

DAFTAR PUSTAKA

- Adebowale, K. O. A., Afolabi, T.A., Lawal, O. S. 2002. Isolation, chemical modification and physicochemical characterisation of Bambarra groundnut (*Voandzeia subterranean*) starch and flour. *Food Chemistry* 78(3): 305-311.
- Agama-Acevedo E, Nun˜ez-Santiago MC, Alvarez-Ramirez J, Bello- Pe´rez LA. 2015. Physicochemical, digestibility and structural characteristics of starch isolated from banana cultivars. *Carbohydrate Polymers* 124:17–24.
- Almatsier, S. 2004. Prinsip Dasar Ilmu Gizi. Gramedia Pustaka Umum. Jakarta.
- An, H. J., dan King, J. M. 2009. Using Ozonation and Amino Acids to Change Pasting Properties of Rice Starch. *Journal of food science*, 74 (3), C278 C283.
- Anindya A.S dan Haryadi. 2014. Oksidasi Hancuran Singkong Menggunakan H₂O₂ dan Asam Laktat dengan Katalisator Ferrous Sulfate Heptahydrate untuk Meningkatkan Baking Expansion. *Jurnal Aplikasi Teknologi Pangan* 3 (4) 2014.
- Arif, A., Agus, B., Hoerudin. 2013. Nilai Indeks Glikemik Produk Pangan dan Faktor-Faktor yang Mempengaruhinya. *Jurnal Litbang Pascapanen Pertanian*.
- Badan Pusat Statistik. 2016. Produksi Tanaman Buah-Buahan Pisang (Ton). Diakses melalui www.bps.go.id.
- Barichello, V., Rickey Y. Y., Robert H. C., David W. S. 1990. Low Temperature Sweetening in Susceptible and Resistant Potatoes: Starch Structure and Composition. *Journal of Food Science* Volume 55, No. 4.
- Bello-Pe´rez, L. A., Agama-Acevedo, E., Sa´nchez-Herna´ndez, L., & Paredes Lo´pez, O. 1999. Isolation and Partial Characterization of Banana Starches. *Journal of Agricultural and Food Chemistry*, 47, 854–857.
- Bello-Perez, L. A., Romero-Manilla, R., & Paredes-Lopez, O. 2005. Preparation And Properties of Physically Modified Banana Starch Prepared By Alcoholic-Alkaline Treatment. *Starch/Staerke* 52: 154–159.
- BeMiller, J. N dan Han, J. A. 2007. Preparation and Physical Characteristic of Slowly Digesting Modified Food Starches. *Carbohydrate Polymers* 67: 366-374.
- Bimo, Agung Warsito, Abdul Syakur. 2011. Aplikasi Ignition Co Sebagai Pembangkit Tegangan Tinggi Impuls Untuk Penyedia Daya Reaktor Ozon. Tugas Akhir. Universitas Diponegoro. Semarang.

- Bismo, S, Indar Kustiningsih, Jayanudin, Febri Haryanto dan Hergi Julio Saptono, 2008. Studi Awal Degradasi Fenol Dengan Teknik Ozonasi Di Dalam Reaktor Annular. Universitas Diponegoro. Semarang.
- Butterworth, Peter J., Frederick J. Warren, Terri Grassby, Hamung Patel, Peter R. Ellis. 2012. Analysis of Starch Amylolysis Using Plots for First-Order Kinetics. *Carbohydrate Polymers* 87 (2012) 2189– 2197.
- Cahyana, Y., Titipanillah, R., Mardawati, E., Sukarminah, E., Rialita, T., Andoyo, R., Handarini, K. 2018. Non-starch contents affect the susceptibility of banana starch and flour to ozonation. *Journal of Food Science and Technology*, 55(5), 1726–1733.
- Cahyana, Yana. Evelyn Wijaya. Tien Siti Halimah. Herlina Marta. Edy Suryadi. Dian Kurniati. 2018. The Effect of Different Thermal Modifications on Slowly Digestible Starch and Physicochemical Properties of Green Banana Flour (*Musa acuminata colla*). *Food Chemistry* 274 (2019) 274–280. Available online 03 September 2018.
- Catal. H, Senol Ibanoglu. 2014. Effect of Aqueous Ozonation on the Pasting, Flow and Gelatinization Properties of Wheat Starch. *Food Science and Technology*, 59 (2014) 577-582.
- Chan Hui, Tin. 2014. Effect of Ozone Treatment on the Physicochemical Properties of Corn, Sago and Tapioca Starches. . University Sains Malaysia, Malaysia.
- Chapman. 1930. “Stratospheric Ozone Chemistry”. Didittica.dma.unifi.it/WebWRite/pub/Energetica/MaterialeIntegrativo/Ozne.pdf. Diakses tanggal 18 Januari 2018.
- Chattopadhyay, S., Singhal, R. S., & Kulkarni, P. R. 1997. Optimization of Conditions of Synthesis of Oxidized Starch from Corn And Amaranth for Use in Film-Forming Applications. *Carbohydrate Polymers*, 34, 203–212.
- Cheetam, N. W. H., and L. Tao, 1998. Variation in crystalline type with amylose content in maize starch granules: an X-ray powder diffraction study. *Carbohydrate Polymers* 36: 277-284.
- Chung, H. J., Liu Q., & R. Hoover. 2009. Impact of Annealing and Heat-Moisture Treatment on Rapidly Digestible, Slowly Digestible and Resistant Starch Levels in Native and Gelatinized Corn, Pea, and Lentil Starches. *Carbohydrate Polymers*. 75(3), 436-447.
- Cooke D, dan Gidley MJ. 1992. Loss of Crystalline and Molecular Order during Starch Gelatinization: Origin of the Enthalpic Transition. *Carbohydr. Res.* 227:103–12.

