43.
- Bartolome, A. P., Ruperez, P. and Fuster, C. 1995. Pineapple fruit: morphological characteristics, chemical composition and sensory analysis of Red Spanish and Smooth Cayenne cultivars. *Food Chem.* 53: 75-79.
- Baydar, H., Sagdic, O., Ozkan, G. and Karadogan, T. 2004. Antibacterial activity and composition of essential oils of *Origanum*, *Thymbra* and *Sajureja* species with commercial importance in Turkey. *Food Control.* 15: 169-172.
- Baylis, C. L. 2006. Enterobacteriaceae. *In* Food Spoilage Microorganisms. (Blackburn, C.W., ed.). p. 624-659. CRC Press LLC. New York.
- Benavente-Garcia, O., Castillo, J., Marin, F. R., Ortuno, A. and Del Rio, J. A. 1997. Uses and properties of citrus flavonoids. *J. Agric. Food Chem.* 45: 454-451.
- Bendjeddou, D., Lalaoui, K. and Satta, D. 2003. Immunostimulating activity of the hot water-soluble polysaccharide extracts of *Anacyclus pyrethrum*, *Alpinia galanga* and *Citrullus colocynthis*. *J. Ethnopharmacol.* 88: 155-160.
- Bengoechea, M. L., Sancho, A. I., Bartolome, B., Estrella, I., Gomez-Cordoves, C. and Hernandez, T. 1997. Phenolic composition of industrially manufactured purees and concentrates from peach and apple fruits. *J. Agric. Food Chem.* 45: 4071-4075.

- Benjakul, S., Visessanguan, W., Phongkanpai, V. and Tanaka, M. 2005. Antioxidant activity of caramelisation products and their preventive effect on lipid oxidation in fish mince. *Food Chem.* 90: 231-239.
- Benzie, I. F. F. and Strain, J. J. 1996. The ferric reducing ability of plasma (FRAP) as a measure of "Antioxidant Power": The FRAP Assay. *Anal. Biochem.* 239: 70-76.
- Berge, P., Ertbjerg, P., Larsen, L. M., Astruc, T., Vignon, X. and Moller, A. J. 2001. Tenderization of beef by lactic injected at different times post mortem. *Meat Sci.* 57: 347-357.
- Berhow, M. A., Fong, C. H. and Hasegawa, S. 1996. Limonoid and flavonoid composition in varieties of papaya and papadocitrus. *Biochem. Syst. Ecol.* 24: 237-242.
- Berke, T. G. and Shieh, S. C. 2001. Capsicum, Chillies, Paprikas, Bird's Eye Chili. *In Hand Book of Herbs and Spices.* (Peter, K. V., ed). p. 111-112. Woodhead Publishing Limited. Cambridge.
- Binsan, W. 2007. Antioxidative Activity of Mungoong, an Extract Paste, from White Shrimp (*Litopenaeus vannamei*) Cephalothorax. Degree of master of science in food technology. Prince of Songkla University.
- Binsan, W., Benjakul, S., Visessanguan, W., Roytrakul, S., Tanaka, M. and Kishimura, H. 2008. Antioxidative activity of Mungoong, an extract paste from the cephalothorax of white shrimp (*Litopenaeus vannamei*). *Food Chem.* 106: 185-193.
- Buettner, G. R. 1993. The pecking order of free radical and antioxidant: lipid peroxidation, α -tocopherol and ascorbate. *Arch. Biochem. Biophys.* 300: 535-543.
- Burda, S. and Oleszek, W. 2001. Antioxidant and antiradical activities of flavonoids. *J. Agric. Food Chem.* 49: 2774-2777.
- Cacace, J. E. and Mazza, G. 2003. Mass transfer process during extraction of phenolic compounds from milled berries. *J. Food Eng.* 59: 379-389.

- Cadun, A., Cakli, S., and Kislal, D. 2005. A study of marination of deepwater pink shrimp (*Parapenaeus longirostris*, Lucas, 1846) and its shelf life. *Food Chem.* 90: 53-59.
- Cai, Y., Luo, Q., Sun, M. and Harold, C. 2004. Antioxidant activity and phenolic compounds of 112 traditional Chinese medicinal plants associated with anticancer. *Life Sci.* 74: 2157-2184.
- Castenmiller, J. J. M., Linssen, J. P. H., Heinonen, I. M., Hopia, A. I., Schwarz, K., Hollmann, P. C. H. and West, C. E. 2002. Antioxidant properties of differently processed spinach products. *Nahrung.* 46: 290-293.
- Cheah, P. B. and Hasim, N. H. A. 2000. Natural antioxidant extract from galangal (*Alpinia galanga*) for minced beef. *J. Sci. Food Agr.* 80: 1565-1571.
- Cheel, J., Theoduloz, C., Rodriaguez, J. and Schmeda-Hirschmann, G. 2005. Free radical scavengers and antioxidants from lemongrass (*Cymbopogon citratus* (DC.) Stapf.). *J. Agric. Food Chem.* 53: 2511-2517.
- Chen, G. and Xiong, Y. L. 2008. Shelf-stability enhancement of precooked red claw crayfish (*Cherax quadricarinatus*) tails by modified CO₂/O₂/N₂ gas packaging. *LWT.* 41: 1431-1436. Available online at www.sciencedirect.com.
- Chen, Q., Shi, H. and Ho, C. T. 1992. Effects of rosemary extracts and major constituents on lipid oxidation and soy bean lipoxygenase activity. *J. Am. Oil. Chem. Soc.* 69: 999-1002.
- Cheret, R., Delbarre-Ladrat, C., Lamballerie-Anton, M., and Verrez-Bagnis, V. 2007. Calpain and cathepsin activities in post mortem fish and meat muscles. *Food Chem.* 101: 1474-1479.
- Ching, L. S. and Mohamed, S. 2001. Alpha-tocopherol content in 62 edible tropical plants. *J. Agric. Food Chem.* 49: 3101-3105.
- Choi, H. S., Song, H. S., Ukeda, H. and Sawamura, M. 2000. Radical scavenging activities of citrus essential oils and their components: Detection using 1,1-diphenyl-2-picrylhydrazyl. *J. Agric. Food Chem.* 48: 4156-4161.

- Chu, Y. H., Chang, C. L. and Hsu, H. F. 2000. Flavonoid content of several vegetables and their antioxidant activity. *J. Sci. Food Agric.* 80: 561-566.
- Chuah, A. M., Lee, Y. C., Yamaguchi, T., Takamura, H., Yin, L. J. and Matoba, T. 2008. Effect of cooking on the antioxidant properties of coloured peppers. *Food Chem.* 111: 20-28.
- Chyau, C. C., Tsaib, S. Y., Kob, P. T. and Maub, J. L. 2002. Antioxidant properties of solvent extracts from *Terminalia catappa* leaves. *Food Chem.* 78: 483-488.
- Concellon, A., Anon, M. C. and Chaves, A. R. 2004. Characterization and changes in polyphenol oxidase from eggplant fruit (*Solanum melongena* L.) during storage at low temperature. *Food Chem.* 88: 17-24.
- Conway, E. J. and Byrne, A. 1936. An absorpotion apparatus for the micro-determination of certain volatile substances. I The micro-determination of ammonia. *J. Biochem.* 27: 413-529.
- Crawford, M. J. 2000. Fighting Free Radicals: Antioxidants to the Rescue. *Healthy & Natural.* 7: 38.
- Croft, K. D. 1999. Antioxidant Effects of Plant Phenolic Compounds. *In* Antioxidants in Human Health and Disease. (Basu, T. K., Temple, N. J. and Gargp, M. L., eds.). p. 109-121. CABI pub. New York.
- Crozier, A., Lean, M. E. J., McDonald, M. S. and Black, C. 1997. Quantitative analysis of the flavonoid content of commercial tomatoes, onions, lettuce, and celery. *J. Agric. Food Chem.* 45: 590-595.
- Crozier, A., Jaganath, I. B. and Clifford, M. N. 2006. Phenols, Ppolyphenols and Tannins: an Overview. *In* Plant Secondary Metabolites: Occurrence, Structure and Role in the Human Diet. (Crozier, A., Clifford, M. N. and Ashihara, H., eds). p. 1-24. Blackwell Publishing, Ltd. UK.
- Daferera, D. J., Ziogas, B. N. and Polissiou, M. G. 2000. GC-MS analysis of essential oils from Greek aromatic plants and their fungitoxicity on *Penicillium digitatum*. *J. Agric. Food Chem.* 48: 2576-2581.

