

DAFTAR PUSTAKA

- Abowe, J.F.N., 2009. The abundance condition factors and length-weight relationship of some *Sardinella madernensis* (Jenyns, 1842) from Nkoro River, Niger Delta, Nigeria. *Adv. Journal Food. Sciences. Technology*. 1 (1): 66-71
- Abidin, Z., Redjeki, S dan Ambariyanto. 2013. Studi kebiasaan makan ikan Layur (*Trichiurus lepturus*) di perairan pantai Bandengan Kabupaten Jepara dan di perairan Tawang Weleri Kabupaten Kendal. *Journal of Marine research*. 2 (3) : 95-103.
- Abaunza, P., Murta, A.G., Campbell, N., Cimmaruta, R., Comesana, A.S., Dahle G. 2008. Considerations on sampling strategies for an holistic approach to stock identification: The example of the HOMSIR project. *Fisheries Research*. 89 (2):104–113.
- Abdurahiman, K.P., Harishnayak, T., Zacharia, P.U and Mohamed, K.S. 2004. Length-weight relationship of commercially important marine fishes and shell fishes of the southern coast of Karnataka, India. *World Fish Centre Quarterly*. 27(1): 9-10
- Abu, O.M.G and Agarin, O.J. (2016). Length-Weight Relationship and Condition Factor of Silver Catfish (*Chrysichthys nigrodigitatus*) from the Lower Reaches of the New Calabar River Niger Delta. *International Journal of Innovative Studies in Aquatic Biology and Fisheries*, 2(4): 1-7.
- Affandi, R, S.S. Djadja, M.F. Rahardjo, Sulistiono. 1992. Iktiologi, suatu pedoman kerja laboratorium. IPB. 344 hlm.
- Aida, S. N. 2011. Panjang Bobot, kebiasaan makan dan faktor kondisi ikan Baung (*Mystus nemurus*) di sungai Batang Hari. *Seminar Nasional VIII Biologi Perikanan*. Universitas Gajah Mada .
- Ajah. P.O., Georgewill. M.N and Ajah. M.O. 2006. The food and feeding habits of five freshwater and brackish-water fish species in Nigeria. *African Journal of Aquatic Science*, 31(2): 313–318.
- Akombo, P.M., Akange, E.T., Adikwu, I.A. and Araoye, P.A. (2014). Length-weight relationship, condition factor and feeding habits of *Synodontis schall* (Bloch and Schneider, 1801) In river Benue at Makurdi, Nigeria. *International Journal of Fisheries and Aquatic Studies*, 1(3): 42-48.
- Akhtar, M. S., A. K. Pal., N. P Sahu., A. Ciji and P. C Mahanta. 2014. Higher acclimation temperature modulates the composition of muscle fatty acid of *Tor putitora* juveniles. *Weather and Climate Extremes*, 4 :19–21
- Alabssawy. A.N., Hassan. M. M., Khalaf-Allah. and Ahmed A. Gafar. A.A. 2019. Anatomical and histological adaptations of digestive tract in relation to food and feeding habits of lizardfish, *Synodus variegatus* (Lacepède, 1803). *Egyptian Journal of Aquatic Research*, 45 (2): 159-165.

- Alaert, G, dan Santika, S, S. 1984. Metode Penelitian air. Surabaya : Usaha Nasional
- Albouy, C., Guilhaumon, F., Villéger, S., Mouchet, M., Mercier, L., Culioli, J.M., Tomasini, J.A., Le Loc'h, F., Mouillot, D., 2011. Predicting trophic guild and diet overlap from functional traits: statistics, opportunities and limitations for marine ecology. *Marine Ecology Progress Series*, 436, 17—28.
- Allaya, H., Faleh, A.B., 1, Rebaya, M., Zrelli, S., Hattour, A., Quignard, J.P and Trabelsi, M. 2017. Morphological Differences Between two Populations of the Little Tunny, *Euthynnus alletteratus* (Rafinesque, 1810) in Tunisian Waters (Central Mediterranean Sea). *Pakistan Journal Zoology*, 49(5): 1621-1629.
- Alam, M. M., Jahan, S. N., Hussain, M. A., De, M., Goutham-Bharathi, M. P., BarrosoMagalhães, AL.B., A. Ghaffar Mazlan, A.G and Das Simon, K. 2013. Length-length relationship, length-weight relationship and condition factor of freshwater fish species of Bangladesh. *Aquaculture, Aquarium, Conservation & Legislation International Journal of the Bioflux Society* Volume, 6 (5): 498-509.
- Alikdodra, S.H. 2010. Teknik pengelolaan satwaliar dalam rangka mempertahankan keanekaragaman hayati Indonesia. IPB Press, edisi kedua.
- Ambak, M. A., A. A. Bolong., P. Ismail and B.M. Tam. 2006. Genetic variation of snakehead fish (*Channa striata*) populations using random amplified polymorphic DNA. *Biotechniques* 5 (1):104-110
- Ambily, V and Nandan, S.B. 2017. Studies on some aspects of reproductive biology of Shovelnose catfish, *Arius subrostratus* (Valenciennes, 1840) from Cochin estuary, India. *International Journal of Fisheries and Aquatic Studies*, 5(5): 165-171
- American Public Health Association (APHA). 1989. *Standard Methods For The Examination Of Water and Waste Water* . Ed ke-17. Washington D.C: APHA.
- Amin, M.R., M.F.A. Mollah., K. Taslima., Muhammadullah. 2013. Morphological observation and length-weight relationship of critically endangered riverine catfish *Rita rita* (Hamilton). *Pakistan Journal of Biological Sciences*. 17 (2) 234-240.
- Ando, H., M. Shahjahan and A. Hattori, 2013. Molecular neuroendocrine basis of lunar-related spawning in grass puffer. *General Comparative Endocrinology*, 181: 211-214.
- Antunes, R.S.P., R.D . Souza., A. J. Prioli., 2011. Genetic Variability of *Brycon orbignyanus* (Valenciennes, 1850) (Characiformes: Characidae) in Cultivated and Natural Populations of the Upper Paraná River, and Implications for the Conservation of the Species. *Archives of Biology and Technology Brazil*, 54(4): 839-848
- Arra, S., Sylla,S., Kouame, A.C., Zanbi, T.T., and Ouattara, M. 2018. Reproductive biology of the African moonfish, *Selene dorsalis* (Gill, 1862) (Carangidae) in continental shelf of Côte d'Ivoire fishery (West Africa). *International Journal of Fisheries and Aquatic Studies*. 6(2): 358-363

- Arifin, O. Z., Subagja, J., Prakoso, V. A., and Suhud, E. H. 2017. Effect of stocking density on growth performance of domesticated barb (*Barbonymus balleroides*). *Indonesian Aquaculture Journal*, 12 (1):1-6
- Arno, G. 2018. Kajian awal musim hujan dan awal musim kemarau di Indonesia. *Jurnal meteorologi dan geofisika*, 13 (1) : 1-8
- Arocha, F., and Barrio. 2009. Sex ratios, spawning seasonality, sexual maturity, and fecundity of white marlin (*Tetrapturus albidus*) from the western central Atlantic. *Fisherie. Research*, 95:98–111.
- Aryani, N., Nuraini and I Suharman. 2013. Morphological characterization of baung fish (*Hemibagrus nemurus*) aquatic habitat on the different method based Truss morfometrics. *Journal of Fisheries and Aquaculture*, 4 (3) : 139-142.
- Aryani, N., Hasibuan, S., Mardiah, A and Syandri, H. 2017. Morphometric Characteristics of Asian Catfish, *Hemibagrus wyckii* (Bleeker, 1858) (Bagridae), from the Riau Province of Indonesia. *Pakistan Journal of Biological Sciences*, 20 (8): 382-389.
- Aryani, N., Azrita., Mardiah, A and Syandri, H. 2017. Influence of Feeding Rate on the Growth, Feed Efficiency and Carcass Composition of the Giant Gourami (*Osphronemus goramy*). *Pakistan Journal of Zoology*, 49(5): 1775-1781.
- Arsyad, S. 2006. Konservasi Tanah dan Air. Bandung: Penerbit IPB (IPB Press)
- Aprilian E, Roesma, D.I and Tjong, D.H. 2016. Morphological variation of Bada fish (*Rasbora maninjau*, Lumbantobing) in Maninjau Lake, West Sumatra. *Journal of Entomology and Zoology Studies.*, 4(2): 541-544
- Ashida, H and Horie, M. 2015. Reproductive condition, spawning season, batch fecundity and spawning fraction of skipjack tuna *Katsuwonus pelamis* caught around Amami-Oshima, Kagoshima, *Japan Fisheries Science*, 81: 861-869
- Asdak, C. 2007. *Hidrologi dan pengelolaan daerah aliran sungai*. PPSDAL- Lembaga Penelitian UNPADJ. Gadjah Mada University Press. Yogyakarta. 620 hal.
- Ayotunde, E .O., Offem B.O. and Ada, F. B. (2012), “Assessment of heavy water profile of water, sediment and freshwater cat fish (*Chrysichthys nigrodigitus*, Siluriformes: Bagridae) of Cross River State, Nigeria”, *International Journal of Tropical Biology*, Vol. 60 No. 3, pp. 1289 -1301
- Azrita., Syandri, H., Dahelmi., Syaifullah dan Nugroho, E. 2013. Karakterisasi morfologi ikan bujuk (*Channa lucius*) pada perairan Danau Singkarak Sumatera Barat, Rawa Banjiran Tanjung Jabung Timur Jambi dan Rawa Banjiran Kampar Riau. *Jurnal Natur Indonesia.*, 15 (1):1-8
- Azrita., Syandri, H., Junaidi. 2014. Genetic variation among asang fish (*Osteochilus vittatus* : Cyprinidae) populations using random amplified polymorphic DNA (RAPD) markers. *International Journal of Fisheries and Aquatic Studies*, 1(6): 213-217

