DAFTAR PUSTAKA

Amri, E., and Mamboya, F., 2012, Papain, A Plant Enzyme of Biological Importance: A Review, *Am. J. Biochem. Biotechnol.*, 8(2), 99-104.

Anibijuwon, I.I., and Udeze, A.O., 2009, Antimicrobial Activity of *Carica papaya* (Pawpaw Leaf) on Some Pathogenic Organism of Clinical Origin from South-Western Nigeria, *Ethnobotanical Leaflets*, 13(8), 50-64.

Anonim, 1983, *Botanical Derivates Catalogue of The Biochemistry of Foods*, Elsevier Scientific Publ. Co., Amsterdam.

Anonim, 1999, *Sigma SSCASE01.001 Universal Protease Activity Assay : Casein as a Substrat*.

Anonim, 2001, *Peraturan Pemerintah Republik Indonesia No 82 Tahun 2001 Tentang Pengelolaan Kualitas Air dan Pengendalian Pencemaran Air*.

Anonim, 2006, *Pokja AMPL 5 Mei 2006 Tentang Hak Atas Akses Sumber Daya Air Bagi Masyarakat di Jogjakarta*.

Anonim, 2012, *Harian Kompas 26 November 2012 Tentang 76 Persen Sungai di Sleman Tercemar Bakteri E. coli*.

Anonim, 2014, *Badan Lingkungan Hidup Yogyakarta Tentang Kualitas Air Sungai Daerah Istimewa Yogyakarta Tahun 2014*.

Anonim, 2014, *Cystein Protease II Webmaster, Department of Chemistry University of Maine, Orono*.

Apsari, P.D., dan Susanti, H., 2011, Perbandingan Kadar Fenolik Total Ekstrak Metanol Kelopak Merah dan Ungu Bunga Rosella (*Hibiscus sabdariffa*, Linn) Secara Spektrofotometri, *Prosiding Seminar Nasional Home Care UAD*, 30 Juni- 1 Juli 2011, Yogyakarta.

Arum, R.H., Satiawihardja, B., dan Kusumaningrum, H.D., 2014, Aktivitas Antibakteri Getah Pepaya Kering Terhadap *Staphylococcus aureus* pada Dangke, *J. Teknol. dan Industri Pangan*, 1(25), 65-71.

Arunachalam, C., and Saritha, K., 2009, Protease Enzyme: An Eco-Alternative for Leather Industry, *Indian J. Sci. Technol.*, 12(2), 29-32.

Ashok, C.D., Prachu, B.M., Umesh, J.U., and Manohar, P.V., 2011, Antibacterial and Antioxidant Activity of Plant Latex. *J. Pharm. Res*., 4(2), 406-407.

Balls, A. K., and Lineweaver, H., 1939, Isolation and Properties of Crystalline Papain, *J. Biol. Chem*., 130(2), 669-686.

Balls, D.W., Hill, J.W., and Scott, R.J., 2011, *Introduction to Chemistry General, Organic, and Biological*, Vol.1, Flat World Knowladge, Washington.

Boshra, V., and Tajul, A.Y., 2013, Papaya-An Innovative Raw Material for Food and Parmaceutical Processing Industry, *Health Environ. J.*, 1(4), 68-75.

Budiman, A., 2003, Kajian Terhadap Pengaruh Etanol Sebagai Bahan Pengendap dan Pengaruh Air, Bufer Fosfat serta Etanol pada Ekstraksi Papain, *Skripsi*, Jurusan Teknologi Industri Pertanian Fakultas Teknologi Pertanian IPB, Bogor.

Budiyanto, T., dan Sunyoto, 2011, Varietas Unggul Baru Pepaya Merah Delima Si Merah Yang Manis, *Majalah Sinartani Agroinovasi*, 3429(1), 5-7.

Burke, D.E., Lewis, S.D., and Shafer, J.A., 1974, A Two Procedure for Purification of Papain from Extract Papaya Latex, *Arc. Biochem. Biophys*., 1(164), 30-36.

Copeland, R.A., 2000, *Enzymes*, 2nd Ed., John Willey and Son, Inc., New York.

Caygill, R., 1878, *The Market Potential for Papain*, Tropical Product Institute, London.

Cayle, T., 1964, *Enzymes in Food Processing*, Academic Press, New York.

Denniston, K.D., Topping J.J., Robert. L., and Caret L.L., 2007, *General Organic and Biochemistry*, 5th Ed., Mc-Graw Hill, New York.

Dongoran, D.S., 2004, Pengaruh Aktivator Sistein dan Natrium Klorida Terhadap Aktivitas Papain, *Jurnal Sains Kimia*, 1(8), 29-34.

