DAFTAR PUSTAKA

Asaduzzaman, A.K.M., M. Haq, and B.S. Chun. 2018. Reduction of histamine and heavy metals in mackerel hydrolyzates produced by catalysts associated-subcritical water hydrolysis. Journal of Industrial and Engineering Chemistry. Article in press. ---.

Barcik, W., M. Wawrzyniak, C.A. Akdis, and L. O'Mahony. 2017. Immune regulation by histamine and histamine secreting bacteria. Immunology. 48 : 106 – 113.

Bjornsdottir, K. G. E. Bolton, P. D. McClellan-Green. J. Lee-Ann. And D.P. Green. 2009. Detection of Gram-Negative Histamine-Producing Bacteria in Fish: A Comparative Study. Journal of Food Protection. ---.

Bjornsdottir-Butler, K., S. A. McCarthy, P.V. Dunlap, and R.A. Benner, Jr. 2016. *Photobacterium angustum* and *Photobacterium kishitanii*, Psychrotrophic High-Level Histamine-Producing Bacteria Indigenous to Tuna. Applied and Environmental Microbiology. 82 (7) : 2167 – 2176.

Boudewijns, M., J. M. Bakkers, P. D. J. Sturm, and W. J. G. Melchers. 2006. 16S rRNA gene sequencing and the routine clinical microbiology laboratory: a perfect marriage. J. Clin. Microbiol. 44:3469–3470.

Bover-Cid S., Holzapfel W.H. (1999): Improved screening procedure for biogenic amine production by lactic acid bacteria. International Journal of Food Microbiology, 53: 33–41.

Brenner, D.J., J.J Farmer III, G.R. Fanning, A.G. Steigerwalt, P. Klykken, H.G. Wathen, F.W. Hickman, and W.H. Ewing. 1978. International Journal of Systematic Bacteriology. 28 (2) : 269 – 282.

Cakli, S., B. Kilinc, A. Cadun, T. Dincer, and S. Tolasa. 2007. Quality differences of whole ungutted sea bram (Sparus aurata) and sea bass (Decentrarchus labrax) while stored in ice. Food Control. 18 : 391 – 397.

Chappelle, E.W., and J. M. Luck. 1957. The decarboxylation of amino acids, protein, and peptides by N-Bromosuccinimide.

Cocero, M.J., A. Cabeza, N. Abad, T. Adamovic, L. Vaquerizo, C.M. Martinez, M.V. Pazo-Cepeda. 2018. Understanding biomass fractionation in subcritical and supercritical water. The Journal of Supercritical Fluids. 133 : 550 – 565.

Comtrade. 2019. UN Comtrade Database. https://comtrade.un.org/data . Diakses tanggal 23 Mei 2019.

Coton, E., Rollan, G. C. and Lonvaud-Funel, A. 1998 Histidine carboxylase of *Leuconostoc oenos* 9204: Purification, kinetic properties, cloning and nucleotide sequence of the hdc gene. Journal of Applied Microbiology 84 : 143-151.

Cowan, S.T., K.J. Steel, G.I. Barrow, and R.K.A. Feltham. 1993. Cowan and Steel's Manual for The Identification of Medical Bacteria. 3rd ed. Cambridge University Press, Australia.

Curiel, J.A., C. Ruiz-Capillas, B. de las Rivas, A.V. Carrascosa, F. Jimenez-Colmenero, and R.Munoz. 2011 Production of biogenic amines by lactic acid bacteria and enterobacteria isolatd from fresh pork sausages packaged in different atmospheres and kept under refrigeration. Meat Science. 88 : 368 – 373.

Dityawarman, A. 2018. Analisis hubungan suhu dengan parameter pertumbuhan bakteri penghasil histamine pada ikan cakalang. Program Pascasarjana Fakultas Pertanian. Universitas Gadjah Mada Yogyakarta. Thesis.

Doyle, M.P. and R.L. Buchanan. 2013. Food Microbiology: Fundamental and Frontiers 4th ed. ASM Press, Washington D.C.

EFSA Panel on Biological Hazard (BIOHAZ). 2011. Scientific Opinion on risk based control of biogenic amine formation in fermented foods. EFSA Journal. 9 (10) : 2393.

Eissa, I. A. M., H. I. Derwa, M. Ismail, M. El-Lamie, A. A. Dessouki, H. Elsheshtawy, and E. M. Bayoumy. Molecular and phenotypic characterization of *Photobacterium damselae* among some marine fishes in Lake Temsah. Microbial Pathogenesis. 114 : 315 – 322.