- Crowther, P.C., 1979. *The Processing of Banana Products for Food Use*. London: Tropical Product Institute.
- Cui, S. W. 2005. *Food Carbohydrates: Chemistry, Physical Properties, and Application*. CRC Press. Prancis.
- Dewati, Retno. 2008. *Limbah Kulit Pisang Kepok Sebagai Bahan Baku Pembuatan Etanol*. UPN Press. Surabaya.
- Dhital, S., A.K. Shrestha, and M.J. Gidley. 2010. Relationship Between Granule Size and In Vitro Digestibility of Maize and Potato Starches. *Carbohydrate Polymers* 82 (2): 480-488.
- Dhital, S., Gidley, M. J., & Warren, F. J. 2015. Inhibition of alpha-amylase activity by cellulose: Kinetic analysis and nutritional implications. *Carbohydrate Polymers*, 123, 305–312.
- Edwards, Cathrina H., Maillot, M., Parker, Roger., Warren, F.J. 2018. A comparison of the kinetics of in vitro starch digestion in smooth and wrinkled peas by porcine pancreatic alpha-amylase. *Food Chemistry* 244 (2018) 386–393.
- Englyst, K. N., Hudson, G. J., dan Englyst, H. N. 2006. Starch Analysis in Food. Englyst Carb. Service. *Encyclopedia of Analytical Chemistry*. 1-17.
- Fessenden, Ralph. J., dan Joan S. Fessenden. 1986. *Organic Chemistry* 3rd Ed. Wadsworth, Inc. Belmont, California.
- Foster, P.K.F., S.H.A. Holt, and J.C.B. Miller. 2002. International Table of Glycemic Index and Glycemic Load Values. *Am. J. Clin. Nutr.* 76 (1): 45-56.
- Garcia, E., & Lajolo, F. M. 1988. Starch Transformation During Banana Ripening: The Amylase and Glucosidase Behavior. *Journal Of Food Science* 53: 1181-1186.
- Gérard, Catherine, Paul Collona, Alain Buléon, Véronique Planchot. 2001. Amylolysis of Maize Mutant Starches. *Journal of the Science of Food and Agriculture. J Sci Food Agric* 81:1281-1287.
- Gilbert, O., S. Aleman, R. Guzman, M. B. Raymunde, A. Laurentin, E. Manzanilla, J. Ricci, dan E. Perez. 2014. Morphometric Variations of Banana Starches Issued from Various Genomic Group and In vitro Starch Digestibility. *Enliven: Journal of Dietetics Resesarch and Nutrition*, 1: 1-8.
- González-Soto, R.A., L.Sánchez-Hernández, J. Solorza-Feria, C. Núñez-Santiago, E. Flores-Huicochea and L.A.Bello-Pérez. 2006. Resistant Starch Production from Non-conventional Starch Sources by Extrusion. *J. Food Sci. Tech. Int SAGE Publications* 12 (1): 5-11.

