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DAFTAR PUSTAKA

Ardiana, S. A., Astarini, I. A., Putra, I. N. G., Pertiwi, P. D., Sembiring, A., Yusmalinda, A., & Al Malik, D. 2021. Genetic Diversity and Phylogenetic of Longtail Tuna (*Thunnus tonggol*) Landed in Pabean Fish Market, Surabaya. *Musamus Fisheries and Marine Journal*, 107–115. https://doi.org/10.35724/mfmj.v3i2.3375

Arisuryanti, T., Ulfa, N., Firdaus, N. and Hakim, L. 2020. Genetic characterization of striped snakehead (*Channa striata* Bloch, 1793) from Arut River, Central Kalimantan inferred from COI mitochondrial gene. *AIP Conference Proceedings*, 2260. DOI: 10.1063/5.0015905.

Armbrecht, M. 2013. Detection of contamination in DNA and protein samples by photometric measurements. *Appl Note 279*, 279:1–6.

Asril, M., Simarmata, M.M.T., Sari, S.P., Indarwati, Setiawan, R. B., Arsi, Afriansyah, and Junairiah. 2022. *Keanekaragaman Hayati*. Medan: Yayasan Kita Menulis.

Basith, A., Abinawanto, A., Kusrini, E. and Yasman, Y. 2021. Genetic diversity analysis and phylogenetic reconstruction of groupers *Epinephelus* spp. from Madura Island, Indonesia based on partialsequence of *COI* gene. *Biodiversitas*, 22(10): 4282-4290. DOI: 10.13057/biodiv/d221020.

Benedick, S., White, T. A., Searle, J. B., Hamer, K. C., Mustaffa, N., Khen, C. V., Mohamed, M., Schilthuizen, M., and Hill, J. K. 2007. Impacts of habitat fragmentation on genetic diversity in a tropical forest butterfly on Borneo. *Journal of Tropical Ecology*, 23 (6): 623-634.

Blaxter, M.L. 2004. The promise of a DNA taxonomy. Philosophical Transactions of the Royal Society B. *Biological Sciences*, 359 (4): 669–679.

Borror, D.J. 1992. *Pengenalan Pelajaran Serangga*. Yogyakarta: Gadjah Mada University Press.

Charlesworth, D. 2003. Effects of inbreeding on the genetic diversity of populations. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, *358*(1434): 1051-1070.

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Chutia, B. C., Kakati, L.N., Ghose, J. and Shankar, M. 2010. Vanya Silk Varieties in Nagaland. *Indian Silk*, 1: 16-21.

Dailami, M., Artika, I.M., Kusrini, M.D. and Safari, D. 2016. Phylogenetic Analysis of Cytochrome Oxidase I from Buduk Toads *Duttaphrynus melanostictus* and *Phrynoidis asper* from Bogor. *Current Biochemistry*, 3(2): 54-65.

Dewi, E. K., Soma, I. G. and Wandia, I. N. 2013. Diversitas genetik populasi monyet ekor panjang di Mekori menggunakan marka molekul mikrosatelit D3S1768. *Indonesia Medicus Veterinus*, 2(1): 43-57.

DOĞAN, İ., & DOĞAN, N. (2016). Genetic distance measures. *Turkiye Klinikleri Journal of Biostatistics*, *8*(1), 87-93.

Drake, J.W, Charlesworth, B., Charlesworth, D. and Crow, J.F. 1998. Rates of Spontaneous Mutation, *148* (4), 1667–1686.

Fatchiyah F, Arumingtyas L. E, Widyarti S & Rahayu S. 2011. Biologi molekular: Prinsip dasar analisis. Erlangga. Jakarta.

Fazekas, A.J., Kesanakurti, P.R., Burgess, K.S., Percy, D.M., Graham, S.W., Barrett, S.C.H., Newmaster, S.G., Hajibabaei, M. and Husband, B.C. 2009. Are plant species inherently harder to discriminate than animal species using DNA barcoding markers? *Molecular Ecology Resources*, 9(1) 130–139.

Folmer, O., Black, M., Hoeh, W., Lutz, R. and Vrijenhoek, R. 1994. DNA primers for amplification of mitochondrial cytochrome c oxidase subunit I from diverse metazoan invertebrates. *Molecular Marine Biology and Biotechnology*, 3(5) 294–299.

Frankham, R., Ballou, J.D. and Briscoe, D.A. 2002. *Introduction to Conservation Genetics*. New York: Cambridge University Press: 45-70

GBIF. 2025. *Cricula trifenestrata* Helfer 1837. Accessed on January 25, 2025 at GBIF.org. https://doi.org/10.15468/39omei.