Emborg, J. 2007. *Morganella psychrotolerans* : Identification, histamine formation and importance for histaminee fish poisoning. Department of Seafood Research. Danish Institute for Fisheries Research. Technical University of Denmark. Thesis.

Emborg, J., and P. Dalgaard. 2006. Formation of histamine and biogenic amines in cold-smoked tuna : An investigation of Psychrotolerant bacteria from samples implicated in cases of histamine fish poisoning. Journal of Food Protection. 69 : 897 – 906.

Emborg, J., P. Dalgaard, and P. Ahrens. 2006. *Morganella psychrotolerans* sp. nov., a histamine producing bacterium isolatd from various seafoods. International Journal of Systematic and Evolutionary Microbiology. 56 : 2473–2479.

Erkmen, O. and T.F. Bozoglu. 2016. Food Microbiology, Principles into Practice: Volume 1, Microorganism Related to Foods, Foodborn Diseases, and Food Spoilage. Willey, West Sussex.

Evans, K. 2008. Behaviour and habitat preferences of bigeye tuna (*Thunnus obesus*) and their influence on longline fishery catches in the western Coral Sea. Canadian Journal of Fisheries and Aquatic Sciences. 65 (11): 2427–2443.

FAO and WHO. 2013. Public Health Risks of Histamine and other Biogenic Amines from Fish and Fishery Products. Meeting Report. FAO Headquaters : Rome, Italy.

Gow, J.A., and F.H.J. Mills. 1984. Pragmatic to Distinguish Psychrophiles and Psychrotrophs in Ecological System. Applied and Environmental Microbiology. 47 : 213 – 215.

Hacisalihoglu, A., J.A. Jogjean., and J. A. Duine. 1997. Distribution of amine oxidases and amine dehydrogenases in bacteria grown on primary amines and characterization of the arnine oxidase from *Klebsiella oxytoca*. Microbiology. 143 : 505 – 512.

Holt, G. J., N. R. Krieg, P. H. A. Sneath, Stanley, and S. T. Williams. 1994. Bergeys's Manual of Determinative Bacteriology 9th. Williams & Wilkins, USA.

Hongpattarakere, T., N. Buntin, and A. Nuylert. 2016. Histamine development and bacterial diversity in microbially-challenged tonggol (*Thunnus tonggol*) under temperature abuse during canning manufacture. J. Food Sci Technol. 53 (1) : 245 – 256.

Hyder, P., K. Bigelow, R. Brainard, M. Seki, and J. Firing. 2019. Migration and Abundance of Bigeye Tuna (*Thunnus obesus*), and Other Pelagic Species, Inferred from Catch Rates and Their Relation to Variations in the Ocean Environment. NOAA National Marine Fisheries Services. Pdf.

Ingraham, J.L., and J.L Stokes. 1959. Psychrophilic bacteria. Microbiology and Molecular Biology Reviews. 23 (3) : 97 – 108.

Janda, J.M., S.L. Abbott, S. Khashe, and T. Robin. 1996. Biochemical Investigations of Biogroups and Subspecies of *Morganella morganii*. Journal of Clinical Microbiology. 34: 108 – 113.

Janda, M., and S. L. Abbott. 2007. 16S rRNA gene sequencing for bacterial identification in the diagnostic laboratory: Pluses, Perils, and Pitfalls – Minireview. Journal of Clinical Microbiology. 45 : 2761 – 2764.

Jensen, K.T., W. Frederiksen, F.W. Hickman-Brenner, A.G. Steigerwalt, C.F. Riddle, and D. J. Brenner. 1992. Recognition of Morganella Subspecies, with Proposal of *Morganella morganii* subsp. *morganii* subsp. nov. *and Morganella morganii* subsp. *sibonii* subsp. nov. International Journal of Systematic Bacteriology. 42 (4): 613 – 620.

Jordan, E.O., R.R. Crawford, and J. McBroom. 1933. The Morgan Bacillus. Department of Hygiene and Bacteriology, The University of Chichago. Downloaded from http://jb.asm.org/ on May 5, 2019 by guest.

Justé A, Van Trappen S, Verreth C, Cleenwerck I, De Vos P, Lievens B, Willems KA. 2012. Characterization of *Tetragenococcu*s strains from sugar thick juice reveals a novel species, *Tetragenococcus osmophilus* sp. nov., and divides *Tetragenococcus halophilus* into two subspecies, *T. halophilus subsp. halophilus* subsp. nov. and *T. halophilus* subsp. *flandriensis* subsp.nov. Int J Syst Evol Microbiol 62:129–137.