- Babare, R. S., Chavan S. P. and P. M. Kannevad. 2013. Gut Content Analysis of Wallago Attu and Mystus (Sperata) seenghala the common catfishes from Godavari River System in Maharashtra State. *Adv. Biology Research*, Vol 4 (2): Pp-123-128
- Badaii, F.A., Othman, Md.S., and Gasim, M.B. 2013. Water Quality Assessment of the Semenyih River, Selangor, Malaysia. *Journal of Chemistry*, 1-10.
- Banik S, Bhattacharya P. 2012. Ompok pabo (Hamilton, 1822) of Tripura, India: an endangered fish species in relation to some biological parameters. *Research Journal of Biology*, 2:91-97.
- Bailey, K. M. 1997. Structural dynamics and ecology of flatfish populations. *Journal of Sea Research*, 37(3-4):269-280
- Balon, E.K. 2004. About the oldest domesticates among fishes. *Journal of Fish Biology*, 65, 1-27.
- Balcome, S. R., S. E. Bunn, F. J. McKenzie-Smith & P. M. Davies. 2005. Variability of fish diets between dry and flood periods in an arid zone floodplain river. *Journal of Fish Biology*, 67(6): 1552-1567.
- Ballesteros, T. M., Torres-Mejia, M, and Ramirez-Pinilla, M. P. 2009. How does diet influence the reproductive seasonality of tropical freshwater fish? A case study of a characin in a tropical mountain river. *Neotropical Ichthyology*, 7(4):693-700
- Bacha M., Amara R., 2009 Spatial, temporal and ontogenetic variation in diet of anchovy (*Engraulis encrasicolus*) on the Algerian coast (SW Mediterranean). *Estuarine, Coastal and Shelf Science*, 85:257-264.
- Bardakci, F. and Skibinski, D. O. F. (1994), Application of RAPD technique in tilapia fish: species and subspecies identification. *Heredity*, 73, 117-123
- Barman, H. K., A. Barat, B. M. Yadav, S. Banerjee, P. K. Meher, P. V. G. K. Reddy and R. K. Jana. 2003. Genetic variation between four species of Indian major carps as revealed by random amplified polymorphic DNA assay. *Aquaculture*, 217:115-123.
- Barus, T. A. 2004. Pengantar Limnologi Studi Tentang Ekosistem Air Daratan. Medan: USU Press.
- Bazzoli, N. & E. Rizzo.1990. Acomparative cytological andcytological study of the oogenesis in ten brasilian te- leost fish species. Europe. *Archives of Biological Sciences*, 101: 399- 410
- Bhagawati, D., Abulias, M.N dan Amuranto, A. 2012. Karakter mulut dan variasi struktur gigi pada family bagridae yang tertangkap di sungai Serayu Kabupaten Banyumas. *Jurnal Depik*, 1 (3) : 144-148

- Bhardwaj, R. M. 2005.. Water quality monitoring in India—Achievements and Constraints. Inter-Secretariat Working Group on Environment Statistics (IWG-Env), International Work Session on Water Statistics, 20–22 June 2005, Vienna, Austria.
- Barman, H.K., Barat, A., Bharat, M., Yadav., Banerjee, S., Meher, P. K., Krishna Reddy, P. V. G., Jana, R. K. 2003. Genetic variation between four species of Indian major carps as revealed by random amplified polymorphic DNA assay. *Aquaculture*, 217:115-123
- Beaumont AR, Hoare K. 2003. *Biotechnology and Genetics in Fisheries and Aquaculture*. Blacwell Publishing.
- Bengen, D. G. 2000. Teknik Pengambilan Contoh dan Analisis Data Biofisik Sumberdaya Pesisir. Pusat Kajian Sumberdaya Pesisir dan Lautan. IPB. Bogor.
- Begum M., Pal H. K., Islam M.A., Alam M.J. (2010). Length-weight relationship and growth condition of *Mystus gulio* (Ham.) in different months and sexes. *University Journal of Zoology*, 28: 73-75.
- Begum, M., Akter, T and Minar, M. H. 2012. Analysis of the proximate composition of domesticated stock of Pangas (*Pangasianodon hypophthalmus*) in Laboratory Condition. *Environmental Sciences and Natural Resources*, 5(1): 69-74.
- Bennett, M.G and Kozak, J.P. 2015. Spatial and temporal patterns in fish community structure and abundance in the largest U.S. river swamp, the Atchafalaya River floodplain, Louisiana. *Ecology of Freshwater Fisheries*, 1-13.
- Bervian, G., N. F. Fontoura & M. Haimovici. 2006. Statistical model of variable allometric growth: otolith growth in *Micropogonias furnieri* (Actinopterygii, Sciaenidae). *Journal of Fisheries Biology*, 68: 196-208
- Bold, H. C and M. J. Wynne. 1985. Introduction to the Algae. 2nd Edition. Prentice Hall Inc. Engelwood Cliffs, New York.
- Boyd, C.E. 1988. *Water Quality in Ponds for Aquaculture*. Auburn University of Agriculture Experiment Station. Alabama, USA. 359 p.
- BMKG. 2016. Badan Meteorologi, klimatologi dan geofisika. <https://www.bmkg.go.id/tag/tag=meteorologi&lang=ID>
- Braich, O.S and Kaur, R. 2017. Temporal composition and distribution of benthic macroinvertebrates in wetlands. *Current Science*, 112 (1); 116-125.
- Buj, I., Podnar, M., Mrakovcic, M., Caleta, M., Mustafic P., Zanella, D. & Marcic, Z. 2008. Morphological and genetic diversity of *Sabanejewia balcanicain* Croatia. *Folia Zoology*, 57(1-2):100-110,
- Callejas. C and , M.D. Ochando, 2002. Phylogenetic relationships among *Spanish Barbusspecies* (Pisces, Cyprinidae) shown by RAPD. *Heredity*, 89:36–43.

- Callejas, C. and Ochando, M. D. 1998. Identification of Spanish barbel species using the RAPD technique. *Journal Fisheries Biology*, 53, 208-215
- Calvanti MJ, Monteiro LR, Lopes PRD. 1999. Landmark-based morphometric analysis in Selected Species of Serranid Fishes (Perciformes: Teleostei). *Zoological Studies*, 38: 287-294.
- Carvalho, G. R. and Pitcher, T.J. 1994. *Molecular genetics and fisheries*. Chapman and Hall. London.
- Cao, L., Song, B., J. zha., C. Yang., X. Gong., J. Li., W. Wang. 2009. Age composition, growth, and reproductive biology of yellow catfish (*Peltobagrus fulvidraco*, bagridae). *Environmental Biology of Fishes*, 86 : 75-88.
- Castillo-Rivera, M., Moreno, G & Iniestra, R. 1994. Spatial, seasonal, and diel variation in abundance of the bay anchovy, *Anchoa mitchilli* (Teleostei: Engraulidae), in a tropical coastal lagoon of Mexico. *The Southwestern Naturalist*, 39: 263-268
- Cerda, L, Calman, B. G, Lafleur Jr GJ, Limesand S. 1996. Pattern of vitellogenesis and ovarian follicular cycle of *Fundulus heteroclitus*. *General and Comparative Endocrinology*, 103: 24-35.
- Chaklader, M.R., Siddik, M.A.B., Hanif, M.A., Nahar, A., Mahmud, S and Piria, M. 2016. Morphometric and Meristic Variation of Endangered Pabda Catfish, *Ompok pabda* (Hamilton-Buchanan, 1822) from Southern Coastal Waters of Bangladesh. *Pakistan Journal of Zoology*, 48(3): 681-687.
- Chen, J., Hu, D., Zhang, C & Ding, Z. 2018. Temporal and spatial changes of macrobenthos community in theregions frequently occurring blackwater aggregation in Lake Taihu. 8: 517. DOI:10.1038/s41598-018-24058-y.
- Cheng, Q. 2010. Morphological variation of *Coilia Mystus* (Clupeiformes: Engraulidae) in Three Chinese Estuaries. *Journal of Life Sciences*, 4 (6) : 29-34
- Cherif M, Zarrad R, Gharbi H, Missaoui H, Jarboui O. 2008. Length-weight relationships for 11 fish species from the Gulf of Tunis (SW Mediterranean Sea, Tunisia). *American Journal of Aquatic Sciences*, 3, 1-5.
- Chong. L. K., S. G. Tan., K. Yusoff and S. S. Siraj. 2000. Identification and characterization of Malaysian river Catfish, *Mystus nemurus*(C&V): RAPD and AFLP Analysis. *Biochemical Genetics*, 38: 63-76.
- Croteau, M. N., L. Hare and A. Tessier. 2002. Influence of Temperature on Cd Accumulation by Species of the Biomonitor *Chaoborus*. *Journal of Oceanology and Limnology*, 47 (2): 505-514.
- Damjanovic K, Glauser G, Bshary R, Ros A. F. H. 2015. Intra- and interspecific social challenges modulate the levels of an androgen precursor in a seasonally territorial tropical Damsel fish. *Hormones and Behavior*, 71 (1): 75–82.

- Damsgard, B., A. M. Arnesen & M. Jobling. 1999. Seasonal patterns of feed intake and growth of hammerfest and spalbard arctic charr maturing at different ages. *Journal of Aquaculture*, 171 : 149-160
- Daniel and Imaobong, E. 2015. Proximate composition of three commercial fishes commonly consumed in Akwa Ibom State, Nigeria. *International Journal of Multidisciplinary Academic Research*, 3 (1): 2309-3218
- Darma B. 1995. Mengenal Gastropoda di Indonesia. Jakarta: LON-LIPI
- De Giosa, M., Czerniejewski, P. and Rybczyk, A. (2014). Seasonal Changes in Condition Factor and WeightLength Relationship of Invasive *Carassius gibelio* (Bloch, 1782) from Leszczynskie Lakeland, Poland. *Advances in Zoology*.
- Delariva, R.L., Agostinho, A.A., 2001. Relationship between morphology and diets of six neotropical loricariids. *Journal of Fisheries Biology*, 58 (3), 832-847.
- Dinh, Q. M., Qin, J.Q., Dittmann, S., Tran, D.C. 2016. Morphometric variation of *Parapocryptes serperaster* (Gobiidae) in dry and wet seasons in the Mekong Delta, Vietnam. *Ichthyological Research*, 63:267-274
- Dinesh, K. R.; Lim, T. M.; Chua, W. K. and Phang, V. P. E. 1993. RAPD analysis: an efficient method of DNA fingerprinting in fishes. *Zoological Science*, 10 : 849-854.
- Dinesh, K.R., Lim, T. M., Chua, K. L., Chan, W. K and Phang, V. P. E. 1996. Genetic variation inferred from RAPD fingerprinting in three species of tilapia. *Aquaculture International*, 4: 19-30.
- Direktorat Jendral Perikanan Tangkap. 2010. *Data statistik kelautan dan perikanan*. Kementrian Kelautan dan Perikanan
- Duarte, J. M.; Santos, J. B. and Melo, L. C. 1999. Comparison of similarity coefficients based on mRAPD markers in the common bean. *Genetics and Molecular Biology*, 22, 427-432
- Duarte, S., Araujo, F.G., Sales, A and Bazzoli, N. 2007. Morphology of Gonads, Maturity and Spawning Season of *Loricariichthys spixii* (Siluriformes, Loricariidae) in a Subtropical Reservoir. *Brazilian Archives of Biology and Technology*, 50 (6): 1019-1032.
- Dunham RA. 2002. Aquaculture and Fisheries Biotechnology. *Genetic Approach*. CABI Publishing. Cambridge, USA.
- Dunham, R.A. 2004. Aquaculture and Fisheries Biotechnology : Genetic Approaches. CABI publishing, UK. 372 pp.
- Effendi, H. 2003. *Telaah kualitas air bagi Pengelolaan Sumberdaya dan Lingkungan Perairan*. Kanisius. Jogjakarta. 257 hal.

