

## BIBLIOGRAPHY

- AACC. 2000. Approved Methods of the American Association of Cereal Chemists, 10<sup>th</sup> ed. Method 61-02. The Association: St. Paul, Minnesota.
- Altay, F. and S. Gunasekaran. 2006. Influence of drying temperature, water content, and heating rate on gelatinization of corn starches. *Journal of Agricultural Food and Chemistry* 54: 4235-4245.
- Anderson, A. K. and H. S. Guraya. 2006. Effect of microwave heat-moisture treatment on properties of waxy and non-waxy rice starches. *Food Chemistry* 97: 318-323.
- AOAC. 1999. Official Methods of Analysis of the Association of Official Analytical Chemists, 16<sup>th</sup> ed. Methods 920.87, 922.06. The Association: Gaithersburg, MD.
- Barnes, P. and T. Galliard. 1991. Rancidity in cereal products. *Lipid Technoogy* 3: 23-28.
- Belitz, H. D. and W. Grosch. 1999. Food Chemistry (*second edition*). Springer-Verlag, Berlin Heidelberg, Germany. 992p.
- Bergman, C. J., J. T. Delgado, R. Bryant, C. Grimm, K. R. Cadwallader, and B. D. Webb. 2000. Rapid gas chromatographic technique for quantifying 2-acetyl-1-pyrroline and hexanal in rice (*Oryza sativa*, L.). *Cereal Chemistry* 77: 454-458.
- Bhattacharya, K. R. 1985. Parboiling of rice. pp. 289-348. In: B. O. Juliano, (ed.), *Rice Chemistry and Technology*. 2<sup>nd</sup> ed. American Association of Cereal Chemists, St. Paul, Minnesota.
- Biliaderis, C. G., J. R. Tonogai, C. M. Perez, and B. O. Juliano. 1993. Thermophysical properties of milled rice starch as influenced by variety and parboiling method. *Cereal Chemistry* 70: 512-516.
- Buttery, R. G., L. C. Ling, and B. O. Juliano. 1982. 2-Acetyl-1-pyrroline: An important aroma component of cooked rice. *Chemical Industry (london)*: 958-959.
- Buttery, R. G., B. O. Juliano, and L. C. Ling. 1983a. Identification of rice aroma compound 2-acetyl-1-pyrroline in Pandan leaves. *Chemical Industry* 23: 478-479.
- Buttery, R. G., L. C. Ling, B. O. Juliano, and J. G. Turnbaugh. 1983b. Cooked rice aroma and 2-acetyl-1-pyrroline. *Journal of Agricultural Food and Chemistry* 31: 823-826.
- Buttery, R. G., L. C. Ling, and T. R. Mon. 1986. Quantitative analysis of 2-acetyl-1-pyrroline in rice. *Journal of Agricultural Food and Chemistry* 34: 112-114.
- Buttery, R. G., J. G. Turnbaugh, and L. C. Ling. 1988. Contribution of volatiles to rice aroma. *Journal of Agricultural Food and Chemistry* 36: 1006-1009.
- Cameron, D. K., and Y. J. Wang. 2005. A better understanding of factors that affect the hardness and stickiness of long-grain rice. *Cereal Chemistry* 82: 113-119.
- Champagne, E. T., G. L. Brenda, K. M. Bong, T. V. Bryan, L. B. Karen, E. B. Franklin, D. W. Bill, M. M. Anna, A. M. Karen, L. Steve, S. M. Kent, and E. K. David. 1998. Effects of postharvest processing on texture profile analysis of cooked rice. *Cereal Chemistry* 75: 181-186.
- Chrastil, J. 1990a. Chemical and physicochemical changes of rice during storage at different temperatures. *Journal of Cereal Science* 11: 71-85.

- Chrastil, J. 1990b. Protein-starch interactions in rice grains; Influence of storage on oryzenin and starch. *Journal of Agricultural Food and Chemistry* 38: 1804-1809.