Kanki, M., T. Yoda, T. Tsukamoto, and E. Baba. 2007. Histidine decarboxylase and their role in accumulation of histamine in Tuna and dried saury. Applied and Environmental Microbiology. 73 : 1467 – 1473.

Kementrian Kelautan dan Perikanan. 2019. https://kkp.go.id/setjen/satudata/page/1453-kelautan-dan-perikanan-dalam-angka. Diakses pada tanggal 12 Desember 2019.

Kim, S.H., B. Ben-Gigirey, J. Barros-Vellazquez, R.J. Price, and H. An. 2000. Histamine and Biogenic Amine Production by *Morganella morganii* Isolatd from Temperature-Abused Albacore. Journal of Food Protection. 63 (2) : 244 – 251.

Kim, S.H., H. An, and R.J. Price. 1999. Histamine formation and bacterial spoilage of albacore harvested off the U.S. Northwest Coast. Journal of Food Science. 64 (2) : 340 – 343.

Kim, S.H., K. G. Field, M.T. Morrissey, R. J. Price, C. Wei, and H. An. 2001. Source and Identication of Histamine-Producing Bacteria from Fresh and Temperature-Abused Albacore. Journal of Food Protection. 64 (7) : 1035 – 1044.

Kobayashi, T., X. Wang, N. Shigeda, C. Taguchi, K. Ishii, S. Kei-Ichi, Y. Harada, C. Imada, T. Terehara, and A. Shinagawa. 2016. Distribution of histamine-producing lactic acid bacteria in canned salted anchovies and their histamine production behaviour. Ann Microbiol. 66 : 1277 – 1284.

Kung, H.F., C.Y. Huang, C.M. Lin, L.H. Liaw, Y.C. Lee, and Y.H. Tsai. 2015. The histamine content of dried flying fish products in Taiwan and the isolation of halotolerant histamine-forming bacteria. Journal of Food and Drug Analysis. 23 : 335 – 342.

Labella, A.M., M.D. Castro, M. Manchado, T. Lucena, D.R. Arahal, and J.J. Borrego. 2018. Photobacterium malacitanum sp. nov., and Photobacterium andalusiense sp. nov., two new bacteria isolatd from diseased farmedfish in Southern Spain. Systematic and Applied Microbiology. 41 : 444 – 451.

Li, J., and T. B. Brill. 2003. Decarboxylation Mechanism of Amino Acids by Density Functional Theory. J. Phys. Chem. A. 107 : 5993 – 5997.

Li, T., L. Huo, C. Pulley, and A. Liu. 2012. Decarboxylation mechanism in biological system: Review. Bioorganic Chemistry. 43 : 2 – 14.

Lieber E.R., and S.L. Taylor. 1978. Thin-layer chromatographic screening methods for histamine in tuna fish. Journal of Chromatography A. 153:143–152

Lin, C.S., H.C. Tsai, C.M. Lin, C.Y. Huang, H.F. Kung, and Y.H. Tsai. 2014. Histamine content and histamine-forming bacteria in mahi-mahi (*Coryphaena hippurus*) fillets and dried products. Food Control. 42 : 165 – 171.

Lopez-Sabater, E. I., J. J. Rodriguez-Jerez, M. Hernandez-Herrero, A.X. Roig-Sagues, and M. T. Mora-Ventura. 1995. Sensory Quality and Histamine Formation during Controlled Decomposition of Tuna (*Thunnus thynnus*). Journal of Food Protection. 59 (2) : 167 – 174.

Lorentzen, G., M.S.W. Breiland, J. Ostli, J.W. Andersen, and R.L Olsen. 2015. Growth of halophilic microorganisms and histaminee content in dried salt-cured cod (Gadus morhua L.) stored at elevated temperature. LWT – Food Science and Technology. 60 : 598 – 602.

Lucas, P. M., W. A. M. Wolken, O. Claisse, J. S. Lolkema, and A. Lonvaud-Funel. 2005 Histamine producing pathway encoded on an unstable plasmid in *Lactobacillus hilgardii* 0006. Applied and Environmental Microbiology. 71 : 1417-1424.

MacFaddin, J.F. 2000. Biochemical Tests for Identification of Medical Bacteria. 3rd Edition, Lippincott Williams & Wilkins, Philadelphia.

Maijala R., and S. Eerola. 1993. Contaminant lactic acid bacteria of dry sausages produce histaminee and tyramine. Meat Science, 35: 387–395.

Maintz, L., and N. Novak. 2007. Histamine and histamine intolerance. Am. J. Clin. Nutr. 85 : 1185 – 1196.

Marcobal, A., B. de las Rivas, R. Munoz. 2006. Methods for the Detection of Bacteria Producing Biogenic Amines on Foods: A Survey. J. Verbr. Lebensm. 1 : 187 – 196.

