

DAFTAR PUSTAKA

- Akesowan, A. 2002. *Viscosity and Gel Formation of a Konjac Flour from Amorphophallus muelleri Blume*. Faculty of Science, University of the Thai Chamber of Commerce Bangkok: Thailand.
- Albanese, D., Cinquanta, L., Matteo, M. 2007. Effects of an innovative dipping treatment on the cold storage of minimally processed Annurca apples. *Food Chemistry*, 105, 1054–1060.
- Alma, Buchari. 2010. *Kewirausahaan*. Edisi Revisi. Bandung : CV. Alfabeta.
- Ardhian. 2013. Kandungan oksalat umbi porang (*Amorphophallus muelleri Blume*) hasil penanaman dengan perlakuan pupuk P dan K. *Jurnal Biotropika*, 1 (2), 53-56.
- Arofah, R. N., Zaki, M. A., Nurkhamidah, S., & Susianto, S. 2023. Pra Desain Pabrik Tepung Glukomanan dari Chips Porang (*Amorphophallus oncophyllus*) dengan Metode Kombinasi Purifikasi Mekanis dan Kimiawi Bertingkat dengan Menggunakan Ethanol. *Jurnal Teknik ITS*, 12(2), F94–F99. <https://doi.org/10.12962/j23373539.v12i2.118375>
- AOAC. 2015. *Official Methods of Analysis of the Association of Official Analytical Chemistry International*. AOAC Inc. Arlington.
- Assosiasi Konyaku Jepang. 1976. *Penetapan Standarisasi Tepung Glukomanan Murni Iles-iles dan Hal-hal Penting dalam Pelaksanaannya*. Assosiasi Konyaku Jepang. Dewan Pengurus Konyaku Tingkat Propinsi.
- Chua, M., Chan, K., Hocking, T. J., Williams, P. A., Perry, C. J., & Baldwin, T. C. 2012. Methodologies for the extraction and analysis of konjac glucomannan from corms of *Amorphophallus konjac* K. Koch. *Carbohydrate Polymers*, 87(3), 2202–2210. <https://doi.org/10.1016/j.carbpol.2011.10.053>
- De Man, J.M. 1997. *Kimia Makanan*. Bandung: Penerbit ITB.
- Desi, A., & Widjanarko, S. B. 2010. Pengaruh Tingkat Pencucian dan Lama Kontak dengan Etanol Terhadap Sifat Fisik dan Kimia Tepung Porang (*Amorphophallus oncophyllus*) <https://doi.org/10.13140/RG.2.1.3850.0083>
- Desroisier, N. W. 1998. *Teknologi Pengawetan Pangan*. UI Press. Jakarta.
- Dewi, S. K., Dwiloka, B., & Setiani, B. E. 2017. Pengurangan Kadar Oksalat pada Umbi Talas dengan Penambahan Arang Aktif pada Metode Pengukusan.

6(2), 2–5.