- Gottschalk, C., Libra, J. A. L., Saupe, A. 2010. *Ozonation of Water and Waste Water: A Practical Guide to Understanding Ozone and its Applications*, Second Edition. Wiley-VCH Verlag GmbH & Co. KGaA.
- Gozé, P., Larbi Rhazi., André Pauss., Thierry Aussenac. 2016. Starch Characterization after Ozone Treatment of Wheat Grains. *Journal of Cereal Science* 70 (2016) 207-213.
- Gunaratne, A. dan R. Hoover. 2002 Effect of heat-moisture treatment on the structure and physicochemical properties of tuber and root starches. *Carbohydr. Polym.* 49:452-437.
- Halimah, L., 2015. Analisis Teknik dan Uji Kinerja Mesin Pembuat Air Berozon (Ozonizer) Tipe TIP 01. . Jurusan Teknik Manajemen Industri Pertanian Fakultas Teknologi Industri Pertanian. Universitas Padjadjaran. Jatinangor.
- Heyne, K. 1950. *De Nuttige Planten van Indonesia*. N. V. Uitgeverij W. van Hoeve, Netherlands.
- Hizukuri, S. 1985. Relationship between the distribution of the chain length of amylopectin and the crystalline structure of starch granules. *Carbohydrate Research* 141(2): 295-306.
- Hoover R, Ratnayake WS. 2002. Starch characteristics of black bean, chick pea, lentil, navy bean and pinto bean cultivars grown in Canada. *Food Chem.* 2002; 78:489–498
- Jenkins. P. J., & Donald, A. M. 1995. The Influence of Amylose on Starch Granule Structure. *International Journal of Biological Macromolecules*, 17, 315-321.
- Kayisu, K., Hood, L. F., & Vansoest, P. J. 1981. Characterization of starch and fiber of banana fruit. *Journal of Food Science*, 46(6), 1885–1890.
- Khadre, M.A., Yousef, A.E., Kim, J.-G., 2001. Microbiological Aspects of Ozone Applications in Food: A Review. *J. Food Sci.* 66, 1242–1252.
- Kishore, Vijay., Sangeetha Gowda K. R., Swati Krishna, Kusha Sharma¹, Rashmi M., Nishita K. P. 2014. Bovine Serum Albumin a Potential Thermostabilizer: a Study on α -Amylase. *Journal of Applied & Environmental Microbiology*, 2014, Vol. 2, No. 2, 37-41
- Klein B, Vanier NL, Moomand K, Pinto VZ, Colussi R, da Rosa Zavareze E, Dias ARG. 2014. Ozone oxidation of cassava starch in aqueous solution at different ph. *Food Chem* 155:167–173.
- Koswara, S., 2009. Teknologi Modifikasi Pati. Terdapat pada : <http://www.ebookpangan.com>. (diakses pada Tanggal 12 Januari 2018).

- Kuakpetoon, D., & Wang, Y. J. 2006. Structure Characteristics and Physicochemical Properties of Oxidized Corn Starches Varying In Amylose Content. *Carbohydrate Research*, 341, 1896-1915.
- Kusnandar, F. 2010. *Teknologi Modifikasi Pati dan Aplikasinya di Industri Pangan. A Review*. Departemen Ilmu Teknologi Pangan. Institut Pertanian Bogor. Bogor.
- Lenntech, 2009. Ozone Decomposition [WWW Document]. URL <http://www.lenntech.com/library/ozone/decomposition/ozone-decomposition.htm> (accessed 1.18.18).
- Li, W., Guiling W., Qingui L., Hao J., Jianmei Z., Shaohui O., and Guoquan Z. 2016. Effects of removal of surface proteins on physicochemical and structural properties of A- and B-starch isolated from normal and waxy wheat. *J Food Sci Technol* 53(6): 2673–2685.
- Lii, C. Y., Chang, S. M., & Young, Y. L. 1982. Investigation of The Physical and Chemical Properties of Banana Starches. *Journal of Food Science*, 47, 1493–1497.
- Lii, C. Y., dan Chang, S.M. 1981. Characterization of Red Bean Starch and Its Noodle Quality. Terdapat Pada Kim, Y.S., D. P. Wiesenborn, J.H. Lorenzen, and P. Bergland. 1996. Suitability of Edible Bean and Potato Starches For Starch Noodles. *Cereal Chem.* 73(3): 302-308.
- Liu, J., Manman, Iv., Lijing, W., Li, Y., Huanhuan, F., Wang, M. 2016. Comparative study: How annealing and heat moisture treatment affect the digestibility, textural, and physicochemical properties of maize starch. *Starch/Stärke* 68: 1-11.
- Liu, Q. 2005. *Understanding Starches and Their Role in Foods. Food Carbohydrates Chemistry, Physical, Properties, and Applications*. CRC Press, Boca Raton. University of California, San Diego.
- Lopéz, M.G., L.A. Bello-Perez, O. Paredes-Lopez. 1994. Amylopectin: Structural, Gelatinization and Retrogradation Studies. *Food Chem.* 50: 411-418
- Lopez-Rubio, A., Flanagan, B. M., Gilbert, E. P. and Gidley, M. J. 2008. A novel approach for calculating starch crystallinity and its correlation with double helix content: A combined XRD and NMR study. *Biopolymers* 89(9): 761-768.
- Mahapatra, A.K., Muthukumarappan, K., Julson, J.L., 2005. Applications of Ozone, Bacteriocins and Irradiation in Food Processing: A Review. *Crit. Rev. Food Sci. Nutr.* 45, 447–461.

