



DAFTAR PUSTAKA

- Abol-Munafi, A.B., B. M. Tam., M.A. Ambak., dan P. Ismail. 2004. Effect of different diets on growth and survival rates of Snakehead *Channa striata* (Bloch, 1793) larvae. *Korean Journal of Biological Sciences*, 8(4): 313–317.
- Agiestina, P. 2019. Komposisi Nukleotida Sekuen Gen Mitokondria 16S Ikan Gabus (*Channa Striata* Bloch, 1793) dari Sungai Ogan, Banyuasin, Sumatra Selatan. Seminar. Fakultas Biologi. Universitas Gadjah Mada. p. 27.
- Amos, W., dan J. Harwood. 1998. Factors affecting levels of genetic diversity in natural populations. *Philosophical Transactions of The Royal Society of London series B*, 353: 177–186
- Ardiansyah, A. 2011. Pembakuan nama pulau di Indonesia sebagai upaya untuk menjaga kedaulatan Negara Republik Indonesia. *Pandecta*, 6(1): 117–121.
- Arif, I. A., H. A. Khan., A. H. Bahkali., A.A. Al Homaidan., A. H. Al Farhan., S. M. Al., dan M. Shobrak. 2011. Review DNA marker technology for wildlife conservation. *Saudi Journal of Biological Sciences*, 18(3): 219–225.
- Arisuryanti, T., G. A. Pratama., L. Hakim., J. P. Koentjana., dan F. K. Nazira. 2019. Genetic Characterization of kissing gourami (*Helostoma temminckii* Cuvier, 1829) in Ogan River, South Sumatra inferred from 16S rRNA and COI mitochondrial genes. *Indonesian Fisheries Research Journal*, 25(1): 37–44.
- Ath-thar, M. H. F., R. Gustiano., I. I. Kusmini., V. A. Prakoso., dan P. Putri. 2017. Induksi horminal maturasi gonad ikan gabus (*Channa striata*). *Jurnal Riset Akuakultur*, 12(1), 9–20.
- Bandelt, H., P. Forster., dan A. Röhl. 1999. Median-joining networks for inferring intraspecific phylogenies. *Mol Biol Evol*, 16(1): 37–48.
- Boonkusol, D., dan W. Tongbai. 2016. Research article genetic variation of striped snakehead fish (*Channa striata*) in river basin of Central Thailand inferred from mtDNA COI gene sequences analysis. *Journal of Biological Sciences*, 16(1): 37–43.
- Closs, G. P., M. Krkosek., dan J. D. Olden. 2016. *Conservation of Freshwater Fishes*. Cambridge University Press. Cambridge. pp. 22–23.
- Collins, R. A., L. M. Boykin., R. H. Cruickshank., dan K. F. Armstrom. 2012. Barcoding's next top model: an evaluation of nucleotide substitution models for specimen identification. *Methods in Ecology and Evolution*, 3: 457–465.
- Courtenay, W. R., dan J. D. Williams. 2004. *Snakeheads (Pisces, Channidae)—A Biological Synopsis and Risk Assessment*. U.S. Geological Survey circular. Florida. pp. 115–119.
- de Jong, M. A., N. Wahlberg., M. van Eijk., P. M. Brakefield., dan B. J. Zwaan. 2011. Mitochondrial DNA signature for range-wide populations of *Bicyclus anynana* suggests a rapid expansion from recent refugia. *PLoS ONE*, 6(6): 1–5.
- de Vicente, M. C., F. A. Guzmán., J. Engels., dan V. R. Rao. 2005. Genetic characterization and its use in decision making for the conservation of crop germplasm. *The Role of Biotechnology*, 121–128.
- Efron, B., E. Halloran., dan S. Holmes. 1996. Bootstrap confidence levels for phylogenetic trees. *Proceedings of the National Academy of Sciences of the United States of America*, 93: 13429–13434.