- Effendi, H., Muslimah, S., and Prita Ayu Permatasari, P.A. 2017. Relationship between land use and water quality in Pesanggrahan River. *Earth and Environmental Science*, 149: 1-10
- Effendie, M.I. 2006. *Biologi Perikanan*. Yayasan Pustaka Nusatama. Yogyakarta.
- Effiong, B.N and Fakunle, J.O. 2011. Proximate and mineral composition of some commercially important fishes in Lake Kainji, Nigeria. *Journal of Basic and Applied Scientific Research*, 1(12): 2497 -2500
- Ekokotu, P. A. and Olele, N. F.(2014). Cycle of Gonad Maturation, Condition Index and Spawning of *Clarotes Laticeps* (Claroteidae) In the Lower River Niger. *International Journal of Fisheries and Aquatic Studies*, 1(6): 144-150
- El-Kader, H.A., Z.G. Abdel-Hamid and K.F. Mahrous. 2013. Genetic Diversity among Three Species of *Tilapia* in Egypt Detected by Random Amplified Polymorphic DNA Marker. *Journal of Applied Biological Sciences*, 7 (2). 57- 64.
- Eisakhani, M and Malakahmad, A. 2009. Water quality assessment of bertam river and its tributaries in Cameron Highlands, Malaysia, *World Applied Sciences Journal*, 7: 769–776.
- Elo, K., Ivanoff, S., Jukka, A., Vuorinen, J. A and Piironen, J. 1997. Inheritance of RAPD markers and detection of interspecific hybridization with brown trout and Atlantic salmon. *Aquaculture*, 152:55-56.
- Erlangga. 2011. Analisis histology Ginjal ikan Baung (*Hemibagrus Nemurus*) yang terindikasi pencemaran di perairan sungai Kampar, Riau. *Berkala Perikanan Terubuk*, 39 (1) ; 1- 14
- Esguicero, A.L.H. and Arcifa, S.A., 2010. Fragmentation of a Neotropical migratory fish population by a century-old dam. *Hydrobiologia*, 638: 41–53
- Esenowo, I.K., Ugwumba, A.A.A and Akpan, A.U. 2017. Evaluating the Physico-chemical Characteristics and Plankton Diversity of Nwaniba River, SouthSouth Nigeria. *Asian Journal of Environment & Ecology*, 5(3): 1-8.
- Esteves, K.E and Pinto Lobo, A.V. 2001. Feeding pattern of *Salminus maxillosus* (Pisces, Characide) at Cachoeira das emas , Mogi-Guacu River (Sao Paulo State, Southeast Brazil). *Revista Brasileira de Biologia*, 61(2): 267-276
- Fadekemi, I.Y., Oluwayemisi, A.E and Adekunle, D.A. 2018. Aspects of the reproductive biology of *Elops lacerta* (valenciennes, 1847) from Epe Lagoon, South Western Nigeria. *International Journal of Fisheries and Aquatic Studies*, 6(2): 442-448
- Fahrul, M. F, 2007, Metode Sampling Bioekologi. Jakarta
- Fardiaz, S. 1992. Polusi Air dan Udara. Yogyakarta : Kanasius.
- Ferreira, D. G., L. Souza-Shibatta., O. A. Shibatta., S. H. Sofia., J. Carlsson., J. H.P. Dias.,S. Makrakis and M. C. Makrakis, 2017. Genetic structure and diversity of

migratory freshwater fish in a fragmented Neotropical river system. *Reviews in Fish Biology and Fisheries*, 27:209–231.

Finkeldey, R. 2005. *An Introduction to Tropical forest Genetics*. Germany: Georg-August University Gottingen. 231 pp.

Florence, W.K., Hulley, P.A., Stewart, B.A and Gibbons, M.J. 2002. Genetic and morphological variation of the lanternfish *Lampanyctodes hectoris* (Myctophiformes: Myctophidae) off southern Africa. *South African Journal of Marine Science*, 24: 193–20

Frankham, R.1996. Relationship of genetic variation to population size in wildlife. *Conservation of Biology*, 10 (6):1500-1508.

Franssen NR, Harris J, Clark SR, Schaefer JF, Stewart LK (2013) Shared and unique morphological responses of stream fishes to anthropogenic habitat alteration. *Proceedings of the Royal Society*, B280: 20122715

Fontoura, N.F., Anamélia S. Jesus, A.S., Gabriel G. Larre, G.G and Porto, J.R. 2010. Can weight/length relationship predict size at first maturity? A case study with two species of Characidae. *Neotropical Ichthyology*, 8(4):835-840

Froese R. 2006. Cube law, condition factor and weight-length relationships: History, meta-analysis and recommendations. *Journal of Applied Ichthyology*, 22, 241-253.

Fujaya, Y. 2004. *Fisiologi Ikan Dasar Pengembangan Teknik Perikanan*. Cetakan pertama. Rineka Putra. Jakarta.

Galineau, A., G. Corraze., T Boujard., L. Larroquet and S. Kaushik. 2001. Relation Between dietary lipid level and voluntary feed intake, growth, nutrient gain, lipid deposition and hepatic lipogenesis in rainbow trout. *Journal Reproduction Nutrition Development* 41 : 487 - 503

Gardner EJ, Simmon MJ, Snustad PD. 1991. *Population and Evolutionary Genetics*. Chichester Brisbane, New York.

Garg RK, Saikar P, Silawat N and Mehtorta NN. 2009. Genetic Polymorphism of Two Populations of Catfish *Aorichys seenghala* (skyees) using RAPD Fingerprint. *International journal of Zoology*, 3.130-134.

Gast, L., Vilar, M.A., Vilar, M., C.P., AuJo, M. K and oliveira, M.C. 2014. Vertical and temporal variation in phytoplankton assemblages correlated with environmental conditions in the Mundaú reservoir, semi-arid northeastern Brazil. *Brazil Journal of Biology*, 74 (3): 93-102

Olizadeh, M., A. Yahya, A. Talib, O. Ahmad. 2012. Effects of environmental factors on polychaete assemblage in Penang National Park, Malaysia. *World Academy of Science, Engineering and Technology Journal*, 72: 669–672

- Gholizadeh, M., A. Yahya, A. Talib, O. Ahmad. 2012. Effects of environmental factors on polychaete assemblage in Penang National Park, Malaysia. *Word Academy of Science, Engineering and Technology Journal*, 72: 669–672.
- Gholizadeh, M., A. Yahya, A. Talib, O. Ahmad. 2012. Effects of environmental factors on polychaete assemblage in Penang National Park, Malaysia. *Word Academy of Science, Engineering and Technology Journal*, 72: 669–672
- Giljanovic, S.N. 2005. The quality of water resources in Dalmatia. *Environmental Monitoring and Assessment*, 104: 235–267.
- Goldman CR & Horne AJ. 1983. *Limnology*. Mc Graw-Hill International Book Company. Tokyo. 464 p.
- Goloso, V.N., Ivanova, N.N., Gusarov, A.V, Sharifullin, A.G., 2017. Assessment of the Trend of Degradation of Arable Soils on the Basis of Data on the Rate of Stratozem Development Obtained with the Use of ¹³⁷Cs as a Chronomarker. *Eurasian Soil Science*, 50 (10), 1195–1208
- Gonzalez, P. & C. Oyarzun. 2003. Diet of the chilean sandperch *Pinguipes chilensis* (Perciformes, Pinguipedidae) in southern Chile. *Journal of Applied Ichthyology*, 19(6): 371-375
- Gupta, S. 2014. Morphology, growth pattern, feeding and reproductive biology of *Mystus gulio* (HamiltonBuchanan, 1822) (Siluriformes: Bagridae). *International Journal of Aquatic Biology*, 2(4): 201-205
- Gupta S. & S. Banerjee. (2012). Indigenous ornamental fish: a new boon in ornamental fish trade of West Bengal. *Fishing Chimes*, 32: 130-134.
- Gupta, S & S. Benerje. 2013. Studies on reproductive biology of *Mystus tengara* (Ham.-Buch., 1822), a freshwater catfish of West Bengal, India. *International Journal of Aquatic Biology*, 1(4) : 175-184
- Gupta S. & S. Banerjee. 2013. Fecundity Estimation of *Mystus tengara* (Ham.Buch., 1822), A Freshwater Catfish from West Bengal, India. *Indian Journal of Applied Research*, 3 (6) : 36-37.
- Gupta. S. 2014. A review on *Mystus cavasius*, a popular food fish of Indian subcontinent. *International Journal of Fauna and Biological Studies*, 1 (6): 27-31
- Gupta, S and Banerjee, S. 2014. Food and Feeding Habit of a Freshwater Catfish, *Mystus tengara* (Siluriformes: Bagridae). *Journal of Ichthyology*. 54(9) : 42–748.
- Gupta, S. 2014. Morphology, growth pattern, feeding and reproductive biology of *Mystus gulio* (HamiltonBuchanan, 1822) (Siluriformes: Bagridae). *International Journal of Aquatic Biology*, 2(4): 201-205
- Gustiano, R, Kontara, E.K., Wahyuningsih, H, Subagja J., Asih, S., Saputra, A. 2013. Domestication of Mahseer (*Tor soro*) in Indonesia. *Fish & Shellfish Larviculture Symposium*, Ghent University. 165-168 p.