- Martinez-Flores, H. E., Yoon-Kil-Chang, Martinez-Burtos, F., Sgarbieri, V. 2004. Effect of High Fiber Products on Blood Lipids and Lipoproteins in Hamster. *Nutrition Research* 24 (1).
- Mercier, C. and P. Colonna. 1988. Starch and Enzymes: Innovations In The Products, Process and Uses. *Biofuture Chemic*. p. 55-60.
- Moongngarm, Anuchita, Wanassanun Tiboombun, Mai Sanpong, Pimpila Sriwong, Laongdao Phiewtong, Rattanapon Prakitrum and Nattipon Huychan. 2014. Resistant Starch and Bioactive Contents of Unripe Banana Flour As Influenced By Harvesting Periods and Its Application. *American Journal of Agricultural and Biological Sciences* 9 (3): 457-465, 2014
- Moore, Kenneth J., Hans-Joachim G. Jung. 2001. Lignin and fiber digestion. *Journal of Range Management*, Vol. 54, No. 4 (Jul., 2001), pp. 420-430.
- Moretti, R. and Thorson, J. S. 2008. A comparison of sugar indicators enables a universal high-throughput sugar-1-phosphate nucleotidyltransferase assay. *Analytical Biochemistry* 377(2): 251-258.
- Musita, N. 2009. Kajian Kandungan dan Karakteristik Pati Resisten Dari berbagai Varietas Pisang. Balai Riset dan Standarisai Industri Bandar Lampung, Lampung.
- O'Donnell, Colm., B.K. Tiwari., P.J Cullen. Rip G. Rice. 2012. *Ozone In food Industry*. Willey Blackwell Publishing, Oxford.
- Oates, C.G. 1997. Towards an understanding of starch granule structure and hydrolysis. *Trends in Food Science & Technology*, 8, 375 – 382
- Oladebeye AO, Oshodi AA, Amoo IA, Karim AA. 2013. Functional, thermal and molecular behaviours of ozone-oxidised cocoyam and yam starches. *Food Chem* 141:1416–1423.
- Park, J. and Johnson, M. 1949. A submicrodetermination of glucose. *Journal of Biological Chemistry* 181: 149-151.
- Patel, Hamung. 2014. Molecular mechanisms of α -amylase action on retrograded starch: The relationship between digestion kinetics and physicochemical characteristics. Electronic Thesis. <https://kclpure.kcl.ac.uk/portal/>.
- Patel, K. F., Mehta, H. U., & Srivastava, H. C. 1974. Kinetics and Mechanism of Oxidation Starch with Sodium Hypochlorite. *Journal of Applied Polymer Science*, 18. 389-399.
- Pelissari, F. M., M.M Andrade-Mahecha, P. J do Amaral S., dan Florencia C. M. 2013. Comparative Study on The Properties of Flour and Starch Films of Plantain Bananas (*Musa paradisiaca*). *Food Hydrocolloids* 30: 681-690.

