

DAFTAR PUSTAKA

- Adnan, N., Chua, L, Sarmidi,M., 2014. *Thermal Treatment Effect on Free Amino Acids in Honey Samples*. Jurnal Teknologi. Vol. 69, No. 4: 29-33.
- Ames, J. 1992. *The MAILLARD Reaction*. In *Biochemistry Of Food Proteins*; Hudson B. J. F., Ed.; Elsevier Applied Science,London. : 99-153.
- Ames, J. 2009. *Dietary Maillard Reaction Products: Implications for Human Health and Disease*. Czech J. Food Sci. Vol. 27:s66-s69.
- Amic, D., Amic, D.D., Belso,D., Rastija, V., Lucic, B., Trinajstic., N. 2007. *SAR And QSAR Of The Antioxidant Activity Of Flavonoids*. Current Medicinal Chemistry. Vol.14, No.7: 827-845.
- Ashoor, S.H. dan Zent, B. 1984. *MAILLARD Browning Of Common Amino Acids And Sugars*. Journal Of Food Science. Vol.49 : 1206-1207.
- Bae, S.E. , Won, Y.D. , Lee, S.H. dan Park, H.J. 2014. *Changes In S-Allyl Cysteine Contents And Physicochemical PropertiesOf Black Garlic During Heat Treatment*. Food Science and Technology. 55: 397-402.
- Bastos,D. , Monaro E., Siguemoto, E. dan Sefora .M. 2012. *MAILLARD Reaction Products In Processed Food: Pros And Cons, Food Industrial Processes - Methods And Equipment*, Dr.Benjamin Valdez (Ed.) Isbn: 978-953-307-905-9, Intech. www.intechopen.com/books/food-industrial-processes-methods-and-equipment/maillard-reaction-products-in-processed-food-pros-and-cons. Akses Pada Tanggal 2 September 2016.
- Baxter, J. 1995.*Free Amino Acid Stability in Reducing Sugar Systems*. Journal Of Food Science.Vol.SO, No. 2:405-408.
- Beck, J., Ledl F., Sengi, M. dan Severin, T. 1990. *Formation Of Acids, Lactones And Esters Through The Maillard Reaction*. Z Lebensm Unters Forsch. 190:212-216.
- Bunea' A., [Andjelkovic](#) , M., [Socaciu](#), C., Bobis, O. dan Verhe, R., Camp, J.V. 2008. *Total And Individual Carotenoids And Phenolic Acids Content In Fresh, Refrigerated And Processed Spinach (Spinacia Oleracea L.)*. Vol. 108, No. 2: 649-656.
- Blank, I., Robert, F., Goldmann1, T., Pollien, P., Varga1, N.,Devaud, S., Saucy,F., Huynh-Ba1,T. dan Stadler, R. 2005. *Mechanisms Of Acrylamide*

Formation MAILLARD-Induced Transformation Of Asparagine Chemistry And Safety Of Acrylamid In Food. Springer Science+Business Media, Inc.

Brewer, M. 2011. *Natural Antioxidants: Sources, Compounds, Mechanisms of Action, and Potential Applications.* Comprehensive Reviews in Food Science and Food Safety. Vol 10: 221-247.

Castellano , G. 2012. *Classification Of Phenolic Compounds By Chemical Structural Indicators And Its Relation To Antioxidant Properties Of Posidonia Oceanica (L.)* Math. Comput. Chem. Vol. 67: 231-250.

Claude, J. dan Ubbink, J.W. 2006. *Thermal Degradation of Carbohydrate Polymers In Amorphous State : A Physicial Study Including Colorimetry.* Food Chem. Vol. 96 :402-410.

Choe, E. dan Min, D.B. 2009. *Mechanisms Of Antioxidants In The Oxidation Of Foods.* Comprehensive Reviews In Food Science And Food Safety. Vol. 8 : 345-358.

Choi, S. , Cha dan H. S. Lee. Y.S. 2014. *Physicochemical and Antioxidant Properties of Black Garlic.* Molecules. Vol. 19:16811-16823.

Contreras. C dan Novakofski, K. 2010. *Dietary Advanced Glycation End Products and Aging.* Nutrients. Vol.2 : 1247-1265.

