

## DAFTAR PUSTAKA

- Abdullah, A., Nurjanah. Hidayat, T., Yusefi, V. 2013. Profil Asam Amino dan Asam Lemak Kerang Bulu (*Anadara antiquata*). *JPHPI*. 16(2):160-165.
- Adawyah, R. 2020, Pengaruh Lama Pemasakan terhadap Kadar Protein, Lemak, Profil Asam Amino, dan Asam Lemak Tepung Ikan Sepat Rawa (*Trichogaster trichopterus*). *Jurnal Pengolahan Hasil Perikanan Indonesia*. 23(2) pp. 286–294.
- Afrianto, Eddy dan Evi Liviawaty. 1989. *Pengawetan dan Pengolahan Ikan*. Penerbit Kanisius, Yogyakarta. 125 hal.
- Afifah, B., N. Abdulgani., G. Mahasri. 2014. Efektifitas Perendaman Benih Ikan Mas (*Cyprinus carpio L.*) dalam Larutan Perasan Daun Api-Api (*Avicennia marina*) terhadap Penurunan Jumlah *Trichodina* sp. *Jurnal Sains dan Seni Pomits*. III (2) :2337-3520
- Afifudin, I. K., Suseno, S. H., Jacob, A. M. 2014. Profil Asam Lemak dan Asam Amino Gonad Bulu Babi. *Jurnal Pengolahan Hasil Perikanan Indonesia*. 17(1): 60–70.
- Afrisanti, D. W. 2010. *Kualitas Kimia dan Organoleptik Nugget Daging Kelinci dengan Penambahan Tepung Tempe*. Universitas Sebelas Maret. Surakarta.
- Agri, F. 2011. *Cara Mudah Usaha Ternak*. Yogyakarta : Cahaya Atma.
- Ahmad, T., Ernawati, dan M. Yakob. 1998. *Budidaya Bandeng secara Intensif*. Penebar Swadaya. Bogor. Hal 1-2.
- Ahmad, N., Martudi, S., dan Dawami, D. 2017. Pengaruh Kadar Protein yang Berbeda terhadap Pertumbuhan Ikan Gurame (*Osphronemus gouramy*). *Jurnal Agroqua: Media Informasi Agronomi Dan Budi Daya Perairan*, 15(2): 51–58.
- Alasalvar, C., Taylor, K. D. A., dan Shahidi, F. 2005. Comparison of Volatiles of Cultured and Wild Seabream (*Sparus aurata*) during Storage in Ice by Dynamic Headspace Analysis/Gas Chromatography-Mass Spectrometry. *J. Agricultural and Food Chem*, 53: 2616–2622.
- Almatsier, S. 2001. *Prinsip Dasar Ilmu Gizi*. Jakarta: Gramedia Pustaka Utama.
- Amin, S., Amir, M., dan Slamet, I. 2016. Kromatografi Cair Kinerja Tinggi untuk Analisis Senyawa Diuretik yang Disalahgunakan sebagai Doping dalam Urin. *Jurnal Sains Keolahragaan dan Kesehatan, Volume I*(No. 2).
- Apriyantono. A. 2002. *Pengaruh Pengolahan Terhadap Nilai Gizi Dan Keamanan Pangan*.

- Ardianingsih, R. 2009. Penggunaan High Performance Liquid Chromatography (HPLC) dalam Proses Analisa Deteksi Ion. *J. LAPAN: 10(4)*.
- Ashurst, P. R. 1991. *Food Flavorings*. Sheffield Academic Press. England.
- Astuti R, Aminah S, Syamsianah A. 2014. Komposisi Zat Gizi Tempe yang Difortifikasi Zat Besi dan Vitamin A pada Tempe Mentah dan Matang. *Agritech*. 34(2):151-9.
- Bahar, Burhan. 2006. *Panduan Praktis Memilih dan Menangani Produk Perikanan*. PT. Gramedia Pustaka Utama. Jakarta
- Behnouch, B., Sheikazadi, A., Bazmi, E., Fattahi, A., Sheikazadi, E., dan Anary, S. H. S. 2015. Comparison of UHPLC and HPLC in Benzodiazepines Analysis of Postmortem Samples: A Case–Control Study. *Medicine*, 94(14): 1–7.
- Bi, S., Chen, L., Sun, Z., Wen, Y., Xue, Q., Xue, C., Li, Z., Sun, C., Wei, Z., dan Liu, H. 2021. Investigating Influence of Aquaculture Seawater with Different Salinities on Non-Volatile Taste-Active Compounds in Pacific Oyster (*Crassostrea gigas*). *Journal of Food Measurement and Characterization*, 15(2): 2078–2087. <https://doi.org/10.1007/s11694-020-00807-4>.
- Bligh EG, Shaw SJ, Woyewoda AD. 1988. *Effect of Drying and Smoking on Lipids of Fish*. Di dalam: Burt JR, editor. *Fish Smoking and Drying*. New York: Elsevier Science Publishers Ltd. hlm 41-52.
- Bognár A. 1998. Comparative Study of Frying to Other Cooking Techniques Influence on the Nutritive Value. *Grasas y Aceites*. 49(4–5): 250–260.
- BSN. 2013. Standar Nasional Indonesia: *Ikan Segar 2729:2013*. Jakarta.
- BSN. 2015. Standar Nasional Indonesia: *Pedoman Pengujian Sensori pada Produk Perikanan 2346:2015*. Jakarta.
- Buckle, K. A., Edwards, R. A., Fleet, G. H., & Wootton, M. 1987. *Ilmu pangan*. Penerbit Universitas Indonesia, Jakarta (Diterjemahkan oleh H, Purnomo dan Adiono).
- Burdock, G. 2002. *Fanarali's Handbook of Flavor Ingredients*. CRC Press. Boca Raton.
- Burdock, G. A. 1991. *Flavor and Fragrance Materials*. Allured Publishing Co. New York.
- Cahyono, B. 2000. *Budidaya Ikan Air Tawar*. Kanisius. Yogyakarta.

