

Daftar Pustaka

- Adam. 2009. *Tempe dan Proses Pembuatannya*. <http://www.ad4msan.com/> Diakses pada tanggal 21 april 2015.
- Alexopoulos, C. J., Mims, W., dan Blackwell. 1996. *Introductory Mycology*. John Wiley & Sons, New York.
- Amarowicz, R., M. Naczk, dan F. Shahidi. 2000. *Antioxidant Activity of Crude Tannins of Canola and Rapeseed Hulls*. JAOCs, Vol. 77 (9): 957-961.
- Anon, M.C., 1969. *Tempeh: protein-rich food may increase disease resistance*. Agricultural Research (Washington) 17, 5.
- Anonim. 2006. *Potensi Kacang Tunggak Sebagai Bahan Baku Tempe dan Nugget Cukup Menjanjikan*. Balai Penelitian dan Pengembangan Pertanian. <http://www.litbang.deptan.go.id/> berita/kategori/4/. Diakses pada tanggal 23 april 2015.
- Apriyantono, A., D. Fardiaz., N. L. Puspitasari., Sedarnawati dan S. Budiyanto. 1989. *Analisis Pangan*. PAU Pangan dan Gizi IPB. Bogor. Hal 74-82.
- Arrai S., Yamashita M., Noguchi M. dan Fujimaki. 1987. *Taste of L-glutamyl oligopeptides in relation to their chromatographic properties*. Agric.Biol.Chem 37 (1). 151-156.
- Ashenafi, M., 1991. *Growth of Listeria monocytogenes in fermenting tempeh made of various beans and its inhibition by Lactobacillus plantarum*. Food Microbiology 8 , 303 – 310.
- Ashenafi, M dan Busse, M. 1991. *The Microflora of Soaking During Tempeh Production from Various Beans*. Journal of Food Science and Technology. 501-506.
- Astuti, M., Meliala, A., Fabien, D., Wahloq, M. 2000. *Tempe, a nutritious and healthy food from Indonesia*. Asia Pacific J Clin Nutr (2000) 9(4): 322–325.
- Barnet, HL dan Hunter, BB 1998, *Illustrated Genera of Imperfect Fungi*, The American Phytopathological Society Press.



- Bavia, ACF., da Silva, CE., Ferreira, Márcia, P., Santos, LR., Mandarino, JMG., and Carrão, PMC. 2012. *Chemical Composition Of Tempeh From Soybean Cultivars Specially Developed For Human Consumption*. Ciênc. Tecnol. Aliment., Campinas, 32(3): 613-620, jul.-set. 2012.
- Bele , A.A., and Khale, A. 2010. *An Overview On Thin Layer Chromatography*. H. K. College of Pharmacy. Jogeshwari (W). Mumbai. Maharashtra. India. DOI:[http://dx.doi.org/10.13040/IJPSR.0975-8232.2\(2\).256-67](http://dx.doi.org/10.13040/IJPSR.0975-8232.2(2).256-67)
- Berg, S., Olsson, J., Swanberg, M., Schnu " rer, J., Eriksson, A. 2001. *Method for the production of fermented cereal food products and products thereof*. PCT/SE02/00357, 01.03.2001.
- Bernhardt, C.F. 1976. *The Legume Food Crops*. ASEAN Grain Legumes. CRIA. Bogor.
- Bessey, EA. 1979, *Morphology and Taxonomy Of Fungi*, Edisi ke-3, Vikas Publishing House PVT LTD. New Delhi.
- Bisping B, Hering L, Baumann U, Denter J, Keuth S, Rehm HJ. 1993. *Tempe fermentation: some aspects of formation of gamma-linolenic acid, proteases and vitamins*. Biotechnol Adv.11(3):481–493.
- Buckle, K.A., R.A. Edwards, G.H. Fleet, and M. Wootton. 1985. *Ilmu Pangan*. Penerjemah: Purnomo, H. dan Adiono). Jakarta: UI Press
- Chutrong, J. dan Bussabun, T. 2014. *Preparation of Tempeh spore Powder by Freeze Drying*. World academy of science, engineering and technology. International journal of biological, Veterinary, agricultural and food engineering. Vol :8 No 1. 2014.
- Desmazeaud, M.1996. Lactic Acid Bacteria in Food: Use and Safety, *Cahiers Agricultures*, 5 (5), 331-342.
- Downes, D. F. & K. Ito. 2001. *Compendium of Methods for The Microbiological Examination of Foods*. Fourth Edition. American Public Health Association Washington DC.p.656.
- Fardiaz S. 1989. Mikrobiologi Pangan. Pusat Antar Universitas. Institut Pertanian Bogor. Bogor.
- Fauzi, M. 1994. *Analisa Hasil Pangan (Teori dan Praktek)*. Jember: UNEJ