- Peng, Shanli, Kaiyun Luo, Xiaoting Zhou, Genyi Zhang. 2016. Tea Polyphenols: enzyme inhibition effect and starch digestibility. Research Article.
- Pomeranz, Z. 1985. Functional Properties of Food Components 2nd ed. Academic Press Inc. New York.
- Prabawati S., Suyanti, dan D. A. Setyabudi. 2008. Teknologi Pascapanen dan Teknik Pengolahan Buah Pisang. Balai Besar Penelitian dan Pengembangan Pascapanen Pertanian. Departemen Pertanian.
- Prihatiningtyas , E, 2006. Ozon Suatu Dilema, Warta Limnologi, No. 40, Oktober 2006.
- Pukkahuta C, Varavinit S. 2007. Structural transformation of sago starch by heat-moisture and osmotic-pressure treatment. *Starch/Starke* 59:624–631.
- Putri, Annisa Risdianika. 2012. Pengaruh Kadar Air Terhadap Tekstur dan Warna Keripik Pisang Kepok (*Musa parasidiaca formatypica*). Jurusan Teknologi Pertanian Fakultas Pertanian Universitas Hasanuddin. Makassar.
- Putri, T. K., D. Veronika, Ade Ismail, Agung Karuniawan, Yudithia Maxiselly, Aep Wawan Irwan, Wawan Sutari. 2015. Pemanfaatan Jenis-Jenis Pisang (Banana dan Plantain) Lokal Jawa Barat Berbasis Produk Sale dan Tepung. *Jurnal Kultivasi* Vol. 14(2) Oktober 2015. Department of Crop Science, Padjadjaran University.
- Radley, J. A. 1976. *Starch and Its Derivatives*. D Van Nostrand Company, Inc. New York.
- Rafida, Nadia. 2017. Kajian Karakteristik Dan Kadar Slowly Digestible Starch (SDS) Pada Pati Pisang Kapas Alami Dan Termodifikasi Fisik. . Program Studi Teknologi Pangan Fakultas Teknologi Industri Pertanian, Universitas Padjadjaran, Jatinangor.
- Rimbawan dan A. Siagian. 2004. Indeks Glikemik Pangan, Cara Mudah Memilih Pangan yang Menyehatkan. Penebar Swadaya, Jakarta.
- Rocha TS, Felizardo G, Jane JL, Franco CML. 2012. Effect of annealing on the semicrystalline structure of normal and waxy corn starches. *Food Hydrocoll.* 29:93–99
- Sandhu, Harkanwal P.S., Frank A. Manthey, Senay Simsek. 2012. Ozone Gas Affects Physical and Chemical Properties of Wheat (*Triticum Aestivum L.*) Starch. *Journal of Carbohydrate Polymers* 87 (2012) 1261– 1268.
- Sandhu, K. S., Kaur, M., Singh, N., & Lim, S. 2008. A comparison of native and oxidized normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties. *LWT*, 41, 1000–1010.

- Sangseethong, K., Termvejsayanon, N., & Sriroth, K. 2010. Characterization of Physicochemical Properties of Hypochlorite and Peroxide-Oxidized Cassava Starches. *Carbohydrat Polymers*, 82, 446-453.
- Sarko, A., H.C.H Wu. 1978. The Crystal Structures of A-, B- and C-Polymorphs of Amylose and Starch. *Starch/Starke* 30 (1978) Nr. 3, S. 73-78.
- Satuhu S., dan Supriyadi A. 2000. *Pisang Budidaya, Pengolahan, dan Prospek Pasar*. Penebar Swadaya. Jakarta.
- Shintaleon, 2013. Ozon dan Ozonasi [WWW Document]. URL <https://shintaleon.wordpress.com/2013/03/15/ozon-ozonasi/> (Diakses 18 Januari 2018)
- Sitorus, S. R. 2001. *Pembuatan Biskuit Untuk Makan Sapihan dari Pati Garut (Maranta arundinaceae L.)*. Fakultas Teknologi Pertanian. Institut Pertanian Bogor. Bogor.
- Sky-Peck, Howard H., Phichai Thuvasethakul. 1977. Human Pancreatic α -Amylase II: Effects of Ph, Substrate and Ions on the Activity of the Enzyme. *Annals of Clinical and Laboratory Science*, Vol. 7, No. 4.
- Slaughter, S. L., Ellis, P. R. & Butterworth, P. J. 2001. An Investigation of The Action of Porcine Pancreatic α -amylase on Native and Gelatinised Starches. *Biochimica Biophysica Acta*, 1525, 29–36.
- Smith, R. J. 1967. Production and Used of Hypochlorite Oxidized Starches. In R. L. Whistler & E. F. Paschall (Eds.). *Starch chemistry and technology* (Vol. II, pp. 620–625). Academic Press. New York.
- Smith, W., 2011. *Principles of Ozone Generation*. Watertec Eng. Pty Ltd Aust.
- Song, H.Y., S.Y. Lee, S.J. Lee, K.M. Kim, J.S. Kim, G.J. Han and T.W. Moon. 2014. Digestibility and Physicochemical Properties of Granular Sweet Potato Starch as Affected by Annealing. *Food Sci. Biotechnol.* 23(1): 23-31.
- Suhartanto, M. R., Harti. H. dan Haryadi, S. S. 2008. Program Pengembangan Pisang. <http://pkht.or.id/> (Diakses pada 12 Januari 2018)
- Sukhija. S., Singh. S., and Riar C.S. 2015. Effect of Oxidation, Cross-linking and Dual Modification on Physicochemical, Crystallinity, Morphological, Pasting and Thermal Characteristics of Elephant Foot Yam (*Amorphophallus paeoniifolius*) Starch. *Journal Food Hydrocolloids* 55 (2016) 56-64.
- Syafarudin, Angky dan Novia. 2013. Produksi Ozon dengan Bahan Baku Oksigen Menggunakan Alat Ozon Generator. *Jurnal Teknik Kimia* No.2 Vol. 19