- Dwiyono, K., & Djauhari, M. A. 2019. *Indonesian Konjac: Its Benefits in Industry and Food Security*. Universitas Nasional Jakarta, Jakarta.
- Gonçalves, C., Rodriguez, J. R., Gomes, N., Teixeira, J., Belo, I. 2010. Adaptation of dinitrosalicylic acid method to microtiter plates. *Anal. Methods*, Vol. 2, pp. 2046-2048.
- Gong, X., Wang, S., & Qu, H. 2011. Solid-Liquid Equilibria of D-Glucose, D-Fructose and Sucrose in the Mixture of Ethanol and Water from 273.2 K to 293.2 K. *Chinese Journal of Chemical Engineering*, 19(2), 217–222. [https://doi.org/10.1016/S1004-9541\(11\)60157-2](https://doi.org/10.1016/S1004-9541(11)60157-2)
- Gui-dan, T., Xiao-bing, D., Xing-guo, Z. and Geng, Z. 2008. (Study on Purification of Konjac Glucomannan (KGM) with Acid Alcohol). *Food Science*, 29(12), 308–311.
- Gyenes, T., Torma, V., & Zrínyi, M. 2008. Swelling properties of aspartic acid-based hydrogels. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 319(1–3), 154–158. <https://doi.org/10.1016/j.colsurfa.2007.06.016>
- Hamsah. 2013. *Karakterisasi Sifat Fisikokimia Tepung Buah Pedada (Sonneratia caseolaris)*. Program Studi Ilmu Dan Teknologi Pertanian : Makassar.
- Handayani, T., Aziz, Y. S., & Herlinasari, D. 2020. Pembuatan Dan Uji Mutu Tepung Umbi Porang (*Amorphophallus Oncophyllus Prain*) Di Kecamatan Ngrayun. *Jurnal MEDFARM: Farmasi dan Kesehatan*, 9(1), 13-21.
- Irawan, S. S., & Widjanarko, S. B. 2013. Metilasi pada tepung porang (*Amorphophallus muelleri*) menggunakan pereaksi dimetil sulfat berbagai variasi konsentrasi. *Journal Pangan dan Agroindustri*, Vol. 1 No. 1, pp. 148–156.
- Kemenperin RI. 2022. *Pasar Ekspor Potensial, Kemenperin Terus Kembangkan Hilirisasi Industri Porang*. Jakarta : Kementerian Perindustrian Republik Indonesia.
- Koswara, S. 2005. *Teknologi Pengolahan Umbi-Umbian, Bagian 2: Pengolahan Umbi Porang*. Tropical Plant Curriculum (TPC) Project, 1-42.
- Koswara, S. 2013. *Modul: Teknologi Pengolahan Umbi-Umbian Bagian 2: Pengolahan Umbi Porang*. Southeast Asian Food And Agricultural Science and Technology (SEAFast) Center. Bogor Agricultural University.

- Li, B., Xia, J., Wang, Y., & Xie, B. 2005. Grain-size effect on the structure and antiobesity activity of konjac flour. *Journal of Agricultural and Food Chemistry*, 53(19), 7404–7407. <https://doi.org/10.1021/jf050751q>
- Li, J., Li, B., Geng, P., Song, A., & Wu, J. 2017. Food hydrocolloids ultrasonic degradation kinetics and rheological profiles of a food polysaccharide (konjac glucomannan) in water. *Food Hydrocolloids*, 70, 14–19. <https://doi.org/10.1016/j.foodhyd.2017.03.022>.
- Long, Huang and M. Yoshimura. 2003. Rheological Properties of Konjac Glukomannan. *Foods Ingredients j. Japan*. Vol 208. No.10.
- Lubis, E. K., Djubaedah, E., Alamsyah, R., Noerdin NK, M. 2004. Mempelajari Pengolahan Glukomanan Asal Iles-Iles dan Penggunaannya dalam Produk Makanan. *Warta IHP/J of Agro-Based Industry*. Vol. 21 No. 2, pp 31-41.
- Mawarni, R. T., dan Widjanarko, S. B. 2015. Penggilingan metode ball mill dengan pemurnian kimia terhadap penurunan okasalat tepung porang. *Jurnal Pangan dan Agroindustri*. 3(2) : 571-581.
- Mirastuti, Y. A. 2010. *Studi Efektifitas Pemakaian Etanol Hasil Rekoverti pada Proses Pemurnian Tepung Porang (Amorphophallus Oncophyllus)*. Universitas Brawijaya, Malang.
- Molzon, J. A., Lausier, J. M., & Paruta, A. N. 1978. Solubility of Calcium Oxalate in 1-Alkanols and Ethanol-Water Mixtures. *Journal of Pharmaceutical Sciences*, 67(5), 733–735. <https://doi.org/10.1002/jps.2600670552>
- Nakata, P.A. 2003. Advances in Our Understanding of Calcium Oxalate Crystal Formation and Function in Plants. *Plant Science Volume* 164:901–909.
- Nick Pace, C., Treviño, S., Prabhakaran, E., & Martin Scholtz, J. 2004. Protein structure, stability and solubility in water and other solvents. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1448), 1225–1235. <https://doi.org/10.1098/rstb.2004.1500>
- Nurlela, N., Andriani, D., & Arizal, R. 2020. Ekstraksi Glukomanan Dari Tepung Porang (*Amorphophallus muelleri* Blume) dengan etanol. *Jurnal Sains dan Terapan Kimia*, Vol. 14 No. 2, pp. 88-98.
- Ohashi S. Shelso GJ. Moinaro AL. Drinkwater WL. 2000. Clarified Konjac Glucomannan. *US Patent no. 6,162,196*.
- Ohtsuki, T. 1968. Studies on reserve carbohydrates of four *Amorphophallus* species, with special reference to mannan. *Bot. Mag. Tokyo*, pp. 119-126.

