

## DAFTAR PUSTAKA

- Akili, M. S., Ahmad, U. and Suyatma, N. E. (2012) 'Karakteristik Edible Film dari Pektin Hasil Ekstraksi Kulit Pisang Characterization Of Edible Film Based On Pectin Extracted From Banana Peel', *Jurnal Keteknikan Pertanian*, 26, pp. 39–46.
- Bergo, P. and Sobral, P. J. A. (2007) 'ARTICLE IN PRESS Effects of plasticizer on physical properties of pigskin gelatin films', 21, pp. 1285–1289. doi: 10.1016/j.foodhyd.2006.09.014.
- Bourtoom, T. (2008) 'Review Article Edible films and coatings : characteristics and properties', *International Food Research Journal*, 15(3), pp. 237–248.
- Denavi, G. *et al.* (2009) 'Effects of drying conditions on some physical properties of soy protein films', *Journal of Food Engineering*, 90(3), pp. 341–349. doi: 10.1016/j.jfoodeng.2008.07.001.
- Dhanapal, A. *et al.* (2012) 'Edible films from Polysaccharides', *Food Science and Quality Management*, 3(0), pp. 9–17.
- Dobies, M., Kuśmia, S. and Jurga, S. (2005) '1H NMR and rheological studies of the calcium induced gelation process in aqueous low methoxyl pectin solutions', *Acta Physica Polonica A*, 108(1), pp. 33–46.
- DONHOWE, I. G. and FENNEMA, O. (1993) 'THE EFFECTS of PLASTICIZERS ON CRYSTALLINITY, PERMEABILITY, and MECHANICAL PROPERTIES of METHYLCELLULOSE FILMS', *Journal of Food Processing and Preservation*, 17(4), pp. 247–257. doi: 10.1111/j.1745-4549.1993.tb00729.x.
- Flutto, L. and Danisco (2003) 'PECTIN', in Caballero, B., Trugo, L., and Finglas, P. M. (eds) *Encyclopedia of Food Sciences and Nutrition*. second. Academic Press, pp. 4440–4449. doi: 10.1016/B0-12-227055-X@00901-9.
- FRISCH, K. C. (1970) 'TOPOLOGICALLY INTERPENETRATING POLYMER NETWORKS'.
- GONTARD, N., GUILBERT, S. and CUQ, J. -L (1993) 'Water and Glycerol as Plasticizers Affect Mechanical and Water Vapor Barrier Properties of an Edible Wheat Gluten Film', *Journal of Food Science*, 58(1), pp. 206–211. doi: 10.1111/j.1365-2621.1993.tb03246.x.

- Han, J. H. and Gennadios, A. (2005) 'Edible and', in Jung Han and Han, J. (eds) *Innovations in Food Packaging*. 1st edn. Academic Press, pp. 239–262.
- Hanum, F. *et al.* (2012) 'Ekstraksi Pektin Dari Kulit Buah Pisang Kepok (Musa paradisiaca)', *Jurnal Teknik Kimia USU, Articel in press (2012)*, pp. 49–53.
- Henderson, S. M. and Perry, R. L. (1955) 'Agricultural Engineering', in *Agricultural Process Engineering*. London, pp. 272–299.
- Julianti, E. and Nurminah, M. (2007) *Teknologi Pengemasan*. Universitas Sumatera Utara.
- Kanani, N. *et al.* (2017) 'PENGARUH TEMPERATUR PENGERINGAN TERHADAP SWELLING DAN TENSILE STRENGTH EDIBLE FILM HASIL PEMANFAATAN PATI LIMBAH KULIT SINGKONG', *KONVERSI*, 6(2), pp. 75–82.
- Krochta, J. (2002) 'Proteins as Raw Materials for Films and Coatings : Definitions, Current Status, and Opportunities', in *Protein-Based Films and Coatings*. CRC press, pp. 1–41. doi: 10.1201/9781420031980.ch1.
- Krochta, J. M. and Johnston, C. D. M. (1997) *Edible and Biodegradable Polymer Films : Challenges and Opportunities*, *Food Technology*. Institute of Food Technologists.
- Krochta, J. M. and De Mulder-Johnston, C. (1997) 'Edible and Biodegradable Polymer Films : Challenges and Opportunities', *Food Technology*, 51(2), pp. 61–74.
- Lai, H., Padua, G. W. and Wei, L. U. N. S. (1997) 'Properties and Microstructure of Zein Sheets Plasticized with Palmitic and Stearic Acids', *Cereal Chemistry*, 74(1), pp. 83–90.
- Lopez, A. *et al.* (2000) 'Thin-Layer Drying Behaviour of Vegetable Wastes From Wholesale Market', *Drying Technology*, 18(4–5), pp. 995–1006. doi: 10.1080/07373930008917749.
- Mahkam, M. and Allahverdipoor, M. (2004) 'Controlled Release of Biomolecules from pH-sensitive Network Polymers Prepared by Radiation Polymerization', 12(April), pp. 151–156. doi: 10.1080/10611860410001688009.
- Mayachiew, P. and Devahastin, S. (2008) 'Comparative evaluation of physical properties of edible chitosan films prepared by different drying methods', *Drying Technology*, 26(2), pp. 176–185. doi: 10.1080/07373930701831309.