- Feng, XM, Eriksson, Anders R.B., and Schnurer Johan. 2005. *Growth of lactic acid bacteria and Rhizopus oligosporus during barley tempeh fermentation.* International Journal of Food Microbiology 104 (2005) 249–256.
- Gandjar, I., Samson, R. A, Tweel-Vermeulen, K., Oetari, A. dan Santoso, I. 1999. *Pengenalan Kapang Tropik Umum.* Yayasan Obor Indonesia, Jakarta.
- Gandjar, I., Sjamsuridzal, W., dan Oetari, A. 2006. Mikologi Dasar dan Terpan. Yayasan Obor Indonesia, Jakarta.
- Guerra, P.N., Bernárdez, F., Méndez , P., Cachaldora, J., Pastrana, P., and Pastrana, L. 2007. *Production of Four Potentially Probiotic Lactic Acid Bacteria and their Evaluation as Feed Additives for Weaned Piglets.* Animal Feed Science and Technology 134 (2007) 89 –107.
- Gunter, Robert. 2005. *Rhizopus Soil Microbiology.* <http://soils1.cses. ut.edu/>. Diakses 10 april 2015.
- Hadisepoetro, E.S.S., Takada, N. dan Oshima, Y. 1979. *Microflora in ragi and usar.* Journal of Fermentation Technology 57: 251-259.
- Hadioetomo, R.S. 1993. Mikrobiologi Dasar Dalam Praktek. Gramedia, Jakarta.
- Handoyo, T dan Morita, N. 2006. *Structural and Functional Properties of Fermented Soybean (Tempeh) by Using Rhizopus oligosporus.* [International Journal of Food Properties](#) 9(2):347-355. Impact Factor: 0.92 . DOI: 10.1080/10942910500224746
- Hang P, Schimmer S, Buur H.1977. *Phytate: Removal From Whole Dry Beans by Enzymatic Hydrolysis and Diffusion.* J.Food Sci.
- Haliza, W., Purwani, Endang Y., dan Thahir, R. 2007. *Pemanfaatan Kacang-Kacangan Lokal Sebagai Substitusi Bahan Baku Tempe dan Tahu.* Buletin teknologi pascapanen pertanian vol. 3 2007. Balai Besar Penelitian dan Pengembangan Pascapanen Pertanian. Bogor.
- Harborne, J. B. 1987. *Metode Fitokimia Penuntun Cara Modern Menganalisis Tumbuhan.* Bandung. ITB.
- Harisha S. 2007. *Biotechnology Procedures and Experiments Handbook.* Kanada : Infinity SciPr.



- Haron, H., Ismail, A., Azlan, A., Shahar, S., and peng, L.S. 2009. *Daidzein and Genestein Contents in Tempeh and Selected Soy Products*. Journal of Food Chemistry. Food Chemistry 115 (2009) 1350–1356.
- Harvey D. 2000. *Modern Analytical Chemistry*. Singapore (SG): McGraw-Hill.
- Hermana, M. Karmini and D. Karyadi. 1996. *Healthsignificance of tempe for human nutrition*. Proceedings of the Second International Soybean Processing and Utilization Conference. Funny Publishing Limited Partnership. Bangkok Thailand. 391-394.
- Hidayat, N. 2009. *Tahapan Proses Pembuatan Tempe*. <http://lecture>. brawijaya.ac.id /nurhidayat/. Diakses pada tanggal 15 maret 2015.
- Hesseltine, C. W. 1976. *Research at Northern Regional Research Laboratory on Fermented Foods*. Proc. Conf. Soybean Product for Protein in Human Foods. USDA .
- Hasseltine,C.W. and H.L. Wang 1972. *Fermented Soybean Food Products, dalam Soybean*. Chemistry and Technolog. Vol 1. 300-419. Avi Publishing Co. Westport.Comn.
- Hesse, A dan Weller, M. G. 2016. *Protein quantification by derivation-free High-Performance Liquid chromatography of aromatic amino acids*. Journal of amino acid. Article Id 7374316. <http://dx.doi.org.10115/2016/7374316>. research article.
- Hofstetter, J., and Roche, V. 1991. *Analytical Methods for Vitamin in Food/Pharma Premixes*. Basel : F. Hoffmann-La Roche Ltd. New York : Open University Press, Inc.
- Holt, John. G., Noel, R.K., Peter, H.A.S., James, T.S., and Stanley, T.W. 1994. *Bergey's Manual of Determinative Bacteriology 9th Edition*. United States of America: A Waverly Company.
- Hurley , J and Held, P. 2006. *Determination of Total Protein by the Lowry Method Using the BioTek Instruments' ELx808 Microplate Reader* . BioTek Instruments, Inc. Highland Park, Winooski.
- Husek, p. 1991. *Rapid derivation and gas chromatographic determination of amino acids*. Journal of chromatography A. vol. 552. No1-2. pp. 289-299.