Goodwin, K. D., Thompson, L. R., Duarte, B., Kahlke, T., Thompson, A. R., Marques, J. C. and Caçador, I. 2017. DNA Sequencing as a Tool to Monitor Marine Ecological Status. *Frontiers in Marine Science*. 4: 1–14. https://doi.org/10.3389/fmars.2017.00107.

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Greyling, M., Van Der Bank, F.H., Grobler, J.P. and Wessels, D.C.J. 2001. Allozyme Variation in Two Populations of the Mopane Worm, *Imbrasia belina* (Saturniidae) and the Effect of Developmental Stage and Staggered Generations. *South African J. Anim.* Sci. 31: 15–24. https://doi.org/10.4314/sajas.v31i1.3843

Hadiyanti, A.H.D. 2012. Variasi Genetik Serangga Penghasil Sutera Emas *Cricula trifenestrata* Helf. (Lepidoptera: Saturniidae) dengan Penanda Molekuler ISSR (*Inter Simple Sequence Repeats*). Universitas Gadjah Mada.

Hadiyanti, A.H.D. 2018. Genetic variation of golden silk-producing insect C*ricula trifenestrata* Helf. (Lepidoptera: Saturniidae) using ISSR (Inter Simple Sequence Repeats) molecular marker. *Scientiae Educatia: Jurnal Pendidikan Sains*, 7(1): 93-107.

Hartono, Frans, T.M. and Kalangi, J.I. Pengaruh Beberapa Jenis Pakan Tanaman Kehutanan terhadap Kualitas dan Kuantitas Kokon Ulat Sutera Emas (*Cricula trifenestrata* Helf). *In Cocos*. 7(5): 1-12.

Hebert, P.D.N., Cywinska, A., Ball, S.L. and de Waard, J.R. 2003. Biological Identifications through DNA Barcodes. *Proceedings of the Royal Society London B*: 313-321.

Hikmatyar, M., Rohman, F., & Kurniawati, E. (2015). Evaluasi kemurnian dan konsentrasi DNA menggunakan spektrofotometer UV. Jurnal Sains dan Teknologi, 8(3), 112-117.

Hollingsworth, P.M., Graham, S.W. and Little, D.P. 2011. Choosing and using a plant DNA barcode. *PLoS ONE*, 6(5) e19254

Hubert, N. and Hanner, R., 2015. DNA barcoding, species delineation and taxonomy: a historical perspective. *DNA barcodes*, *3*(1): 44-58

Huemer, P., Mutanen, M., Sefc, K. M., & Hebert, P. D. 2014. Testing DNA barcode performance in 1000 species of European Lepidoptera: large geographic distances have small genetic impacts. *Plos one*, *9*(12), e115774.

Indah, N.I. and Sukadi. 2017. Strategi Pengembangan Agribisnis Hama Ulat Sutera Emas (*Circula trifenestra*ta Helf.) (Lepidoptera: Saturniidae) pada Alpukat sebagai Pengembangan Potensi Desa di Desa Sidomulyo Kec. Silo Kab. Jember. *Jurnal Ilmiah Inovasi*. 17(3):149-153.

UNIVERSITAS
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Kartika, G. R. A., Sartimbul, A., & Widodo, W. 2017. Varian genetik Sardinella lemuru di perairan Selat Bali. *Jurnal Kelautan: Indonesian Journal of Marine Science and Technology*, *10*(1), 21-28.

Kelly, A.M., Megan, L.J., Libby, A.S. and James, M.R. 2018. Protocol for obtaining DNA barcodes from plant and insect fragments isolated from forensic-type soils. *International Journal of Legal Medicine*, 132(6) 1515-1526.

Kobilinsky, L., Levine, L., & Nunno, H.M. 2007. *Inside forensic science forensic DNA analysist*. New York: Chelsea House Publishers.

Kress, W. J. and Erickson, D.L. 2012. DNA Barcodes: Methods and Protocols. *In Methods in Molecular Biology*, 858(1) 3–8.

Lau, J. S., Ransangan, J., & Rodrigues, K. F. 2018. Genetic Diversity and Population Structure of the Asian Green Mussel (Pernaviridis) in the Waters of Sabah, Malaysia Based on Mitochondrial DNA D-Loop Sequences. *Turkish Journal of Fisheries and Aquatic Sciences*, *18*(1), 109-117.

Li, D., Guo, Y., Shao, H., Tellier, L. C., Wang, J., Xiang, Z., & Xia, Q. 2010. Genetic diversity, molecular phylogeny and selection evidence of the silkworm mitochondria implicated by complete resequencing of 41 genomes. *BMC evolutionary biology*, *10*(1): 81.