- Taggart, P. 2004. Starch As An Ingredients : Manufacture and Applications, Dalam: Ann Charlotte Eliasson (ed). Starch in Food: Structure, Function, and Application. CRC Press, Baco Raton, Florida.
- Tahir, Rumana Yasmin. 2008. Amylolysis of native and hydrothermally treated starches: Acomparative study using enzyme kinetics as an approach to understanding starch digestibility. Electronic Thesis. <https://kclpure.kcl.ac.uk/portal/>.
- Tharanthan, R.N. and S. Mahadevamma. 2003. Grain Legumes, A Boon To Human Nutrition. Trends Food Sci. Technol. 14(12): 507-518.
- Thompson, D. B. 2000. On the non-random nature of amylopectin branching. Carbohydrate Polymers. 43 (2000): 223-239.
- Titipanillah, Rosmala. 2017. Kajian Sifat Fungsional Dan Amilografi Pati dan Tepung Pisang Kapas (*Musa acuminata*) Termodifikasi Oksidasi pada Berbagai Konsentrasi Ozon (O₃). Program Studi Teknologi Pangan Fakultas Teknologi Industri Pertanian. Universitas Padjadjaran. Jatinangor.
- Tjitrosoepomo, G.. 2000, Morfologi Tumbuhan. Gadjah Mada University Press. Yogyakarta.
- Tjokroadikoesoemo, P.S. 1986. HFS dan Industri Ubi Kayu Lainnya. PT Gramedia. Jakarta.
- Tolvanen, A, Pasi. 2013. Development of an Environmentally Friendly Method of Starch Oxidation by Hydrogen Peroxide and a Complex Water-soluble Iron Catalyst. Åbo Akademi University Press. Finland.
- Topping, D, L., dan Clifton, P. M. 2001. Short Chain Fatty Acid and Human Colonic Function: Roles of Resistant Starch and Nonstarch Polysaccharides. Physiological Review, 81, 1031-1064.
- US Food and Drug Administration. 1997. Substances Generally Recognized As Safe, Proposed Rule. Federal Register; 62, 18937-18964.
- Valmayor, R.V., Jamaluddin, S. H., Silayoni, B., Kusumo, S., Danh, L. D., Pascua, O. C., dan Espino, R. R. C., 2000. Banana Cultivar Names and Synonyms in Southeast Asia. PCARRD Info. Los Bano, Laguna.
- Vanier N. L, Shanise L.M El Halal, Alvaro R.G Dias, Elssandra da Rosa Zavareze. 2017. Molecular Structure, Functionality and Applications of Oxidized Starches: A Review. Food Chemistry. No.221: 1546-1550.
- Vanier, N. L., Zavareze, E. R., Pinto, V. Z., Klein, B., Botelho, F. T., Dias, A. R. G., Elias, M. C. 2012. Physicochemical, crystallinity, pasting and morphological properties of bean starch oxidised by different