- Hui, Y.H (ed). 2006. *Handbook of Food Science, Technology, and Engineering Vol.1.* CRC Press, Taylor & Francis Group. Boca Raton.
- Hui, Y.H., L.Meunier-Goddik, A.S.Hansen, J.Josephsen,W.Nip, P.S.Stanfield, and F. Torldra.2004. *Handbook of Food and Beverage Fermentation Technology.* Marcel Dekker Inc. New York
- John K. 2002. *Cajanus cajan* (L.) Millsp. (*PigeonPea*). www.fs.fed.us/global/iitf/pdf/shrubs/Cajanus%20cajan.pdf.
- Josef, K and Chris, W.2000.*The basic and process conditions underpinning reaction flavor production.* Food Flavor Technology. CRC Press, Florida.
- Kurtzman C.P. and J.W. Fell. 1998. *The Yeast A Taxonomic Study.* New York: Elsivier.
- Kasmidjo. 1990. *Tempe Mikrobiologi dan Biokimia Pengolahan Serta Pemanfaatannya.* Pusat Antar Universitas Pangan dan Gizi UGM. Yogyakarta.
- Khokhar, Z., Syed, Q., Baig, S., Nadeem, M., Gul Sher, M., Irsa, I. 2010. *Studies On The Development Of Value Added Food By Barley With Rhizopus Oligosporus In Koji Fermentation.* Sci.Int (Lahore),22(3).Page219-226.ISSN 1003-5316;CODE: SINTE.
- Lane, M.J and Nursten, H.E. 1983. *The variety of odors produced in Maillard model systems and how they are influenced by reaction conditions, in Maillard Reaction and Food and Nutrition.* ACS symp. series, 215, 141–158.
- Lahtinen, S.P., M. Guimonde, A.C. Ouwhend, J.P. Reinikainen, & S.J. Salminen. 2005. *Comparison of Four Methods to Enumerate Probiotic Bifidobacteria in FermentedFood Product.* Department of Food Chemistry and Biochemistry. University ofTurku. Turku
- Levine, R. L., Berlett, B. S. and Stadtman, E. R. 1996. *Methionin residue as endogenous antioxidants in protein.* Proc. Narl. Acad. Sci. USA.
- Liu, K. 1999. *Soybeans chemistry, technology and utilization.* An aspen pul. Aspen Publ Inc. Gaithersburg. Maryland.



- Lipsy, P. 2010. *Thin Layer Chromatography Characterization of the Active Ingredients in Excedrin and Anacin*. USA: Department of Chemistry and Chemical Biology, Stevens Institute of Technology.
- Lowry, O.H., Rosebrough, N.J., Farr, A.L., and Randall, R.J. 1951. *Protein Measurement with the Folin Phenol Reagent*. *J. Biol. Chem.* 193:265-275.
- Magnusson, J., Strom , K., Roos, S., Sjogren, J., Schnurer, J., 2003. *Broad and complex antifungal activity among environmental isolates of lactic acid bacteria*. *FEMS Microbiology Letters* 219, 129 – 135.
- Maloney, Mark D. 2005. *Carbohydrates, Hand Book of Thin-Layer Chromatography*. Spelman College. Atlanta. Georgia. USA.
- Matés, J..M., Aledo, JC., Pérez-Gómez, C., del Valle, A.C., Segura, J.M. 1999. *Interrelationship between oxidative damage and antioxidant enzyme activities: an easy and rapid experimental approach*. Biochemical education. DOI: 10.1111/j.15393429.2000.tb00031.x28:93-5
- Miller, G.L. 1959. *Use of Dinitrosalicylic Acid Reagent for Determination of Reducing Sugar*, Analytical Chemistry, 31, 426-428.
- Murata, K., H. Ikehata and T.Miyamoto.1967. *Studies on the Nutritional value of tempeh*. *J. Food Sci.* 32 : 580.
- Mulyowidarso, R. K, Fleet G. H and Buckle, K. A. 1989. *The microbial ecology of soybean soaking for tempe production*. *Int J Food Microbiol.* Feb;8(1):35–46.
- Mulyowidarso, R. K, Fleet G. H and Buckle, K. A. 1991. *Changes in the concentration of organic acids during the soaking of soybeans for tempe production*. *International Journal of Food Science and Technology*, 26, 607–614.
- Nakajima, N., Nozaki, N., Ishihara, K., Ishikawa, A., Tsuji, H. 2005. *Analysis of Isoflavon Content in Tempeh, a Fermentation Soybean, and Preparation of a New Isoflavone-Enriched Tempeh*. *Journal of bioscience and bioengineering*. Vol.100, no 6.685-687.
- Nakata T., Takhashi M., Nakatani M., Kuramitsu R., Tamura M. and Okai H. 1995. *Role of basic and acidic fragments in delicious peptides (Lys-Gly-Asp-Glu-Glu-Ser-Leu-Ala) and taste behavior of sodium and potassium salts in acidic oligopeptides*. *Biosci Biotech Biochem* 59 (4) 689-693.