Ebata, M., and Yasunobu, K.T., 1962, Chymopapain: Isolation, Crystallization and Preliminary Characterization, *J. Biol. Chem*., 237(4), 1086-1094.

Fatoni, A., Zusfahair, dan Lestari, P., 2008, Isolasi dan Karakterisasi Protease Ekstraseluler dari Bakteri dalam Limbah Cair Tahu, *Jurnal Natur Indonesia*, 10(2), 83-88.

Folin, O., and Ciocalteu, V., 1927, On Tyrosine and Tryptophane Determinations In Proteins, *J. Biol. Chem*., 2(73), 627-648.

Fruton, J.S., and Simmonds, S., 1963, *General Biochemistry*, 2nd Ed., John Willey and Son Inc., New York.

Hajna, A.A., and Perry, C.A., 1943, Comparative Study for Presumptive and Confirmative Media for Bacteria of the Coliform Group and for Fecal Streptococci, *Am. J. Publ. Health*., 33, 550-556.

Hamzah, F., dan Hamzah, F.H., 2010, Pemurnian Papain, Pengembangan Produk Losion Pemutih Kulit dan Sabun Pembersih Muka, *Agriplus*, 3(20), 186-193.

Iriani, E.S., 1991, Pengaruh Varietas Buah Pepaya dan Metoda Pemurnian Terhadap Mutu Papain yang Dihasilkan, *Skripsi*, Jurusan Teknologi Industri Pertanian Fakultas Teknologi Pertanian IPB, Bogor.

Isa, M., 2010, Extraction of Papain Enzymes From Papaya Leaves, *Thesis*, Faculty of Chemical and Natural Resources Engineering Universiti Malaysia Pahang, Pahang.

Khotimah, S., 2013, Kepadatan Bakteri Coliform di sungai Kapuas Kota Pontianak, *Prosiding Semirata FMIPA Universitas Lampung*, 10-12 Mei 2013, Bandar Lampung.

Kimmel, J.R., 1954, Crystalline Papain, *Thesis*, Faculty of Biochemistry University of Utah, Utah.

Kimmel, J.R., and Smith, E.L., 1954, Crystalline Papain: Preparation, Specifity and Activation, *J. Biol. Chem*., 207(2), 515-531.

Krishna, K.L., Paradhavi, M., and Patel, J.A., 2008, Review on Nutritional and Pharmacological Properties of Papaya (*Carica papaya* Linn), *Nat. Prod. Radiance*, 7(4), 364-373.

Kyabaggu, D., Ejobi, F., and Olila, D., 2007, The Sensitivities to First Line Antibiotic Therapy of The Common Urinary Tract Bacterial Infections Detected in Urine Samples at a Hospital in Metropolitan Kampala (Uganda), *Afr. Health. Sci*., 7(4), 214-222.

Menard, R., and Storer, A., 2000, *Papain*. Dalam Barret, A.J., Rawlings, N.D., and Woessner, J.F., *Handbook of Proteolytic Enzyme*, Academic Press, London.

Mitchel, R.E.J., Chaiken, I.M., and Smith, E.L., 1970, The Complete Amino Acid Sequence of Papain: Addition and Correction, *J. Biol. Chem*., 14(246), 3485-3492.

Ortiz, A.N., Madrigal, L.S., Fernandez, R.H., and Cooke, R.D., 1980, The Storage and Drying Characteristics of Papaya (*Carica papaya* L.) Latex, *J. Sci. Food Agric*., 5(31), 510-514.

Pakki, E., Kasim, S., Rewa, M., dan Karangan, S., 2009, Uji Aktivitas Antibakteri Enzim Papain dalam Sediaan Krim Terhadap *Staphylococcus aureus*, *Majalah Farmasi dan Farmakologi*, 1(13), 1-4.

Paul, B., Nasreen, M., Sarker, A., and Islam, M.R., 2013, Isolation, Purification and Modification of Papain Enzyme to Ascertain Industrially Valuable Nature, *International Journal of Bio-Technology and Research (IJBTR)*, 5(3), 11-22.

Poedjiadi, A., dan Supriyatin, T., 2009, *Dasar-Dasar Biokimia*, UI-Press, Jakarta.

Puig, A., Gil, I., and Sánchez, O., 2008, Evaluation of Drying Techniques Measuring Proteolytic Activity of Papain Obtained from Unripe Fruit and Skin Juice, *Ind. Biotech. Intern. Conference*., June 8-11, Italy.

Purseglove, J.W., 1968, *Tropical Crop, Dycotiledones*, Longman Scientific and Technical, London.