Cozkun, O., Kanter, M., Armutcu, F., Cetin, K., Kaybolmaz, B. dan Yazgan, O. 2004. *Protective Effects Of Quercetin, A Flavonoid Antioxidant, In Absolute Ethanol-Induced Acut Gastric Ulcer.* Eur J Gen Med. Vol. 1. No.3: 37-42.

Davies, C. dan Labuza, T. 1998. *The Maillard Reaction Application To Confectionery Products,* In G. Zeigler (Ed.), Confectionery Science. Pennsylvania State University Press.

Delgado, C., Andrade, Rufián, J., Henares. 2009. *Assessing The Generation And Bioactivity Of Neoformed Compoundsnin Thermally Treated Foods.* Isbn: 978-84-96101-76-0. Granada.

Devchand, K. 1994. *Antioxidant Activity Of MAILLARD Reaction Products.* Thesis. European Journal Of Lipid Science And Technology. University Of Natal, Durban.

Dong, M., Yang, G., Liu, H., Lin, S., Sun, D. dan Wang, Y. 2014. *Aged Black Garlic Extract Inhibits HT29 Colon Cancer Cell Growth Via The PI3K/Akt Signaling Pathway.* Biomedical Reports. 2: 250-254.

- Ehling, S., Hengel, M. dan Shibamoto. 2005. *Chemistry and Safety of Acrylamid in Food*. Springer Science+Business Media, Inc.223-233.
- Eriksson, S. 2005. *Acrylamide In Food Products:Identification, Formation And Analytical Methodology*. Doctoral Thesis. Stockholms Universitet. Sweden.
- European Food Safety Authority. *Acrylamide In Food*. Efsa Explains Risk Assessment. Isbn 978-92-9199-685-8.
- Farbood, Y., Sarkaki, A., Hashemi, S., Mansouri, M. dan Dianat, M. 2013. *The Effects Of Gallic Acid On Pain And Memory Following Transient Global Ischemia/Reperfusion In Wistar Rats*. Avicenna Journal Of Phytomedicine. Vol. 3, No. 4: 329-340
- Fransisco, J., dan Salvio, J.P. 1998. *Study Of Hydroxymethylfurfural Formation From Acid Degradationof The Amadori Product In Milk-Resembling System*. J. Agric. Food Chem. Vol.46:3885–3890.
- Ghasemzadeh , A. dan Ghasemzadeh , N. 2011. *Flavonoids And Phenolic Acids: Role And Biochemical Activity In Plants And Human*. Journal Of Medicinal Plants Research. Vol. 5. No.31: 6697-6703.
- Goh, S.G., Noranizan, M., Leong, C.M., Sew C.C. dan Sobhi, B. 2012. *Antioxidant Compounds In Single Strength Pineapple Juice Throughout Refrigerated Storage* .International Food Research Journal. Vol.19, No.3: 1131-1136.
- González,A., Santana,R., Silva-Islas,C., Chánez-Cárdenas,M., Santamaría,A., Maldonado,P. 2012.*The Antioxidant Mechanisms Underlying the Aged Garlic Extract and S-Allylcysteine-Induced Protection*. Hindawi Publishing Corporation Oxidative Medicine and Cellular Longevity. :1-16.
- Gordon, M.H. 1990. *The Mechanism of Antioxidants Action In Vitro*. Di dalam: B.J.F. Hudson, editor. *Food Antioxidants*. Elsevier Applied Science. London.
- Handa, SS, Vasisht, K, Et.Al. 2006. *Compendium Of Medicinal And Aromatic Plants*Asia, II*. ICS*UNIDO. Itali.
- Hassan, S.M., Aqil A.A. dan Attimarad, M. 2013. *Determination Of Crude Saponin And Total Flavonoids Content In Guar Meal*. Medicinal Plant Research. Vol. 1, No. 1: 4-28.
- Hodge, J. 1953. *Dehydrated Foods Chemistry Of Browning Reactions In Model Systems*. Agricultural And Food Chemistry. Vol.1, No.15:928-944.