- Chrastil, J. 1992. Correlation between the physicochemical and functional properties of rice. *Journal of Agricultural Food and Chemistry* 40: 1683-1686.
- Chrastil, J. 1993. Changes of oryzenin and starch during preharvest maturation of rice grains. *Journal of Agriculture and Food Chemistry* 41: 2242-2244.
- Chrastil, J. 1994. Stickiness of oryzenin and starch mixtures of preharvest and postharvest rice grains. *Journal of Agriculture and Food Chemistry* 42: 2147-2151.
- Chrastil, J., and Z. Zarins. 1992. Influence of storage on peptides subunits composition of rice oryzenin. *Journal of Agriculture and Food Chemistry* 40: 927-930.
- Chrastil, J., and Z. Zarins. 1994. Changes in peptide subunit composition of albumins, globulins, prolamines, and oryzenin in maturing rice grains. *Journal of Agricultural and Food Chemistry* 42: 2152-2155.
- Daniels, M. J., B. P. Marks, T. J. Siebenmorgen, R. W. McNew, and J. F. Meullenet. 1998. Effects of long-grain rough rice storage history on end-use quality. *Journal of Food Science* 63: 832-835.
- Derycke, V., W. S. Veraverbeke, G. E. Vandeputte, W. De Man, R. C. Hoseney, and J. A. Delcour. 2005a. Impact of proteins on pasting and cooking properties of nonparboiled and parboiled rice. *Cereal Chemistry* 82: 468-474.
- Derycke, V., G. E. Vandeputte, R. Vermeylen, W. De Man, B. Goderis, M. H. J. Koch, and J. A. Delcour. 2005b. Starch gelatinization and amylose-lipid interaction during rice parboiling investigated by temperature resolved wide angle X-ray scattering and differential scanning calorimetry. *Journal of Cereal Science* 42: 334-343.
- Dhaliwal, Y. S., K. S. Sekhon, and H. P. Naki. 1991. Enzymatic activities and rheological properties of stored rice. *Cereal Chemistry* 68: 18-21.
- Efferson, J. N. 1985. Rice quality in world markets. pp. 1-13. In: International Rice Research Institute, *Rice Grain Quality and Marketing*. International Rice Research Institute, Manila, Philippines.
- Fitzgerald, A. M., M. Martin, R. M. Ward, W. D. Park, and H. J. Shead. 2003. Viscosity of rice flour: A rheological and biological study. *Journal of Agriculture and Food Chemistry* 51: 2295-2299.
- Gujral, H. S., and V. Kumar. 2003. Effect of accelerated aging on the physicochemical and textural properties of brown and milled rice. *Journal of Food Engineering* 59: 117-121.
- Hamaker, B. R., T. J. Siebenmorgen, and R. H. Dilday. 1993. Aging of rice in the first six months after harvest. *Arkansas Farm Research* 42: 8-9.
- Hamaker, B. R., and V. K. Griffin. 1990. Changing the viscoelastic properties of cooked rice through protein disruption. *Cereal Chemistry* 67: 261-264.
- Harrison, T. J., and G. R. Dake. 2005. An expeditious, high-yielding construction of the food aroma compounds 6-acetyl-1,2,3,4-tetrahydropyridine and 2-acetyl-1-pyrroline. *The Journal of Organic Chemistry* 70: 10872-10874.

- Islam, M. R., N. Shimizu, and T. Kimura. 2004. Energy requirement in parboiling and its relationship to some important quality indicators. *Journal of Food Engineering* 63: 433-439.
- Jaisut D., S. Prachayawarakorn, W. Varanyanond, P. Tungtrakul, and S. Soponronnarit. 2008. Effects of drying temperature and tempering time on starch digestibility of brown fragrant rice. *Journal of Food Engineering* 86: 251-258.
- Ježussek, M., B. O. Juliano, and P. Schieberle. 2002. Comparison of key aroma compounds in cooked brown rice varieties base on aroma extract dilution analysis. *Journal of Agricultural Food and Chemistry* 50: 1101-1105.
