

## DAFTAR PUSTAKA

- Adebowale, Kayode O., T. Adeniyi Afolabi, Olayide S. Lawal. 2002. Isolation, Chemical Modification and Physicochemical Characterisation of Bambarra groundnut (*Voandzeia subterranean*) starch and flour. *Food Chemistry*, 78, 305–311.
- Anonim. 2010. Ozone Decomposition. <http://www.lenntech.com/library/ozone/decomposition/ozone-decomposition.htm>. [Diakses 5 November 2017].
- Anonim. 2016. <http://www.pertanian.go.id/Data5tahun/ATAP-TP2015/27-ProdUbikayu.pdf>. [Diakses 5 Desember 2016].
- Aini, N dan Hariyadi, P. 2007. Pasta pat1 jagung putih waxy dan non-waxy yang dimodifikasi secara oksidasi dan asetilasi-oksidasi. *Jurnal Ilmiah Pertanian Indonesia*, 12(2), 108-115.
- BeMiller, J and Whistler, R. 2009. Starch Chemistry (Third Edition). Academic Press is an imprint of Elsevier, USA.
- Bertoft, E. 2017. Understanding Starch Structure: Recent Progress. *Agronomy*, 7 (56), 1-29.
- Bertolini, A.C., Mestres, C., Lourdin, D., del Valle, G., & Colonna, P. 2001. Relationship between thermomechanical properties and baking expansion of sour cassava starch (Polvilho Azedo). *Journal of the Science of Food and Agriculture*, 81, 429–435.
- Bertolini, A. 2009. Starch: Characterization, Properties, and Applications. CRC Press: New York.
- Chan, H., Bhat, R., and Karim, AA. 2009. Physicochemical and Functional Properties of Ozone-Oxidized Starch. *J. Agric. Food Chem*, 57, 5965–5970.
- Chan, H., Leh, CP., Bhat, R., Senan, C., Williams, PA., and Karim, AA. 2011. Molecular structure, rheological and thermal characteristics of ozone-oxidized starch. *Food Chemistry*, 126, 1019–1024.
- Charles, AL., Hang, YC., Ko, WC., Sriroth, K., and Uang, AH. 2005. Influence of amylopectin structure and amylose content on the gelling properties of five cultivars of cassava starches. *Journal Agricultural and Food Chemistry*, 53, 2717–2725.
- Charoenkul, N., Uttapap, D., Pathipanawat, W., and Takeda, Y. 2006. Molecular Structure of Starches from Cassava Varieties having Different Cooked Root Textures. *Starch/Stärke*, 58, 443–452.

- Colussi, R., El Halal, SLM., Pinto, VZ., Bartz, J., Gutkoski, LC., Zavareze, EDS., and Dias, ARG. 2015. Acetylation of rice starch in an aqueous medium for use in food. *LWT-Food Science and Technology*, 62, 1076-1082.
- Cui, S. W. 2005. Food Carbohydrates Chemistry, Physical Properties, and Applications. CRC Press Taylor & Francis Group, Boca Raton, United States.
- Dana, D., Saguy, IS. 2001. Frying of Nutritious Foods: Obstacles and Feasibility. *Food Sci. Technol. Res*, 7 (4), 265–279.
- Demiate, I.M; Dupuy, N; Huvenne, J. P; Cereda, M. P dan Wosiacki, G. 2000. Relationship Between Baking Behavior of Modified Cassava Starches and Starch Chemical Structure Determined by FTIR Spectroscopy. *Carbohydrate Polymer*, 42, 149-158.
- Dewi, AMP. 2011. Oksidasi tapioka dengan hidrogen peroksida dan katalisis irradiasi uv c, serta aplikasinya untuk edible film [Tesis]. Fakultas Teknologi Pertanian, Universitas Gadjah Mada.
- Dias, ARG., Zavareze, EDR., Elias, MC., Helbig, E., Silva, DOD., Ciacco, CF. 2011. Pasting, expansion and textural properties of fermented cassava starch oxidised with sodium hypochlorite. *Carbohydrate Polymers*, 84, 268–275.
- El-Shafie, Amira, El Sheikh, Manal A., and Mohammed A. Ramadhan. 2010. Photo-oxidation of Rice Starch. Part I : Using hydrogen peroxide. *Carbohydrate Polymers*, 80, 266-269.
- Eriksson, M. 2005. Ozone chemistry in aqueous solution [Thesis]. Department of Chemistry. Royal Institute of Technology.
- Ershov, BG dan Morozov, PA. 2009. The Kinetics of Ozone Decomposition in Water, the Influence of pH and Temperature. *Russian Journal of Physical Chemistry A*, 83 (8), 1295–1299.
- Fagundes, C., Moraes, K., Pérez-Gago, MB., Palou, L., Maraschin, M., and Monteiro, AR. 2015. Effect of active modified atmosphere and cold storage on the postharvest quality of cherry tomatoes. *Postharvest Biology and Technology*, 109, 73–8.
- Farley, F. F., & Hixon, R. M. 1942. Oxidation of raw starch granules by electrolysis in alkaline sodium chloride solution. *Industrial Engineering Chemistry*, 34, 677 – 681.
- Fonseca, LM., Gonçalves, JR., El Halal, SLM., Pinto, VZ., Dias, ARG., Jacques, AC and Zavareze, EDR. 2015. Oxidation of potato starch with different sodium hypochlorite concentrations and its effect on biodegradable films. *LWT - Food Science and Technology*, 60, 714-720.