- Jabeen, S. Bibi,R., Alam, S., Saleem, M., Hamid, F., Ahmad, W. dan Shah, H. 2015. *Withering Timings Affect The Total Free Amino Acids And Mineral Contents Of Tea Leaves During Black Tea Manufacturing*. Arabian Journal Of Chemistry .<http://Dx.Doi.Org/10.1016/J.Arabjc.2015.03.011>.
- Jeon, S.Y., Baek, J.H. Jeong dan E.J, Cha, Y.J. 2012. *Volatile Flavor Compounds in Commercial Black Garlic Extracts*.Journal Korean Soc Food Science Nutrition. Vol.41, No.1:116-122.
- Joint FAO/WHO Consultation. 2002. *Health Implications Of Acrylamide In Food*. World Health Organization.
- Kamanna, V. Dan Chandrasekhara, N. 1980. *Fatty Acid Composition Of Garlic (Ailium sativum Linnaeus) Lipids*. JAOAC. 57:175-176.
- Kauzmann, W. 1959. *Some Factors in the Interpretation of Protein Denaturation*. *Advanced in Protein Chemistry*. 14:1–63.
- Keramat, J., Lebail, A., Prost, C. dan Javari, M. 2011. *Acrylamide In Baking Products: A Review Article*. *Food Bioprocess Technol*. Vol.4:530–543.
- Kim, J., Kang, O. dan Gweon, O. 2013. *Comparison Of Phenolic Acids And Flavonoids In Black Garlic At Different Thermal Processing Steps*. Journal of Functional Foods. 5 : 80-86.
- Kodera, Y. Suzuki,A. , Imada, O. , Kasuga, S. , Sumioka, I. , Kanezawa, A. Taru, N. , Fujikawa, M. Nagae, S. , Masamoto, K. , Maeshige, K. , dan Ono, K. 2002. *Physical,Chemical AndBiologicalProperties Of S-Allylcysteine,AnAmino Acid Derived Garlic*. Vol.50, No.3:622-632.
- Lee, J. dan Harnly, J. 2005. *Free Amino Acid and Cysteine Sulfoxide Composition of 11Garlic (Allium sativum L.) Cultivars by Gas Chromatography with Flame Ionization and Mass Selective Detection*. J. Agric. Food Chem. 2005, 53, 9100-9104.
- Lee,Y. , Gweon, O. , Seo, Y. , Im,J. Kang,M. , Myo dan J. Kim,J.. 2009. *Antioxidant Effect OfGarlic And Aged Black Garlic In Animal Model Of Type 2 Diabetes Mellitus**. NutritionResearchandPractice. Vol.3, No.2: 156-161.
- Lei, M. , Xu, M. , Zhang, Z. Zhang dan M. Gao, Y. 2014. *The Analysis of Saccharide in Black Garlic and its Antioxidant Activity*.Journal of Food Science and Technology. Vol.6, No.6: 755-760.