- Ostrowska-Czubenko, J., Gierszewska, M., & Pieróg, M. 2015. pH-responsive hydrogel membranes based on modified chitosan: Water transport and kinetics of swelling. *Journal of Polymer Research*, 22(8), 153. <https://doi.org/10.1007/s10965-015-0786-3>
- Peiying, L, S. Zhang, G. Zhu, Y. Chen, Quyang H., Han M., Wang Z., Xiong W, and Peng H. 2002. *Professional standard of the people Republic of China for konjac flour* (NY/T 494). Beijing: Ministry of Agriculture of P.R. of China.
- Peppas, N. A., Bures, P., Leobandung, W., and Ichikawa, H. 2000. Hydrogels in pharmaceutical formulations. *Eur. J. Pharm. Biopharm.* 50, 27–46.
- Pusat Penelitian dan Pengembangan Porang Indonesia Universitas Brawijaya Malang. 2013. *Modul Deseminasi : Budidaya dan Pengembangan Porang (Amorphophallus muelleri Blume) Sebagai Salah Satu Potensi Bahan Baku Lokal*. Univeritas Brawijaya, Malang.
- Rahayu LH. 2013. *Peningkatan Kadar Glukomanan Dari Tepung Porang (Amorphophallus Oncophyllus) Melalui Metode Pencucian Menggunakan Larutan Isopropil Alkohol (IPA) Berbantu Ultrasonik*. Program Pasca Sarjana Undip, Semarang
- Rahmawati, S. H., & Herdiana, N. 2023. Comparison Of Calcium Oxalate Concentrations With Different Extraction Methods In Porang Flour (*Amorphophallus muelleri* Blume). *Jurnal Pengembangan Agroindustri Terapan*, 2(1). <https://doi.org/10.25181/jupiter.v2i1.2889>
- Richbourg, N. 2023. *Hydrogel Design*. Diakses 19 Desember 2023 dari <https://hydrogeldesign.org/>
- Saleh, N., Rahayuningsih, St,A., Budhi, S.R., Erliana, G., Didik, H., dan I Made, J.M. 2015. *Tanaman Porang : Pengenalan, Budidaya, dan Pemanfaatannya*. Bogor : Pusat Penelitian dan Pengembangan Tanaman Pangan.
- Saputro, E.A., O. Lefiyanti, dan I.E. Mastuti. 2014. Pemurnian Tepung Glukomanan dari Umbi Porang (*Amorphophallus muelleri* Blume) Menggunakan Proses Ekstraksi/Leaching dengan Larutan Etanol. *Simposium Nasional RAPI Vol 13*: 7- 13.
- Sinaga, A. S. 2019. Segmentasi Ruang Warna $L^* a^* b^*$. *Jurnal Mantik Penusa* Vol. 3, No. 1 pp.43-46.
- Standar Nasional Indonesia (SNI). 2020. *Serpih porang* (SNI 7939:2020). Badan Standardisasi Nasional, Jakarta.