- Daood, H. G., Vinkler, M., Markus, F., Hebshi, E. A. and Biacs, P. A. 1996. Antioxidant vitamin content of spice red pepper (paprika) as affected by technological and varietal factors. *Food Chem.* 55: 365-372.
- Davidson, P. M. 1997. Chemical Preservatives and Natural Antimicrobial Compounds. *In Food Microbiology: Fundamentals and Frontiers.* (Doyle, M. P., Beuchat, L. R. and Montville, T. J., eds.). A. S. M. Press. Washington D. C. USA.
- Dorantes, L, Colmenero, R., Hernandez, H., Mota, L., Jaramillo, M. E. , Fernandez, E., Solano, C. 2000. Inhibition of growth of some foodborne pathogenic bacteria by *Capsicum annum* extracts. *Int. J. Food. Microbiol.* 57: 125-128.
- Du, G., Li, M., Ma, F. and Liang, D. 2009. Antioxidant capacity and the relationship with polyphenol and vitamin C in *Actinidia* fruit. *Food Chem.* 113: 557-562.
- Duangmal, K. and Apenten, R. K. O. 1999. A comparative study of polyphenoloxidases from taro (*Colocasia esculenta*) and potato (*Solanum tuberosum* var. Romano). *Food Chem.* 64: 351-359.
- Dumri, K. 2001. Study on the Pro-oxidative Activity in Thai spices. Master's degree (Biotechnology). Mahidol University.
- Durling, N. E., Catchpole, O. J., Grey, J. B., Webby, R. F., Mitchell, K. A., Foo, L. Y. and Perry, N. B. 2007. Extraction of phenolics and essential oil from dried sage (*Salvia officinalis*) using ethanol-water mixtures. *Food Chem.* 101: 1417-1424.
- Dziedzic, J. D. 1990. Phosphates improve many foods. *Food Technol.* 44: 80-92.
- Egan, H., Kirk, R.S. and Sawyer, R. 1981. Pearson's Chemical Analysis of Foods. London: Churchill Livingstone.
- Elbe, J. H. 1996. Colorants. *In Food Chemistry.* 3rd ed. (Fennema, O.R., ed.). p. 651-722. Merce Dekker. New York.
- Elliott, R. P., Straka, R. P. and Garibaldi, J. A. 1964. Polyphosphate inhibition of growth of pseudomonads from poultry meat. *J. Appl. Microbiol.* 12: 517-522.

- Endo, Y., Usuki, R. and Kaneda, T. 1985. Antioxidant effects of chlorophyll and pheophytin on the autooxidation of oils in the dark. II. The mechanism of antioxidative action of chlorophyll. *J. Am. Oil Chem Soc.* 62: 1387- 1390.
- Engelberth, J. 2006. Secondary Metabolites and Plant Defense. *In Plant Physiology*. 4th ed. (Taiz, L, and Zeiger, E., eds.). p. 315-341. Inc. Publishers. Sunderland, Massachusetts.
- Eriksson, C. E. and Na, A. 1995. Antioxidant agents in raw materials and processed foods. *Biochem. Soc. Symp.* 61: 221-234.
- Fellows, P. 2000. Packaging. *In Food Processing Technology: Principles and Practice*. 2nd ed. (Fellows, P., ed) p. 462-510. Woodhead Publishing Limited. England.
- Fernandez-Orozco, R., Frias, J., Munoz, R., Zielinski, H., Piskula, M. K., Kozłowska, H. and Vidal-Valverde, C. 2008. Effect of fermentation conditions on the antioxidant compounds and antioxidant capacity of *Lupinus angustifolius* cv. *zapaton*. *Eur. Food Res. Technol.*: 227:979-988.
- Ferruzzi, M. G., Bohm, V., Courtney, P. D. and Schwartz, S. J. 2002. Antioxidant and antimutagenic activity of dietary by radical scavenging and bacterial reverse mutagenesis assays. *J. Food Sci.* 67: 2589-2595.
- Ferruzzi, M. G. and Blakeslee, J. 2007. Digestion, absorption, and cancer preventative activity of dietary chlorophyll derivatives. *Natural Res.* 27: 1-12.
- Ficker, C. E., Smith, M. L., Susiarti, S., Leamanb, D. J., Irawati, C. and Arnason J. T. 2003. Inhibition of human pathogenic fungi by members of Zingiberaceae used by the Kenyah (Indonesian Borneo). *J. Ethnopharmacol.* 85: 289-293.
- Figueirinha, A., Paranhos, A., Perez-Alonso, J. J., Santos-Buelga, C. and Batista, M. T. 2008. *Cymbopogon citratus* leaves: Characterisation of flavonoids by HPLC-PDA-ESI/MS/MS and an approach to their potential as a source of bioactive polyphenols. *Food Chem.* 110: 718-728.

- Frankel, E. N., Bosanek, C. A., Meyer, A. S., Silliman, K. and Kirk, L. L. 1998. Commercial grape juices inhibit the in vitro oxidation of human low-density lipoproteins. *J. Am. Oil. Chem. Soc.* 46: 834-838.
- Friedman, M. and Jürgens, H. S. 2000. Effect of pH on the stability of plant phenolic compounds. *J. Agric. Food Chem.* 48: 2101-2110.
- Fogliano, V., Verde, V., Randazzo, G. and Ritieni, A. 1999. Method for measuring antioxidant activity and its application to monitoring the antioxidant capacity of wines. *J. Agric. Food Chem.* 47: 1035-1040.
- Fukumoto, L. R. and Mazza, G. 2000. Assessing antioxidant and prooxidant activities of phenolic compounds. *J. Agric. Food Chem.* 48: 3597-3604.
- Gao, X., Ohlander, M., Jeppsson, N., Bjork, L. and Trajkovski, V. 2000. Changes in antioxidant effects and their relationship to phytonutrients in fruits of sea buckthorn (*Hippophae rhamnoides* L.) during maturation. *J. Agric. Food Chem.* 48: 1485-1490.
- Garbutt, J. 1997. *Essentials of Food Microbiology*. A Member of Hodder Headline Group. London.
- Garver, K. I. and Muriana, P. M. 1993. Detection, identification and characterization of bacteriocin-producing lactic acid bacteria from retail food products. *Int. J. Food Microbiol.* 19: 241-258.
- Gazzani, G., Papetti, A., Massolini, G. and Daglia, M. 1998. Anti- and prooxidant activity of water soluble components of some common diet vegetables and the effect of thermal treatment. *J. Agric. Food Chem.* 48: 4118-4122.
- Gertenbach, D. D. 2002. Solid-Liquid Extraction Technologies for Manufacturing Nutraceuticals. *In Functional Foods: Biochemical and Processing Aspects*. Vol. II. (Shi, J., Mazza, G. and Maguer, M. L., eds.). p. 331-366. CRC Press LLC. New York.
- Gökglu, N., Cengiz, E. and Yerlikaya P. 2004. Determination of the shelf life of marinated sardine (*Sardina pilchardus*) stored at 4°C. *Food Control*.15: 1-4.