Mavromatis, P., and P. C. Quantick. 2002. Modification of Niven's medium for the enumeration of histamine-producing bacteria and discussion of the parameters associated with its use. Journal of Food Protection. 3 (65) : 546 – 551.

Moleenar, D., J.S. Bosscher, B.T. Brink, A.J.M. Driessen, and W.N. Konings. 1993. Generation of a Proton Motive Force by Histidin Decarboxylation and Electrogenic Histidin/Histamine Antiport in Lactobacillus buchneri. Journal of Bacteriology. 175 (10) : 2864 – 2870.

Mongkolthanaruk, W., M. Nagase, Y. Kawai, K. Tanigawa, Y. Li, T. Yamaguchi, and T. Aimi. 2012. Evaluation of histamine productivity of *Tetragenococcous halophilus* isolatd from salted mackerel. Fish Sci. 78 : 441 – 449.

Moon, J.S., S.K. Cho, H.Y. Choi, J.E. Kim, S.Y. Kim, K.J. Cho, and N.S. Han. 2010. Isolation and characterization of biogenic amine producing bacteria in fermented soybean pastes. The Journal of Microbiology. 48 : 257 – 261.

Moon, J.S., S.Y. Kim, K.J. Cho, S.J. Yang, G.M. Yoon, H.J. Eom, and N.S. Han. 2013. Isolation and characterization of Histamine-Producing Bacteria from fermented fish products. Jounal of Microbiology. 51 : 881 – 885.

Moyer, C.L., and R.W. Morita. 2007. Psychrophiles and Psychrotrophs. Encyclopedia of Life Sciences (ELS) Article.

Nevena, P., and J. Sherma. 2014. Comparative study of the quantification of thin-layer chromatograms of a model dye using three types of commercial densinometers and image analysis with ImageJ. Trends in Chromatography. 9 : 21 – 28.

Niven, C.F., JR., M.B. Jeffrey, and D. A. Corlett, JR. 1981. Differential Plating Medium for Quantitative Detection of Histamine-Producing Bacteria. Applied and Environmental Microbiology. 41 : 321 – 322.

O'Hara, C.M., F.W. Brenner, and J.M. Miller. 2000. Classification, Identification, and Clinical Significance of *Proteus, Providencia,* and *Morganella*. Clinical Microbiology Reviews. 13 (4) : 534 – 546.

Ozogul, F. 2004. Production of biogenic amines by *Morganella morganii, Klebsiella pneumoniae* and *Hafnia alvei* using a rapid HPLC method. Eur Food Res Technol. 219 : 465 – 469.

Ozogul, F., and Y. Ozogul. 2007. The ability of biogenic amines and amoniak production by single bacterial cultures. Eur Food Res Technol. 225 : 385 – 394.

Petti, C.A., C.R. Polage, and P. Schreckenberger. 2005. The role of 16S rRNA gene sequencing in identification of microorganisms misidentified by conventional method. Journal of Clinical Microbiology. 43 : 6123 – 6125.

Philips, R.S. 2015. Chemistry and Diversity of Phyridoxal-5-phosphate dependent enzyme : A review. Biochimica et Biophysica Acta. 1854 : 1167 – 1174.

Pubchem. 2018. https://pubchem.ncbi.nlm.nih.gov/compound/histamine diakses tanggal 24 Agustus 2018.

Rauss, K. F. 1936. The systematic position of Morgan's bacillus. J. Pathol. Bacteriol. 42:183–192.

Reece, J. B., L. A. Urry, M. L. Cain, S. A. Wasserman, P.V. Minorsky, and R. B. Jackson. 2014. Campbell Biology 10th edition. Pearson. New York.

Reichardt W., and R.Y. Morita. 1982. Temperature characteristic of psychrotrophic and psychrophilic bacteria. Journal of General Microbiology. 128 : 565 – 568.

Rinto. 2017. Kajian penolakan ekspor produk perikanan Indonesia ke Amerika Serikat. Prosiding Seminar Nasional Inovasi Teknologi Pengolahan Produk Dan Bioteknologi Kelautan dan Perikanan III. Teknologi Hasil Perikanan Fakultas Pertanian Universitas Sriwijaya.

Rodtong, S., S. Nawong, and J. Yongsawatdigul. 2005. Histamine accumulation and histamine-forming bacteria in Indian anchovy (Stolephorus indicus). Food Microbiology. 22 : 475 – 482.