- Haryono. 2001. Variasi Morologi dan Morfometri Ikan Dokun (*Puntius lateristriga*) di Sumatera. *Jurnal Biota*, 6 (3): 109-116.
- Haniffa, M. A. (2009). Native catfish culture-a technology package for fish farmers. *Aquaculture Asia Magazine*, 14(3): 22-24.
- Hasri, I, Kamal, M.M dan Zairion. 2011. Pertumbuhan dan Laju Eksploitasi ikan Endemik Rasbora tawarensis (Weber and de Beaufort, 1916) di Danau Laut Tawar, Aceh Tengah. *Jurnal Ikhtiologi Indonesia*, Vol 11 No. 1 Hal. 21 – 28.
- Hayes, D.B., Ferreri, C. P and Taylor, W. 1996. Linking fish habitat to their population dynamics. *Canadian Journal of Fisheries and Aquatic Sciences*, 53:383– 390.
- Hatanaka, T and Pedro Manoel Galetti Jr, P. M. 2003. RAPD markers indicate the occurrence of structured populations in a migratory freshwater fish species. *Genetics and Molecular Biology*, 26 (1) : 19-25
- Hee, N. H. 2002. [The identity of *Mystus nigriceps* \(Valenciennes in Cuvier & Valenciennes, 1840\), with the Description of a New Bagrid Catfish \(Teleostei: Siluriformes\) from Southeast Asia.](#) *The Raffles Bulletin of Zoology*, 50 (1): 161–168.
- Heltonika, B., ffandi, R dan Supriatna, I. 2016. Pendugaan ukuran pertama kali matang gonad ikan Senggaringan (*Mystus nigriceps*) di sungai klawing, purbalingga jawa tengah. *Jurnal Akuakultur Rawa Indonesia*, 4(1) :22-26.
- Hien, D. V & S. Doolgindachbaporn. 2011. Effect niacin and folic in feed ration on growth and live weight of Green Catfish (*Mystus nemurus* Valenciennes 1840). *Pakistan Journal of Biology Sciences*, 14(1) : 64-68.
- Horinouchi M, Kume G, Yamaguchi A, Toda K, Kurata K (2008) Food habits of small fishes in a common reed *Phragmites australis* belt in Lake Shinji, Shimane, Japan. *Ichthyological Research*, 55:207–217
- Hossain, M.Y., Ahmed, Z.F., Leunda, P.M., Jasmine, S., Osoz, J., Mirana, R., and Ohtom, J. 2006. Condition, length–weight and length–length relationships of the Asian striped catfish *Mystus vittatus* (Bloch, 1794) (Siluriformes: Bagridae) in the Mathabhanga River, southwestern Bangladesh. *Journal of Applied Ichthyology*, 22: 304–307.
- Hossain, M.Y., Ahmed, Z. F., Ohtomi, J., Ibrahim A.H., El-kady, M. A. H., Fulanda, B and Chakraborty, S.K. 2008. Threatened fishes of the world: *Wallago attu* (Bloch and Schneider, 1801) (Siluriformes: Siluridae). *Environmental Biology of Fishes*, 82:277–278.
- Hossain, M.Y., Rahman, M. M and Abdallah, E.M. 2012. Relationships between Body Size, Weight, Condition and Fecundity of the Threatened Fish *Puntius ticto* (Hamilton, 1822) in the Ganges River, Northwestern Bangladesh. *Sains Malaysiana*, 41(7): 803–814

- Hubert, W.A and Alexander, C.A. 1995. Observer Variation in Counts of Meristic Traits Affects Fluctuating Asymmetry. *Journal of Fisheries Management*, 15(1): 156-158.
- Hyslop, E. J. 1980. Stomach contents analysis-a review of methods and their application. *Journal Fishereis of Biology*, 17 : 1-429
- IUCN. 2015. Redlist of Least Concern [ver 3.1](http://www.redlist.org), Species www.redlist.org.
- Iyabo, U. B. 2016. Food, Feeding Habit and Condition Factor of *Schibe mystus* in Mid Cross River Flood System, *Southeastern Nigeria*. *The American Association for Science and Technology*, 3 (5); 2375-3803
- Iskandar, J dan Y. Dahiyat, 2012. Keaneka ragaman ikan di sungai Siak Riau. *Bionatura-Jurnal Ilmu-ilmu Hayati dan Fisik*, 14 (1) : 51 – 58.
- Islam, M.S., A. S. I. Ahmed., M. S. Azam and M. S. Alam, 2005. Genetic analysis of three River Populations of Catla catla (HAMILTON) using randomly amplified polymorphic DNA markers. *Asian-Aust. Journal of Animal Science*, 18 : 453-457.
- Jamsari. 2007. *Bioteknologi Pemula*. Unri Press Pekanbaru. 193 hal.
- Jeffries, M. and D. Mills. 1996. *Freshwater Ecology, Principles and Applications*. John Wiley and Sons. Chichester, UK. 285 p.
- Johansson. F., Radman. P and Andersson. J. 2006. The relationship between ontogeny, morphology, and diet in the Chinese hook snout carp (*Opsariichthys bidens*). *Ichthyological Research*, 53: 63–69
- Jhonatan, F., Setyawati, T.R and Linda, R.2016. Keanekaragaman Makrozoobentos di Aliran Sungai Rombok Banangar Kabupaten Landak Kalimantan Barat. *Protobiont*, 5 (1) : 39-45
- Kamal, M.M., Supriyadi, Wibowo, A., Kuhaja, T., Sudarisman, R., Rojayati, A.2010. Potensidampak faktor antropogenik dan perubahaniklim terhadap biodiversitas ikan perairan umumdi Pulau Sumatera. *Prosiding Seminar NasionalIkan VI dan Kongres Masyarakat Iktiologi III* : 391-400.
- Kaneko S, Kanou K, Sano M (2016) Food habits of salt marsh fishes in Lake Hinuma, Ibaraki Prefecture, central Japan. *Fisheries Science*, 82:631–637
- Khalaf-Allah, H.M.M., 2013. Morphological adaptations of digestive tract according to food and feeding habits of the broomtail wrasse, *Cheilinus lunulatus*. *Egypt. Journal of Aquatic Biology and Fisheries* , 17 (1), 123–141.
- Khan MA, Sabah. 2013. Length-weight and lengthlength relationships for five fish species from Kashmir Valley. *Journal of Applied Ichthyology*, 29, 283-284.
- Khedkar, G. D., Reddy, C. S., Mnaa, P., Ravinder, K., Muzumdar, K. 2010. *Clarias batrachus* (Linn.1758) population is lacking genetic diversity in India. *Molecular Biology Report*, 37:1355–1362.

- Kaoueche, M., Sfar, L.B., Hammami, I and Hassine, O. K. B. 2017. Morphometric variations in white seabream *Diplodus sargus* (Linneus, 1758) populations along the Tunisian coast. *Oceanologia*, 59 : 129-138
- Khoo G, Lim KF, Gan DKY, Chen F, Chan WK, Lim TM. (2002). Genetic diversity within and among feral populations and domesticated strains of the guppy (*Poecilia reticulata*) in Singapore. *Marine Biotechnology*, 4:367–378
- King, M. 1995. *Fisheries Biology*. Assesment and Management. Fishing News Books, Blackwell Science Ltd.
- Koffi, B.K., Barte, S and Kone, T. 2014. Length-weight Relationships of 30 Fish Species in Aby Lagoon, Southeastern Cote d'Ivoire. *Journal of Biological Sciences*, 6(4): 173-178
- Komari, N., U. Irawati., dan E. Novita. 2013. Kandungan kadmium dan seng pada ikan baung (*Hemibagrus nemurus*) di perairan Trisakti Banjarmasin Kalimantan Selatan. *Sain dan terapan kimia*, 7 (1) :42-49.
- Konana KM, Adépo-Gourèneb AB, Ouattaraa A, Nyingyc WD, Gourènea G (2010) Morphometri variation among male populations of freshwater shrimp *Macrobrachium vollehovenii* Herklots, 1851 from Côte d'Ivoire Rivers. *Fisheries Reseacrh*, 103:1–8
- Kottelat, M., S.N. Kartikasari., A.J. Whitten dan S. Wirjoatmodjo. 1993. *Freshwater Fishes of Western Indonesia and Sulawesi*. Ed. Dua bahasa. Periplus Editions Limited. Jakarta. 293 hal
- Kozloff, E.N. Phylum Mollusca (Snail, Claims, Octopuses, and Their Relatives) : Invertbrates. Saunders College Publishing: 367-464.
- Krabbenhoft, T. J., Collyer, M. L. & Quattro, J. M. 2009 Differing evolutionary patterns underlie convergence on elongate morphology in endemic fishes of Lake Waccamaw, North Carolina. *Biological Journal of the Linnean Society*, 98, 636 – 645
- Kramer, K. and H. Lange-Bertalot. 1991. Bacillariophyceae: Centrales, Fragillariaceae and Eunotiaceae. Sußwasserflora von mitteleuropa. VEB Gustav Fiescher Verlag. Jena.
- Krebs, C.J. 1985. Ecology. The Experimental Analysis of Distribution and Abundance. Third Edition. Harper Collins Publisher. New York,
- Krismono, Adriani, Siti Nuroniah dan H. Satria. 1992. Penelitian Pendahuluan Dampak Budidaya Ikan dalam Keramba Jaring Apung Terhadap Perairan Waduk Saguling. *Bull. Penel. Perikanan Darat*, 11 (2): 8-19.
- Kumar V, Singh PK, Dudhane AS, De DK, Satya P. 2014. Anatomical and morphological characteristics of nine jute genotypes. *Journal of Crop and Weed*, 10 (2): 334-339

- Kumar, N.S., G. Gurusubramanian. 2011. Random Amplified Polymorphic DNA (RAPD) Markers and Its Applications. *The Scientific Visualization*, 11(3). Pp. 116-124
- Kumla, S., S. Doolgindachbaporn., R. Sudmoon and N. Sattayasai, 2012. Genetic variation, population structure and identification of yellow catfish, *Mystus nemurus*(C&V) in Thailand using RAPD, ISSR and SCAR marker. *Molecular Biology Reports*, 39:5201–5210.
- Kurian, M & N. D. Inasu. 2003. Reproductive biology of a catfish *Horabagrus brachyysoma* (Gunther) from inland waters of Central Kerala, India. *Journal of the Inland Fisheries*, 35 (1) :1-7
- Kusmini, I.I., Nugroho, E., Alimuddin dan Mulyasari. 2010. Karakteristik genotype hibrida Huna Biru (*Cherax albartisli*) dengan Huna Capitmerah (*Cherax quardricarinatus*). *Jurnal Riset Akuakultur*, 5 (2) : 191-197.
- Kusmini, I.I., Gustiano, R., Mulyasari., Iskandariah dan Huwoyon, G. H. 2015. Ikan lokal tengadak (*Barbonymus schwanenfeldii*) asal Kalimantan sebagai andalan untuk ikan budidaya. *Prosiding Seminar Nasional Ikan ke-8*. Jakarta, Indonesia. Masyarakat Ikhtiologi Indonesia. pp. 177-187
- Kusmini, I. I dan Radona, D. 2019. Performa tiga generasi ikan baung *Hemibagrus nemurus* (Valenciennes, 1840) hasil domestikasi pada fase pendederan satu. *Jurnal Ikhtiologi Indonesia*, 19(2): 187-193.
- Leary, R.B., Allendorf, F.W., and Knudsen, K.L. 1985. Developmental Instability and High Meristic Counts in Interspecific Hybrids of Salmonid Fishes. *Evolution*, 39 (6) : 1318-1326.
- Leesanga S, Siraj SS, Daud SK, Sodsuk PK, Tan SG, Harmin SA (2004) Intraspecific polymorphism in *Mystus nemurus*(C&V) detected by RAPD-PCR fingerprinting. *Pertanika Journal of Tropical Agricultural Science*, 27(1):11–20
- Liang, S.H., Wu1, H.P and Shieh, B.S. 2005. Size Structure, Reproductive Phenology, and Sex Ratio of an Exotic Armored Catfish (*Liposarcus multiradiatus*) in the Kaoping River of Southern Taiwan. *Zoological Studies*, 44(2): 252-259.
- Lim, K. K. P. & H. H. Ng, 2008. *Pseudomystus heokhuii*, a new species of bagrid catfish from Sumatra (Teleostei: Bagridae). *Zootaxa*, 1686: 37–47.
- LIPI . 2010. Ikan di Indonesia. On line .http://www.biologi.lipi.go.id/bio_english. [akses tanggal 12 Januari 2015 jam 22:34 WIB].
- Liu, J., Zhang, X., Xia1 J., Wu, S., She, D and Zou, L., 2016. Characterizing and explaining spatio temporal variation of water quality in a highly disturbed river by multi statistical techniques. *SpringerPlus*, 5:1-17
- Liu, Y. G., Chen., S. L and Li, B. F. 2007. Genetic differentiation among common and selected hatchery populations of flounder: evidence from RAPD markers. *Biochemical Systematics and Ecology*, 35 (10) :689–695