- González-Montelongo, R., Gloria Lobo, M. and González, M. 2010. Antioxidant activity in banana peel extracts: Testing extraction conditions and related bioactive compounds. *Food Chem.* 3: 1030-1039.
- Gordon, M. H. 2001. The Development of Oxidative Rancidity in Foods. *In Antioxidants in Food Practical Applications*. 1st ed. (Pokorny, J., Yanishlieva-Maslarova, N. and Gordon, M., eds). p. 7-21. CRC Press LLC. New York. and Woodhead Publishing limited. England.
- Gourmetthai. 2007. Tom-kha kai (Online). Available:
<http://www.gourmetthai.com/Recipes/Content.asp?ID=88> (17 June 2007).
- Gregory, J. F. 1996. Vitamins. *In Food Chemistry*. 3rd ed. (Fennema, O. R., Ed.). p. 531-616. Dekker. New York.
- Hall, C. 2001. Sources of Natural Antioxidants: Oilseeds, Nuts, Cereals, Legumes, Animal Products and Microbial Sources. *In Antioxidants in Food Practical Applications*. 1st ed. (Pokorny, J., Yanishlieva, N. and Gordon, M. eds.). p. 147-158. CRC Press LLC. New York. and Woodhead Publishing limited. England.
- Halliwel, B. 1999. Antioxidant defence mechanisms: From the beginning to the end (of the beginning). *Free Radical Res.* 31: 261-272.
- Hamama, A. A. and Nawar, W. W. 1991. Thermal decomposition of some phenolic antioxidants. *J. Agric. Food Chem.* 39: 1063-1069.
- Heard, G. M. 2002. Microbiology of Fresh-Cut Produce. *In Fresh-Cut Fruits and Vegetables: Science, Technology, and Market*. (Lamikanra, O., ed.). p. 187-248. CRC Press LLC. USA.
- Hogg, J. S., Lohmann, D. H. and Russell, K. E. 1961. The kinetics of reaction of 2,2-diphenyl-1-picrylhydrazyl with phenols. *Can. J. Chem.* 39: 1588-1594.
- Hojnik, M., Skerget, M. and Knez, Z. 2007. Isolation of chlorophylls from stinging nettle (*Urtica dioica* L.). *Sep. Purif. Technol.* 57: 37-46.
- Hopia, A. and Heinonen, M. 1999. Antioxidant activity of flavonol aglycones and their glycosides in methyl linoleate. *J. Am. Oil Chem. Soc.* 76:139-144.

- Hornero-Mendez, D., Gomez-Ladron, R. and Minguez-Mosquera, M. I. 2000. Carotenoid biosynthesis changes in five red pepper (*Capsicum annuum* L.) cultivars during ripening. Cultivar selection for breeding. J. Agric. Food Chem. 48: 3857-3864.
- Hoshina, C., Tomita, K. and Shioi, Y. 1998. Antioxidant activity of chlorophylls its structure activity relationship. Photo Mechanic Effects. 4: 3281-3284.
- Hourant, P. 2004. General Properties of the Alkaline Phosphate: Major Food and technical Applications. Phosphorus Bulletin. 15: 85-94.
- Howard, L. R., Talcott, S. T., Brenes, C. H. and Villalon, B. 2000. Changes in phytochemical and antioxidant activity of selected pepper cultivars (*Capsicum* species) as influenced by maturity. J. Agric. Food Chem. 48: 1713-1720.
- Hu, R. 1999. Food Product Design: A Computer-aid Statistical Approach. Technomic Publishing Co., Inc. Pennsylvania.
- Hutadilok-Towatana, N., Chaiyamutti, P., Panthong, K., Mahabusarakam, W. and Rukachaisirikul, V. 2006. Antioxidative and free radical scavenging activities of some plants used in Thai folk medicine. Pharm. biol. 44(3): 221-228.
- Iorizzi, M., Lanzotti, V., DeMario, S., Zollo, F., Blanco-Molina, M., Macho, A. and Munoz, E. 2001. New glycosides from *Capsicum annuum* L. var. *acuminatum*. Isolation, structure determination and biological activity. J. Agric. Food Chem. 49: 2022-2029.
- Ittah, Y., Kanner, J. and Granit, R. 1993. Hydrolysis study of carotenoid pigment of paprika (*Capsicum annuum* L. variety Lehava) by HPLC/photodiode array detection. J. Agric. Food Chem. 41: 899-901.
- Jackman, R. L. and Smith, J. L. 1996. Anthocyanins and Betalains. In Natural Food Colorants. 2nd ed. (Hendry, G. A. F. and Houghton, J. D., eds.). p. 244-309. Blackie Academic & Professional. UK.
- Jadhav, S. J., Nimbalkar, S. S., Kulkarni, A. D. and Madhavi, D. L. 1995. Lipid Oxidation in Biological and Food Systems. In Food Antioxidants: Technological, Toxicological, and

- Health Perspectives. (Madhavi, D. L., Deshpande, S. S. and Salunkhe, D. K., eds.) p. 5-53. Marcel Dekker, Inc. New York.
- Jantan, I. B., Ahmad, F. B. and Ahmad, A. S. 2004. Constituents of the rhizome and seed oils galangal *Alpinia galangal* (L) from Malaysia. J. Essent. Oil Res. 16: 174-176.
- Jantan, I., Rafi, I. A. A. and Jalil, J. 2005. Platelet-activating factor (PAF) receptor-binding antagonist activity of Malaysian medicinal plants. Phytomedicine 12: 88-92.
- Jayaprakasha, G. K., Girenavar, B. and Patil, B. S. 2008. Antioxidant capacity of pummelo and navel oranges: Extraction efficiency of solvents in sequence. Lebensm. Wiss. Technol. 41: 376-384.
- Jensen, J. M., Robbins, K. L., Ryan, K. J., Homco-Ryan, C., McKeith, F. K. and Brewer, M. S. 2003. Effect of lactic and acetic acid salts on quality characteristics of enhanced pork during retail display. Meat Sci. 63: 501-508.
- Jeong, S. M., Kim, S. Y., Kim, D. R., Jo, S. C., Nam, K. C., Ahn, D. U. and Lee, S. C. 2004. Effect of heat treatment on the antioxidant activity of extracts from citrus peels. J. Agric. Food Chem. 52: 3389-3393.
- Jimenez-Escrig, A., Rincon, M., Pulido, R. and Saura-Calixto, F. 2001. Guava fruit (*Psidium guajava* L.) as a new source of antioxidant dietary fiber. J. Agric. Food Chem. 49: 5489-5493.
- Jirovetz, L., Buchbauer, G., Shafj, M. P. and Leela, N. K. 2003. Analysis of the essential oils of the leaves, stems, rhizomes and roots of the medicinal plant *Alpinia galanga* from southern India. Acta Pharm. 53: 73-81.
- Julsrigival, J., Chansakaow, S., Vajabhikul, S., and Chaiyasut, C. 2006. Antiradical activity of volatile oil and extract from Thai *Zingiberaceous* plants. Department of Pharmaceutical Sciences, Faculty of Pharmacy. Chiang Mai University. Chiang Mai.
- Juntachote, T., and Berghofer, E. 2005. Antioxidative properties and stability of ethanolic extracts of holy basil and galangal. Food Chem. 92: 193-202.