Putri, A.P., Kusrijadi, A., dan Suryatna, A., 2013, Kajian Penggunaan Amonium Sulfat pada Pengendapan Enzim Protease (Papain) dari Buah Pepaya sebagai Koagulan dalam Produksi Keju Cottage, *J. Si. Tek. Kim.*, 2(4), 159-168.

Samson, J.A., 1986, *Tropical Fruits*, 2nd Ed., Longman Scientific and Technical, London.

Sarah, R.E., Apriliana, E., Soleha, T.U., dan Warganegara, E., 2014, Uji Most Probable Number (MPN) Bakteri Koliform pada Sumber Air Minum Rumah Tangga di Kecamatan Sukabumi Bandar Lampung, *Jurnal Kedokteran Unila*, 287, 56-63.

Sasmito, T., 1984, Contribution to Biochemical Studies on Papain, *Disertation*, State University of Gent, Belgia.

Sastrawijaya, T., 2009, *Pencemaran Lingkungan*, Rineka Cipta, Jakarta.

Scopes, R.K., 1994, *Protein Purification: Principle and Practice*, 3rd Ed., Springer Verlag., New York.

Setyaningsih, D., and Sediawan, W.B., 2004, Kesetimbangan Papain dalam Getah Pepaya Padat dan Air pada Ekstraksi Papain: Variasi Kadar $NaHSO_3$

dalam Air, *Prosiding Seminar Nasional Rekayasa Kimia dan Proses*, 21-22 Juli 2004, Semarang.

Silaban, R., Panggabean, F.T.M., dan Rahmadani, 2012, Kajian Pemanfaatan Enzim Papain Getah Buah Pepaya untuk Melunakkan Daging, *Disertasi*, Pasca Sarjana Pendidikan Kimia Universitas Negeri Medan, Medan.

Soda, F.N., dan Agustini, R., 2013, Pengaruh Penambahan Ion Logam K^+ Terhadap Aktivitas Enzim Papain, *UNESA Journal of Chemistry*, 2(2), 29-34.

Sosrodihardjo, S., dan Yurneti, 1985, Pengaruh Waktu Penyadapan terhadap Produksi dan Mutu Getah Pepaya, *Buletin Penelitian Hortikultura*, 12(2).

Stepek, G., Buttle, D.J., Duce, I.R., Lowe, A., and Behnke, J.M., 2005, Assessment of The Anthelmintic Effect of Natural Plant Cysteine Proteinases Against The Gastrointestinal Nematode, Heligmosomoides Plygyrus, In Vitro, *Parasitology*, 2(130), 203-211.

Suhartono, M.T., 1989, *Enzim dan Bioteknologi*, PAU IPB Press, Bogor.

Suhartono, M.T., 1992, *Protease*, PAU IPB Press, Bogor.

Suryatinah, Y., Andiarsa, D., dan Hairani, B., 2013, Cysteine Effect to Crude Papain Proteolytic Activity on *Ascaridia galli* Mortality In Vitro, *Jurnal Buski*, 4(4), 188-191.

Suyanti, Setyadjit, dan Abdullah, 2012, Produk Diversifikasi Olahan untuk Meningkatkan Nilai Tambah dan Mendukung Pengembangan Buah Pepaya (*Carica papaya* L.) di Indonesia, *Buletin Teknologi Pascapanen Pertanian*, 8(2), 62-70.

Thenawidjaja, M., 1993, *Dasar-dasar Biokimia*, (diterjemahkan dari Lehninger, A.L., 1982, Principles of Biochemistry, Worth Publisher Inc., New York), Erlangga, Jakarta.

Tursiman, Ardiningsih, P., dan Nofiani, R., 2012, Total Fenol Fraksi Etil Asetat dari Buah Asam Kandis (*Garcinia dionica* Blume), *JKK*, 1(1), 45-48

Walsh, C.T., 2005, *Posttranslational Modification of Proteins: Expanding Nature's Inventory*, Roberts and Company Publisher, Colorado.

Warisno, 2003, *Budi Daya Pepaya*, Penerbit Kanisius, Yogyakarta.

Wedhastri, S., 1989, Fraksinasi Kasein, Hidrolisat Kasein dan Enzim Papain dengan Filtrasi Gel, *Tesis*, Pasca Sarjana Mikrobiologi Fakultas Pertanian UGM, Yogyakarta.

Whitaker, J.R., 1994, *Principles of Enzymology for Food Science*, 2nd Ed., Marcel Dekker Inc., New York.

Winarni, F., dan Puspitasari, D.E., 2013, Peran Pemerintah dalam Penanggulangan Pencemaran Air Tanah Oleh Bakteri *E.coli* di Kota Yogyakarta, *Mimbar Hukum*, 2(25), 219-230.

Winarno, 1992, *Kimia Pangan dan Gizi*, Gramedia Pustaka, Jakarta.