

## DAFTAR PUSTAKA

- Adams, G. (2020). A beginner's guide to RT-PCR, qPCR and RT-qPCR. *The Biochemist*, 42(3), 48–53. <https://doi.org/10.1042/BIO20200034>
- Alacs, E. A., Georges, A., FitzSimmons, N. N., & Robertson, J. (2010). DNA detective: A review of molecular approaches to wildlife forensics. *Forensic Science, Medicine, and Pathology*, 6(3), 180–194. <https://doi.org/10.1007/s12024-009-9131-7>
- Alonso, A. (2013). DNA Extraction and Quantification. In *Encyclopedia of Forensic Sciences* (pp. 214–218). Elsevier. <https://doi.org/10.1016/B978-0-12-382165-2.00039-8>
- Andayani, N., Maryanto, A. E., & Nur, M. N. (2023). Development of DNA Extraction Method for Forensics Studies of Preserved Hair and Skin Samples from Sumatran Tiger (*Panthera tigris sumatrae*, Pocock 1929). *HAYATI Journal of Biosciences*, 30(5), 816–824. <https://doi.org/10.4308/hjb.30.5.816-824>
- Andréasson, H., Nilsson, M., Budowle, B., Lundberg, H., & Allen, M. (2006). Nuclear and mitochondrial DNA quantification of various forensic materials. *Forensic Science International*, 164(1), 56–64. <https://doi.org/10.1016/j.forsciint.2005.11.024>
- Antunes, A., Pontius, J., Ramos, M. J., O'Brien, S. J., & Johnson, W. E. (2007). Mitochondrial Introgressions into the Nuclear Genome of the Domestic Cat. *Journal of Heredity*, 98(5), 414–420. <https://doi.org/10.1093/jhered/esm062>
- Armbruster, D. A., & Pry, T. (2008). Limit of Blank, Limit of Detection and Limit of Quantitation. *Clinical Biochemistry Rev*, 29 Suppl((i)), S49–S52.
- Armstrong, E. E., Khan, A., Taylor, R. W., Gouy, A., Greenbaum, G., Thiéry, A., Kang, J. T., Redondo, S. A., Prost, S., Barsh, G., Kaelin, C., Phalke, S., Chugani, A., Gilbert, M., Miquelle, D., Zachariah, A., Borthakur, U., Reddy, A., Louis, E., ... Ramakrishnan, U. (2021). Recent Evolutionary History of Tigers Highlights Contrasting Roles of Genetic Drift and Selection. *Molecular Biology and Evolution*, 38(6), 2366–2379. <https://doi.org/10.1093/molbev/msab032>
- Ashrifurrahman, A., Simamora, S., Ritonga, R., Novarino, W., Tjong, D. H., Rizaldi, R., Syaifullah, S., & Roesma, D. I. (2022). Sumatran tiger identification and phylogenetic analysis based on the CO1 gene: Molecular forensic application. *Biodiversitas Journal of Biological Diversity*, 23(4). <https://doi.org/10.13057/biodiv/d230410>
- Baptista, C. J., Seixas, F., Gonzalo-Orden, J. M., & Oliveira, P. A. (2022). Wildlife Forensic Sciences: A Tool to Nature Conservation towards a One Health Approach. *Forensic Sciences*, 2(4), 808–817. <https://doi.org/10.3390/forensicsci2040058>
- Berensmeier, S. (2006). Magnetic particles for the separation and purification of nucleic acids. *Applied Microbiology and Biotechnology*, 73(3), 495–504. <https://doi.org/10.1007/s00253-006-0675-0>
- Bhavanishankar, M., Reddy, P. A., Gour, D. S., & Shivaji, S. (2013). Validation of non-invasive genetic identification of two elusive, sympatric, sister-species