- Juntachote, T., Berghofer, E., Siebenhandl, S. and Bauer, F. 2006a. The antioxidative properties of holy basil and galangal in cooked ground pork. *Meat Sci.* 72: 446-456.
- Juntachote, T., Berghofer, E., Bauer, F. and Siebenhandl, S. 2006b. The application of response surface methodology to the production of phenolic extracts of lemon grass, galangal, holy basil and rosemary. *J. Food Sci. Tech.* 41: 121-133.
- Juntachote, T., Berghofer, E., Siebenhandl, S. and Bauer, F. 2007. The effect of dried galangal powder and its ethanolic extracts on oxidative stability in cooked ground pork. *Lebensm. Wiss. Technol.* 40: 324-330.
- Kahkonen, M. P., Hopia, A. I., Vuorela, H. J., Rauha, J. P., Pihlaja, K., Kujala, T. S. and Heinonen, M. 1999. Antioxidant activity of plant extracts containing phenolic compounds. *J. Agric. Food Chem.* 47: 3954-3962.
- Katina, K., Liukkonen, K. H., Kaukovirta-Norja, A., Adlercreutz, H., Heinonen, S. M., Lampi, A. M., Pihlavad, J. M. and Poutanen, K. 2007. Fermentation-induced changes in the nutritional value of native or germinated rye. *J. Cereal Sci.* 46: 348-355.
- Katsube, T., Tsurunaga, Y., Sugiyama, M., Furuno, T. and Yamasaki, Y. 2009. Effect of air-drying temperature on antioxidant capacity and stability of polyphenolic compounds in mulberry (*Morus alba* L.) leaves. *Food Chem.* 113: 964-969.
- Kerth, C. R., Miller, M. F. and Ramsey, C. B. 1995. Improvement of beef Tenderness and quality trails with calcium chloride injection in beef loins 48 hours postmortem. *J. Anim. Sci.* 73: 750-756.
- Khattaka, S., Rehmana, S., Shahb, H. U., Ahmadc, W. and Ahmadd, M. 2005. Biological effects of indigenous medicinal plants *Curcuma longa* and *Alpinia galangal*. *Fitoterapia.* 76: 254-257.
- Kidmose, U., Edelenbos, M., Norbeak, R. and Christensen, L. P. 2000. Colour Stability in Vegetables. *In Colour in Food: Improving Quality.* (MacDougall, D. B., ed). p. 179-218. Woodhead Publishing Limited and CRC Press, LLC. USA.

- Kilinc, B. and Cakli, S. 2004. Chemical, microbiological and sensory changes in thawed frozen fillets of sardine (*Sardina pilchardus*) during marination. *Food Chemistry* 88: 275-280.
- Kim, M. C. and Pratt, D. E. 1992. Thermal Degradation of Phenolic Antioxidants. *In Phenolic Compounds in Food and Their Effects on Health II: Antioxidation & Cancer Prevention*. (Huang, M. T., Ho, C. T. and Lee, C. Y., eds.). p. 200-218. American Chemical Society, Washington, D. C.
- Klimczak, I., Malecka, M., Szlachta, M. and Gliszczynska-Swiglo, A. 2007. Effect of storage on the content of polyphenols, vitamin C and the antioxidant activity of orange juices. *J. Food Compos. Anal.* 20: 313-322.
- Koleva, I. I., van Beek, T. A., Linssen, J. P. H., de Groot, A., and Evstatieva, L. N. 2002. Screening of plant extracts for antioxidant activity: a comparative study on three testing methods. *Phytochem. Analysis.* 13: 8-17.
- Kondo, K., Kurihara, M., Fukuhara, K., Tanaka, T., Suzuki, T., Miyata, N. and Toyoda, M. 2000. Conversion of procyanidin B-type (catechin dimer) to A-type: evidence for abstraction of C-2 hydrogen in catechin during radical oxidation. *Tetrahedron Lett.* 41: 485-488.
- Koohmaraie, M. 1996. Biochemical factors regulating the toughening and tenderization processes in meat. *Meat Sci.* 43: 193-201.
- Kubota, K., Nakamura, K., and Kobayashi, A. 1998. Acetoxy-1,8-cineoles as aroma constituents of *Alpinia galangal* Willd. *J. Agric. Food Chem.* 46: 5244-5247.
- Kubota, K., Someya, Y., Yoshida, R., Kobayashi, A., Morita, T. and Koshino, H. 1999. Enantiomeric purity and odor characteristics of 2- and 3-acetoxy-1,8-cineoles in the rhizomes of *Alpinia galangal* Willd. *J. Agric. Food Chem.* 47: 685-689.
- Kulisic, T., Radonic, A., Katalinic, V., and Milos, M. 2004. Use of different methods for testing antioxidative activity of oregano essential oil. *Food Chem.* 85: 633-640.
- Lafka, T., Sinanoglou, V. and Lazos, E. 2007. On the extraction and antioxidant activity of phenolic compounds from winery wastes. *Food Chem.* 104: 1206-1214.

- Lamikanra, O. 2002. Enzymatic Effects on Flavor and Texture of Fresh-Cut Fruits and Vegetables. *In* Fresh-Cut Fruits and Vegetables: Science, Technology, and Market. (Lamikanra, O., ed). p. 125-187. CRC Press, LLC. USA.
- Larrauri, J. A., Ruperez, P. and Saura-Calixto, F. 1997. Effect of drying temperature on the stability of polyphenols and antioxidant activity of red grape pomace peels. *J. Agric. Food Chem.* 45: 1390-1393.
- Lean, L. P. and Mohamed, S. 1999. Antioxidative and antimycotic effects of turmeric, lemongrass, betel leaves, clove, black pepper leaves and *Garcinia atriviridis* on butter cakes. *J. Sci. Food Agric.* 79: 1817-1822.
- Lee, C. C. and Houghton, P. 2005. Cytotoxicity of plants from Malaysia and Thailand used traditionally to treat cancer. *J. Ehtopharmacol.* 100: 237-243.
- Lee, S. Y. and Baek, S. Y. 2008. Effect of chemical sanitizer combined with modified atmosphere packaging on inhibiting *Escherichia coli* O157:H7 in commercial spinach. *Food Microbiology* 25: 582-587.
- Lee, Y., Howard, L. R. and Villalon, B. 1995. Flavonoids and antioxidant activity of fresh pepper (*Capsicum annuum*) cultivars. *J. Food Sci.* 60: 473-476.
- Lee, J. H. and Schwartz, S. J. 2005. Analysis of Carotenoids and Chlorophylls in Foods. *In* Methods of Analysis of Food Components and Additives. (Otles, S., ed). Taylor & Francis Group, LLC. USA.
- Lemos, A. L. S. C., Nunes, D. R. M., and Viana, A. G. 1999. Optimization of the still-marinating process of chicken parts. *Meat Sci.* 52: 227-234.
- Leong, L. P. and Shui, G. 2002. An investigation of antioxidant capacity of fruits in Singapore market. *Food Chem.* 76: 69-75.
- Li-E, J., Qing, C. and Ke-Chang, X. 2008. Antioxidant activities and composition of extracts from chili. *Int. J. Food Sci Tech.* 43: 666-672.

- Lien, E. J., Ren, S., Bui, H. H. and Wang, R. 1999. Quantitative structure-activity relationship analysis of phenolic antioxidants. *Free Radical Bio. Med.* 26: 285-294.
- Lissi, E., Modak, B., Torres, R., Esocbar, J. and Urzua, A. 1999. Total antioxidant potential of resinous exudates from *Heliotropium* species, and a comparison of the ABTS and DPPH methods. *Free Radical Res.* 30: 471-477.
- Liyana-Pathirana, C. and Shahidi, F. 2005. Antioxidant activity of commercial soft and hard wheat (*Triticum aestivum* L.) as affected by gastric pH conditions. *J. Agric. Food Chem.* 53: 2433-2440.
- MacDougall, D. B. 2002. Colour Measurement of Food. *In* Colour in Food Improving Quality. (MacDougall, D.B. ed). p. 33-63. CRC Press LLC. USA.
- Mahae, N. and Chaiseri, S. 2009. Antioxidant activities and antioxidative components in extracts of *Alpinia galangal* (L.) Sw. *Kasetsart J. (Nat. Sci.)* 43: 358-369.
- Maki, M. 2004. Lactic Acid Bacteria in Vegetable Fermentations. *In* Lactic Acid Bacteria Microbiological and Functional Aspects. 3rd ed. (Salminen, S, Wright, A. and Ouwehand, A., eds). p. 419-430. Marcel Dekker. New York.
- Manach, C., Scalbert, A., Morand, C., Remesy, C. and Jimenez, L. 2004. Polyphenols: food sources and bioavailability. *Am. J. Clin. Nutr.* 79: 727-747.
- Mansour, E. H. and Khalil, A. H. 2000. Evaluation of antioxidant activity of some plant extracts and their application to ground beef patties. *Food Chem.* 69: 135-141.
- Manzocco, L., Calligaris, S., Mastrocola, D., Nicoli M. C. and Lerici, C. R. 2001. Review of nonenzymatic browning and antioxidant capacity in processed foods. *Trends Food Sci. Tech.* 11: 340-346.
- Maoka, T., Mochida, K., Kozuka, M., Ito, Y., Fujiwara, Y., Hashimoto, K., Enjo, F., Ogata, M., Nobukuni, Y., Tokuda, H., Nishino, H. 2001. Cancer chemopreventive activity of carotenoids in the fruits of red paprika *Capsicum annuum* L. *Cancer Lett.* 172: 103-109.