- Cavuoto P, Fenech MF. 2012. A Review of Methionine Dependency and The Role of Methionine Restriction in Cancer Growth Control and Life-Span Extension. *Cancer Treatment Reviews*. 38(6):726–736.
- Chalamaiah, M.A., Dinesh Kumar, B.A., Hemalatha, R.B. and Jyothirmayi T. 2012. Fish Protein Hydrolysates: Proximate Composition, Amino Acid Composition, Antioxidant Activities and Applications: A review. *Food Chemistry*. 135(4), 3020–3038.
- Chasanah E, Nurilmala M, Purnamasari AR, Fithriani D. 2015. Komposisi Kimia, Kadar Albumin dan Bioaktivitas Ekstrak Protein Ikan Gabus (*Channa striata*) Alam dan Hasil Budaya. *JPB Kelautan dan Perikanan 2*: 123-132. [Indonesian]
- Chen, D. W., dan M. Zhang. 2006. Non-Volatile Taste Active Compounds in the Meat of Chinese Mitten Crab (*Eriocheir Sinensis*). *Food Chemistry*, 104, 1200–1205.
- Chen, D. W., dan Zhang, M. 2007. Non-Volatile Taste Active Compounds in the Meat of Chinese Mitten Crab (*Eriocheir sinensis*). *Food Chemistry*, 104(3): 1200–1205. <https://doi.org/10.1016/j.foodchem.2007.01.042>.
- Chi, A.-Y., Ji, H.-W., Gao, J.-L., Lu, H.-Y., Lan, W.-B., & Meng, L.-Y. 2012. Effects of Different Heating Treatments On Taste-Active Components of *Litopenaeus vannamei*. *Modern Food Science and Technology*, 28(7), 776–779.
- Chiou, T.K. and Lai, M.M. 2002. Comparison of Taste Components in Cooked Meats of Small Abalone Fed Different Diets. *Fish. sci.*, 68: 388-394.
- Choi, B.H. and Coloff, J.L. 2019. The Diverse Functions of Non-Essential Amino Acids in Cancer. *Cancers*, 11 (5), 675.
- Dai, Y., J. Miao., S. Z. Yuan., Y. Liu., X. M. Li dan R. T. Dai. 2013. Colour and Sarcoplasmic Protein Evaluation of Pork Following Water Bath and Ohmic Cooking. *Meat Sci*, 93: 898-905.
- Damanik, A.M., Ilza, M., Edison. 2019. *Karakteristik Profil Asam Amino pada Daging Ikan Patin (Pangasius sp.) berdasarkan Habitat* [Skripsi]. Universitas Riau. Pekanbaru.
- Darliem, C. M. 2015. *Studi Perbandingan Metode Perebusan dan Pengukusan Terhadap Mutu Kamaboko Ikan Jambal Siam (Pangasius hypophthalmus)* [Skripsi]. Fakultas Perikanan dan Ilmu Kelautan. Universitas Riau. Pekanbaru.

- Deng Y, Luo Y, Wang Y, dan Zhao Y. 2014. Effect of Different Drying Methods on the Myosin Structure, Amino Acid Composition, Protein Digestibility and Volatile Profile of Squid Fillets. *Food Chemistry*, 171: 168–176.
- Deng, Y., Luo, Y., Wang, Y., & Zhao, Y. 2015. Effect of Different Drying Methods on the Myosin Structure, Amino Acid Composition, Protein Digestibility and Volatile Profile of Squid Fillets. *Food Chemistry*, 171, 168–176.
- Devi, W. S., C. Sarojnalini. 2012. Impact of Different Cooking Methods on Proximate and Mineral Composition of *Amblypharyngodon mola* of Manipur. *International Journal of Advanced Biological Research* 2 (4) : 641-645.
- Dewi EN, Amalia U, Mel M. 2016. The effect of Different Treatment to the Amino Acid Content of Microalga *Spirulina platensis*. *Aquatic Procedia*. 7: 59-65.
- Djafar, R. 2014 Efektivitas Konsentrasi Belimbing Wuluh terhadap Parameter Mutu Organoleptik dan pH Ikan Layang Segar Selama Penyimpanan Ruang. *Nikè: Jurnal Ilmiah Perikanan dan Kelautan*, Vol. II, No. 1, Maret 2014, hal. 23-28. Jurusan Teknologi Perikanan – UNG.
- Dwiari, SR. 2008. *Teknologi Pangan*. Direktorat Pembinaan Sekolah Menengah Kejuruan. Jakarta.
- Edison, T. 2009. Amino Acid: Esensial For Our Bodies. <http://livewellnaturally.com>. [Diakses tanggal 13 Maret 2023].
- Erkan, N., Ozden, O., dan Selcuk, A. 2010. Effect of Frying, Grilling, and Steaming on Amino Acid Composition of Marine Fishes. *Journal of Medical Food*, 13(6): 1524–1531.
- Fahdi, F., Pratiwi, D., & Sari, H. 2020. Identifikasi Cemaran Bakteri (*Escherichia coli*) terhadap Ikan Kembung dan Ikan Dencis yang Dijual di Pasar Tradisional Deli Tua. *Jurnal Penelitian Farmasi & Herbal*, 2(2), 31-37.
- Fardiaz. 2006. *Kimia Flavor I*. Universitas Sumatera Utara. Medan.
- Faridah, A., Pada, K., Yulastri, A., dan Yusuf, L. 2008. *Patiseri* (3rd ed.). Direktorat Pembinaan Sekolah Menengah Kejuruan, Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah, Departemen Pendidikan Nasional. Jakarta.
- Fellows, P.J. 1992. *Food Processing Technology*. Ellis Horwood, New York.
- Fellows, P. 2000. *Food Processing Technology: Principles and Practice*. Woodhead Publ. Ltd. Cambridge.