- Juliano, B. O., C. M. Perez, A. B. Blakeney, T. Castillo, N. Kongseret, B. Laignelet, E. T. Lapis, V. V. S. Murty, C. M. Paule, and B. O. Webb. 1981. International cooperative testing on the amylose content of milled-rice. *Starch* 33: 157-162.
- Juliano, B. O. 1985a. Polysaccharides, proteins, and lipids of rice. pp. 59-174. In: B. O. Juliano, (ed.), *Rice Chemistry and Technology*. 2<sup>nd</sup> ed. American Association of Cereal Chemists, St. Paul, Minnesota.
- Juliano, B. O. 1985b. Criteria and test for rice grain quality. pp. 443-524. In: B. O. Juliano, (ed.), *Rice Chemistry and Technology*. 2<sup>nd</sup> ed. American Association of Cereal Chemists, St. Paul, Minnesota.
- Lai, V. M. F., S. Lu, and C. Lii. 2000. Molecular characteristics influencing retrogradation kinetics of rice amylopectins. *Cereal Chemistry* 77: 272-278.
- Laksanalamai, V., and S. Ilangantileke. 1993. Comparison of aroma compound (2-acetyl-1-pyrroline) in leaves from Pandan (*Pandanus amaryllifolius*) and Thai fragrant rice (Khao Dawk Mali-105). *Cereal Chemistry* 70: 381-384.
- Lam, H. S., and A. Proctor. 2003. Milled rice oxidation volatiles and odor development. *Journal of Food Science* 68: 2676-2681.
- Lamberts, L., K. Brijs, R. Mohamed, N. Verhelst, and J. A. Delkour. 2006. Impact of browning reactions and bran pigments on color of parboiled rice. *Journal of Agriculture and Food Chemistry* 54: 9924-9929.
- Lima, I., and R. P. Singh. 1993. Objective measurement of retrogradation in cooked rice during storage. *Journal of Food Quality* 16: 321-337.
- Lyon, B. G., E. T. Champagne, B. T. Vinyard, W. R. Windham, F. E. Barton II, B. D. Webb, A. M. McClung, K. A. Moldenhauer, S. Linscombe, K. S. McKenzie, and D. E. Kohlwey. 1999. Effects of degree of milling, drying condition, and final moisture content on sensory texture of cooked rice. *Cereal Chemistry* 76: 56-62.
- Mahatheeranont, S., S. Keawsa-ard, and K. Dumri. 2001. Quantification of the rice aroma compound, 2-acetyl-1-pyrroline, in uncooked Khao Dawk Mali 105 Brown rice. *Journal of Agricultural and Food Chemistry* 49: 773-779.
- Martin, M., and M. A. Fitzgerald. 2002. Proteins in rice grains influence cooking properties. *Journal of Cereal Science* 36: 285-294.
- McDonough, C. M., C. D. Floyd, R. D. Waniska, and L. W. Rooney. 2004. Effect of accelerated aging on maize, sorghum, and sorghum meal. *Journal of Cereal Science* 39: 351-361.
- McLellan, M. R., L. R. Lind, and R. W. Kime. 1995. Hue angle determinations and statistical analysis for multiquadrant hunter *L,a,b* data. *Journal of Food Quality* 18: 235-240.

- Meullenet, J. F., B. P. Marks, J. A. Hankins, V. K. Griffin, and M. J. Daniels. 2000. Sensory quality of cooked long-grain rice as affected by rough rice moisture content, storage temperature, and storage duration. *Cereal Chemistry* 77: 259-263.
- Meullenet, J. F., V. K. Griffin, K. Carson, G. Davis, S. Davis, J. Gross, J. A. Hankins, E. Sailor, C. Sitakalin, S. Suwansri, A. L. Vasquez Caisido. 2001. Rice external preference mapping for Asian consumers living in the United States. *Journal of Sensory Studies* 16: 73-94.