- Marinova, E. M. and Yanishlieva, N. V. 1997. Antioxidative activity of extracts from selected species of the family *Lamiaceae* in sunflower oil. *Food Chem.* 58: 245-248.
- Markus, F., Daood, H. G., Kapitany, J. and Biacs, P. A. 1999. Change in the carotenoid and antioxidant content of spice red pepper (paprika) as a function of ripening and some technological factors. *J. Agric. Food Chem.* 47: 100-107.
- Marques, U. M. L., Barros, R. M. C. and Patricia, S. P. 2005. Antioxidant activity of chlorophylls and their derivatives. *Food Res. Int.* 38: 885-891.
- Marques, V. and Farah, A. 2009. Chlorogenic acids and related compounds in medicinal plants and infusions. *Food Chem.* 113: 1370-1376.
- Marston, A. and Hostettmann, K. 2006. Separation and Quantification of Flavonoids. *In* Flavonoids: Chemistry, Biochemistry and Applications. (Adersen, O. M. and Markham, K. R. eds.). p. 1-37. CRC Press Taylor & Francis group. USA.
- Masniyom, P. 2004. Shelf-Life Extension of Refrigerated Seabass (*Lates calcalifer*) Slices under Modified Atmosphere Packaging. Doctor of Philosophy Thesis in Food Technology. Prince of Songkla University.
- Materska, M., Piacente, S., Stochmal, A., Pizza, C., Oleszek, W. and Perucka, I. 2003. Isolation and structure elucidation of flavonoid and phenolic acid glycosides from pericarp of hot pepper fruit *Capsicum annuum* L. *Phytochemistry.* 63: 893-898.
- Materska, M., and Perucka, I. 2005. Antioxidant activity of the main phenolic compounds isolated from hot pepper fruit (*Capsicum annuum* L.). *J. Agric. Food Chem.* 53: 1750-1756.
- Matsufuji, H., Nakamura, H., Chino, M. and Takeda, M. 1998. Antioxidant activity of capsanthin and the fatty acid esters in paprika (*Capsicum annuum*). *J. Agric. Food Chem.* 46: 3468-3472.
- Matsuda, H., Morikawa, T., Managi, H. and Yoshikawa, M. 2003a. Antiallergic principles from *Alpinia galanga*: structural requirements of phenylpropanoids for inhibition of

- degranulation and release of TNF- α and IL-4 in RBL-2H3 Cells. *Bioorg. Med. Chem. Lett.* 13: 3197-3202.
- Matsuda, H., Pongpiriyadacha, Y., Morikawa, T., Ochi, M. and Yoshikawa, M. 2003b. Gastroprotective effects of phenylpropanoids from the rhizomes of *Alpinia galanga* in rats: structural requirements and mode of action. *Eur. J. Pharmacol.* 471: 59-67.
- Mayachiewa, P. and Devahastin, S. 2008. Antimicrobial and antioxidant activities of Indian gooseberry and galangal extracts. *LWT- Food Sci. Tech.* 41: 1153-1159.
- McKee, L. H. 1995. Microbial contamination of spices and herbs: a review. *Lebensm. Wiss. Technol.* 28: 1-11.
- Meilgaard, M., Civille, G. V. and Carr, B. T. 1999. *Sensory Evaluation Technique*. 3rd ed. CRC Press Inc. Boca Raton.
- Mejlholm, O., Kjeldgaard, J., Modberg, A., Vest, M. B., Boknaes, N., Koort, J., Björkroth, J. and Dalgaard, P. 2008. Microbial changes and growth of *Listeria monocytogenes* during chilled storage of brined shrimp (*Pandalus borealis*). *Inter. J. Food Micro.* 124: 250-259.
- Miean, K. H. and Mohamed, S. 2001. Flavonoid (myricetin, quercetin, kaempferol, luteolin, and apigenin) content of edible tropical plants. *J. Agric. Food Chem.* 49: 3106-3112.
- Miller, N. J., Sampson, J., Candeias, L. P., Bramley, P. M. and Rice-Evans, C. A. 1996. Antioxidant activities of carotenes and xanthophylls. *FEBS Letters.* 384: 240-242.
- Modly, C. E., Das, M., Don, P. C. S., Marcelo, C. L., Mukhtar, H. and Bickers, D. K. 1986. Capsaicin as an in vitro inhibitor of benzopyrene metabolism and its DNA binding in human and murine keratinocytes. *Drugs Metab.* 14: 413-416.
- Moffatt, J., Hashimoto, M., Kojima, A., Kennedy, D. O., Murakami, A., Koshimizu, K., Ohigashi, H., Matsui-Yuasa, I. 2000. Apoptosis induced by 1'-acetoxychavicol acetate in Ehrlich ascites tumor cells is associated with modulation of polyamine metabolism and caspase-3 activation. *Carcinogenesis* 21: 2151-2157.

- Moller, J. K. S., Madsen, H. L., Aaltonen, T. and Skibsted, L. H. 1999. Dittany (*Origanum dictamnus*) as a source of water-extractable antioxidants. *Food Chem.* 64: 215-219.
- Montgomery, D.C. 2001. *Design and Analysis of Experiments*. John Wiley & Sons, Inc. New York. USA.
- Moon, J. K. and Shibamoto, T. 2009. Antioxidant Assays for Plant and Food Components *J. Agric. Food Chem.* 57: 1655-1666
- Mukai, M., Oka, W., Watanabe, K., Egawa, Y. and Nagaoka, S. 1997. Kinetic study of free-radical-scavenging action of flavonoids in homogeneous and aqueous triton x-100 micellar solutions. *J. Phys. Chem. A.* 101: 3746-3753.
- Naczki, M. and Shahidi, F. 2006. Review Phenolics in cereals, fruits and vegetables: Occurrence, extraction and analysis. *J. Pharmaceut. Biomed.*: 1523-1542
- Nanasombat, S. and Lohasupthawee, P. 2005. Antibacterial activity of crude ethanolic extracts and essential oils of spices against salmonellae and other enterobacteria. *KMITL. Sci. Tech. J.* 5: 527-538.
- Natakami, N. and Ikeda, K. 1984. Isolation of antioxidative lignan from papua mace. *Crit. Rev. Food Sci. Nutr.* 32: 67-103.
- Natta, L., Orapin, K., Krittika, N. and Pantip, B. 2008. Essential oil from five Zingiberaceae for anti food-borne bacteria. *Int. Food Research J.* 15: 337-346.
- Nauss, K. M., Kitakawa, S., and Gergely, J. 1969. Pyrophosphate binding to and adenosine triphosphatase activity of myosin and its proteolytic fragments. *J. Biol. Chem.* 244: 755-765.
- Nawar, W. W. 1996. Lipid. *In Food Chemistry*. 3rd ed. (Fennema, O. R. ed.). p. 210-243. Marcel Dekker, Inc. New York.
- Nicoli, C., Anese, M., Parpinel, M. T., Franceschi, S. and Lericci, C. R. 1997. Loss and/or formation of antioxidants during food processing and storage. *Cancer Lett.* 114: 71-74.