- F.R.S.A, Ahmad Nur. 2019. *Profil Proksimat dan Organoleptik Ikan Nila (Oreochromis niloticus) Segar di Pasar Tradisional Wilayah Kota Malang*. [Sarjana thesis], Universitas Brawijaya.
- Fuke, S., & Konosu, S. 1991. Taste-Active Components in Some Foods: A Review of Japanese Research. *Physiology and Behavior*, 49(5), 863–868.
- Gam, L., C. Leow dan S. Baie. 2005. Amino Acid Composition of Snakehead Fish *Channa striatus* of Various Sizes Obtained at Different Times of the Year. *Malaysian Journal of Pharmaceutical Sciences*, 3 (2): 19–30.
- Gam, L., C. Leow, dan S. Baie. 2006. Proteomic Analysis of Snakehead Fish (*Channa striata*) Muscle Tissue. *Malaysia Journal of Biochemistry and Molecular Biology*. 14: 25-32.
- Garwan R. 2009. *Perkembangan Histamin selama Proses Fermentasi dan Penyimpanan Produk Bakasang Ikan Cakalang (Katsuwonus pelamis Lin.)*. [Tesis]. Institut Pertanian Bogor. Bogor.
- Gencbay, G. and Turhan, S. 2016. Proximate Composition and Nutritional Profile of the Black Sea anchovy (*Engraulis encrasicolus*) Whole Fish, Fillets, and By-Products. *Journal of Aquatic Food Product Technology*, 25(6), 864-874.
- Gritter, R. J., Bobbit, J. M., dan Schwarting, A. M. 1991. *Introduction to Chromatography* (P. Kosasih, Ed.). ITB. Bandung.
- Gunawan, R., Edison dan Suparmi. 2012. *Pengaruh Penambahan Rumput Laut (Euclidean Cottonii) pada Pengolahan Mie Kering terhadap Penerimaan Konsumen* [Skripsi]. Fakultas Perikanan Universitas Riau. Pekanbaru.
- Guillen, M., dan Errecalde, M. 2002. Volatile Components of Raw and Smoked Black Bream (*Brama raii*) and Rainbow Trout (*Onchorhynchus mykiss*) Studied by Means of Solid Phase Microextraction and Gas Chromatography/Mass Spectrometry). *J. Sci Food and Agric*, 82: 945–952.
- Hadiwiyoto, S. 1993. *Teknologi Pengolahan Hasil Perikanan Jilid 1*. Yogyakarta: Liberty.
- Hangesti, 2006., Picung Sebagai Pengawet Ikan Kembung Segar. <http://www.untag-sby.ac.id>, diakses bulan Maret 2023.
- Hanggani, H. 2003. *Pengaruh Pemberian Ekstrak Chlorella Sp. terhadap Karakteristik Organoleptik dan Mikroorganisme Filet Patin pada Penyimpanan Suhu Rendah* [Skripsi]. Tidak dipublikasikan. Fakultas Pertanian Unpad. Jatinangor. 43 hlm.
- Harli, M. 2008. Asam amino esensial. <http://www.supamas.com>. [Diakses tanggal 13 Maret 2023].

- Harris, R. S., dan E. Karmas. 1989. *Evaluasi Gizi pada Pengolahan Bahan* (S. Achmadi, Ed.). ITB Press. Bandung.
- Hatmojo, S., Susanti, MT., Kurniawan, D. 2005. Produksi Ikan Asap Tradisional dengan Asap Cair. <http://www.dikti.org>. Diakses pada bulan Maret 2023.
- Heath, H. B. 1981. *Source Book of Flavors*. The AVI Publishing Company, Inc. Westport, USA.
- Hegdekar N, Lipinski MM, Sarkar C. 2021. N-Acetyl-l-leucine Improves Functional Recovery and Attenuates Cortical Cell Death and Neuro Inflammation After Traumatic Brain Injury in Mice. *Scientific Reports*. 11(1): 1–13.
- Hidayat. 2011. *Profil Asam Amino Kerang Bulu (Anadara antiquate)* [skripsi]. Fakultas Perikanan dan Ilmu Kelautan. Institut Pertanian Bogor.
- Hidayat. 2014. *Kajian Penggunaan Rumput Laut (Eucheuma cottoni) sebagai Bahan Tambahan dalam Pengolahan Kamaboko Ikan Patin (Pangasius pangasius)* [Skripsi]. Jurusan Teknologi Hasil Perikanan. Fakultas Perikanan dan Ilmu Kelautan. UNRI. Tidak dipublikasikan. Pekanbaru.
- Hui, YH. 2006. *Handbook of Food Science, Technology, And Engineering*. CRC Press. Boca Raton.
- Ilyas, S. 1983. *Teknologi Refrigerasi Hasil Perikanan 1, Teknik Pendinginan Ikan*. Paripurna. Jakarta.
- Irawan, P. B., Zulfanita, dan I. A. Wicaksono. 2012. *Analisis Usaha Pembenihan Gurame (Osphronemus gouramy Lacepede) di Desa Kaliurip Kecamatan Bener Kabupaten Purworejo*. 1(2): 24–33.
- Jacob, A.M., Nurjanah., Lingga, L.A. 2012. Karakteristik Protein dan Asam Amino Daging Rajungan (*Portunus pelagicus*) Akibat Pengukusan. *Masyarakat Pengolahan Hasil Perikanan Indonesia*. 15(2): 156-163.
- Jacob, A. M., Nurjanah, Hidayat, T., Perdiansyah, R. 2020. Komposisi Kimia dan Profil Asam Lemak Ikan Layur Segar Penyimpanan Suhu Dingin. *Jurnal Pengolahan Hasil Perikanan Indonesia*. 23(1): 147-157.
- Jangkaru, Z. 2002. *Memacu Pertumbuhan Gurame*. Penebar Swadaya. Jakarta.
- Jiang, W. D., Qu, B., Feng, L., Jiang, J., Kuang, S. Y., Wu, P., Tang, L., Tang, W. N., Zhang, Y. A., Zhou, X. O., Liu, Y. 2016. Histidine Prevents Cu-Induced Oxidative Stress and the Associated Decreases in mRNA from Encoding Tight Junction Proteins in the Intestine of Grass carp (*Ctenopharyngodon idella*). *PLoS One*. 11(6): 1–19.