- concentrations of sodium hypochlorite. *Food Chemistry* 131 (2012) 1255-1262.
- Waliszewski, Krzysztof N., Maria A. Aparicio, Luis A. Bello, Jose A. Monroy. 2003. Changes of banana starch by chemical and physical modification. *Carbohydrate Polymers* 52 (2003) 237–242
- Wang, S., Wang, J., Yu, J., dan S. Wang. 2014. A comparative study of annealing of waxy, normal, and high-amylose maize starches: the role of amylose molecules. *Food Chemistry* 164:332-338.
- Wang, T. L., Bogracheva, T. Y. and Hedley, C. L. 1998. Starch: as simple as A, B, C?. *Journal of Experimental Botany* 49: 481–502.
- Wang, Y.J., dan Wang, L. 2003. Physicochemical Properties of Common and Waxy Corn Starches Oxidized by Different Levels of Sodium Hypochlorite. *Carbohydrate Polymers*, 52(3), 207-217.
- Wijaya, Evelyn. 2017. Mempelajari Karakteristik Fisikokimia dan Kandungan Pati Tercerna Lambat (*Slowly Digestible Starch*) pada Tepung Pisang Kapas Termodifikasi Secara Fisik. Skripsi. Program Studi Teknologi Pangan Fakultas Teknologi Industri Pertanian, Universitas Padjadjaran, Jatinangor.
- Willet, W., J. Manson, and S. Liu. 2002. Glycemic Index, Glycemic Load and Risk of Type 2 Diabetes. *Am. J. Clin. Nutr.* 76(1): 274S-280S.
- Wills, R.B.H., Harris, D.R., Seberry, J.A., 1999. Delayed ripening of bananas through minimisation of ethylene. *Tropical Agric.* 76, 279–282.
- Winarno, F.G., 2002. *Kimia Pangan dan Gizi*. Gramedia Pustaka Utama. Jakarta.
- Wojeicchowski, J. P., Siquera, G. L.A., Lacerda, L. G., Schnitzler, E., Demiate, I. M. 2018. Physicochemical, structural and thermal properties of oxidized, acetylated and dual-modified common bean (*Phaseolus vulgaris* L.) starch. *Food Sci. Technol, Campinas*, 38(2): 318-327, Apr.-June 2018.
- Wurzburg, O. B. 1986. *Converted Starches. Modified starches: Properties and Uses*. CRC Press, Boca Rafton, FL.
- Wurzburg, O. B. 1989. *Modified Starches: Food Polysaccharides and Their Application*. Marcel Dekker, Inc. New York.
- Xia, Y., Gao, W., Jiang, Q., Li, X., Huang, L. and Xiao, P. 2012. Physicochemical, crystalline, and thermal properties of native and enzyme hydrolyzed *Pueraria lobata* (Willd.) Ohwi and *Pueraria thomsonii* Benth. starches. *Starch - Stärke* 64: 864–873.
- Yadav, B. S., Sharma, A., and Yadav, R. B. 2009. Studies on Effect on Multiple Heating and Cooling Cycles on the RS formation in Cereal, Legumes and

- Tubers. *International Journal of Food Sciences and Nutrition* 60(S4):258-272.
- Yun, S. H. & Matheson, N. K. 1990. Estimation of Amylose Content of Starches after Precipitation of Amylopectin by Concanavalin-A. *Starch/Starke*, 42, 302-305.
- Zavareze, E. R., Pereira, J. M., Evangelho, J. A., Moura, F. A., Gutkoski, L. C. and Dias, A. R. G. 2017. Crystallinity, thermal and gel properties of oat starch oxidized using hydrogen peroxide. *International Food Research Journal* 24(4): 1545-1552 (August 2017).
- Zhang, G. dan Hamaker, B. R. 2009. Slowly Digestible Starch: Concept, Mechanism, and Proposed Extended Glycemic Index, *Critical Reviews in Food Science and Nutrition*, 49:10, 852-867.
- Zhang, Genyi, Mahesh Venkatachalam, and Bruce R. Hamaker. 2006. Structural Basis for the Slow Digestion Property of Native Cereal Starches. *Biomacromolecules* 2006, 7, 3259-3266.
- Zhang, P., R.L. Whistler, J.N. BeMiller, B.R. Hamaker. 2005. Banana Starch: Production, Physicochemical Properties, and Digestibility Review. *Carbohydrate Polymers* 59: 443-458.
- Zhang, Y.R., Wang, X.L., Zhao, G.M., & Wang, Y.Z. 2012. Preparation and properties of oxidized starch with high degree of oxidation. *Carbohydrate Polymers*, 87(4), 2554-2562.