- Forssell, P., Hamunen, A., Autio, K., Suortti, T., and Poutanen, K. 1995. Hypochlorite Oxidation of Barley and Potato Starch. *Starch/starke*, 47, 371-377.
- Franco, CML., Ogawa, C., Rabachini, T., Rocha, TDS., Cereda, MP., and Jane, J. 2010. Effect of Lactic Acid and UV Irradiation on the Cassava and Corn Starches. *Braz. Arch. Biol. Technol*, 52(2), 443-454.
- Genkina, NK., Wikman, J., Bertoft, E., Yuryev, VP. 2007. Effects of structural imperfection on gelatinization characteristics of amylopectin starches with A- and B-type crystallinity. *Biomacromolecules*, 8, 2329-2335.
- Guzel-Seydim, ZB., Greene, AK., Seydim, AC. 2004. Use of ozone in the food industry. *Lebensm.-Wiss. u.-Technology*, 37, 453-460.
- Herawati, H. 2011. Potensi Pengembangan Produk Pati Tahan Cerna Sebagai Pangan Fungsional. *Jurnal Litbang Pertanian*, 30(1), 31-39.
- Hidayah, TN., Mangunwidjaja, D., Sunarti, TC., dan Sutrisno. 2005. Pengaruh suhu proses ekstrusi dan campuran ubijalar merah (*Ipomoea batatas*) dengan kacang bogor (*Voandzeia subterranea* L thouars) terhadap beberapa karakteristik fisik ekstrudat. *Jurnal Teknologi Pertanian*, 6(2), 121-130.
- Jane, J., Chen, YY., Lee, LF., McPherson, AE., Wong, KS., Radosavljevic, M., and Kasemsuwan, T. 1999. Effects of Amylopectin Branch Chain Length and Amylose Content on the Gelatinization and Pasting Properties of Starch. *Cereal Chem*, 76(5), 629-637.
- Kang, EJ., Smith, TJ., Drake, MA. 2012. Alternative Bleaching Methods for Cheddar Cheese Whey. *Journal of Food Science*, 77, 818-823.
- Klein, B., Vanier, NL., Moomand, K., Pinto, VZ., Colussi, R., Zavareze, EDR., and Dias, ARG. 2014. Ozone oxidation of cassava starch in aqueous solution at different pH. *Food Chemistry*, 155, 167-173.
- Kochhar, SP dan Gertz, C. 2004. New theoretical and practical aspects of the frying Process. *Eur. J. Lipid Sci. Technol*, 106, 722-727.
- Kuakpetoon, D. and Wang, Y.J. 2001. Characterization of Different Starches Oxidized by Hypochlorite. *Starch/Stärke*, 53, 211-218.
- Kuakpetoon, D. and Wang, Y.J. 2006. Structural Characteristics and physicochemical properties of oxidized corn starches varying in amylose content. *Carbohydrate Research*, 341, 1896-1915.
- Lawal, OS. 2004. Composition, physicochemical properties and retrogradation characteristics of native, oxidised, acetylated and acid-thinned new