- Johnson, E. L., dan Stevenson, R. 1991. *Dasar Kromatografi Cair*. Institut Teknik Bandung. Bandung.
- Jones Pm, Persaud Pj. 2010. *Islet Function And Insulin Secretion*. In: Richard Ig, Holt, Clive S, Cockram, Flyvbjerg A, Goldstein Bj, Editor. Textbook Of Diabetes 4th Edition. Singapura: A John Wiley & Sons, Ltd. Publication. Pp 87-103.
- Kartika, B., Hastuti dan W. Supartono. 1988. *Pedoman Uji Inderawi Bahan Pangan. Pusat Antar Universitas Pangan dan Gizi*. Universitas Gadjah Mada. Yogyakarta. 170 hal.
- Kato H, Rhue MR, Nishimura T. 1989. *Role of Free Amino Acids and Peptides in Foodtaste*. Di dalam: Teranishi R (editor). Flavorchemistry; trends and developments.
- Kawai, M., Okiyama, A., & Ueda, Y. 2002. Taste Enhancements Between Various Amino Acids and IMP. *Chemical Senses*, 27(8), 739–745.
- Kawai M, Uneyama H, Miyano H. 2009. Taste-Active Components in Foods, with Concentrationon Umami Compounds. *Journal of Health Science*. 55: 667-673.
- Khairuman, dan Amri, K. 2011. *Buku Pintar Budidaya 15 Ikan Konsumsi*. Agromedia Pustaka. Jakarta.
- Khomsan, A. 2004. *Pangan dan Gizi untuk Kesehatan*. PT. Raja Grafindo Persada. Jakarta.
- Kopec, W., Jamroz, D., Wiliczkiwicz, A., Biazik, E., Pudlo, A., Korzeniowska, M., Skiba, T. 2020. Antioxidative Characteristics of Chicken Breast Meat and Blood After Diet Supplementation with Carnosine, L-histidine, and  $\beta$ -alanine. *Antioxidants*. 9(11): 1093.
- Kubota, S., Itoh, K., Niizeki, N., Song, X. A., Okimoto, K., Ando, M., Murata, M., Sakaguchi, M. 2002. Organic Taste-Active Components in the Hot Water Extract of Yellowtail Muscle. *Food Science and Technology Research*. 8:45-49.
- Labensky, SR., dan Hause, A. 1999. *On Cooking, A Textbook of Culinary Fundamentals* (2nd Edition). Prentice-Hall Inc. London.
- Laksmi, R. 2012. Daya Ikat Air, Ph dan Sifat Organoleptik Chicken Nugget yang Disubstitusi Telur Rebus. *Animal Agriculture Journal*, 1(1): 453–460.
- Lehninger AJ. 1982. *Dasar-dasar Biokimia*. Jilid 1. Jakarta: Erlangga.
- Lehninger. 1991. *Dasar-dasar Biokimia*. Jilid II. Diterjemahkan oleh Maggy Thenajaya. Erlangga. Jakarta.

- Lewis, M. 2006. *Thermal Processing Food Processing Handbook* (Brennan JG, Ed.). Wiley-VCH GmbH and Co. KgaA. Weinheim.
- Linder MC. 1992. *Biokimia Nutrisi dan Metabolisme dengan Pemakaian secara Kimia*. Aminuddin P. Penerjemah. Jakarta: UI Press.
- Lioe, H. N., Apriyantono, A., Takara, K., Wada, K., Naoki, H., & Yasuda, M. 2004. Low Molecular Weight Compounds Responsible for Savory Taste of Indonesian Soy Sauce. *Journal of Agricultural and Food Chemistry*, 52(19), 5950–5956.
- Litaay, M. 2005. Peranan Nutrisi dalam Siklus Reproduksi Abalone. *Oseana*, 3:1-7.
- Liu, C., Ji, W., Jiang, H., Shi, Y., He, L., Gu, Z., dan Zhu, S. 2021. Comparison of Biochemical Composition and Non-Volatile Taste Active Compounds in Raw, High Hydrostatic Pressure-Treated and Steamed Oysters *Crassostrea hongkongensis*. *Food Chemistry*, 344. Doi: 10.1016/j.foodchem.2020.128632
- Liu, C., Li, M., Wang, Y., Yang, Y., Wang, A., dan Gu, Z. 2022. Effects of High Hydrostatic Pressure and Storage Temperature on Fatty Acids and Non-Volatile Taste Active Compounds in Red Claw Crayfish (*Cherax quadricarinatus*). *Molecules*, 27(16). Doi: 10.3390/molecules27165098
- Liu, J. K., Zhao, S. M., dan Xiong, S. B. 2009. Influence of Re-cooking on Volatil and Non-Volatil Compounds Found in Silver Carp *Hypophthalmichthys molitrix*. *Fish Sci*, 75: 1067–1075.
- Lucas, W. G., Kalesaran, O. J., dan Lurmenta, C. 2015. Pertumbuhan dan Kelangsungan Hidup Larva Gurame (*Osphronemus Gouramy*) dengan Pemberian Beberapa Jenis Pakan. *E-Journal Budidaya Perairan*: 3(2).
- Mackie, I. M, Aitken, J. H Merrit and M.L Windsor. 1982. *Fish Handling and Processing*. Ministry of Agriculture, Fisheries, and Food, Torry Research Station Press. Edinburgh.
- Mahyuddin, K. 2009. *Panduan Lengkap Agribisnis Ikan Gurame*. Penebar Swadaya. Jakarta.
- Mailoa, M. N., Savitri, I. K. E., Lokollo, E., Kdise, S. S. 2020. Mutu Organoleptik Ikan Layang (*Decapterus* sp.) Segar selama Penjualan di Pasar Tradisional Kota Ambon. *Ejournal of Industrial System Portal*, 16 (01), 36-44.
- Mandila, S.P., Hidajati, N. 2013. Identifikasi Asam Amino pada Cacing Sutra (*Tubifex* sp.) yang Diekstrak dengan Pelarut Asam Asetat dan Asam Laktat. *UNESA Journal of Chemistry*. 2(1): 103-108.