- McHUGH, T. H., AUJARD, J. -F and KROCHTA, J. M. (1994) 'Plasticized Whey Protein Edible Films: Water Vapor Permeability Properties', *Journal of Food Science*, 59(2), pp. 416–419. doi: 10.1111/j.1365-2621.1994.tb06980.x.
- Mulder, M. (1996) *Basic Principles of Membrane Technology*. Kluwer Academic Publishers. doi: 10.1007/978-94-009-1766-8.
- Rindlava, Å., Hulleman, S. H. D. and Gatenholma, P. (1997) 'Formation of starch films with varying crystallinity', *Carbohydrate Polymers*, 34(1–2), pp. 25–30. doi: 10.1016/S0144-8617(97)00093-3.
- Rodriguez, M. *et al.* (2006) 'Combined effect of plasticizers and surfactants on the physical properties of starch based edible films', 39, pp. 840–846. doi: 10.1016/j.foodres.2006.04.002.
- Seixas, F. L. *et al.* (2013) 'Biofilms composed of alginate and pectin: Effect of concentration of crosslinker and plasticizer agents', *Chemical Engineering Transactions*, 32, pp. 1693–1698. doi: 10.3303/CET1332283.
- da Silva, M. A., Bierhalz, A. C. K. and Kieckbusch, T. G. (2012) 'Influence of Drying Conditions on Physical Properties of Alginate Films', *Drying Technology*, 30(1), pp. 72–79. doi: 10.1080/07373937.2011.620727.
- Soazo, M., Rubiolo, A. C. and Verdini, R. A. (2011) 'Effect of drying temperature and beeswax content on physical properties of whey protein emulsion films', *Food Hydrocolloids*. Elsevier Ltd, 25(5), pp. 1251–1255. doi: 10.1016/j.foodhyd.2010.11.022.
- Talja, R. (2007) *Preparation and characterization of potato starch films plasticized with polyols*. University of Helsinki.
- Tapia-Blácido, D. R., Sobral, P. J. d. A. and Menegalli, F. C. (2013) 'Effect of drying conditions and plasticizer type on some physical and mechanical properties of amaranth flour films', *LWT - Food Science and Technology*. Elsevier Ltd, 50(2), pp. 392–400. doi: 10.1016/j.lwt.2012.09.008.
- Thakur, B. R. *et al.* (2009) 'Critical Reviews in Food Science and Nutrition Chemistry and uses of pectin — A review Chemistry and Uses of Pectin — A Review', *Critical reviews in food science and nutrition*, 37(1)(March 2013), pp. 47–73. doi: 10.1080/10408399709527767.
- Thibault, J. F. and Ralet, M.-C. (2003) 'PHYSICO-CHEMICAL PROPERTIES OF PECTINS IN THE CELL WALLS AND AFTER EXTRACTION', in Voragen, F., Schols, H., and Visser, R. (eds) *Advances in pectin and pectinase research*. Dordrecht, The Netherlands: Kluwer Academic Publishers, pp. 91–105.



Wenten, I. G. *et al.* (2012) *Teori Perpindahan dalam Membran, Teknik Kimia Insitut Teknologi Bandung*. Bandung.

Wiset, L. *et al.* (2014) 'Effects of Drying Temperatures and Glycerol Concentrations on Properties of Edible Film from Konjac Flour', *Journal of Medical and Bioengineering*, 3(3), pp. 171–174. doi: 10.12720/jomb.3.3.171-174.



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**PENGARUH PROSES PENGERINGAN TERHADAP KARAKTERISTIK EDIBLE FILM**

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