- Guo, C., I. C. McDowell., M. Nodzenski., D. M. Scholtens., A. S. Allen., W. L. Lowe., dan T. E. Reddy. 2017. Transversions have large regulatory effects than transitions. *BMC Genomics*, 18(394): 1–9.
- Harmilia, E. D., dan E. Dharyati. 2017. Kajian pendahuluan kualitas perairan fisika-kimia Sungai Ogan, Kecamatan Indralaya, Kabupaten Ogan Ilir, Sumatra Selatan. *Fiseries*, 6(1): 7–11.
- Ilmi, W., dan T. Arisuryanti. 2018. Composition of mitochondrial DNA 16S nucleotide of dwarf snakehead (*Channa gachua* Hamilton, 1822) from Keji River, Magelang, Central Java. *Journal of Tropical Biodiversity and Biotechnology*, 3(2): 57–61.
- IPGRI/CIP. 2003. *Descriptores del Ulluco (Ullucus tuberosus)*. Dalam de Vicente, M. C., Guzmán, F. A., Engels, J., dan Rao, V. R. 2005. Genetic characterization and its use in decision making for the conservation of crop germplasm. *The Role of Biotechnology*, 121–128.
- Jais, A. M. 2007. Pharmacognosy and pharmacology of Haruan (*Channa striatus*), a medicinal fish with wound healing properties. *Boletín Latinoamericano y Del Caribe de Plantas Medicinales y Aromáticas*, 6(3): 52–60.
- Jamandre, B. W., J. Durand., dan W. Tzeng. 2014. High sequence variations in mitochondrial DNA control region among worldwide populations of flathead mullet *Mugil cephalus*. *International Journal of Zoology*, 1–10.
- Kombong, C. B. S., dan T. Arisuryanti. 2018. Komposisi nukleotida sekuen gen mitokondria 16S dan COI ikan gabus (*Channa striata* Bloch, 1793) dari Danau Sentani, Jayapura, Papua. *Jurnal Perikanan Universitas Gadjah Mada*, 20(2): 57–62.
- Kumar, S., G. Stecher., dan K. Tamura. 2016. MEGA7 : Molecular evolutionary genetics analysis version 7.0 for bigger datasets brief communication. *Molecular Biology Evolution*, 33(7): 1870–1874.
- Lacy, R. C. 1997. Importance of genetic variation to the viability of mammalian populations. *Journal of Mammalogy*, 78(2): 320–335.
- Lakra, W. S., M. Goswami., A. Gopalakrishnan., D. P. Singh., A. Singh., dan N.S. Nagpure. 2010. Genetic relatedness among fish species of Genus *Channa* using mitochondrial DNA genes. *Biochemical Systematics and Ecology*, 38(6): 1212–1219.
- Librado, P., dan J. Rozas. 2009. DnaSP v5 : a software for comprehensive analysis of DNA polymorphism data. *Bioinformatics*, 25(11): 1451–1452.
- Listyanto, N., dan S. Andriyanto. 2009. Ikan Gabus (*Channa striata*) manfaat pengembangan dan alternatif teknik budidayanya. *Media Akuakultur*, 4(1): 18–25.
- Ludwig, W., F.O. Glockner., dan Yilmaz. 2011. The use of rRNA gene sequence data in the classification and identification of prokaryotes. *Methods in Microbiology*, 38: 348–384.
- Maddison, W. P. dan D. R. Maddison. 2018. *Mesquite: a modular system for evolutionary analysis*. Version 3.51. <http://www.mesquiteproject.org>.
- Mak, T. W., dan T. W. Saunders. 2008. *Primer to The Immune Response*. Academic Press. California. p.110.
- Mardulyn, P. 2012. Trees and/or networks to display intraspesific DNA sequence variation. *Molecular Ecology*, 21: 3385–3390.