- Mao X, Zeng X, Qiao S, Wu G, Li D. 2011. Specific Roles of Threonine in Intestinal Mucosal Integrity and Barrier Function. *Frontiers in Bioscience (Elite edition)*. 3(4):1192-200.
- Mareta, R., Subandiyono, S., dan Hastuti, S. 2018. Pengaruh Enzim Papain dan Probiotik dalam Pakan terhadap Tingkat Efisiensi PeManfaatan Pakan dan Pertumbuhan Ikan Gurame (*Osphronemus gouramy*). *Sains Akuakultur Tropis*, 1(1): 21–30.
- Mau JL, Lin HC, Chen CC. 2001 Non-Volatile Components of Several Medicinal Mushrooms. *Food Res Int* 34:521–526 35.
- Matsui R, Honda R, Kanome M, HagiwaraA, Matsuda Y, Togitani T, IkemotoN, Terashima M. 2018. Designing Antioxidant Peptides Based on the Antioxidant Properties of the Amino Acid Side-Chains. *Food Chemistry*. 245: 750–755.
- McAllan L, Cotter PD, Roche HM, Korpela R, Nilaweera KN. 2013. Impact of Leucine on Energy Balance. *Journal of Physiology and Biochemistry*. 69(1): 155–163.
- Mc Donald, P., R. A. Edwards, J. F. D. Greenhalgh and C. A. Morgan. 2002. *Animal Nutrition*. 5 th Edition. Longman Scientific and Technical. New York.
- Meilgaard, M., Civille, G. V., dan B.T Carr. 1999. *Sensory Evaluation Techniques* (3rd ed.). CRC press. Boca Raton.
- Mohanty, B., Mahanty, A., Ganguly, S., Sankar, T.V., Chakraborty, K., Rangasamy, A. and Sharma, A.P. 2014. Amino Acid Compositions of 27 Food Fishes and Their Importance in Clinical Nutrition. *Journal of Amino Acids*. 2014, 269797.
- Morita, K., Kubota, K., dan Aishima, T. 2003. Comparison of Aroma Characteristics of 16 Fish Species by Sensory Evaluation and Gas Chromatographic Analysis. *Journal of the Science of Food and Agriculture*, 83 (4): 289–297.
- Morris CR, Hamilton-Reeves J, MartindaleRG, Sarav M, Ochoa Gautier JB. 2017. Acquired Amino Acid Deficiencies: A Focus on Arginine and Glutamine. *Nutrition in Clinical Practice*. 32:30S-47S.
- Morton, I. D., dan A. J. Macleod. 1982. *Food Flavour Part A. Introduction*. Elsevier. Amsterdam.
- Muhtadi M & Suhendi A. 2018. Aktivitas Antidiabetes dari Kombinasi Serbuk Ikan Gabus (*Channa striata*) dan Estrak Etanol Kulit Buah Rambutan

- (*Nephelium lappaceum*) pada Tikus Putih Jantan Galur Wistar. *Jurnal Farmasi Sains dan Praktis*. 4(2):9-14.
- Murtadho. 2005. *Isolasi dan Analisa Profil Peptida Berasa Gurih dari Ekstrak Ikan Asin Jambal Roti* [Skripsi]. Institut Pertanian Bogor. Bogor.
- Mustain, A. M., 2002. *Mempelajari Aspek Penerimaan Bahan dan Proses Pengemasan pada Produk Confectionary di PT. Sweet Candy Indonesia* [Skripsi]. Bogor: Fakultas Teknologi Pertanian. Institut Pertanian Bogor.
- Naknean, P., dan Meenune, M. 2010. Review Article Factors Affecting Retention and Release of Flavour Compounds in Food Carbohydrates. *International Food Research Journal*, 17: 23–24.
- Niwa Y, Irma MH, Rina H, Yoyo W. 2007. *Nutrisi dan Bahan Pakan Ikan Budidaya*. Jambi: Balai Budidaya Air Tawar.
- Nurjanah, Kustiariyah, Rusyadi, S. 2008. Karakteristik Gizi dan Potensi Pengembangan Kerang Pisau (*Solen spp.*) di Perairan Kabupaten Pamekasan, Madura. *Jurnal Perikanan dan Kelautan*. Vol 13: (1) 41.
- Nurjanah, Suseno, S.H., Hidayat, T., Ekawati, Y., Paramudhita, P., Arifianto. 2015. Changes in Nutritional Composition of Skipjack (*Katsuwonus pelamis*) due to Frying Process. *International Food Research Journal*. 22(5): 2093-2102.
- Nurjanah, Jacob, A. M., Hidayat, T. 2020. Perubahan Komposisi Kimia Kijing Lokal (*Pilsbryconcha exilis*) Segar dan Kukus. *Marinade* Vol. 03(02) : 148-159.
- Oladapa, A., Akin, M.A.S., dan Olusegun, L.O. 1984. Quality Changes of Nigerian Traditionally Processed Freshwater Fish Species. *J Food Tech*, 19 (1984), 341- 348.
- Ozugul, Y., Ozugul, F. 2007. Fatty Acid Profiles of Commercially Important Fish Species from the Mediterranean, Aegean and Black Seas. *Food Chemistry*. Vol 100 (4): 1634-1638.
- Palemba, Y. 2017. *Kajian Mutu Ikan Layang (Decapтерus sp) Segar dengan Metode Pendinginan Es Balok (Curah) serta Penerapan Sistem Drainase dan Lama Pelelehan Es di Sorong Papua Barat* [Tugas Akhir Program Magister]. Universitas Terbuka. Jakarta.
- Pariansyah, A., Nurlaila, E.H., Bertoka FSD Negara. 2018. Aplikasi Maserat Buah Mangrove *Avicennia marina* sebagai Pengawet Alami Ikan Nila Segar. *Acta Aquatica: Aquatic Sciences Journal* 5(1): 36-44.