Lopez-Rubio, A., Suaza-Vasco, J., Marcet, P.L., Ruiz-Molina, N., Caceres, L., Porter, C. and Uribe, S. 2016. Use of DNA *Barcoding* to Distinguish the Malaria Vector Anopheles *neivai* in Colombia. *Zootaxa*. 4175: 377–389. doi: 10.11646/zootaxa.4175.4.7.

Magnussen, K., Butiman, C., Promma, S., Wisrisit, J., Thunchailertthakul, T. and Sumida, M. 2023. First Report of *Cricula* Silkmoth, *Cricula trifenestrata* Helfer (Lepidoptera: Saturniidae) on Cinnamon Tree, *Cinnamomum* sp. (Lauraceae) from Chaiyaphum Province, Northeastern Thailand: Morphological Characteristics, Host Plants and Parasitic Fly. *International Journal of Wild Silkmoth and Silk*, 24: 11-20.

Magnussen, K., Sumida, M., Kangrang, A., Vollrath, F., Katisart, T. and Butiman, C. 2025. External Morphology, Defensive Adaptations, Aposematic Coloration, and Sexual Dimorphism of the Fifth Instar Larva of *Cricula*

UNIVERSITAS
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Silkmoth, *Cricula trifenestrata* Helfer (Lepidoptera: Saturniidae) from Thailand. *Insects*, 16(105): 1-18. https://doi.org/10.3390/ insects16020105

Marin, F., Beluffi, C., & Fischer, F. 2021. Genetic evolution of a multi-generational population in the context of interstellar space travels--Part I: Genetic evolution under the neutral selection hypothesis. *arXiv preprint arXiv:2102.01508*.

Matlock, B. 2015. Assessment of nucleic acid purity. *Tech Note*. 52646:1–2.

Muliani, D. R., Yulianda, F. and Butet, N.A. 2020. Karakteristik Gen *Cytochrome Oxidase* Subunit I (Coi) Tiram Daging dari Genus *Crassostrea* Sebagai Identitas Jenis di Delta Cimanuk, Jawa Barat. *Jurnal Moluska* Indonesia. 4(1): 8-16. doi:10.54115/jmi.v4i1.11.

Nei, M. (1972). Genetic distance between populations. *The American Naturalist*, *106*(949), 283-292.

Nurkomar, I., Trisnawati, D. W., & Arrasyid, F. 2022. Life cycle and survivorship of eri silkworm, *Samia cynthia ricini* Biosduval (Lepidoptera: Saturniidae) on three different cassava leaves diet. *27*, 94-105.

Pentinsaari, M., Salmela, H., Mutanen, M., & Roslin, T. 2016. Molecular evolution of a widely-adopted taxonomic marker (COI) across the animal tree of life. *Scientific reports*, *6*(1), 35275.

Pracaya. 2008. *Hama dan Penyakit Tanaman*. Depok: Penebar Swadaya.

Pradeep, A. R., Jingade, A. H., Singh, C. K., Awasthi, A. K., Kumar, V., Rao, G. C., & Prakash, N. B. 2011. Genetic analysis of scattered populations of the Indian eri silkworm, *Samia cynthia ricini* Donovan: Differentiation of subpopulations. *Genetics and Molecular Biology*, 34: 502-510.

Pramudi, M.I., Soedijo, S., Rosa, H.O. and Aphrodyanti, L., 2021. Dasar-dasar ekologi serangga. *Banjarbaru: CV. Banyubening Cipta Sejahtera*.

Pratiwi, A.P. 2014. Variasi Genetik *Attacus atlas* L. (Lepidoptera: Saturniidae) Berdasar Penanda Molekuler ISSR (*Inter Simple Sequence Repeat*). *Biogenesis: Jurnal Ilmiah Biologi*, 2(1): 21-29.

Purbasari, K. 2012. Variasi Genetik Serangga Penghasil Sutera Emas *Cricula trifenestrata* Helf. (Lepidoptera: Saturniidae) Berdasarkan Penanda RAPD (*Random Amplified Polymorphic DNA*). Universitas Gadjah Mada.

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Rahmawati, R., Eprilurahman, R., Hakim, L., Arisuryanti, T., Rohmah, Z., & Trijoko, T. 2021. Morphologicals and molecular characteristics of regang prawn (*Macrobrachium sintangense* De Man, 1898) from Special Region of Yogyakarta. *Jurnal Biologi Udayana*, *25*(1): 7-17.