- Nicoli, M. C., Anese, M. and Parpine, M. 1999. Influence of processing on the antioxidant properties of fruit and vegetables. *Trends Food Sci Tech.* 10: 94-100.
- Nishi, A., Kubota, K., Kameoka, H. And Osawa, T. 1991. Antioxidizing component, musizin in *Rumex japonicus Houtt.* *J. Am. Oil. Chem. Soc.* 68: 735-739.
- Noguchi, N. and Niki, E. 1999. Chemistry of Active Oxygen Species and Antioxidants. *In* Antioxidant Status, Diet, Nutrition, and Health. (Papas, A. M., ed). p. 1-20. Boca Raton. U.S.A.
- Nordberg, J. and Arner, E. S. J. 2001. Reactive oxygen species, antioxidants, and the mammalian thioredoxin system (Review article). *Free Radical Bio. Med.* 31: 1287–1312.
- O'Connor, T. P. and O'Brien, N. M. 2006. Lipid Oxidation. *In* Advanced Dairy Chemistry Volume 2: Lipids. 3rd ed. (Fox, P. F. and McSweeney, P. L. H., eds.). p. 557-585. Springer Science Business Media, Inc. USA.
- Oonmetta-aree, J. 2005. Effects of the Zingiberaceae Spice Extracts on Growth and Morphological Changes of Foodborne Pathogens. Degree of Doctor of Philosophy in Food Technology. Suranaree University of Technology.
- Oreopoulou, V. 2003. Extraction of Natural Antioxidants. *In* Extraction Optimization in Food Engineering. (Tzia, C. and Liadakis, G., eds.). p. 329-346. Marcel Dekker, Inc. USA.
- Orhan, I., Eryilmaz, B. and Bingol, F. 2002. A comparative study on the fatty acid contents of *Capsicum annuum* varieties. *Biochem. Syst. Ecol.* 30: 901-904.
- Osada, Y. and Shibamoto, T. 2006. Antioxidative activity of volatile extracts from Maillard model system. *Food Chem.* 98: 522-528.
- Othman, R., Ibrahim, H., Mohd, M. A., Mustafac, M. R. and Awang, K. 2006. Bioassay-guided isolation of a vasorelaxant active compound from *Kaempferia galanga* L. *Phytomedicine.* 13: 61-66.
- Osman, A. M., Wong, K. K. Y. and Fernyhough, A. 2006. ABTS radical-driven oxidation of polyphenols: isolation and structural elucidation of covalent adducts. *Biochem. Bioph. Res. Co.* 346: 321-329.

- Osuna-Garcia, J. A., Wall, M. M. and Waddell, C. A. 1998. Endogenous levels of tocopherols and ascorbic acid during fruit ripening of New Mexican-type chile (*Capsicum annuum* L.). *J. Agric. Food Chem.* 46: 5093-5096.
- Othmana, R., Ibrahim, H., Mohd, M. A., Mustafac, M. R., and Awang, K. 2006. Bioassay-guided isolation of a vasorelaxant active compound from *Kaempferia galanga* L. *Phytomedicine.* 13: 61-66.
- Packer, L., Hiramatsu, M. and Yoshikawa, T. 1999. Antioxidant food supplements in human health. Academic Press, USA.
- Pakawatchai, C., Siripongvutikorn, S., and Usawakesmanee, W. 2009. Effect of herb and spice pastes on the quality changes in minced salmon flesh waste during chilled storage. *Asian Journal of Food and Agro-Industry* 2(04): 481-492.
- Palevitch, D. and Craker, L. E. 1995. Nutritional and medicinal importance of red pepper (*Capsicum* spp.). *J. Herbs Spices Med. Plants.* 3: 55-83.
- Peleg, H., Naim, M., Rouseff, R. L. and Zehavi, U. 1991. Distribution of bound and free phenolic acids in oranges (*Citrus sinensis*) and grapefruit (*Citrus paradise*). *J. Sci. Food Agric.* 57: 417-426.
- Pereira, R. P., Fachineto, R., Prestes, A. S., Puntel, R. L., Silva, G. N. S., Heinzmann, B. M., Boschetti, T. K., Athayde, M. L., Burger, M. E., Morel, A. F., Morsch, V. M. and Rocha, J. B. T. 2009. Antioxidant Effects of Different Extracts from *Melissa officinalis*, *Matricaria recutita* and *Cymbopogon citrates*. *Neurochem Res.* 34: 973-983.
- Peterson, D. M., Emmons, C. L. and Hibbs, A. H. 2001. Phenolic antioxidants and antioxidant activity in pearling fractions of oat groats. *J. Cereal Sci.* 33: 97-103.
- Pietta, P. G. 2000. Flavonoids as antioxidants. *J. Nat. Prod.* 63: 1035-1042.
- Pinelo, M., Manzocco, L., Nunez, M. J. and Nicoli, M. C. 2004a. Interaction among phenols in food fortification: negative synergism on antioxidant capacity. *J. Agric. Food Chem.* 52: 1177-1180.

- Pinelo, M., Rubilar, M., Sineiro, J. And Nunez, M. J. 2004b. Extraction of antioxidant phenolics from almond hulls (*Prunus amygdalus*) and pine sawdust (*Pinus pinaster*). Food Chem. 85: 267-273.
- Pinelo, M., Rubilar, M., Sineiro, J. And Nufiez, M. J. 2005. A thermal treatment to increase the antioxidant capacity of natural phenols: catechin, resveratrol and grape extract cases. Eur. Food Res. Technol: 284-290.
- Polozza, P. 1998. Pro-oxidant actions of carotenoids in biologic systems (review). Nut. Rev. 56: 257-265.
- Prachayabreud, W., Leelaprude, V., and Muadcheingka, M. 1996. Effects of *Alpinia galanga*, *Cassia alata*, and *Rhinacanthus nasutus* extracts on *Candida albicans*. Mahidol Dental Journal 16 (2): 67-74.
- Prasad, K., Lardal, M. A., Yu, M. and Raney, B. L. 1996. Evaluation of hydroxyl radical-scavenging property of garlic. Mol. Cell. Biochem. 154: 55-63.
- Prior, R. L., Xianli, W. and Schaich, K. 2005. Standardized methods for the determination of antioxidant capacity and phenolics in food and dietary supplements. J. Agric. Food Chem. 53: 4290-4302.
- Puerta, T. 1999. Inhibition of leukocytes lipoxigenase by phenolics from virgin olive oil. Biochem. Pham. J. 57: 445-449.
- Pulido, R., Bravo, L. and Saura-Calixto, F. 2000. Antioxidant activity of dietary polyphenols as determined by a modified ferric reducitn antioxidant power assay. J. Agric. Food Chem. 48: 3396-3402.
- Purseglove, J. W., Brown, E. G., Green, C. L. and Robbins, S. R. J. 1981. Spices. Vol. I. D. Van Nostrand Co. New York.
- Pyo, Y. H., Lee, T. C., Logendra, L. and Rosen, R. T. 2004. Antioxidnt activity and phenolic compounds of Swiss chard (*Beta vulgaris* subspecies *cycla*) extracts. Food Chem. 85: 19-26.