- Pianusa, A.F., Grace, S., Wonggo, D., 2015. Kajian Perubahan Mutu Kesegaran Ikan Tongkol (*Euthynnus affinis*) yang Direndam dalam Ekstrak Rumput Laut (*Eucheuma spinosum*) dan Ekstrak Buah Bakau (*Sonneratia alba*). *J. Media Tek. Hasil Perikanan* 3 (2): 66-74.
- Pino, J. A. 2015. *Papaya Fruit Aroma Compounds- State of the Art Research. Tropical Fruits-From Cultivation to Consumption and Health Benefits* (S. Todorov dan Ivanova I.V, Eds.). Nova Science Publishers, Inc. New York.
- Pratama, R. I. 2011. *Karakteristik Flavor Beberapa Produk Ikan Asap di Indonesia* [Tesis]. Institut Pertanian Bogor. Bogor.
- Pratama, R. I. 2013. Komposisi Kandungan Senyawa Flavor Ikan Mas (*Cyprinus carpio*) Segar dan Hasil Pengukusan. *Jurnal Akuatika*, 4(1): 55–67.
- Pratama, R. I., I. Rostini, dan E. Rochima. 2018. Profil Asam Amino, Asam Lemak, dan Komponen Volatil Ikan Gurame Segar *Osphronemus gouramy* dan Kukus. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 21(2): 218–231.
- Pratama, R.I., Rostini, I., dan Rochima, E. 2017. Amino Acid Profile and Volatile Components of Fresh and Steamed Vaname Shrimp (*Litopenaeus vannamei*). *Prosiding 1st International Conference on Food Security Innovation (ICFSI)*, 57–68. Serang.
- Pratama, W. W., H. Nursyam., A. M. Hariati., R. A. Islamy dan V. Hasan. 2020. Short Communication: Proximate Analysis, Amino Acid Profile and Albumin Concentration of Various Weights of Giant Snakehead *Channa micropeltes* from Kapuas Hulu, West Kalimantan, Indonesia. *Biodiversitas*, 21 (3): 1196–1200.
- Purwaningsih, W dan Ina Karlina. 2012. *Asuhan Keperawatan Jiwa*. Cetakan II. Yogyakarta : Nuha Medika.
- Purnawingsih, S., Salamah, E., Apriyana, G.P. 2013. Profil Protein dan Asam Amino Keong Ipong-Ipong (*Fasciolaria salmo*) pada Pengolahan yang Berbeda. *Jurnal Gizi dan Pangan*. 8(1): 78-81.
- Rafiqi, A.F., A. Junaidi. 2012. *Asam Amino Gerak dan Perubahan*. Universitas Wirajaya Sumenep.
- Reeds, P.J. 2000. Dispensable and Indispensable Amino Acids for Humans. *The Journal of Nutrition*, 130(7), 1835S-1840S.
- Risa Sarnes. 2013. *Senyawa Flavour pada Makanan*. Universitas Brawijaya. Malang.
- Rothe, M. 1989. *Introduction to Aroma Research*. Kluwer Academic Publisher. Dordrecht (Netherlands).

- Rubiyanto, D. 2016. *Teknik Dasar Kromatografi*. Deepublish. Yogyakarta.
- Sani, B. 2014. *Budidaya Ikan Gurame*. Dafa Publishing. Jakarta.
- Sankar, T.V., Anandan, R., Mathew, S., Asha, K.K., Lakshmanan, P.T., Varkey, J. and Mohanty, B.P. 2013. Chemical Composition and Nutritional Value of Anchovy (*Stolephorus commersonii*) Caught from Kerala Coast, India. *European Journal of Experimental Biology*, 3(1), 85-89.
- Saraswati, Jacob, A.M., Nurjanah dan A.. 2013. *Kandungan asam lemak dan kolesterol kakap merah (Lutjanus bohar) setelah pengukusan*. JPHPI 2013, Volume 16 Nomor 2. Fakultas Perikanan dan Ilmu Kelautan. Institut Pertanian Bogor. Bogor
- Sarie, O. T., Asikin, A. N dan Kusumaningrum, I. 2018. Pengaruh Perbedaan Jenis Ikan terhadap Karakteristik Gel Surimi. *Ziraa'ah*, 43(3): 266- 272.
- Schweigert, B.S., H.R. Kraybill, and D.A. Greenwood. 2010. Amino Acid Composition of Fresh and Cooked Beef Cuts. *J. Science Food and Nutrition*, 56(2):156-162.
- Sediaoetama, Achmad Djaeni. 2008. *Ilmu Gizi untuk Mahasiswa dan Profesi di Indonesia*. Jakarta: Dian Rakyat.
- Sena CM, Pereira AM, Seiça R. 2013. Endothelial Dysfunction-A Major Mediator of Diabetic Vascular Disease. *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease*. 1832(12):2216–2231.
- Setyaningsih, D., Anton, A., dan Maya, P. S. 2010. *Analisis Sensori untuk Industri Pangan dan Agro* (S. Raharjo dan D. Adawiyah, Eds.). IPB Press. Bogor.
- Shfali Dhingra dan Sudesh Jood. 2007. Organoleptic and Nutritional Evaluation of Wheat Breads Supplemented with Soybean and Barley Flour. *Food Chemistry*, 77(2001): 479–488.
- Shirai, T., Hirakawa, Y., Koshikawa, Y., Toraisi, H., Terayama, M. and Suzuki, T. 1996. Taste Components of Japanese Spiny and Shovel-Nosed Lobsters. *Fish. Sci*, 62:283-287.
- Siburian, E. T. P., P. Dewi dan N. Kariada. 2012. Pengaruh Suhu dan Waktu Penyimpanan Terhadap Pertumbuhan Bakteri dan Fungi Ikan Bandeng. *Unnes Journal of Life Science*. 1 (2) : 101-105.
- Soekarto, S.T. 1990. *Penilaian Organoleptik untuk Industri Pangan dan Hasil Pertanian*. Bhatara Karya Aksara. Jakarta.
- Spurvey, S., Pan, B. S., & Shahidi, F. 1998. *Flavour of Shellfish*. in F. Shahidi (Ed.), *Flavor of Meat, Meat Products, and Seafoods* (2nd ed., pp. 159–196). London, United Kingdom: Blackie Academic and Professional.