Roig-Sagues, A.X., M. M. Hernandez-Herrero, E.I. Lopez-Sabater, J.J. Rodriguez-Jerez, and M. T. Mora-Ventura. 1997. Evaluation of three decarboxylating agar media to detect histamine and tyramine-producing bacteria in ripened sausages. Letter in Applied Microbiology. 26 : 309 – 312.

Sanger, F., S. Nicklen, and A.R. Coulson. 1977. DNA sequencing with chain-terminating inhibitors. Proc. Natl. Acad. Sci. 74 (12) : 5463 – 5467.

Sarfraz, A., Ansari, M.A.A., Bhattacharyya, S., Jaiswal, N., Das, S., Singh, S., Ravikirti. 2014. Liver abscess caused by Morganella morganii subspecies sibonii biogroup G in a chronic alcoholic patient. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 5 (5): 467-469.

Satomi, Masataka. 2016. Effect of Histamine-producing Bacteria on Fermented Fishery Products. Food Science and Technology Research. 22 : 1 – 21.

Schaefer, K. M. 2010. Vertical movements, behavior, and habitat of bigeye tuna (Thunnus obesus) in the equatorial eastern Pacific Ocean, ascertained from archival tag data. Marine Biology. 157 (12): 2625–2642.

Schaefer, K.M. 2015. Movements, dispersion, and mixing of bigeye tuna (*Thunnus obesus*) tagged and released in the equatorial Central Pacific Ocean, with conventional and archival tags. Fisheries Research. 161: 336–355.

Sibert, J. R. 2003. Horizontal movements of bigeye tuna (*Thunnus obesus*) near Hawaii determined by Kalman filter analysis of archival tagging data. Fisheries Oceanography. 12 (3): 141–151.

Siboni, K. 1976. Correlation of the characters fermentation of trehalose, non-transmissable resistance to tetracycline, and relatively long flagellar wavelength in Proteus morganii. Acta Pathol. Microbiol. Scand. Sect. B. 84:421–427.

Stratton, J.E., R.W. Hutkins, S.S. Sumner, and S. Taylor. 1992. Histamine and Histamine-Producing Bacteria in Retail Swiss and Low-Salt Cheeses. Journal of Food Protection. 55 (6) : 435 – 439.

Takahashi, H., B. Kimura, M. Yoshikawa, and T. Fujii. 2003. Cloning and Sequencing of the Histidine Decarboxylase Genes of Gram-Negative, Histamine-Producing Bacteria and Their Application in Detection and Identification of These Organisms in Fish. Applied and Environmental Microbiology. 69 (5) : 2568 – 2579.

Tao, Z., M. Sato, Y. Han, Z. Tan, T. Yamaguchi, and T. Nakano. 2011. A simple and rapid method for histamine analysis in fish and fishery products by TLC determination. Food Control. 22 : 1154 – 1157.

Taylor S.L. 1986. Histamine poisoning: toxicology and clinical aspects. Crit Rev Toxicol 17:91–128.

Tembhurne, M., A. Ghag, H. Sanathkumar, and B. B. Nayak. 2013. Dominance of Enterobacteria among Histamine-Producing Bacteria Isolatd from Indian Mackerel. Advances in Microbiology. 3 : 537 – 542.

Triwijayani, A.U. 2016. Identifikasi bakteri kitinolitik dari sedimen tambak udang dan karakterisasi gen kitinasenya. Fakultas Pertanian. Universitas Gadjah Mada Yogyakarta. Skripsi.

Vaaler, G. L., M. A. Brasch, and E. E. Snell. 1986. Pyridoxal 5'-phosphate-dependent histidine decarboxylase – nucleotide – sequence of the hdc gene and the corresponding amino-acid-sequence. Journal of Biological Chemistry 261 : 1010-1014.

Visciano, P., M. Schirone, R. Tofalo, and G.Suzzi. 2012. Biogenic amines in raw and processed seafood. Frontiers in Microbiology. 188 : 1 – 10.

Winslow, C. E. A., I. J. Kligler, and W. Rothberg. 1919. Studies on the classification of the colon-typhoid group of bacteria with special reference to their fermentative reactions. J. Bacteriol. 4:429–503.

Yamaki, S., Y.Kawai, and K. Yamazaki. 2015. Characterization of a novel bacteriophage, Phda1, infecting the histamine-producing *Photobacterium damselae* subps. *damselae*. Journal of Applied Microbiology. 118 : 1541 – 1550.

Zhang, J., X. Zhu, R. Xu, Q. Gao, D. Wang, and Y. Zhang. 2018. Isolation and identification of histamine-producing Enterobacteriaceae from Qu fermentation starter for Chinese rice wine brewing. International Journal of Food Microbiology. 281 : 1 – 9.