- Rajalakshmi, D. and Narasimhan, S. 1996. Food Antioxidants: Sources and Methods of Evaluation. *In* Food Antioxidants (Madhavi, D. L., Despande, S. S. and Salunkhe, D. K., eds.) p. 5-64. Marcel Decker, Inc. New York.
- Re, R., Pellegrini, N., Proteggente, A., Pannala, A., Yang, M., and Rice-Evans, C. 1999. Antioxidant activity applying an improved ABTS radical cation decolorization assay. *Free Radical Bio. Med.* 26: 1231-1237.
- Rice-Evans, C., Miller, N. J., Bolwell, P. G., Bramley, P. M., and Pridham, J. B. 1995. The relative antioxidant activities of plant derived polyphenolic flavonoids. *Free Radical Res.* 22: 375-383.
- Rice-Evans, C. A. and Miller, N. J. 1996. Antioxidant activities of flavonoids as bioactive compounds of foods. *Biochem Soc. Trans.* 24: 790-795.
- Rice-Evans, C., Miller, N. J. and Paganga, G. 1996. Structure-antioxidant activity relationships of flavonoids and phenolic acids. *Free Radical Bio. Med.* 20: 933-956.
- Rice-Evans, C. A., Miller, J. and Paganga, G. 1997. Antioxidant properties of phenolic compounds. *Trends Plant Sci.* 2: 152-159.
- Robbins, R. J. 2003. Phenolic acids in foods: an overview of analytical methodology. *J. Agric. Food Chem.* 51: 2866-2887.
- Robert, R. E., Pellegrini, N., Proteggente, A., Pannala, A., Yang, M., and Rice-Evans, C. 1999. Antioxidant activity applying an improved ABTS radical cation decolorization assay. *Free Radical Bio. Med.* 26: 1231-1237.
- Roginsky, V. and Lissi, E. 2005. Review of methods to determine chain-breaking antioxidant activity in food. *Food chem.* 92: 235-254.
- Rutherford, T. J., Marshall, D. L., Andrews, L. S., Coggin, P. C., Schilling, M. W. and Gerard, P. 2007. Combined effect of packaging atmosphere and storage temperature on growth of *Listeria monocytogenes* on ready-to-eat shrimp. *Food Microbiology* 24: 703-710.

- Ruusunen, E., and Poulanne, M. 2005. Average muscle fiber cross sectional area varies considerably in pork loins. In Proceedings of the 51st international congress of meat science and technology (pp.1506-1510), August 7-12, 2005, Baltimore, Maryland, USA.
- Sacchetti, G., Maietti, S., Muzzoli, M., Scaglianti, M., Manfredini, S., Radice, M. and Bruni, R. 2005. Comparative evaluation of 11 essential oils of different origin as functional antioxidants, antiradicals and antimicrobials in foods. *Food Chem.* 91: 621-632.
- Saura-Calixto, F. and Goni, I. 2006. Antioxidant capacity of the Spanish Mediterranean diet. *Food Chem.* 94: 442-447.
- Schaneberg, B. T. and Khan, I. A. 2002. Comparison of extraction methods for marker compounds in the essential oil of lemon grass by GC. *J. Agric. Food Chem.* 50: 1345-1349.
- Schroeder, M. J. A., 2003. The Visual Appeal of Food and Beverages. *In Food Quality and Consumer Value: Delivering Food that Satisfies.* (Schroeder, M. J. A. ed.). p. 232-238. Springer publisher. Berlin. New York.
- Shahidi, F., Janitha, P. K. and Wanasundara, P. D. 1992. Phenolic antioxidant. *Crit. Rev. Food Sci. Nutr.* 32: 67-103.
- Shahidi, F. and Naczk, M. 1995. *Food Phenolics: Sources, Chemistry, Effects and Applications.* Technomic Pub. Co., Inc. Pennsylvania.
- Shahidi, F. and Naczk, M. 2004. *Phenolics in Food and Nutraceuticals.* CRC Press. New York. USA.
- Shahidi, F. and Naczk, M. 2005. Analysis of Polyphenols in Foods. *In Methods of Analysis of Food Components and Additives.* (Ottles, S., ed). p. 199-160. Taylor & Francis Group, LLC. USA.
- Sheard, P. R., Nute, G. R., Richardson, R. I., Perry, A. and Taylor, A. A. 1999. Injection of water and polyphosphate in to pork to improve juiciness and tenderness after cooking. *Meat Sci.* 51: 371-376.

- Sheard, P. R. and Tali, A. 2004. Injection of salt, tripolyphosphate and bicarbonate marinade solutions to improve the yield and tenderness of cooked pork loin. *Meat Sci.* 68: 305-311.
- Shi, H., Noguchi, N. and Niki, E. 2001. Introducing Natural Antioxidants. *In Antioxidants in Food Practical Applications*. 1st ed. (Pokorny, J., Yanishlieva, N. and Gordon, M. eds.) p. 147-158. Woodhead publishing Ltd. Newyork. and CRC Press LLC Cornwall. England.
- Shobana, S. and Naidu, K. A. 2000. Antioxidant activity of selected Indian spices. *Prostag Leukotr Ess.* 62: 107-110.
- Sikorski, Z. E. and Haard, N. F. 2007. Interactions of Food Components. *In Chemical and Functional Properties of Food Components*. 3rd ed. (Sikorski, Z. E., ed.). p. 330-353. Taylor & Francis Group, LLC. USA.
- Singleton, V. L., Orthofer, R. and Lamuela-Raventos, R. M. 1999. Analysis of total phenols and other oxidation substrates and antioxidants by means of Folin–Ciocalteu reagent. *Method Enzymol.* 299: 152-178.
- Siripongvutikorn, S., Thummaratwasik, P. and Huang, Y. 2005. Antimicrobial and antioxidation effects of Thai seasoning, Tom-Yum. *Lebensm. Wiss. Technol.* 38: 347-352.
- Siripongvutikorn, S., Usawakesmanee, W., Wittaya, T., Koonpaew, B. and Pengseng, N. 2012. Combined effect of low acid paste and modified atmospheric condition on quality changes of white shrimp (*Litopenaeus vannamei*) during chilled storage. *International Food Research Journal.* 19(4): 1573-1580.
- Speck, M. L. 1976. *Compendium of Methods for the Microbiological Examination of Foods*. American Public Health Association, Inc. Washington, DC.
- Stechell, K. D. R. 2000. Absorption and metabolism of soy isoflavones from food to dietary supplements and adults to infants. *J. Nutr.* 130: 654S-655S.

- Steinkrus, H. K. 1992. Lactic Acid Fermentation. *In* Applications of Biotechnology to Traditional Fermented Food. (Gaden, E. L., Bokanga, M., Harlander, S. and Hesseltine, G. W., eds), p. 43-51. Nation Academy Press. Washington, D.C.
- Sultana, B., Anwar, F. and Ashraf, M. 2009. Effect of extraction solvent/technique on the antioxidant activity of selected medicinal plant extracts. *Molecules*. 14: 2167-2180.
- Sun, T and Ho, C. T. 2005. Antioxidant activities of buckwheat extracts. *Food Chem*. 90: 743-749.
- Thai food to world. 2007. Tom-kha kai (Online). Available <http://www.thaifoodtoworld.com/home/index.php> (18 June 2007).
- Thepnuan, R. 2007. Studies on Some Enzymes and the Effect of Modified Atmosphere Packaging and Some Chemicals on Quality Changes of Black Tiger and White Shrimps during Refrigerated Storage.
- Thomas, C. and O'Beirne, D. 2000. Evaluation of the impact of short-term temperature abuse on the microbiology and shelf life of a model ready-to-use vegetable combination product. *Int. J. Food Microbiol*. 59: 47-57.
- Tomas-Barberan, F. A. and Robins, R. J. 1997. *Phytochemistry of Fruit and Vegetables*. Oxford: Clarendon Press. New York.
- Tsangalis, D., Ashton, J. F., Mcgill, A. E. J. and Shah, N. P. 2002. Enzymic transformation of isoflavone phytoestrogens in soymilk by β -glucosidase-producing bifidobacteria. *J. Food Sci*. 67: 3104-3113.
- Uhlman, L., Schillinger, U., Rupnow, J. R. and Holzappel, W. H. 1992. Identification and characterization of two bacteriocin-producing strains of *Lactococcus lactis* isolated from vegetables. *Int. J. Food Microbiol*. 16: 141-151.
- Valko, M., Rhodes, C. J., Moncola, J., Izakovic, M. and Mazura, M. 2006. Free radicals, metals and antioxidants in oxidative stress-induced cancer. *Chem. Biol. Interact*. 160: 1-40.