- Liu, Z. J and Cordes, J. F. 2004. DNA marker technologies and their applications in aquaculture genetics. *Aquaculture*, 238 : 1 – 37
- Lostrom, S., Jonathan, P., Evans., Pauline, F., Grierson., Shaun, P.C., Peter, M. D and Jennifer, L. K. 2015. Linking stream ecology with morphological variability in a native freshwater fish from semi-arid Australia. *Ecology and Evolution*, 5(16): 3272–3287
- Makmur S dan D. Prasetyo. 2006. Kebiasaan makan, tingkat kematangan gonad dan fekunditas ikan Haruan (*Channa striata*) di suaka perikanan Sambujur DAS Barito Kalimantan Selatan. *Jurnal ilmu perairan dan perikanan Indonesia*, 13(1): 27-34.
- Maltagliati, F and Camili, L. 2000. Temporal genetic variation in a population of *Aphanius fasciatus* (Cyprinodontidae) from a brackish-water habitat at Elba Island (Italy). *Environmental Biology of Fishes*, 57: 107–112
- Manikandarajan, T., Eswar, A., Anbarasu, R., Ramamoorthy, K. and Sankar, G. 2014. Proximate, Amino Acid, Fatty Acid, Vitamins and Mineral analysis of Catfish, *Arius maculatus* and *Plotosus lineatus* from Parangipettai South East Coast of India. *Journal of Environmental Science, Toxicology and Food Technology*, 8 (5): 2319-2399
- Martins, C.; Wasko, A. P.; Oliveira, C. and Foresti, F. 2003, Mitochondrial DNA variation in wild populations of *Leporinus elongatus* from the Paraná River basin. *Genetics and Molecular Biology*, 26, 33-38
- Mansor, M.I., Che Salmah, M.R., Rosalina, R., Shahrul Anuar, M.S. & Amir Shah Ruddin, M.S. 2010. Length-weight relationships of freshwater fish species in Kerian River Basin and Pedu Lake. *Research Journal of Fisheries and Hydrobiology*, 5(1) 1-8.
- Mc Dowel, D. M, and O'Connor BA 1997. Hydraulic Behaviour of Estuaries . London : The McMilan Press, Ltd.
- Medrado, A. S., Figueiredo, A. V. M., Waldschmidt, A. M., de Mello Affonso, P. R. A and Carneiro, P. L. S. 2008. Cytogenetic and morphological diversity in populations of *Astyanax fasciatus* (Teleostei, Characidae) from Brazilian northeastern river basins. *Genetics and Molecular Biology*, 31(1): 208-214
- Mendoza PB, G. Marquez, S Ugarte and R Noguera. 2005. Reproductive biology of *Oreochromis niloticus* (Perciformes: Cichilidae) at Emiliano Zapata dam. Morelos. Mexico. *Revista de Biología Tropical*, 53 (3-4): 515-522
- Merina, G., Afrizal S, dan Izmiarti. 2014. Komposisi dan Struktur Komunitas Fitoplankton di Danau Maninjau Sumatera Barat. *Jurnal Biologi Universitas Andalas*, 3(4) : 267-274.
- Michael, T. 1986. Ecological Methods for Field and Laboratory Investigations. USA. Tata McGraw-Hill Publishing

- Mijkherjee M., A. Praharaj & S. Das. 2002. Conservation of Endangered Fish Stocks Through Artificial Propagation and Larval Rearing Technique in West Bengal, India. *Aquaculture Asia*, 7(2): 8-11.
- Mirza, Z.S., Nadeem, M. S., Beg, M.A., and Malik, I.U. 2013. Spatial and Temporal Fluctuations in the Physico-Chemical Limnology of Mangla Dam (Pakistan). *Pakistan Journal of Zoolology*, 45(3) : 679-686.
- Misra, R. K. and Easton, M. D. L. 1999. A note on the number of morphometric characters used in fish stock delineation studies employing a MANOVA. *Fisheries Research*, 42:191-194.
- Mitu, N. R and Alam, M. M. 2014. Ovarian Development, Reproductive Cycle and Fecundity Indices in *Mystus tengara* (Hamilton, 1822). *Journal of Biological and Chemical Research*, 31 (2): 740-747.
- Mitu, N. R and Alam, M. M., Hussain, M.A., Hasan, M.R., Singha, A.C. 2019. Length-weight and length-length relationships, sex ratio and condition factors of the Asian striped dwarf catfish *Mystus tengara* (Hamilton, 1822) (Siluriformes: Bagridae) in the Ganges River, Northwestern Bangladesh. *Iranian Journal of Ichthyology*, 6(1): 21-30
- Mondal, A and Mitra, A. 2016. Growth, food and feeding habit with prey preference of long whiskered catfish, *Mystus gulio* (Hamilton, 1822) in brackishwater traditional impoundments of Sundarban, India. *International Journal of Fisheries and Aquatic Studies*, 4(6): 49-58
- Montana, C.G., Choudhary, and Winemiller, K.O. 2011. Compositional trends of fisheries in the riverganges, India. *Fisheries Management And Ecology*, 18: 282–296.
- Moyle, P. B & J. J Cech. 2004. *Fishes: An Introduction to Ichthyology*. 5th edition. New Jersey: Prentice-Hall, Inc
- Muller B. A., U. Schneiderat., D. Dhesparasith., H. G. Schwark. 2002. Artificial reproduction of Asia greencatfish (*Mystus nemurus*): trials to obtain high quality sperm from alive males. Abstrak Challenge to organic farming and sustainable land use in the tropics and subtropics. Deutr Tropentag Witzenhausen.
- Muneer. P. M. A., A. Gopalakrishnan., K. K. Musammilu., V. V. Mohindra., K. K. Lal., S. Basheer and W. S. Lakra. 2009. Genetic variation and population structure of endemic yellow catfish, *Horabagrus brachysoma* (Bagridae) among three populations of Western Ghat region using RAPD and microsatellite markers. *Molecular Biology Report*, 36 : 1779-1791.
- Muneer PM, Gopalakrishnan A, Shivanandan R, Basheer VS, Ponniah AG (2011) Genetic variation and phylogenetic relationship between two species of yellow catfish, *Horabagrus brachysoma* and *H.nigricollaris* (Teleostei: Horabagridae) based on RAPD and microsatellite markers. *Molecular Biology Report*, 38:2225–2232.

- Murta, A. G. 2000. Morphological variation of horse mackerel (*Trachurus trachurus*) in the Iberian and North African Atlantic: Implications for stock identification. *Journal of Marine Science*, 57(4):1240-1248
- Muslim, M. 2019. Teknologi pembenihan ikan gabus (*Channa striat*). *Jurnal Ruaya*, 7 (2): 21-25.
- Mustapha, A., Aris, A.Z., Ramli, M.F., and Juahir, H. 2014. Spatial-temporal variation of surface water quality in the downstream region of the Jakara River, northwestern Nigeria: A statistical approach. *Journal of Environmental Science and Health*, 47 : 1551–1560
- Nahdi, A.A., Leaniz, C.G and King, A.J. 2016. Spatio-Temporal Variation in Length-Weight Relationships and Condition of the Ribbon fish *Trichiurus lepturus* (Linnaeus, 1758): Implications for Fisheries Management. *Plos One*, 1-14
- Ndiwa, T.C., Nyingi, D.W., Claude, J and Agnese, J.F. 2016. Morphological variations of wild populations of Nile tilapia (*Oreochromis niloticus*) living in extreme environmental conditions in the Kenyan Rift-Valley. *Environmental of Biology Fisheries*, 99:473–485
- Length-Weight relationship and condition factor of tilapia species grown in marine and fresh water Nehemia, P.A., Maganira, D.J and Rumisha, C. 2012. *Agriculture and biology journal of north American*, 3(3): 117-124
- Nofrita., Dahelmi., Syandri,H and Tjong, J.H. 2015. Morphological differentiation between Bilih Fish (Cyprinidae: *Mystacoleucus padangensis*, Bleeker) in Singkarak Lake and Anai River, West Sumatra, Indonesia. *Journal of Entomology and Zoology Studies*, 3(5): 171-175
- Nagahama.Y. 1994. Endocrine regulation of gametogenesis in fish. *Int. Journal Topic Developmental Biology*, 30 : 217-229
- Negi, R.K and Mamgain, S. 2013. Species diversity, abundance and distribution of Community and conservation status of Tons river of Uttarakhand State, India. *Journal of Fisheries and Aquatic Science*, 8 (5): 617-626.
- Nei, M. 1978. Estimation of average heterozygosity and genetic distance from a small number of individuals. *Genetics*, 89: 583-590
- Nei, M. 1987. *Molecular Evolutionary Genetics*. New York. Columbia University Press. 1596-1599.
- Nei, M and Kumar, S. 2000. *Molecular evaluation and Pylogenetics*. Oxford University Press. United States.
- Ng, P. K. L & H. H. Ng. 1995. *Hemibagrus gracilis*, a new species of large riverine catfish (Teleostei : Bagridae) from Peninsular Malaysia. *The Raffles Bulletin of Zoology*, 43 (1) 133-142