- Mod, R. R., E. J. Conkerton, D. C. Chapital, and L. Y. Yatsu. 1983. Rice phenolic acids and their changes with aging. *Cereal Foods World* 28: 560.
- Monsoor, M. A., and A. Proctor. 2004. Volatile component analysis of commercially milled head and broken rice. *Journal of Food Science* 69: 632-636.
- Moritaka, S., and K. Yasumatsu. 1972. Studies on cereals (X); The effect of sulphydryl groups on storage deterioration of milled rice. *Eiyo To Shokuryo* 25: 59-62.
- Office of Agricultural Economics. 2008. Monthly Rice Export Statistic. [online]. Available: <http://www.oae.go.th/statistic/export/1301MA.xls> (December 25, 2008).
- Okabe, M. 1979. Texture measurements of cooked rice and its relationship to the eating quality. *Journal of Texture Studies* 10: 131-152.
- Ong, M. H., and J. M. V. Blanshard. 1995. Texture determinants of cooked, parboiled rice. II. Physicochemical properties and leaching behaviour of rice. *Journal of Cereal Science* 21: 261-269.
- Oszvald, M., S. Tomoskozi, O. Larroque, E. Keresztenyi, L. Tamas, and F. Bekes. 2008. Characterization of rice storage proteins by SE-HPLC and micro z-arm mixer. *Journal of Cereal Science* 48: 68-76.
- Paule, C. M., and J. J. Powers. 1989. Sensory and chemical examination of aromatic and nonaromatic rice. *Journal of Food Science* 54: 343-346.
- Pearce, M. D., B. P. Marks, and J. F. Meullenet. 2001. Effects of postharvest parameters on functional changes during rough rice storage. *Cereal Chemistry* 78: 354-357.
- Perdon, A. A., B. P. Marks, T. J. Siebenmorgen, and N. B. Reid. 1997. Effects of rough rice storage conditions on the amylograph and cooking properties of medium-grain rice cv. Bengal. *Cereal Chemistry* 74: 864-867.
- Pomeranz, Y. 1992. Biochemical, functional, and nutritive changes during storage. pp. 55-141. In: D. B. Sauer, (ed.), *Storage of Cereal Grains and Their Products*. 4<sup>nd</sup> ed. American Association of Cereal Chemists, St. Paul, Minnesota.
- Priestley, R. J. 1977. Studies on parboiled rice. Part 3. Characteristics of parboiled rice on recooling. *Food Chemistry* 2: 43-50.
- Pukkahuta, C., S. Shobsngob, and S. Varavinit. 2007. Effect of osmotic pressure on starch: new method of physical modification of starch. *Starch* 58: 78-90.
- Sirisoontaralak, P., and A. Noomhorm. 2007. Changes in physicochemical and sensory-properties of irradiated rice during storage. *Journal of Stored Products research* 43: 282-289.

- Soponronnarit, S., M. Chiaw wet, S. Prachayawarakorn, P. Tungtrakul, and C. Taechapaiiroj. 2008. Comparative study of physicochemical properties of accelerated and naturally aged rice. *Journal of Food Engineering* 85: 268-276.
- Sowbhagya, C. M., and K. R. Bhattacharya. 2001. Changes in pasting behavior of rice during aging. *Journal of Cereal Science* 34: 115-124.
- Sriseadka, T., S. Wongpornchai, and P. Kitsawatpaiboon. 2006. Rapid method for quantitative analysis of the aroma impact compound, 2-acetyl-1-pyrroline, in fragrant rice using automated headspace gas chromatography. *Journal of Agriculture and Food Chemistry* 54: 8183-8189.
- Sugimoto, T., K. Tanaka, and Z. Kasai. 1986. Molecular species in the protein body (ii) (PB II) of developing rice endosperm. *Agricultural and Biological Chemistry* 50: 3031-3035.