- Sukma, M., Suryati, S., Meriatna, M., Za, N., & Jalaluddin, J. 2022. Pengaruh Kondisi Ekstraksi Glukomanan Dari Umbi Porang (*Amorphophallus muelleri* blume). *Chemical Engineering Journal Storage (CEJS)*, 2(1), 114. <https://doi.org/10.29103/cejs.v2i1.6427>
- Sumarwoto. 2005. Iles-iles (*Amorphophallus muelleri* Blume); Deskripsi dan Sifat-sifat Lainnya. *Jurnal Biodiversitas*. Volume 6, Nomor 3. Juli 2005: Hal: 185-190
- Sumarwoto. 2006. *Review : Kandungan Mannan Pada Tanaman Iles-Iles (Amorphophallus Muelleri Blume)*. Bioteknologi, Universitas Pembangunan Nasional (UPN), Yogyakarta.
- Takigami, S. 2000. *Konjac mannan*. In : Phillips, G.O. and Williams, P.A. (Ed.). *Handbook of Hydrocolloids*, Cambridge: Wood Publishing.
- Tatirat, O., Charoenrein, S. and Kerr, W. L., 2012. Physicochemical properties of extrusion-modified konjac glucomannan. *Carbohydrate Polym.* 87(2), 1545-1551. <http://dx.doi.org/10.1016/j.carbpol.2011.09.052>
- Thomas, W.R. 1997. *Konjac Gum*. Dalam Alan Imeson. (1999). *Thickening and Gelling Agents for Food*, Blackie Academic and Professional. London.
- Wardani, N. E., Subaidah, W. A., dan Muliastuti H. 2021. Ekstraksi dan Penetapan Kadar Glukomanan dari Umbi Porang (*Amorphophallus muelleri* Blume) Menggunakan Metode DNS. *Jurnal Sains dan Kesehatan*. 3(3): 383-391.
- Wardhani, D. H., Aryanti, N., Murfianto, F., dan Yoganda, K., D. 2016. Peningkatan kualitas glukomanan dari *Amorphophallus oncophyllus* secara enzimatis dengan α -amilase. *Jurnal Inovasi Teknik Kimia*. 1(1) : 71-77.
- Widjanarko, S.B., Faridah, A. and Sutrisno, A. 2011. Effect of Multi Level Ethanol Leaching on PhysicoChemical Properties of Konjac Flour (*Amorphophallus Oncophyllus*). *Technical paper presented, 12th ASEAN Food Conference*, BITEC Bangna, Bangkok, Thailand. 16 -18 June.
- Wigeono, Y. A., Azrianingsih, R., dan Roosdiana, A. 2013. Analisis Kadar Glukomanan Pada Umbi Porang (*Amorphophallus muelleri* Blume) Menggunakan Reflusk Kondensor. *Jurnal Biotropika*. 1(5): 231-235.
- Winarno, F. G. 2002. *Kimia Pangan dan Gizi*. Jakarta: PT. Gramedia Pustaka Utama.
- Witoyo, J. E., Ni'maturohmah, E., Argo, B. D., Yuwono, S., and Widjanarko, S. B. 2022. Polishing effect on the physicochemical properties of porang

flour using centrifugal grinder. *IOP Conference Series: Earth and Environmental Science*. 475 (0102026).

- Xu, W., Wang, S., Ye, T., Jin, W., Liu, J., Lei, J., Li, B., & Wang, C. 2014. A simple and feasible approach to purify konjac glucomannan from konjac flour—Temperature effect. *Food Chemistry*, 158, 171–176. <https://doi.org/10.1016/j.foodchem.2014.02.093>
- Yavari, N., & Azizian, S. 2022. Mixed diffusion and relaxation kinetics model for hydrogels swelling. *Journal of Molecular Liquids*, 363, 119861. <https://doi.org/10.1016/j.molliq.2022.119861>
- Yingqing, Z., Xie, B., & Gan, X. 2005. Advance in the applications of konjac glucomannan and its derivatives. *Carbohydrate Polymers*, 60, 27–31. <https://doi.org/10.1016/j.carbpol.2004.11.003>
- Zhang, K., Feng, W., & Jin, C. 2020. Protocol efficiently measuring the swelling rate of hydrogels. *MethodsX*, 7(100779). <https://doi.org/10.1016/j.mex.2019.100779>
- Zhao, J., Zhang, D., Srzednicki, G., Kanlayanarat, S., & Borompichaichartkul, C. (2010). Development of a Low-Cost Two-Stage Technique for Production of Low-Sulphur Purified Konjac Flour. *International Food Research Journal*, 17(4), 1113–1124.
- Zohuriaan-Mehr, M.J. and K. Kabiri. 2008. Superabsorbent polymer materials : a review. *Iranian Polymer Journal* 17(6): 451.