- Ng, H. H. 2002. The Identity Of *Mystus nigriceps* (Valenciennes In Cuvier & Valenciennes, 1840), With The Description Of A New Bagrid Catfish (Teleostei: Siluriformes) From Southeast Asia. *The Raffles Bulletin of Zoology* , 50(1): 161-168
- Ng, H.H. 2019. *Mystus nigriceps*. *The IUCN Red List of Threatened Species* 2019: e.T89823163A89823197. <https://dx.doi.org/10.2305/IUCN.UK.20193.RLTS.T89823163A89823197.en>. Downloaded on 14 August 2019.
- Ng, H. H & D. G. Buth . 2003. *Mystus Impluviatus* : A new spesies of bagridae catfish (teleostei : bagridae) from eastern Borneo. *Copela*, 2: 373-378.
- Nugroho E, Hadie W, Subagja J, Kurniasih T. 2005. Genetic and morphometric variation of the green catfish (*Mystus nemurus*) from Jambi, Wonogiri and Jatiluhur. *Indonesia Journal of Fisheries Research*, 11(7):1-6.
- Nurhidayati, L., Arfiani F.N dan Retnoaji B. 2017. Indeks Gonadosomatik dan Struktur Histologis Gonad Ikan Uceng (*Nemacheilus fasciatus*, Valenciennes in Cuvier and Valenciennes, 1846). *Biosfera*, 34 (2): 67-74
- Notji, A. 2006. *Laut Nusantara*. Jakarta. Djambatan. 323 hal.
- Nomura, T and N. D. Davis. 2005. Lipid and moisture content of Salmon Prey organism and stomach contents of chum, pink and sockeye Salmon in the bering sea. *NPAFC Technical Report*, 6 : 59-61
- Nybakken, J. W. 1998. *Biologi Laut Suatu Pendekatan Ekologis*. Jakarta: PT.Gramedia.
- Obot, O.I., Ekpo, I.E and Esau, E.F. 2014. Physico-chemical parameters and macro-benthos of Ediene Stream, Akwa Ibom State, Nigeria. *American Journal of Biology and Life Sciences*, 2(5): 112-121.
- Odum E. P. 1971. *Fundamentals of Ecology*, 3 rd Edition. W. B. Sounder Co. Philadelphia and London, 564 p.
- Odum, H.T. 1993. Energy systems in ecology. pp. 193-197 in *Concise Encyclopedia of Environmental Systems*, P.C. Young, ed. Pergamon Press, NY. 769 pp.
- Offem, B. O., Y. A. Samson & I. T. Omoniyi. 2008. Diet, size and reproductive biology of the silver catfish, *Chrysichthys nigrodigitatus* (Siluriformes: Bagridae) in the Cross River, Nigeria. *Revista de Biología Tropical*, 56(4) : 1785-1799
- Ogamba, E.N and Abowei, J.F.N. 2013. An Estimation of the Size Composition and Condition Factor of Ophiocara Porocephala from Amassoma Flood Plains, Niger Delta, Nigeria. *Journal of Applied Sciences, Engineering and Technology*, 6(3): 366-372.
- Ogbeibu, A. E. & P. U. Ezeunara. 2002. Ecological impact of brewery effluent on Ikpoba river using the fish communities as bio indicators. *Jornal Aquacultur Research*, 17: 35-44

- Ogbuebunu, K.E and M. O. Awodiran, 2017. Molecular characterization of *Lates niloticus* (Perciformes, Latidae) populations from three Nigerian waterbodies using random amplified polymorphic DNA and microsatellite markers. *Vestnik zoologii*, 51(1): 31–36.
- Oladimeji, T. E., M. O. Awodiran and O. O. Komolafe, 2015. Genetic differentiation studies among natural populations of *Tilapia zillii*. *Notulae Scientia Biologicae*, 7(4):423-429
- Olarte, D. R., Donald C and Taphorn B. 2006. Abundance, feeding and reproduction of *Salminus* sp. (Pisces: Characidae) from mountain streams of the Andean piedmont in Venezuela. *Neotropical Ichthyology*, 4(1):73-79
- Olurin, K.B and O.A. Aderibigbe. 2006. Length-weight relationship and condition factor of pond reared juvenile *Oreochromis niloticus*. *World Journal of Zoology*, 1(2): 82-85. Oymak
- Oliviera, V.A., Fountura, N.F and Montog, L.F. 2011. Reproductive characteristics and the weight-length relationship in *Anableps anableps* (Linnaeus, 1758) (Cyprinodontiformes: Anablepidae) from the Amazon Estuary. *Neotropical Ichthyology*, 9(4): 757-766.
- Ozaydin O, Uckun D, Akalin S, Leblebici S, Tosunoglu Z. 2007. Length-weight relationships of fishes captured from Izmir Bay, Central Aegean Sea. *Journal of Applied Ichthyology*, 23, 695-696.
- Palma, J., Andrade, J.P., 2002. Morphological study of *Diplodus sargus*, *Diplodus puntazzo*, and *Lithognathus mormyrus* (Sparidae) in the Eastern Atlantic and Mediterranean Sea. *Fisheries Research*, 57 (1), 1–8
- Paugy D. 2002. Reproduction strategies of fishes in a tropical temporary stream of the Upper Senegal Basin. Baoule River in Mali. *Aquatic Living Resources*, 15: 2535.
- Pauly, D., 1983. *Some simple methods for the assessment of tropical fishstock*. FAO Fish. Tech
- Pardoe, H., Thordarson, G and Marteinsdottir, G. 2008. Spatial and temporal trends in condition of Atlantic cod *Gadus morhua* on the Icelandic shelf. *Marine Ecology Progress Series*, 362:261–77.
- Pazos, A. J., Sanches, J. L., Roman, G., Paralle, M. L. P and Abad, M. 2003. Seasonal change in lipid classes and fatty acid composition in the digestive gland of *pecten maxima*. *Comparative Biochemistry and Physiology*, 134 : 367 – 380
- Pinheiro, A., Teixeira, C. M., Rego, A. L., Marques, J. F. & Cabral, H. N. 2005 Genetic and morphological variation of *Solea lascaris* (Risso, 1810) along the Portuguese coast. *Fisheries Research*, 73(1-2):67-78
- Poulet, N., Berrebi, P., Crivelli, A. J., Lek, S. and Argillier, C., 2004. Genetic and morphometric variations in the pikeperch (*Sander lucioperca* L.) of a fragmented delta. *Archiv für Hydrobiologie*, 159: 531– 554.

- Prakoso, V.A., Subagja, J dan Arifin, O.Z. 2020. Keragaan reproduksi induk ikan Baung alam dan hasil domestikasi serta pertumbuhan benih yang dihasilkannya. *Media Akuakultur*, 15 (1): 1-7.
- Price, S.A., Holzman, R., Near, T.J., Wainwright, P.C., 2011. Coral reefs promote the evolution of morphological diversity and ecological novelty in labrid fishes. *Ecology Letters*, 14 (5), 462—469
- Purnamaningtyas, S.E. 2008. beberapa aspek biologi kebogerang (*mystus nigriceps*), di waduk ir. h. djuanda, jawa barat. Prosiding Seminar Nasional Ikan V, Bogor.
- Putri, M. R. A dan D. W. H. Tjahjo. 2011. *Kebiasaan makan ikan bagridae di Waduk Cirata, Jawa Barat*. Seminar nasional VIII. Perikanan dan Kelautan. Universitas Gajah Mada
- Putri, M. R. A dan Purnamaningtyas, S. E. 2011. *Komposisi dan distribusi hasil tangkapan ikan di Waduk Ir. H. Juanda*. Seminar nasional VIII. Perikanan dan Kelautan. Universitas Gajah Mada
- Purnomo, K dan E.S. Kartamihardja. 2005. Pertumbuhan, Mortalitas, dan Kebiasaan Makan Ikan Tawes (*Barbodes gonionotus*) di Waduk Wonogiri. *Jurnal Penelitian Perikanan Indonesia*, 11 (2): 1-8
- Prchalova, M., J. Kubecka., M. Riha., T. Mrkvicka., M. Vasek., T. Juza., M. Kratochvil., J. Peterka., V. Drastik and J. Krizek. 2009. Size selectivity of standardized multimesh gillnets in sampling coarse European species. *Fisheries Research*, 96 : 51–57
- Prescott, G. W. 1978. *How to Know Algae*. Revised Edition. W. M. C Brown Company Publisher Dubuque. Iowa
- Rabiah., Kardhinata, E.H dan Karim, A. 2017. Struktur Komunitas Makrozoobentos di Kawasan Rehabilitasi Mangrove Dan Mangrove Alami Di Kampung Nipah Kabupaten Serdang Bedagai Sumatera Utara. *BioLink*, 3 (2): 125-141.
- Rada, B and Santicb, M. (2014). Community structure of aquatic insects in the karstic Jadro River in Croatia. *Journal of Insect Science*, 14 (54): 1-10.
- Rahardjo, M.F dan Simanjuntak, C.P.H. 2008. Hubungan panjang-bobot dan faktor kondisi ikan tetet, *Johnius belangerii* Cuvier (Pisces: Sciaenidae) di Pantai Mayangan, Jawa Barat. *Jurnal Ilmu-ilmu Perairan dan Perikanan Indonesia*, 15(2): 135-140.
- Rahman., S. M. Zakiur., M. R.Khan., S. Islam., Alam & Samsul. 2009. Genetic variation of wild and hatchery populations of the catla Indian major carp (*Catla catla* Hamilton 1822: Cypriniformes, Cyprinidae) revealed by RAPD markers. *Genetics and Molecular Biology Brazil*, 32(1): 197-201
- Rahman, M. R., M. A.Rahman., M. N. Khan & M. G. Hussain. 2004. Observation on the embryonic and larval development of silurid catfish, Gulsa (*Mystus cavasius* Ham). *Pakistan Journal of Biology Sciences*, 7(6) : 1070 -1075