- Nout, M.J.R. and J.L. Kiers. 2005. *Tempe fermentation, innovation and functionality: update into the third millennium*. Journal of Applied Microbiology, 98: 789-805.
- Pedersen, D.S. and Rosenbohm, C. 2001. *Dry Column Vacuum Chromatography*. Gerog Thieme Verlag Stuttgart. New York.
- Pisol , B., Nuraida, L., Abdullah, N , Suliantari and Khalil, K. A.2013. *Isolation and Characterization of Lactic Acid Bacteria from Indonesian Soybean Tempe*. 4th International Conference on Biology, Environment and Chemistry IPCBEE vol.58 (2013). IACSIT Press, Singapore. DOI: 10.7763/IPCBEE. 2013. V58. 7.
- Pitt, J.I. and A.D Hocking,. 1985. *Fungi and Food Spoilage*. Academic Press, Australia.
- Purawisastra, S; Slamet Dewi S; dan Soetrisno Uken S S. 1993. *Perubahan kandungan protein dan komposisis asam amino kedelai pada waktu pembuatan tempe dan tahu*. Peneliti Gizi Makanan. Article.php.pdf. Diakses pada senin, 14 april 2015.
- Rahayu, K.1989. *Mikrobiologi Pangan*. Pengantar universitas pangan dan gizi. Universitas Gadjah Mada. Hal 21-24., 259-282.
- Rolling, W.F.M. 1995. *Traditional Indonesian Soy Sauce (Kecap) Production : Microbiology of the brine Fermentation*. Vrije Universiteit. Academisch Proefschrift.
- Roelofsen,P. A. and A. Thalens. 1964. *Changes in Some Bvitamins During Molding of Soybeans by Rhizopus oryzaein the Production of Tempeh Kedelai*. J. Food. Sci. 29:224.
- Ryan, J. G. 1998. *Pigeonpea Improvement*. ACIAR Projects 8201 and 8567. Trendsetting. Canberra.
- Samson, R.A., Hoekstra, E.S., Frisvad, J.C.,dan Filtenborg, O. 1999. *Introduction to Food Borne Fungi*, Ed ke-4, Ponsen & Looyen, Netherlands.
- Slamet, D.S. dan Komari, 1986. *Makanan Jajanan Dari Bahan Makanan Campuran Serealia dan Biji Lamtorogung*. Jakarta:25-27 November 1986. Prosiding KPIG dan Kongres VII Persagi.
- Sartika, R. dan Dewi, A. 2008. *Pengaruh Asam Lemak Jenuh, Tidak Jenuh dan Asam Lemak Trans terhadap Kesehatan*. Journal Kesmas Nasional Vol. 2, No. 4,



februari 2008. Depok: Universitas Indonesia.
(<http://isjd.pdii.lipi.go.id/admin/jurnal/2408154160.pdf>).

Schlegel, H.G dan Schmidt, K. 1994. *Mikrobiologi Umum*. Penerjemah: Tedjo Baskoro, R.M.T. UGM Press. Yogyakarta.

Setyaningsih., D., A. Apriyantono dan M. P. Sari. 2008. *Analisis Sensoris untuk Agroindustri*. Bogor.

Singh, F and Diwakar, B. 1993. *Nutritive Value and Uses of Pigeonpea and Groundnut*. International Crops Research Institute for the Semi-Arid Tropics. India. <http://www.icrisat.org/Training/sds.14.pdf>. Diakses 4 maret 2015.

Soetarto, E.S., Nastiti,S. J., Suharni,T., Sembiring, L., 2009. *Petunjuk Praktikum Mikrobiologi*. Laboratorium Mikrobiologi, Fakultas Biologi UGM, Yogyakarta.