- Szczesniak, A. S. 1987. Review paper: correlating sensory with instrumental texture measurements-an overview of recent developments. *Journal of Texture Studies* 18: 1-15.
- Tamaki, M., T. Tashiro, M. Ishikawa, and M. Ebata. 1993. Physicoecological studies on quality formation of rice kernel. IV. Effect of storage on eating quality of rice. *Japanese Journal of Crop Science* 62: 540-546.
- Tava, A. and S. Bocchi. 1999. Aroma of cooked rice (*Oryza sativa*): comparison between commercial Basmati and Italian line B5-3. *Cereal Chemistry* 76: 526-529.
- Teo, C. H., A. Abd. Karim, P. B. Cheah, M. H. Norziah, and C. C. Seow. 2000. On the roles of protein and starch in the aging of non-waxy rice flour. *Food Chemistry* 69: 229-236.
- Tsugita, T., T. Ohta, and H. Kato. 1983. Cooking flavour and texture of rice stored under different conditions. *Agricultural and Biological Chemistry* 47: 543-549.
- Unnevehr, L. J., B. Duff, and B. O. Juliano. 1992. Executive summary. pp. 1-2. In: L. J. Unnevehr, B. Duff, and B. O. Juliano, (eds.), *Consumer Demand for Rice Grain Quality*. International Rice Research Institute, Manila, Philippines.
- Utsumi, S. 1992. Plant food protein engineering. pp. 89-208. In: J. E. Kinsella, (ed.), *Advances in Food and Nutrition Research*. Academic Press, San Diego, CA.
- Villareal, R. M., A. P. Resurreccion, L. B. Suzuki, and B. O. Juliano. 1976. Changes in physicochemical properties of rice during storage. *Starch* 28: 88-94.
- Widjaja, R., M. Wootton, and J. D. Craske. 1996a. Comparative studies on volatile components of non-fragrant and fragrant rice. *Journal of the Science of Food and Agriculture* 70: 151-161.
- Widjaja, R., J. D. Craske, and M. Wootton. 1996b. Changes in volatiles components of paddy, brown and white fragrant rice during storage. *Journal of the Science of Food and Agriculture* 71: 218-224.
- Wongpornchai, S., K. Dumri, S. Jongkaewwattana, and B. Siri. 2004. Effects of drying methods and storage time on the aroma and milling quality of rice (*Oryza sativa* L.) cv. Khao Dawk Mali 105. *Food Chemistry* 87: 407-414.
- Yang, D. S., R. L. Shewfelt, K. S. Lee, and S. J. Kays. 2008. Comparison of odor-active compounds from six distinctly different rice flavor types. *Journal of Agricultural and Food Chemistry* 49: 773-779.

- Yoshihashi, T., N. T. T. Huong, and H. Anatomi. 2002. Precursors of 2-acetyl-1-pyrroline, a potent flavor compound of an aromatic rice variety. *J. Agric. Food Chem.* 50:2001-2004.
- Yoshihashi, T., Ng. T. T. Huong, V. Surojanametakul, P. Tungtrakul, and W. Varanyanond. 2005. Effect of storage conditions on 2-acetyl-1-pyrroline content in aromatic rice variety, Khao Dawk Mali 105. *Journal of Food Science* 70: 34-37.
- Zarins, Z. and J. Chrastil. 1992. Separation and purification of rice oryzzenin subunits by anion-exchange and gel-permeation chromatography. *Journal of Agriculture and Food Chemistry* 40: 1599-1601.
- Zhou, Z., K. Robards, S. Helliwell, and C. Blanchard. 2002. Ageing of stored rice: changes in chemical and physical attributes. *Journal of Cereal Science* 35: 65-78.
- Zhou, Z., K. Robards, S. Helliwell, and C. Blanchard. 2003. Effect of rice storage on pasting properties of rice flour. *Food Research International* 36: 625-634.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
Copyright © by Chiang Mai University  
All rights reserved