- Rahman, Md.M., Hossain, Md. Y., Parvin, S., Rahman, M.St.S., and Allah.E.F.A. 2016. Fecundity of the Threatened Fish, *Mystus vittatus* (Siluriformes: Bagridae) in the Padma River, Bangladesh (Kesuburan Ikan Terancam, *Mystus vittatus* (Siluriformes: Bagridae) di Sungai Padma, Bangladesh). *Sains Malaysiana*, 45(6): 899–907
- Rajagopal, B and Davidar, P. 2008. On the population and breeding aspects of catfish in fresh water wetlands of Tamil Nadu, Peninsular India. *Electronic Journal of Ichthyology*, 1 : 18-30.
- Rajasekar. M., M. Thangraj., Thathiredypalli., R. Barathkumar, Jayachandran Subburaj., K. Muthazhagan. 2012. Genetic Diversity Analysis of Lates calcarifer (Bloch 1790) in Captive and Wild Populations Using RAPD Markers. *Notulae Scientia Biologicae*, 4(3): 33-37.
- Raymond, M and Rousset, F. 1995. Population genetics software for exact test and ecumenicism. *Journal of Heredity*, 86 : 248-249.
- Renan, X., Martine, J.T., Arango, D.C and Brule, T. 2015. Growth stanzas in an Epinephelidae-Lutjanidae complex: considerations to length-weight relationships. *Int. Journal of Tropical Biodiversity and Biotechnology*, 63 (1): 175-187.
- Reynolds J.D., S. Jennings and N.K. Dulvy. 2001. Life history of history of fishes and population responses to exploitation. John Wiley and Sons, Inc, Pp: 148-168.
- Ritakumari S. D., Ajitha B. S. and N. K. Balasubramanian (2006): food of two size-groups of the catfish *Mystus gullo* (hamilton-buchanan) in vemblai canal, Vypeen Island. *The Indian Journal of Fisheries*, 33 : 11-17.
- Roberts, D., S. Soemodihardjo dan W. Kastoro., 1982. Shallow Water Marine Molluscs Of North-West Java : 99 – 110. Lembaga Oseanologi Nasional LIPI. Jakarta
- Roesma, and Santoso, P. 2011. Morphological divergences among three sympatric populations of Silver Sharkminnow (Cyprinidae: *Osteochilus hasseltii* C.V.) in West Sumatra. *Biodiversitas*, 12 (3): 141-145.
- Roesma, D.I., D.H. Tjong., W. Munir, A. V. Agesi dan A. Chornelia, 2017. Genetic diversity of *Tor douronensis* (Pisces: Cyprinidae) in West Sumatra, Indonesia. *Biodiversitas*, 8 (3) :1018-1025.
- Roesma, D. I., H.T. Tjong., W. Munir and, D.R. Aidil. 2018. New record species of *Puntius* (Pisces: Cyprinidae) from West Sumatra based on Cytochrome Oxidase I Gene. *International Journal on Advanced Science Engineering Information Technology*, 8 (1): 25-256.
- Roesma, D.I., D.H. Tjong., W. Karlina., D.R. Aidil. 2019. Taxonomy confirmation of *Puntius* cf. *binotatus* from Gunung Tujuh Lake, Jambi, Indonesia based on Cytochrome Oxidase – I (COI) gene. *Biodiversitas*, 20(1) : 54-60.
- Romimuhtarto, K. 1991. Kualitas Air dalam Budidaya Laut. Bandar Lampung: Jakarta: Sea Farming Workshop Report

- Rouis, S.O., A. Ould Rouis, A.O., Micha, J.C and Arab, A. 2012. Biologie de la reproduction du Cyprinidae, *Barbus callensis* dans le lac de barrage Hamiz (Algérie). *Tropicultura*, 30 (2) : 88-93
- Saini, A., Dua, A., Mohindra, V and Lakra, W.S. 2011. Molecular discrimination of six species of Bagrid catfishes from Indus river system using randomly amplified polymorphic DNA markers. *Molecular Biology Report*, 38:2961–2965
- Saini, A., A. Dua and V. Mohindra, 2010. Genetic variability analysis of giant river cattish (*sperata seenghala*) populations from indus river system by RAPD-PCR. *Russian Journal of Genetics*, 46 : 982–987.
- Sanjayasari, D & T. B. Pramono. 2009. Domestication Strategy of Senggaringan Fish (*Mystus nigriceps*) to Combat Protein Deficiency as Food Security. The 1st International Seminar on Animal Industry, 336-340.
- Santos, C. H. D. A. J. D., De Sousa, C. F. S., Paula-Silva, M. D. N., Val, A. L and De Almeida, V. M. F. 2012. Genetic Diversity in *Cichla monoculus* (Spix and Agassiz, 1931) Populations: Implications for Management and Conservation. *American Journal of Environmental Sciences*, 8 (1): 35-41
- Samuel, S. Adji dan Z. Nasution . 2002. Aspek lingkungan dan biologi ikan di Danau Arang-Arang, Propinsi Jambi. *JPPI edisi sumberdaya dan Penangkapan*, 1(8): 1-13.
- Sandoval-Castellanos. E., M. Uribe-Alcocer., and P. I. Diaz-Jaimes, 2007. Population genetic structure of jumbo squid (*Dosidicus gigas*) evaluated by RAPD analysis. *Fisheries Research*, 83: 113–118.
- Sarker, P. K., H. K. Pal & M. M. Rahman. 2002. Observation on the fecundity and gonadosomatic index of *Mystus gulio* in Brackishwaters of Bangladesh. *Biological Sciences*, 2(4) : 235-237
- Sembiring, S,B,M., Adamari, R., Muzaki, A., Wardana, I.K., Hutapea, J.H., Astuti, W.W. 2014. Perkembangan gonad ikan kerapu sunu (*Plectropomus leopardus*) yang dipelihara dalam keramba jaring apung. *Jurnal Ilmu dan Teknologi Kelautan Tropis*, 6 (1) : 53-61.
- Seiyaboh, E.I., Izah, S.C and Okogbue, B.C. 2016. Seasonal Variation in Length-Weight Relationship and Condition Factor of Five Fish Species from Kolo Creek, Niger Delta. *Greener Journal of Agricultural Sciences*, 6 (11) : 342-348.
- Shafi, N., J. Ayub., N. Ashraf., A. Mian and I. U. Malik, 2016. Genetic diversity in different populations of Mahseer (*Tor putitora*) in Pakistan: A RAPD based study. *International Journal of Agriculture and Biological Sciences*, 18 (6) : 1814–9596.
- Siddik, M.A.B., Hanif, M, A., Chaklader, M, R., Nahar, A and Mahmud, S. 2015. Fishery biology of gangetic whiting *Sillaginopsis panijus* (Hamilton, 1822) endemic to

Ganges delta, Bangladesh. *The Egyptian Journal of Aquatic Research*, 41 (4): 307-313

- Siddik, M.A.B., Hanif, M.A., Chaklader, M. R., Nahar, A and Fotedar, R. 2016. A multivariate morphometric investigation to delineate stock structure of gangetic whiting, *Sillaginopsis panijus* (Teleostei: Sillaginidae). *SpringerPlus*, 5:520
- Silva, D., K. Martins., J.Oliveira., R. D Silva., I. Sampaio., H. Schneider and G. Gomes, 2017. Genetic differentiation in populations of lane snapper (*Lutjanus synagris*–Lutjanidae) from Western Atlantic as revealed by multilocus analysis. *Fisheries Research*, 198 : 138-149.
- Shafi, N., J. Ayub., N. Ashraf., A. Mian and I. U. Malik, 2016. Genetic diversity in different populations of Mahseer (*Tor putitora*) in Pakistan: A RAPD based study. *International Journal of Agriculture and Biological Sciences*, 18 (6) : 1814–9596.
- Shahjahan, M. and H. Ando, 2011. Role of LPXRFamide peptide in the neuroendocrine regulation of reproduction in fish. *Central Eur. Journal of Biology*, 6: 853-860.
- Shahnawaz, A., Venkateshwarlu, M., Somashekar, D.S and Santosh, K. 2010. Fish diversity with relation to water quality of Bhadra River of Western Ghats (India). *Environmental Monitoring and Assessment*, 161 : 83–91.
- Sharma, C. R and Kumari, R. 2018. Seasonal variation in zooplankton community and environmental variables of sacred Lake Prashar Himachal Pradesh, India. *International Journal of Fisheries and Aquatic Studies*, 6(2): 207-213
- Shinkafi, B.A and Ipinjolu, J.K. 2012. Gonadosomatic Index, Fecundity and Egg Size of *Auchenoglanis occidentalis* (Cuvier and Valenciennes) in River Rima, North-Western Nigeria. *Nigerian Journal of Basic and Applied Science*, 20 (3): 217-224
- Siddik, M.A.B., Hanif, Md. A., Chaklader, Md. R., Nahar, A., Fotedar, R. 2016. A multivariate morphometric investigation to delineate stock structure of gangetic whiting, *Sillaginopsis panijus* (Teleostei: Sillaginidae). *SpringerPlus*, 5:520.
- Silverstein, J. T., K. D. Shearer., W. W. Dikcoff and E. M. Plisetskaya. 1999. Regulation of nutrient intake and energy balance in Salmon. *Journal of Aquaculture*, 177 : 161-169
- Simanjuntak, C.P.H., Raharjo, M.F., Sukimin, S. 2006. Iktiofauna rawa banjiran sungai Kampar Kiri. *Jurnal Iktiologi Indonesia*, 6 (2) : 99-109.
- Simanjuntak CPH, Zahid A. 2009. Kebiasaan Makanan dan Perubahan Ontogenetik Makanan Ikan Baji-baji (*Grammoplites scaber*) Di Pantai Mayangan, Jawa Barat. *Jurnal Iktiologi Indonesia*,. 9 (1): 63-73
- Sivakumar, P., Senthamizhchelvi, T., Reguananth, R., Anusha, J and Manivannan, S. 2017. Spatial assessment of water quality in the lower reaches of Cauvery River, Tamil Nadu. *International Journal of Fisheries and Aquatic Studies*, 5(2): 336-342