Rono, M.M.A., Ahad, M.A., Hasan, M.S., Uddin, M.F. and Islam, A.K.M.N. 2008. Morphometrics measurement of mango defoliator *Cricula trifenestrata* (F. Lepidotera: Saturniidae). *Int. J. Sustain. Crop Prod*, 3(3): 45-48

Rozas, J., Ferrer-Mata, A., Sánchez-DelBarrio, J. C., Guirao-Rico, S., Librado, P., Ramos-Onsins, S.E. and Sánchez-Gracia, A. 2017. DnaSP 6: DNA Sequence Polymorphism Analysis of Large Data Sets. Molecular Biology and Evolution, 34 (12): 3299-3302. DOI: 10.1093/molbev/msx248

Sijapati, J., Rana, N., Rana, P. and Shrestha, S. 2008. Optimization of RAPD-PCR Conditions for the Study of Genetic Diversity in Nepalese Isolates of *Bacillus thuringiensisBerliner*. *Nepal Journal of Science and Technology*. 9: 91-97.

Silmi, M. A., Eprilurahman, R., Trijoko, T., & Hakim, L. 2021. Morphological and molecular characters of freshwater shrimp of *Macrobrachium pilimanus* species group in Opak, Winongo and Sempor Rivers, Yogyakarta. *Jurnal Biologi Udayana*, *25*(1): 57-70.

Siswanti, R., Supriyadi, S. and Subagiya, S., 2017. Hubungan Tingkat Serangan Ulat Kipat (Cricula Trifenestrata) terhadap Hasil Mete. *Agrotechnology Research Journal*, *1*(1), pp.21-27.

Suliyanthini, D. 2016. *Ilmu Tekstil*. Jakarta: PT RajaGrafindo Persada.

Suriana, Solihin, D. D., Noor, R. R., & Thohari, A. M. 2012. The characteristics of cytochrome C oxidase gene subunit I in wild silkmoth *Cricula trifenestrata* helfer and its evaluation for species marker. *Tropical Animal Science Journal*, *35*(2):102.

Suriani. 2011. Morfometri dan Keragaman Genetik Ulat Sutera Liar *Cricula trifenestrata* (Helfer) (Lepidoptera: Saturniidae). Institut Pertanian Bogor.

Syukriani Y. 2012. *DNA forensik*. Jakarta: Sagung Seto: 72-93.

UNIVERSITAS
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Tikader, A., Vijayan, K., Saratchandra, B. 2014. *Cricula trifenestrata* (Helfer) (Lepidoptera: Saturniidae) A silk-producing wild insect in India. *Trop. Lepid. Res*. 24: 22–29.

Tourle, R., Downie, D. A., and Villet, M. H. 2009. Flies in the ointment: a morphological and molecular comparison of *Lucilia cuprina* and *Lucilia sericata* (Diptera: Calliphoridae) in South Africa. *Medical and Veterinary Entomology*, *23*(1): 6-14.

Triandiza, T., Kusnadi, A., Sari, N., & Pesilette, R. N. (2020). Keragaman genetik kima kecil (Tridacna maxima) di Pulau Kur, Pulau Biak, dan Manado serta implikasinya untuk konservasi. *Jurnal Penelitian Perikanan Indonesia*, *26*(3), 167-179.

Trivedi, S., Rehman, H., Saggu, S., Panneerselvam, C. and Ghosh, S.K. eds., 2020. *DNA barcoding and molecular phylogeny*. Springer.

Vertiana, E. V., Oksari, A. A., & Hariri, M. R. 2023. Studi Perbandingan Kode Batang DNA Inti dan Kloroplas pada *Heliconia* sp. In Silico. *BIO-SAINS: Jurnal Ilmiah Biologi,* 2(2), 39–47. https://doi.org/10.34005/bio-sains.v2i2.2108

Wang, R., Zheng, L., Touré, Y. T., Dandekar, T., & Kafatos, F. C. 2001. When genetic distance matters: measuring genetic differentiation at microsatellite loci in whole-genome scans of recent and incipient mosquito species. *Proceedings of the National Academy of Sciences*, *98*(19), 10769-10774.

Wertz PW. 2000. Lipids and Barrier Function of the Skin. *Acta Derm. Venereol Suppl (Stockh)*. 208: 7–11.

Wilson, J. J. 2010. Assessing the value of DNA barcodes and other priority gene regions for molecular phylogenetics of Lepidoptera. *PloS one*, *5*(5), e10525.

Wuliandari, J. R., & Situmorang, J. 2002. Pengaruh Pakan Dan Tempat Pemeliharaan Yang Berbeda Terhadap Masa Perkembangan Larva *Attacus atlas* (L.) (Lepidoptera: Saturniidae). *Teknosains*, *15*.