- Merriam-Webster. 1991. *Webster's ninth new collegiate dictionary*. Dalam de Vicente, M. C., Guzmán, F. A., Engels, J., dan Rao, V. R. 2005. Genetic characterization and its use in decision making for the conservation of crop germplasm. *The Role of Biotechnology*, 121 – 128.
- Mustafa, A., M. A. Widodo., dan Y. Kristianto. 2012. Albumin and zinc content of snakehead fish (*Channa striata*) extract and its role in health. *IEESE International Journal of Science and Technology*, 1(2):1–8.
- Nei, M. 2001. *Encyclopedia of Genetics*. Academic Press. Cambridge. pp:828–832.
- Newell, P. D., A. D. Fricker., C. A. Roco., P. Chandrangsu., dan S. M. Merkel. 2013. Curriculum a small-group activity introducing the use and interpretation of BLAST. *Journal of Microbiology & Biology Education*, 14(2): 238–243.
- Nunez, J. C. B., dan M. F. Oleksiak. 2016. A cost-effective approach to sequence hundreds of complete mitochondrial genomes. *Plos One*, 1–23.
- O'Donnell, D. R., A. Parigi., J. A. Fish., A. Dworkin., dan A. P. Wagner. 2014. The roles of standing genetic variation and evolutionary history in determining the evolvability of anti-predator strategies. *Plos One*, 9(6): 1–11.
- Oktavia, L., dan T. Arisuryanti. 2018. Komposisi nukleotida sekuen gen mitokondria 16S rRNA ikan bilih (*Mystacoleucus padangensis* Bleeker, 1852) Danau Singkarak, Solok, Sumatra Barat. *Biogenesis*, 6(2): 98–104.
- Palumbi, S. R. 1996. *Nucleic Acids II: The Polymerase Chain Reaction*. Dalam: Ivanova, N. V., Zemlak, T. S., Hanner, R. H., Hebert, P. D. N. 2007. Universal primer cocktails for fish DNA barcoding. *Molecular Ecology Notes*, 1–5.
- Pangastuti, A. 2006. Review : Definisi spesies prokaryota berdasarkan urutan basa gen penyandi 16S rRNA dan gen penyandi protein. *Biodiversitas*, 7(3): 292–296.
- Phen, C., T. B. Thang., E. Baran., dan L. S. Vann. 2005. *Biological reviews of important Cambodian fish species, based on fishbase*. Worldfish Center. Cambodia. pp 2–6.
- Rahman, A. 2010. Keragaman struktur morfologis dan Gen Cytochrome b DNA mitokondria *Kryptopterus* Spp. dan Ompok Spp. (Siluridae) di Das Batang Hari, Jambi. *Thesis*. Institute Pertanian Bogor. Bogor. p 19.
- Reaz, R., M. S. Bayzid., dan M. S. Rahman. 2014. Accurate phylogenetic tree reconstruction from quartets: a heuristic approach. *Plos One*, 9(8): 1–13.
- Saitou, N., dan M. Nei. 1987. The neighbor-joining method: a new method for reconstructing phylogenetic trees. *Molecular Biology and Evolution*, 4(4): 406–425.
- Song, L.M., K. Munian., Z. A. Rashid., dan S. Bhassu. 2013. Characterisation of Asian snakehead murrel *Channa striata* (Channidae) in Malaysia: An insight into molecular data and morphological approach. *The Scientific World Journal*, 1–16.
- Sun, H., dan X. Wang. 2017. *Mitochondrial DNA and Diseases*. Springer Nature Singapore. Singapura. p. 10.
- Taanman, J. 1999. The mitochondrial genome : structure , transcription , translation and replication. *Biochimia et Biophysica Acta*, 1410: 103–123.
- Taylor, R. W., dan D. M. Turnbull. 2007. Mitochondrial DNA mutations in human disease. *Nature Reviews Genetics*, 6(5): 389–402.
- van der Laan, R., R. Fricke., dan W. N. Eschmeyer. 2019. Eschmeyer's Catalog Of Fishes: Classification. (<http://www.calacademy.org/scientists/catalog-of-fishes-classification/>). Electronic version accessed 27 March 2019.



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Karakterisasi Genetik Ikan Gabus (*Channa striata* (Bloch, 1793)) dari Sungai Ogan, Banyuasin, Sumatra

Selatan Berdasarkan Gen Mitokondria 16S

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- Wei, O. Y., R. Xavier., dan K. Marimuthu. 2010. Screening of antibacterial activity of mucus extract of Snakehead fish , *Channa striatus* (Bloch). *European Review for Medical and Pharmacological Sciences*, 14: 675–681.
- Ye, J., Mcginnis, S., dan T. L. Madden. 2006. BLAST : improvements for better sequence analysis. *Nucleic Acid Research*, 34: 6–9.
- Yulintine, H. B., H. Wulandari., dan E. Harteman. 2017. Snakehead fish (*Channa striata*): semi induced breeding and larval growth. *Indian Journal of Science and Technology*, 10(11):1–8.
- Zuraini, A., M. N. Somchit., M. H. Solihah., Y. M. Goh., A. K. Arifah., M. S. Zakaria., N. Somchit., M. A. Rajion., Z. A. Zakaria., dan A. M. Jais. 2006. Food chemistry fatty acid and amino acid composition of three local Malaysian *Channa* spp. fish. *Food Chemistry*, 97: 674–678.