- Liang,T.,Wei,F.,Tanokura, M., Lu,Y.,Kodani,Y., Nakada,M. dan Miyakawa,T. 2015. *Comprehensive NMR Analysis of Compositional Changes of Black Garlic during Thermal Processing*. J. Agric. Food Chem. Vol.63 : 683-691.
- Lingnert, H. , Grivas,S. , Jagerstad, M. Skog,K., Tornqvist, M. dan Aman,P. 2002. *Acrylamide In Food:Mechanisms Of Formation And Influencing Factors During Heating Of Foods*. Scandinavian Journal of Nutrition. Vol.46, No.4: 159-172.
- LPPT UGM. 2016. Pengujian Akrilamida. Laboratorium Penelitian dan Pengujian Terpadu Universitas Gadjah Mada.
- Lugasi, A., Hóvári,J., Katalin, V. dan Bíró.L. 2013. *The Role Of Antioxidant Phytonutrients In The Prevention Of Diseases*. Acta Biologica Szegediensis. <http://www.Sci.U-Szeged.Hu/ABS>. Diakses tanggal 28 Agustus 2016.
- Manzocco, L., Calligaris, S., Masstrocola.,D., Nicoli, M., dan Lerici, C.R. 2000. *Review Of Non-Enzymatic Browning And Antioxidant Capacity In Processed Foods*. Trends In Food Science & Technology. Vol. 11, Issues 9-10: 340–346.
- Martins, S., Jongen, W. dan Boekel, M. 2001. *A Review Of MAILLARD Reaction In Food And Implications To Kinetic Modeling*. Trends In Food Science & Technology 11. Hal :364–373.
- Molyneux, P. 2004. *The Use Of The Stable Free Radical Diphenylpicrylhydrazyl (Dpph) For Estimating Antioxidant Activity*. Songklanakarin J. Sci. Technol. Vol. 26. No.2: 211-219.
- Mottram, D., Bronislaw, L., Wetzicha dan Dodson, A. 2002. *Acrylamide Is Formed InThe MAILLARD Reaction*. Nature. 419.
- Mucci, L.A. dan Wilson, K.M. 2008. *Acrylamide Intake Through Diet And Human Cancer Risk*. Agric. Food Chem.Vol.56 : 6013–6019.
- Mustafa, A. 2008. *Acrylamide in Bread Precursors, Formation and Reduction*. Doctoral Thesis. Agricultural Sciences. Swedish University.
- Nasr, Y. dan Saleh, H. 2014. *Aged Garlic Extract Protects Against Oxidative Stress And Renal Changes In Cisplatin-Treated Adult Male Rats*. Cancer Cell International. Vol.14. No. 92:1-12.
- Nie, S., Huang, J., Hu, J., Zhang, Y., Wang, S.,Li, C.,Marcone, M. dan Xie, M. 2013. *Effect Of Ph, Temperature And Heating Time On The Formation Of Furan In Sugar–Glycine Model System.s* Food Science and Human Wellness. Vol. 2 :87–92.

- Nijveldt, R., Nood, E., Hoorn, D.E., Boelns, P.G., Norren, K. Leeuwen, P. 2001. *Flavonoids: A Review Of Probable Mechanisms Of Action And Potential Applications*. Am J Clin Nutr. Vol.74:418–25.
- Nursten , H. 2005. *The MAILLARD Reaction Chemistry, Biochemistry And Implications*. The Royal Society Of Chemistry. Cambrigde.
- Ozcan, A. Akpınar-Bayazit, L. Yılmaz-Ersan, and B. Delikanli. *Phenolics in Human Health. International Journal of Chemical Engineering and Applications*. Vol. 5, No. 5:393-396.
- Pietta, P. 2000. *Flavonoids As Antioxidants*. J Nat Prod. Vol. 63:1035- 1042.
- Percival, M. 1998. *Antioxidants*. Clinical Nutrition Insights. Vol.31 : 1-4.
- Prakash, A., Rigelhof, F. dan Miller, E. *Antioxidant Activity*. Diakses tanggal 8 Agustus 2016.
- Procházková, D., Boušová, I. dan Wilhelmová, N. 2011.*Antioxidant And Prooxidant Properties Of Flavonoids*.Fitoterapia. 82: 513–523.
- Queiroz,Y., Ishimoto, E., Bastos, D., Sampaio, G. dan Torres, E. 2009. Garlic (*Allium sativum* L.) And Ready-To-Eat Garlic Product: In Vitro Antioxidant Activity. Food Chemistry. Vol.115: 371-374
- Ragae, S., Seetharaman, K. dan Abdel, E. 2014. *The Impact Of Milling And Thermal Processing On Phenolic Compounds In Cereal Grains*. Critical Reviews In Food Science And Nutrition. Vol. 54:837–849.
- Reynolds, T. 1963. *Chemistry Of Nonenzymic Browning*.
- Rivelli, D.P., Silva, V.V., Ropke, C.D., Miranda, D.V., Almeida, R.L., Sawada, T.C.H. dan Barros, S.B. 2007. *Simultaneous Determination Of Chlorogenic Acid, Caffeic Acid And Caffeine In Hydroalcoholic And Aqueous Extracts Of Ilex Paraguariensis By HPLC And Correlation With Antioxidant Capacity Of The Extracts By DPPH· Reduction*. Brazilian Journal Of Pharmaceutical Sciences. Vol. 43, No.2 : 215-222.
- Robinson,T. 1995. *Kandungan Organik Tumbuhan Tinggi, Terjemahan Kokasih Padmawinata*. Penerbit ITB. Bandung.
- Rosen, J.D. 2002. *Acrylamide In Food: Is It A Real Threat To Public Health?*. American Council On Science And Health, Inc. New York.