- cocoyam (*Xanthosoma sagittifolium*) starch. *Food Chemistry*, 87, 205–218.
- Lawal, OS., Adebawale, KO., Ogunsanwo, BM., Barba, LL., Ilo, NS. 2005. Oxidized and acid thinned starch derivatives of hybrid maize: functional characteristics, wide-angle X-ray diffractometry and thermal properties. *International Journal of Biological Macromolecules*, 35, 71–79.
- Lee, J.S., R.N. Kumar, H.D. Rozman, B.M.N. Azemi. 2005. Pasting, Swelling, and Solubility Properties of UV initiated Starch-graft-Poly(AA). *Food Chemistry*, 91, 203-211.
- Lewicka, K., Siemion, PB., and Kurcok, P. 2015. Chemical Modifications of Starch: Microwave Effect. *International Journal of Polymer Science*, 2015, 1-10.
- Muflihati, I. 2014. Oksidasi pati singkong dengan H<sub>2</sub>O<sub>2</sub> dan irradiasi sinar uv-c menggunakan tumbler untuk meningkatkan frying expansion [Tesis]. Fakultas Teknologi Pertanian. Universitas Gadjah Mada, Yogyakarta.
- Ngadi, M., Adedeji, AA., and Kassama, L. 2008. Microstructural Changes During Frying of Foods. *Researchgate*, 169-200.
- Nguyen, TT., Le, TQ and Songsermpong, S. 2013. Shrimp Cassava Cracker Puffed by Microwave Technique: Effect of Moisture and Oil Content on Some Physical Characteristics. *Kasetsart J. (Nat. Sci.)*, 47, 434 - 446.
- Nurul, H., Boni, I. and Noryati, I. 2009. The effect of different ratios of Dory fish to tapioca flour on the linear expansion, oil absorption, colour and hardness of fish crackers. *International Food Research Journal*, 16, 159-165.
- Oladebeye, AO., Oshodi, AA., Amoo, IA., Karim, AA. 2013. Functional, thermal and molecular behaviours of ozone-oxidised cocoyam and yam starches. *Food Chemistry*, 141, 1416–1423.
- Prabaharan, M., Rao, JV. 2001. Study on ozone bleaching of cotton fabric – process optimisation, dyeing and finishing properties. *Color. Technol*, 117, 98-103.
- Priadi, G. 2013. Pengaruh Oksidasi Hancuran Kasava Asam Dengan Hidrogen Peroksida Dan Katalisis UV-C Dalam Tumbler Terhadap Baking Expansion [Tesis]. Fakultas Teknologi Pertanian, Universitas Gadjah Mada.
- Purwadi, A., Usada, W., Suryadi, Isyuniarto, dan Sukmajaya, S. 2003. Rancang bangun ozonizer jinjing saluran ganda dan manfaatnya. Prosiding Pertemuan dan Presentasi Ilmiah Penelitian Dasar Ilmu Pengetahuan dan Teknologi Nuklir. Yogyakarta.

- Rodriguez A., Rosal, R., Perdigon J.A., Mezena, M., Aguera, A., Hernando, M.D., Leton, P., Fernandez Alba, A.R., Garcia Calvo, E. 2008. Ozone Based Technologies in Water and Waste Water Treatment. *Hdb Env Chem*, 5, 127–175.
- Rolland-Sabaté, A., Sánchez, T., Buléon, A., Colonna, P., Jaillai, B., Ceballos, H., and Dufour, D. 2012. Structural characterization of novel cassava starches with low and high-amylose contents in comparison with other commercial sources. *Food Hydrocolloids*, 27, 161-174.
- Russ, N., Zielbauer, BI., Ghebremedhin, M., and Vilgis, TA. 2016. Pre-gelatinized tapioca starch and its mixtures with xanthan gum and carrageenan. *Food Hydrocolloids*, 56, 180-188.
- Saeleaw, M and Sclaining, G. 2010. Effect of blending cassava starch, rice, waxy rice and wheat flour on physico-chemical properties of flour mixtures and mechanical and sound emission properties of cassava crackers. *Journal of Food Engineering*, 100, 12–24.
- Saeleaw, M and Sclaining, G. 2011. Effect of frying parameters on crispiness and sound emission of cassava crackers. *Journal of Food Engineering*, 103, 229–236.
- Sandhu, HPS., Manthey, FA., and Simsek, S., 2012. Ozone gas affects physical and chemical properties of wheat (*Triticum aestivum* L.) starch. *Carbohydrate Polymers*, 87, 1261– 1268.
- Sangseethong, K., Sriroth, K., and Niti Termvejsayanon. 2010. Characterization of physicochemical properties of hypochlorite- and peroxide-oxidized cassava starches. *Carbohydrate Polymers*, 82, 446 – 453.
- Satmalawati, MEM. 2011. Karakteristik tapioka hasil oksidasi dengan variasi kandungan ozon terlarut dan konsentrasi slurry pati [Tesis]. Fakultas Teknologi Pertanian. Universitas Gadjah Mada, Yogyakarta.
- Somalwar, RS., Janekar, VU., and Umate, B. 2014. Desain alat *Corona discharge*. *Journal of Electrical and Electronics Engineering*, 33-38.
- Smith, W. 2016. PRINCIPLES OF OZONE GENERATION. <http://watertecengineering.com/TZ000002%20Principles%20of%20Ozone%20Generation.pdf>. [Diakses tanggal 26 Desember 2016].
- Suprapti, ML. 2005. Tepung Tapioka: Pembuatan dan Pemanfaatannya. Penerbit Kanisius, Yogyakarta.
- Syamsir, E., Hariyadi, P., Fardiat, D., Andarwulan, N., dan Kusnandar, F. 2011. Karakterisasi Tapioka Dari Lima Varietas Ubikayu (*Manihot Utilisima* Crantz) Asal Lampung. *JAgrotek*, 5(1), 93-105.