- Sriket, P., Benjakul S, Visessanguan, W., Kijroongrojana, K. 2007. Comparative Studies on Chemical Composition and Thermal Properties of Black Tiger Shrimp (*Penaeus monodon*) and White Shrimp (*Penaeus vannamei*) Meats. *Food Chemistry*. 103: 1199-1207.
- Stantic A., Korac A., Buzadzic B., Otasevic V., Jankovic A., Vucetic M. and Korac B. 2012. L -Arginine in Nutrition : Etiopathology of Diabetes Multiple Beneficial Effects in the Etiopathology of Diabetes. *Journal of Nutritional Therapeutics*. (2):114–131.
- Statistik KKP. 2021. *Data Volume Produksi Perikanan Budidaya Pembesaran per Komoditas Utama (Ton)*. [https://statistik.kkp.go.id/home.php?m=prod\\_ikan\\_prov&i=2#panel-footer-kpda](https://statistik.kkp.go.id/home.php?m=prod_ikan_prov&i=2#panel-footer-kpda). Diakses pada 29 Agustus 2022 pada pukul 10.55.
- Steiner-Asiedu, M., Asiedu, D., & Njaa, L. 1991. Effect of Local Processing Methods (Cooking, Frying and Smoking ) on Three Fish Species from Ghana : Part 2 Amino Acids and Protein Quality & Leif Rein Njaa a. *Food Chemistry*, 41, 227–236.
- Sudhakar, M., Manivannan, K. dan Soundrapandian, P. 2009. Nutritive Value of Hard and Soft Shell Crabs of *Portunus Sanguinolentus* (Herbst). *J. of Animal and Veterinary Advances* 1(2):44-48.
- Sugiyono. 2017. *Metode Penelitian Kuantitatif, Kualitatif, dan RdanD*. Alfabeta, CV. Bandung.
- Sumardi, J.A. 2010. *Ikan Segar Mutu dan Cara Pendinginan Teknologi Hasil Perikanan*. Malang: Universitas Brawijaya.
- Sumiati, T. 2008. *Pengaruh Pengolahan Terhadap Mutu Cerna Protein Ikan Mujair (Tilapia massambica)*. Fakultas Pertanian Institut Pertanian Bogor, Bogor.
- Sun, Y., Chen, G., Cao, Z., dan Liu, C. 2022. Comparison of Biochemical Composition and Non-Volatile Taste Active Compounds of Back and Abdominal Muscles in Three Marine Perciform Fishes, *Chromileptes altivelis*, *Epinephelus akaara* and *Acanthopagrus schlegelii*. *Molecules*: 27(14). <https://doi.org/10.3390/molecules27144480>.
- Sundari D, Almasyhuri., dan Astuti L. 2015. *Pengaruh Proses Pemasakan Terhadap Komposisi Zat Gizi Bahan Pangan Sumber Protein*. Media Litbangkes, Vol. 25 No. 4. Kemenkes RI. Jakarta.
- Suprayitno, E., Sulistiyati, T.D. 2017. *Metabolisme Protein*. Malang: UB Press.