- Roy, M., Juneja, L. Isobe, S. dan Tsushida, S. 2009. *Steam Processed Broccoli (Brassica Oleracea) Has Higher Antioxidant Activity In Chemical And Cellular Assay Systems*. Food Chemistry. Vol.114: 263–269.
- Sanbongi, C., Osakabe, N. Natsume, M. Tazikawa, T., Gomi,S. dan Osawa, T. 1998. Antioxidative Polyphenols Isolated From Theobroma Cacao. J. Agric. Food Chem.Vol.47, No.1:119-125.
- Sasaki, J.I. 2015. *Overview of the Black Garlic Movement in the Fields of Research and Marketing*. Journal of Life Sciences. Vol. 9: 65-74.
- Sawai, J., Nakai, T. dan Shimizu, M. 2009. *Reducing Sugar Production In Sweet Potatoes Heated By Electromagnetic Radiation*. Food Sci Tech Int. Vol. 15, No. 1 : 89-95.
- Shamla, L. dan Nisha, P. *Acrylamide Formation In Plantain (Musa paradisiaca) Chips Influenced By Different Ripening Stages: A Correlation Study With Respect To Reducing Sugars, Amino Acids And Phenolic Content*. Food Chemistry. Vol. 222 :53-60.
- Shin, J., Lee, C., Oh, S., Yun, J., Kang, M., Han, S., Park, H., Jung, J., Chung, Y., dan Kang, J. 2014. *Hepatoprotective Effect of Aged Black Garlic Extract in Rodents*. Vol.30, No.1: 49-54.
- Tardiff, R., Gargas,M., Kirman,C., Carson,M. dan Sweeney, M. 2010. *Estimation Of Safe Dietary Intake Levels Of Acrylamide For Humans*. Food And Chemical Toxicology. Vol.48 :658–667.
- Tateyama, M. 1999. *Development Of Polymer-Supported Synthetic Procedure For Heyns Rearrangement Products*. Master Thesis. Montreal, Quebec.
- Wang, S.N. 2014. 4a. *Glucose Assay By Dinitrosalicylic Colorimetric Method*. [Http://Www.Eng.Umd.Edu/~Nsw/Ench485/Lab4a.Htm](http://Www.Eng.Umd.Edu/~Nsw/Ench485/Lab4a.Htm). Diakses pada tanggal 28 Agustus 2016.
- Werdhasari, A. 2014. *Peran Antioksidan Bagi Kesehatan*. Jurnal Biotek Medisiana Indonesia. Vol.3, No.2: 59-68.
- Williams, B., Cuvelier,M. dan Berset, C. 1995. *Use Of A Free Radical Method To Evaluate Antioxidant Activity*. Lebensm.-Wiss. U.-Technol. Vol. 28 : 25-30.
- Yaylayan, V. dan Stadler, R. 2005. *Acrylamide Formation In Food: A Mechanistic Perspective*. Journal Of Aoac International. Vol. 88, No. 1 : 262-267.

Young, I. dan Woodside, J. 2001. *Antioxidants In Health And Disease*. J Clin Pathol. **54**:176–186.

Yu, M., Ou, S., Liumengzi, D., Huang, C. dan Zhang, G. 2013. *Effect Of Ten Amino Acids On Elimination Of Acrylamide In A Model Reaction System*. African Journal of Food Science. Vol. 7.9: 329-333.

Zhang,X., Li, N., Lu, X., Liu, P dan Qiao,X. 2016. *Effects Of Temperature On The Quality Of Black Garlic*. J Sci Food Agric. Vol.96: 2366–2372.

Zhang,Z., Lei, M., Liu,R., Gao,Y., Xu M dan Zhang, M. 2015. *Evaluation Of Alliin, Saccharide Contents And antioxidant Activities Of Black Garlic During Thermal Processing*. Journal Of Food Biochemistry. Vol.39: 39–47.