- Tako, M., Tamaki, Y., Teruya, T., Takeda, Y. 2014. The Principles of Starch Gelatinization and Retrogradation. *Food and Nutrition Sciences*, 5, 280-291.
- Tarwiyah, K. 2001. Tentang Pengolahan Pangan: Kacang Atom. [http://www.pusri.org/budidaya/OlahPangan/kacang\\_atom.pdf](http://www.pusri.org/budidaya/OlahPangan/kacang_atom.pdf). [Diakses 10 Januari 2016].
- Taverna, MG., Leonel, M., Mischán, MM. 2012. Changes in physical properties of extruded sour cassava starch and quinoa flour blend snacks. *Ciênc. Tecnol. Aliment., Campinas*, 32(4), 826-834.
- Tethool, EF., Jading, A., dan Santoso, B. 2012. Characterization of Physicochemical and Baking Expansion Properties of Oxidized Sago Starch Using Hydrogen Peroxide and Sodium Hypochlorite Catalyzed By UV Irradiation. *Food Science and Quality Management*, 5, 1-10.
- Tharanathan, RN. 2005. Starch ---- Value Addition by Modification. *Critical Reviews in Food Science and Nutrition*, 45, 371–384.
- Thomas, G. 2016. Chapter 2 : Glucides. <http://brussels-scientific.com/?p=6868>. [Diakses 12 Januari 2018].
- Tonukari, NJ. 2004. Cassava and the future of starch. *Electronic Journal of Biotechnology*, 7(1), 5-8.
- Trimble, E. 1983. Modified Starch in Foods. *Journal of Consumer Studies and Home Economics*, 7, 247-260.
- Tsukakoshi, Y., Naito, S., Ishida, N., 2008. Fracture intermittency during a puncture test of cereal snacks and its relation to porous structure. *Food Research International*, 41, 909–917.
- Uzomah, A., Ibe, C. 2011. The functional properties, pasting and baking behaviour of chemically modified sour cassava starches. *African Journal of Food Science*, 5(12), 686-694.
- Visser, J., Vliet, TP., Hamer, R. 2007. Crispness of deep fried snack products. <http://www.agfdt.de/loads/kt07/visseabb.pdf>. [Diakses 22 November 2017].
- Wang Y.J; Wang, L. 2003. Physicochemical Properties of Common and Waxy Corn Starches Oxidized by Different Level of Sodium Hypochlorite. *Carbohydrate Polym*, 52, 207-217.
- Waterschoot, J., Gomand, Delcour, JA. 2016. Impact of *swelling power* and granule size on pasting of blends of potato, waxy rice and maize starches. *Food Hydrocolloids*, 52, 69-77.
- Wonsagonsup, R., Deeyai, P., Chaiwat, W., Horrungsawat, S., Leejariensuk, K., Suphantharika, M., Fuongfuchat, A and Dangtip, S. 2014. Modification

of tapioca starch by non-chemical route using jet atmospheric argon plasma. *Carbohydrate Polymers*, 102, 790-798.

Zhu, F. 2015. Composition, structure, physicochemical properties, and modifications of cassava starch. *Carbohydrate Polymers*, 122, 456–480.