- Velioglu, Y. S., Mazza, G., Gao, L., and Oomah, B. D. 1998. Antioxidant activity and total phenolics in selected fruits, vegetables and grain products. *J. Agric. Food Chem.* 46: 4113-4117.
- Viana, G. S. B., Vale, T. G., Pinho, R. S. N. and Matos, F. J. A. 2000. Antinociceptive effect of the essential oil from *Cymbopogon citratus* in mice. *J. Ethnopharmacol.* 70: 323-7.
- Vinitketkumnien, U., Puatanachokchai, R., Kongtawelert, P., Lertprasertsuke, N. and Matsushima, T. 1994. Antimutagenicity of lemon grass (*Cymbopogon citratus* Stapf) to various known mutagens in salmonella mutation assay. *Mutat. Res.* 341: 5-71.
- Vuddhakul, V., Bhoopong, P., Hayeebilan, F. and Subhadhirasakul, S. 2007. Inhibitory activity of Thai condiments on pandemic strain of *Vibrio parahaemolyticus*. *Food microbiol.* 24: 413-418.
- Wang, W. D. 2004. Carotenoid Oxidative/Degradative Products and Their Biological Activity. *In* Carotenoids in Health and Disease. (Krinsky, N. I., Mayne, S. and Sies, H., eds.). p. 313-337. Marcel Dekker, Inc. USA.
- Wangcharoen, W. and Morasuk, W. 2007a. Antioxidant capacity and phenolic content of chilies. *Kasetsart J. (Nat. Sci.)* 41: 561-569.
- Wangcharoen, W. and Morasuk, W. 2007b. Antioxidant capacity and phenolic content of some Thai culinary plants. *Mj. Int. J. Sci. Tech.* 1(2): 100-106.
- Wangcharoen, W. and Morasuk, W. 2009. Antioxidant capacity changes of bird chili (*Capsicum frutescens* Linn.) during hot air drying. *Kasetsart J. (Nat. Sci.)* 43: 12-20.
- Wannissorn, B., Jarikasem, S., Siriwangchai, T. and Thubthimthed, S. 2005. Antibacterial properties of essential oils from Thai medicinal plants. *Fitoterapia.* 76: 233-236.
- Waterman, P. G. and Mole, S. 1994. Analysis of phenolic plant metabolites. Blackwell Scientific Publications. Oxford.

- Wattanachant, S., Benjakul, S. and Ledwardt, D. A. 2005. Processing, Product, and Food safety: Microstructure and thermal characteristics of thai indigenous and broiler chicken muscles. *J. Poultry Sci.* 84: 328-333.
- Wettasinghe, M. and Shahidi, F. 1999. Antioxidant and free radical-scavenging properties of ethanolic extracts of defatted borage (*Borago officinalis* L.) seeds. *Food Chem.* 67: 399-414.
- Wheeler, T. L., Koohmaraie, M., Lansdell, J. L., Siragusa, G. R., and Miller, M. F. 1993. Effect of postmortem injection time, injection level, and concentration of calcium chloride on beef quality traits. *J. Anim. Sci.* 71: 2965-2974.
- Wikipedia, 2008. Modified atmosphere. Available online at http://en.wikipedia.org/wiki/Modified_atmosphere. (11 June 2008).
- Wilska-Jeszka, J. 2007. Food Colorants. *In* Chemical and Functional Properties of Food Components. 3rd ed. (Sikorski, Z. E., ed). p. 191-210. Taylor & Francis Group, LLC. USA.
- Wojdylo, A, Oszmiariski, R. and Czemerzys, R. 2007. Antioxidant activity and phenolic compounds in 32 selected herbs. *Food Chem.* 105: 940-949.
- Wu, H. C., Chen, H. M. and Shiau, C. Y. 2003. Free amino acid and peptide as related to antioxidant properties in protein hydrolysates of mackerel (*Scomber austriasicus*). *Food Res. Int.* 36: 949-957.
- Xu, G., Ye, X., Chen, J. and Liu, D. 2007. Effect of heat treatment on the phenolic compounds and antioxidant capacity of citrus peel extract. *J. Agric. Food Chem.* 55: 330-335.
- Yamaguchi, T., Katsuda, M., Oda, Y., Terao, J., Kanazawa, K., Oshima, S., Inakuma, T. Ishiguro, Y., Takamura, H. and Matoba, T. 2003. Influence of polyphenol and ascorbate oxidases during cooking process on the radical-scavenging activity of vegetables. *Food Sci. Technol. Res.* 9: 79-83.

- Yanagimoto, K., Lee, K. G., Ochi, H. and Shibamoto, T. 2002. Antioxidative activity of heterocyclic compounds formed in Maillard reaction products. *Int. Congr. Ser.* 1245: 335-340.
- Yang, X. and Eilerman, R. G. 1999. Pungent principal of *Alpinia galangal* (L.) Swartz and its applications. *J. Agric. Food Chem.* 47: 1657-1662.
- Yanishlieva-Maslarova, N. 2001. Inhibiting Oxidation. *In Antioxidants in Food Practical applications.* (Pokorny, J., Yanishlieva-Maslarova, N. and Gordon, M., eds.) p. 22-70. CRC Press LLC. New York. and Woodhead Publishing Limited. England.
- Yen, G. C. and Hung, C. Y. 2000. Effects of alkaline and heat treatment on antioxidant activity and total phenolics of extracts from Hsian-tsoa (*Mesona procumbens Hemsli.*). *Food Res. Int.* 33: 487-492.
- Yilmaz, Y. and Toledo, R. 2005. Antioxidant activity of water-soluble maillard reaction products. *Food Chem.* 93: 273-278.
- Young, A. J., Phillip, D. M. and Lowe, G. M. 2004. Carotenoid Antioxidant Activity. *In Carotenoids in Health and Disease.* (Krinsky, N. I., Mayne, S. and Sies, H., eds.) p. 105-127. Marcel Dekker, Inc. USA.
- Young, L. L. and Lyon, C. E. 1997. Effect of calcium marination on biochemical and texture properties of peri-rigor chicken breast meat. *Poultry Sci.* 76: 197-201.
- Yu, L., Haley, S., Perret, J., Harris, M., Wilson, J. and Qian, M. 2002. Free radical scavenging properties of wheat extracts. *J. Agric. Food Chem.* 50: 1619-1624.
- Zaeoung, S. 2004. Cytotoxic Activity Against Tumour Cells and Free Radical Scavenging Activity of Zingiberaceous Rhizomes Used as Spices. Master of Pharmacy thesis in Pharmaceutical Sciences. Prince of Songkla University.
- Zaeoung, S., Plubrukarn, A. and Keawpradub, N. 2005. Cytotoxic and free radical scavenging activities of Zingiberaceous rhizomes. *Songklanakarin J. Sci. Technol.* 27: 799-812.

- Zewdie, Y. and Bosland, P. W. 2001. Capsaicinoid profiles are not good chemotaxonomic indicators for *Capsicum* species. *Biochem. Syst. Ecol.* 29: 161-169.
- Zheng, W. and Wang, S. Y. 2001. Antioxidant activity and phenolic compounds in selected herbs. *J. Agric. Food Chem.* 49: 5165-5170.
- Zielinski, H. and Kozłowska, H. 2000. Antioxidant activity and total phenolics in selected cereal grains and their different morphological fractions. *J. Agric. Food Chem.* 48: 2008-2016.