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Agama : Islam
Nama Orang Tua
 a. Nama Ayah : Halim Samsudin
 b. Nama Ibu : Cucu Herawati
Nama Saudara : Astri Lestari Utami (alm),
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RIWAYAT PENDIDIKAN

Jenjang	Institusi	Tahun
SD	SD Assalam Bandung	2003-2006
SD	SDN Mohammad Toha Bandung	2006-2009
SMP	SMPN 11 Bandung	2009-2011
SMA	SMA Alfa Centauri Bandung	2011-2014
Kuliah	Universitas Padjadjaran	2014-2018

RIWAYAT ORGANISASI

Tahun	Organisasi	Jabatan
2015	Bem Kema FTIP, Unpad Kabinet Abhisatya	Anggota Kementerian Kewirausahaan
2016	Bem Kema FTIP, Unpad Kabinet Symhony	Wakil Ketua Kementrian Kewirausahaan
2017	HMPPI KOMSAT UNPAD	Kepala Divisi Keilmuan dan Profesi

PENGALAMAN KEPANITIAAN

Tahun	Nama Acara	Jabatan
2014	Fooderation (HIMATIPAN UNPAD) 2014	Anggota Bidang Logistik
2015	Studi & Pengenalan Keprofesian Tahap Awal Teknologi Industri Pangan (SPEKTA TIP) 2015	Anggota Bidang Medik
2015	Seminar Technopreneur (BEM FTIP) 2015	Sekretaris
2016	CFTU-CDC FTIP (BEM FTIP) 2016	Anggota Bidang Humas
2016	SPARTA (BEM FTIP) 2016	Wakil Ketua Bidang Medik
2016	Fooderation (HIMATIPAN UNPAD) 2016	Anggota Bidang Marketing
2016	Seminar Kewirausahaan <i>SCREENSHOT</i> (BEM FTIP) 2016	Sekretaris I
2017	FTIP FAIR (BEM FTIP) 2017	Sekretaris I

SEMINAR DAN TRAINING

Tahun	Seminar	Tempat
2014	Ceramah Ilmiah “ <i>High Protein Food Problem and Challenges</i> ”	Universitas Padjadjaran
2014	Seminar <i>Technopreneur “Road To AFTA 2015”</i>	Universitas Padjadjaran
2015	Seminar <i>Food Tech Career Day “Set Your Goals, Get the Position”</i>	Universitas Padjadjaran
2015	Ceramah Ilmiah “Perakitan Tanaman dan Keamanan Pangan Tanaman Transgenik”	Universitas Padjadjaran
2015	Ceramah Ilmiah “ <i>Synthetic Food: Another Fake Food Scandal</i> ”	Universitas Padjadjaran
2015	Seminar <i>Creative Young Entrepreneur-Technopreneur</i>	Universitas Padjadjaran
2015	Ceramah Ilmiah “ <i>Fish Processing as a Potentisal Source of New Food Products</i> ”	Universitas Padjadjaran
2016	Diskusi Internal Minuman Isotonik	Universitas Padjadjaran

2018	<i>International Conference on Health Science & Technology</i>	Universitas Muhammadiyah Semarang
Tahun	Training	Tempat
2015	FTIP <i>Leader Camp</i>	Universitas Padjadjaran
2017	Pelatihan <i>Software SPSS</i>	Universitas Padjadjaran
2017	Pelatihan <i>Good Laboratory Practices (GLP)</i>	Universitas Padjadjaran
2017	Pelatihan HACCP dan ISO 22000:2005	Universitas Padjadjaran

PENGALAMAN KERJA

Tahun	Kegiatan	Tempat
2017	Asisten Praktikum Penanganan Limbah Industri Pangan	FTIP Universitas Padjadjaran
2017	Praktek Kerja Lapangan	Balai Laboratorium Kesehatan Provinsi Jawa Barat
2018	Asisten Praktikum Analisis Pangan	FTIP Universitas Padjadjaran
2018	Asisten Praktikum Teknologi Pengolahan Susu dan Telur	FTIP Universitas Padjadjaran