- Song, J., Hou, F., Zhang, X., Yue, B and Song, Z. 2014. Mitochondrial genetic diversity and population structure of avulnerable freshwater fish, rock carp (*Procypris rabaudi*) in upper Yangtze River drainage. *Biochemical Systematics and Ecology*, 55: 1-9
- Song, K.H., J. Jung and W. Kim, 2016. Genetic variation in a freshwater prawn species, *Palaemon paucidens*, in South Korea. *Biochemical Systematics and Ecology*, 65: 23-32.
- Sparre, P., Venema and Siebren, C. 1999 Introduction to tropical fish stock assessment. Part 2. Exercises. FAO Fisheries Technical Paper. No.306. Rome. FAO. 94p
- Steffens, W. 2006. Freshwater Fish – Wholesome Foodstuffs. *Bulgarian Journal of Agricultural Science*, 12: 320-328
- Strauss R.E., Bookstein F.L. (1982) The Truss : Body form reconstruction in morphometric. *System. Zoo*, 31 (2) : 113-135
- Stoumboudi M. T., W. Villwock., J. Sela., and M. Abraham. (1993). Gonadosomatic index in *Barbus longiceps*, *Capoeta damascina* and their natural hybrid (Pisces, Cyprinidae), versus spermatozoan index in the parental males. *Journal of Fish Biology*, 43: 865-875
- Subagja, J., Prakoso, V.A., Arifin, O.Z., Suparyanto, Y dan Suhud, E.H. 2018. Pertumbuhan benih ikan Baung (*Hemibagrus nemurus*) hasil domestikasi pada lokasi dengan ketinggian berbeda. *Media Akuakultur*, 13 (2): 59-65
- Sukendi. 2001. Biologi reproduksi dan pengendaliannya dalam upaya pembenihan ikan baung (*Mystus nemurus* CV) dari sungai Kampar Riau. [disertasi]. Program Pascasarjana, Institut Pertanian Bogor. Bogor.
- Sulistiono1., Tirta Ni. T dan Brodjol. M. 2009. Kebiasaan makanan ikan kresek (*Thryssa mystax*) diperaian Ujung Pangkah, Jawa Timur. *Jurnal Iktiologi Indonesia*, 9 (1):35-48.
- Supiwong, W., T. Liehr., M. B.Cioffi., A. Chaveerach., N. Kosyakova., K. Pinthong., T. Tanee & A. Tanomotong. 2013. Karyotype and cytogenetic mapping of 9 classes of repetitive DNAs in the genome of the naked catfish *Mytus bocourti* (Siluriformes : Bagridae). *Molecular Cytogenetics*, 6. 51-57.
- Suryandari, A dan Purnomo, K. 2011. Studi kebiasaan makanan jenis-jenis ikan di beberapa Situ dan Waduk di Jawa barat sebagai informasi dasar dalam upaya pengkayaan stok ikan. Prosiding forum Nasional pemacu Sumberdaya Ikan III.
- Syafrialdi. 2011. Keberadaan struktur Makrozoobenthos di sungai Batang Bungo sebagai bioindikator kualitas perairan. [Thesis]. Padang. Pascasarjana Universitas Bung Hatta.
- Syandri, H. 1996. Aspek reproduksi ikan Bilih (*Mystacoleucus padangensis* Blkr) dan kemungkinan pembenihannya di Danau Singkarak. [Disertasi]. Program Pascasarjana, Institut Pertanian Bogor. Bogor.

- Syandri, H dan Azrita. 2001. Domestikasi dan teknologi reproduksi ikan. Bung Hatta University Press.
- Syandri, H. 2007. Konservasi dan rehabilitasi sumber daya alam. Bung Hatta University Press.
- Syandri, H., Azrita dan Aryani, N. 2013. Size distribution, reproduction and spawning habitat of Bilih fish (*Mystacoleucus padangensis* Blkr.) In lake Singkarak. *Bawal*, 5 (1) : 1-8
- Syandri, H., Azrita., Junaidi. 2014. Morphological characterization of asang fish (*Osteochilus vittatus*, Cyprinidae) in Singkarak Lake, Antokan river and Koto Panjang reservoir West Sumatra Province, Indonesia. *Journal of Fisheries and Aquaculture*, 5, (1) :158-162.
- Syandri, H Azrita, Junaidi. 2015. Fecundity of Bonylip barb (*Osteochilus vittatus* Cyprinidae) in different waters habitats. *International Journal of Fisheries and Aquatic Studies*, 2(4): 157-163
- Takagi, M. and Tanigushi, N. 1995. Random Amplified Polymorphic DNA (RAPD) for identification of three species of *Anguilla*, *A. japonica*, *A. australis* and *A. bicolor*. *Fisheries Science*, 61, 884-885
- Tamura, K., J. Dudley., M. Nei and S. Kumar, 2007. MEGA 4: Molecular evolutionary genetics analysis (MEGA) software version 4.0. *Molecular Biology and Evolution*, 24:1596-1599.
- Tang, U. M., R. Affandi, R. Widjajakusuma, H. Setijanto, dan M. F. Rahardjo. 2000. Pengaruh Salinitas terhadap gradient Osmotik dan Tingkat Kelangsungan Hidup Larva Ikan Baung. *Hayati*, 7: 97-100.
- Teletchea, F. and Fontaine, P. 2014. Levels of domestication in fish: implications for the sustainable future of aquaculture. *Fish and Fisheries*, 15, 181-195.
- Thirumaraiselvi, R., Thangaraj, M And Ramanadevi, V. 2013. Morphometric and Genetic Variation in Three Populations of Indian Salmon (*Polydactylus plebeius*). *Notulae Scientia Biologicae*, 5(3) : 275-281
- Tomljanovic, T., Piria, M., Treer, T., Safner, R., Sprem, N., Anicic, I., Matulic, D. and Kordic, V., 2011. Morphological parameters of common carp (*Cyprinus carpio* L.) populations in Republic of Croatia. *Ribarstvo*, 69: 81-93.
- Trun, N, J, Trempy, 2004. *Fundamental Bacterial Genetics*. Blackwell Publishing. Oxford, UK. 287 p.
- Turan, C. 1999. A Note on The Examination of Morphometric Differentiation Among Fish Population: the Truss System. *Journal of Zoology*, 23 : 259-263
- Turan, C. 2004. Stock identification of Mediterranean horse mackerel using morphometric and meristic characters. *Journal of Marine Science*, 61: 774-781.

- Turan, C., M., Oral, B., Ozturk and E. Duzgunes, 2006. Morphometric and meristic variation between stocks of bluefish (*Pomatomus saltatrix*) in the Black, Marmara, Aegean and Northeastern Mediterranean seas. *Fshereis Research*, 79: 139-147.
- Tjahjo, D.W.H. 1988. Penelitian Optimalisasi dan Tehnik Penge/olaan Perikanan Waduk Jatiluhur. Laporan Tahunan Hasil Penelitian Sub Balai Penelitian Perikanan Air Tawar, Jatiluhur.
- Tzeng, T. D. 2004. Morphological variation between populations of spotted mackerel (*Scomber australasicus*) off Taiwan. *Fishereis Research*, 68(1-3):45-55
- Uslichah, U dan Syandri,H. 2003. Aspek reproduksi ikan sasau (*Hampala* sp.) dan ikan lelan (*Osteoecilus vittutus* C.V.) di danau Singkarak. *Jurnal Iktiologi Indonesia*, 3 (1): 41-48.
- Van der Wall. 2006. Observations on the breeding habits of *Clarias gariepinus* (Burchell). *J Journal of Fish Biology*, 6:23-27.
- Vieira, A.N., Rodrigues,A.S.B., Sequeira,V., Neves, A., Paiva ,R.B., . Paulo, O.S and Gordo, L.S. 2016. Genetic and Morphological Variation of the Forkbeard, *Phycis phycis* (Pisces, Phycidae): Evidence of Panmixia and Recent Population Expansion along Its Distribution Area. *Plos One*. 11 (12);1-19.
- Vilella, F. S., Becker, F.G and Hartz, S.M. 2002. Diet of *Astyanax* species (Teleostei, Characidae) in an Atlantic Forest River in Southern Brazil. *Brazilian Archives of Biology and Technology*, 45 (2): 223 -232
- Walpole, R. E. 1995. *Pengantar Statistika* (Terjemahan oleh Bambang Sumantri). PT Gramedia. Jakarta.
- Weber, M. & L. F. de Beaufort, 1913. The fishes of the IndoAustralian Archipelago. Vol. 2. Malacopterygii, Myctophoidea, Ostariophysi: I. Siluroidea. E. J. Brill Leiden xx + 404 pp
- Welcomme RL. 1979. Fisheries ecology of floodplain rivers. New York: Longman.
- Welcomme, R.L. 2001. *Inland Fisheries, Ecology, and Management*. Fishing News Books, A Division of Blackwell Science Ltd, London. 358 p.
- Welsh J and McClelland, M. 1990. Fingerprinting genomes using PCR with arbitrary primers. *Nucleic Acids Research*, 18 (24) :7213-7218
- Williams JGK., A. R. Kubelik., K. J. Livak., J. A. Rafalski., S. V. Tingey. 1990. DNA polymorphisms amplified by arbitrary primers are useful as genetic markers. *Nucleic Acids Research*, 18: 6531-6535
- Williams, D. J., S. Kazianis and R. B. Walter. 1998. Use of random amplified polymorphic DNA (RAPD) for identification of largemouth bass subspecies and their intergrades. *Transactions of the American Fisheries Society*, 127 : 825-832

- Wilson, D. N. 1988. *Cadmium-Market Trends And Influences In Cadmium* . Proceedings Of The International Cadmium Conference London: Cadmium Association
- Xie, X. Z., T. C. Long., Y. G. Zang., Z. Cho. 1998. Reproductive investment in the *Silurus meridionalis*. *Journal of Fish Biology*, 53: 259-271
- Xie, S., Cui, Y., Zhang, T & Li, Z. 2000. Seasonal patterns in feeding ecology of three small fishes in the Biandantang lake, China. *Journal of Fish Biology*, 57: 867-880.
- Yakubu, A. and Okunsebor, S. A. 2011. Morphometric differentiation of two Nigerian fish Species (*Oreochromis niloticus* and *Lates niloticus*) using principal components and discriminant analysis. *International Journal Morphology*, 29 (4):1429-1434.
- Yeh, F.C., Yang, R.C and Boyle T. 1999. POPGENE Versions 1.31, Quick user guide. Microsoft window-based freeware for population genetic analysis. Molecular biology and biotechnology centre, University of Alberta, Canada. https://www.ualberta.ca/~fyeh/popgene_download.html
- Yustina. 2001. Keanekaragaman jenis ikan di sepanjang perairan sungai Rangau Riau. *J. Natur Indonesia*, 4(1) : 1-14.
- Yustina dan Arnentis. 2020. Aspek Reproduksi Ikan Kapiék (*Puntius schwanefeldi* Bleeker) di Sungai Rangau – Riau, Sumatra. *Jurnal Matematika dan Sains*, 7 (1) : 5– 14
- Zibdah M. A & N Kan'an. N. 2009. Aspects of Growth, Reproduction, and Feeding Habit of Three Pomacentrid Fish From Gulf of Aqaba, Jordan. *Jordan Journal of Biological Sciences*, 2(3):119 – 128.
- Zhao. X., Palacci, G., Yadav, V., and Sen., A. 2017. Substrate-driven chemotactic assembly in an enzyme cascade. *Nature Chemistry*, 10: 311–317.
- Zebek E. 2007. Changes of species diversity of phytoplankton and physicochemical water parameters in annual cycles in the urban Lake Jeziorak Mały. *International Journal of Oceanography and Hydrobiology*, 36 (Suppl. 1): 49-55