- Suryaningrum DT, Muljanah I, Tahapari E. 2010. Profil Sensori dan Nilai Gizi Beberapa Jenis Ikan Patin dan Hibrid Nasutu. *Jurnal Pascapanen dan Bioteknologi Kelautan dan Perikanan*. 5: 153-164.
- Susanto, H. 1989. *Pembenihan dan Pembesaran Gurame*. Penebar Swadaya. Jakarta.
- Suseno SH, Suptijah P, Wahyuni DS. 2004. Pengaruh Penambahan Daging Lumat Ikan Nilem (*Osteochilus hasselti*) pada Pembuatan Simping sebagai Makanan Camilan. *Buletin Teknologi Hasil Perikanan* 7(1): 44-55.
- Susilo, E. Y. 2009. *The Effect Of Formulation And Steaming Process Toward Glutamic Acid Concentration In Spirulina Based Flavor Enhancer* [Other Thesis]. Unika Soegijapranata Semarang. Semarang.
- Susilo, R., Suparmi dan Edison. 2017. Kajian Mutu Serbuk Perisa Alami dari Limbah Udang. *Jurnal Online Mahasiswa Fakultas Perikanan dan Ilmu Kelautan Universitas Riau*, 4(1): 1-9.
- Susiwi. 2009. *Penilaian Organoleptik*. Pendidikan Kimia FPMIPA Universitas Pendidikan Indonesia. Bandung.
- Suwetja, I.K. 2011. *Biokimia Hasil Perikanan*. Media Prima Aksara. Jakarta.
- Taheri, S., Motallebi, A.A., Fazlara, A., Aghababyan, A. and Aftabsavar, Y. 2012. Changes of Fatty Acid Profiles in Fillets of Cobia (*Rachycentron canadum*) During Frozen Storage. *Iranian Journal of Fisheries Sciences*, 11(1), 204-213.
- Thariq, A.S., Swastawati, F., Surti, T. 2014. Pengaruh Perbedaan Konsentrasi Garam pada Peda Ikan Kembung (*Rastrelliger neglectus*) terhadap Kandungan Asam Glutamat Pemberi Rasa Gurih (*Umami*). *Jurnal Pengolahan dan Bioteknologi Hasil Perikanan*. 3(3): 105-107.
- Theis, N., Brown, M.A., Wood, P., Waldron, M. 2021. Leucine Supplementation Increases Muscle Strength and Volume, Reduces Inflammation, and Affects Wellbeing in Adults and Adolescents With Cerebral Palsy. *The Journal of Nutrition*. 151(1): 59–64.
- Toth L, Potthast K. 1984. *Chemical Aspects of the Smoking of Meat and Meat Products*. Di dalam: Chichester CO (editor). *Advances in Food Research*. Academic Press Inc. New York.
- Utari, D.M., Rimbawan, R., Riyadi, H., Muhilal, M., Purwastyastuti, P. 2011. Potensi Asam Amino pada Tempe untuk Memperbaiki Profil Lipid dan Diabetes Mellitus. *Jurnal Kesehatan Masyarakat (National Public Health Journal)*.5(4): 166-170.

- Villanueva, R., J. Riba, C. Ruiz-Capillas, Gonzales, A.V., Baeta, M. 2004. Amino Acid Composition Of Early Stages Of Cephalopods And Effect Of Amino Acid Dietary Treatments On Octopus Vulgaris Paralarvae. *Aqualculture*, 242 :455-478.
- Vijayan, D. K., Jayarani, R., Singh, D. K., Chatterjee, N. S., Mathew, S., Mohanty, B. P., Sankar, T. V., Anandan, R. 2016. Comparative Studies on Nutrient Profiling of Two Deep Sea Fish (*Noepinnula orientalis*) and (*Chlorophthalmus corniger*) and Brackish Water Fish (*Scatophagus argus*). *The Journal of Basic and Applied Zoology*. 77: 41-48
- Veronika, R., John, W., dan Sons. 1999. *Practical High Performance Liquid Chromatography* (3rd ed.). ISBN 0-471- 98373-X.
- Wahbi, M. R. Karnila dan Edison. 2018. Profil Asam Amino Ikan Tembakul (*Periophthalmus minutis*) Jantan dan Betina. *Jurnal Online Mahasiswa Unri*. hal. 1-9.
- Wamiti J, Kogi-makau W, Ngala S, OnyangoFE. 2018. Effectiveness of Leucine Supplementation in the Management of Moderate Wasting in Children. *SM Journal of Food and Nutritional Disorders*. 4(1):1023.
- Widiastuti, I.M. 2007. Sanitasi dan Mutu Kesegaran Ikan Konsumsi pada Pasar Tradisional di Kota Palu. *Jurnal Agroland* 14(1): 77-81.
- Winarno, F. G. 1997. *Kimia Pangan dan Gizi*. Gramedia Pustaka Utama. Jakarta.
- Winarno, F. G. 2004. *Kimia Pangan dan Gizi*. Cetakan Kesebelas. PT. Gramedia Pustaka Utama. Jakarta.
- Winarno, F. G. 2008. *Kimia Pangan dan Gizi*. Jakarta: PT. Gramedia.
- Wiraningsih, V., Sukmiwati, M., Sumarto. 2018. Pengaruh Proses Pemasakan terhadap Perubahan Kandungan Protein dan Asam Amino Ikan Sembilang (*Paraplotosus albilabris*). *Berkala Perikanan Terubuk*. 46(1): 33-43.
- Wongso S, Yamanaka H. 1998. Extractive Components of the Adductor muscle of Japanese Baking Scallop and changes During Refrigerated Storage. *Journal of Food Science*. 63(5): 772-776.
- Wu, H.-C., & Shiau, C.-Y. 2002. Proximate Composition, Free Amino Acids and Peptides Contents in Commercial Chicken and Other Meat Essences. *Journal of Food Drug Analysis*, 10, 170–177.
- Xu, Y., D. Zhang, H. Liu, Z. Wang, T. Hui dan J. Sun. 2021. Comprehensive Evaluation of Volatile and Nonvolatile Compounds in Oyster Cuts of Roasted Lamb at Different Processing Stages Using Traditional Nang Roasting. *Foods*, 10 (1508): 1-18.

- Yamaguchi, K., dan K. Watanabe. 1990. Taste Active Component of Fish and Shellfish. *Science of Processing Marine Products, Vol 1*(Hyogo): 111–122.
- Yang JH, Lin HC, Mau JL. 2001. Non-Volatile Taste Components of Several Commercial Mushrooms. *Food Chem* 72:465–471.
- Zakaria, R. 2008. *Kemunduran Mutu Ikan Gurame (Osphronemus gouramy) Pasca Panen pada Penyimpanan Suhu Chilling* [Skripsi]. Insitut Pertanian Bogor. Bogor.
- Zhao CJ, Scheber A, Ganzle MG. 2016. Formation of Taste-Active Amino Acids, Amino Acid Derivatives and Peptides in Food Fermentations. *Food Research International*. 89: 39-47.