Sparringa, R.A., Kendall, M., Westby, A. and Owens, J.D. 2002. *Effects of temperature, pH, water activity and CO₂ concentration on growth of Rhizopus oligosporus*. NRRL 2710. Journal applied microbiology. 92: 329337.

Steinkraus, K.H. 1983. *Handbook of Indigenous Fermented Foods*. Marcel Dekker, Inc, New York.

Steinkraus, K. H., Hand, D.B., Van Buren, J.P., and Heckler, L.R. 1961. *Pilot Plant Studies On Tempeh*. Proc. Conf. Soybean Products for Proteins in Human Food. USDA, Peoria. 71-22.

Shurtleff, W. and Aoyagi , A. 1979. *The Book of Tempeh* (PDF). Soyinfo Center, Harper and Row.

Sujaya, I. N., Nocianitri, K. A. and Asano, K. 2010. *Diversity of bacterial flora of Indonesian ragi tape and their dynamics during the tape fermentation as determined by PCR-DGGE*. International Food Research Journal 17: 239-245.

Sudarmadji, S., Bambang Haryono dan Suhardi. 1996. *Analisa Bahan Makanan dan Pertanian*. Liberty. Yogyakarta.

Srapinkornburee, Wannapa., Tassanaudom, Unnop., and Nipornram, Suriyaporn. 2009. *Commercial Development Of Red Kidney Bean Tempeh*. As. J. Food



Ag-Ind. 2009, 2(03), 362-372. Asian Journal of Food and Agro-Industry.
ISSN 1906-3040.

Syarief, R. 1999. *Wacana Tempe Indonesia*. Universitas Katolik Widya Mandala Press. Surabaya.

Szumilo, H and Flieger, J. 2001. *TLC separation of carbohydrates on silica gel modified with copper (II) salts*. Department of inorganic and analytical Chemistry, medical academy. *Acta poloniae Pharmaceutica- Drug research*. Vol. 58. No 1 pp.3-8.

Tadasse, G., Ephraim, E., and Ashenafi, M. 2005. *Assessment of the antimicrobial activity of lactic acid bacteria isolated from Borde and Shamita, traditional Ethiopian fermented beverages, on some food-borne pathogens and effect of growth medium on the inhibitory activity*. *Journal of Food Safety*.

Tamang, J.P., Shin, D.H., Jung, S.J.,and Chae, S.W. 2016. *Functional Properties of Microorganisms in Fermented Foods*. *Front. Microbiol.* 7:578.doi: 10.3389/fmicb.2016.00578

Taylor, L. 2005. *Tropical Plant Database: GUANDU (Cajanus cajan)*. www.raintree.com/guandu.htm. Diakses pada Senin, 14 april 2015.

Torres, A., J. Frias., M. Granito and C. Vidal-Valverde. 2006. *Fermented PigeonPea (Cajanus cajan) Ingredients in Pasta Products*. *Journal of Agricultural and Food Chemistry*. Vol/No: 54/18. Pg: 6685– 6691. <http://pubs.acs.org/doi/abs/10.1021/jf0606095>. Diakses pada 20 april 2015.

Van der maesen, L.J.G. 1980. *Taxonomy of Cajanus*. Proceedings of the international workshop on pigeonpeas. Icrisat center. India. Vol 2. 9-14.

Van der maesen, L.J.G. 1989."*Cajanus cajan (L.) Millsp*". In: Van der maesen, L.J.G. &Somaatmadja, S. (Editor). "Plant Resources of South-East Asia No. 1: Pulses." Pudoc, Wageningen, The Netherlands.

Wang, H.J. and P. A. Murphy. 1996. *Mass Balance study of isoflavones during soybean processing*. *Journal of agricultural and food chemistry*. Vol. 44. Pp. 2377-2383.



Wang , H.L., Ruttle, D.I., dan Hesseltine, C.W.1969. *Antibacterial Compound from a Soybean Product Fermented by Rhizopus oligosporus*. Proc. Soc. Exptl. Biol. Med.131. 579-583.

Wipradnyadewi, P., Rahayu, S. dan Raharjo, S. 2005. *Isolasi Dan Identifikasi Rhizopus oligosporus Pada Beberapa Inokulum Tempe*. Tesis. Fakultas Teknologi Pertanian. UGM.

Widowati, S dan K.A Buckle. 1991.*Sifat Fisik dan Mikroskopis Pati Gude (Cajanus cajan (L) Millsp)*. Agritech Vol/No: 11/2. Hal: 2-5.

Yong, F.M. and Wood, B.J.B. 1974. *Microbiology and Biochemistry of Soy Sauce Fermentation* Adv. Applied Microbial, London.