- tiger (*Panthera tigris*) and leopard (*Panthera pardus*). *CURRENT SCIENCE*, 104(8).
- Broeders, S., Huber, I., Grohmann, L., Berben, G., Taverniers, I., Mazzara, M., Roosens, N., & Morisset, D. (2014). Guidelines for validation of qualitative real-time PCR methods. *Trends in Food Science & Technology*, 37(2), 115–126. <https://doi.org/10.1016/j.tifs.2014.03.008>
- Brownie, J., Shawcross, S., Theaker, J., Whitcombe, D., Ferrie, R., Newton, C., & Little, S. (1997). The elimination of primer-dimer accumulation in PCR. *Nucleic Acids Research*, 25(16), 3235–3241. <https://doi.org/10.1093/nar/25.16.3235>
- Bustin, S. A., Beaulieu, J.-F., Huggett, J., Jaggi, R., Kibenge, F. S., Olsvik, P. A., Penning, L. C., & Toegel, S. (2010). MIQE précis: Practical implementation of minimum standard guidelines for fluorescence-based quantitative real-time PCR experiments. *BMC Molecular Biology*, 11(1), 74. <https://doi.org/10.1186/1471-2199-11-74>
- Bustin, S. A., Benes, V., Garson, J. A., Hellems, J., Huggett, J., Kubista, M., Mueller, R., Nolan, T., Pfaffl, M. W., Shipley, G. L., Vandesompele, J., & Wittwer, C. T. (2009). The MIQE Guidelines: Minimum Information for Publication of Quantitative Real-Time PCR Experiments. *Clinical Chemistry*, 55(4), 611–622. <https://doi.org/10.1373/clinchem.2008.112797>
- Bustin, S. A., Ruijter, J. M., van den Hoff, M. J. B., Kubista, M., Pfaffl, M. W., Shipley, G. L., Tran, N., Rodiger, S., Untergasser, A., Mueller, R., Nolan, T., Milavec, M., Burns, M. J., Huggett, J. F., Vandesompele, J., & Wittwer, C. T. (2025). MIQE 2.0: Revision of the Minimum Information for Publication of Quantitative Real-Time PCR Experiments Guidelines. *Clinical Chemistry*, 71(6), 634–651. <https://doi.org/10.1093/clinchem/hvaf043>
- Bustin, S., & Huggett, J. (2017). qPCR primer design revisited. *Biomolecular Detection and Quantification*, 14, 19–28. <https://doi.org/10.1016/j.bdq.2017.11.001>
- Cao, Y., Yu, M., Dong, G., Chen, B., & Zhang, B. (2020). Digital PCR as an Emerging Tool for Monitoring of Microbial Biodegradation. *Molecules*, 25(3), 706. <https://doi.org/10.3390/molecules25030706>
- Chauhan, T. (2023, March 8). Common Issues in DNA/RNA Gel Electrophoresis and Troubleshooting [Education]. *Genetic Education*. <https://geneticeducation.co.in/common-issues-in-dna-rna-gel-electrophoresis-and-troubleshooting/>
- Christensen, H., & Olsen, J. E. (2018). Primer Design. In H. Christensen (Ed.), *Introduction to Bioinformatics in Microbiology* (pp. 81–102). Springer International Publishing. [https://doi.org/10.1007/978-3-319-99280-8\\_5](https://doi.org/10.1007/978-3-319-99280-8_5)
- Conte, J., Potoczniak, M. J., Mower, C., & Tobe, S. S. (2019). ELEquant: A developmental framework and validation of forensic and conservation real-time PCR assays. *Molecular Biology Reports*, 46(2), 2093–2100. <https://doi.org/10.1007/s11033-019-04660-7>
- Corradini, B., Gianfreda, D., Ferri, G., Ferrari, F., Borciani, I., Santunione, A. L., & Cecchi, R. (2024). Forensic species identification: Practical guide for animal and plant DNA analysis. *International Journal of Legal Medicine*, 138(6), 2271–2280. <https://doi.org/10.1007/s00414-024-03284-2>

- Dalton, D. L., Kotzé, A., McEwing, R., De Bruyn, M., Mnisi, C., & Mwale, M. (2020). A tale of the traded cat: Development of a rapid real-time PCR diagnostic test to distinguish between lion and tiger bone. *Conservation Genetics Resources*, 12(1), 29–31. <https://doi.org/10.1007/s12686-018-1060-x>
- De Flamingh, A., Rivera-Colón, A. G., Gnoske, T. P., Kerbis Peterhans, J. C., Catchen, J., Malhi, R. S., & Roca, A. L. (2023). Numt Parser: Automated identification and removal of nuclear mitochondrial pseudogenes (numts) for accurate mitochondrial genome reconstruction in *Panthera*. *Journal of Heredity*, 114(2), 120–130. <https://doi.org/10.1093/jhered/esac065>
- Deliveyne, N., Cassey, P., Linacre, A., Delean, S., Austin, J. J., & Young, J. M. (2022). Recovering trace reptile DNA from the illegal wildlife trade. *Forensic Science International: Animals and Environments*, 2(100040), 1–8. <https://doi.org/10.1016/j.fsiae.2021.100040>
- Desjardins, P., & Conklin, D. (2010). NanoDrop Microvolume Quantitation of Nucleic Acids. *Journal of Visualized Experiments*, 1, 2565. <https://doi.org/10.3791/2565>
- Dhanasekaran, S., Doherty, T. M., & Kenneth, J. (2010). Comparison of different standards for real-time PCR-based absolute quantification. *Journal of Immunological Methods*, 354(1–2), 34–39. <https://doi.org/10.1016/j.jim.2010.01.004>
- Elyasigorji, Z., Izadpanah, M., Hadi, F., & Zare, M. (2023). Mitochondrial genes as strong molecular markers for species identification. *The Nucleus*, 66(1), 81–93. <https://doi.org/10.1007/s13237-022-00393-4>
- Farag, M. R., Bohi, K. M. E., Khalil, S. R., Arain, M. A., Sharun, K., Tiwari, R., & Dhama, K. (2020). FORENSIC APPLICATIONS OF MITOCHONDRIAL CYTOCHROME B GENE IN THE IDENTIFICATION OF DOMESTIC AND WILD ANIMAL SPECIES. *Journal of Experimental Biology and Agricultural Sciences*, 8(1), 1–8. [https://doi.org/10.18006/2020.8\(1\).1.8](https://doi.org/10.18006/2020.8(1).1.8)
- Forootan, A., Sjöback, R., Björkman, J., Sjögreen, B., Linz, L., & Kubista, M. (2017). Methods to determine limit of detection and limit of quantification in quantitative real-time PCR (qPCR). *Biomolecular Detection and Quantification*, 12, 1–6. <https://doi.org/10.1016/j.bdq.2017.04.001>
- Friedenberger, A., Doyle, C., Couillard, L., & Kyle, C. J. (2023). The bear necessities: A sensitive qPCR assay for bear DNA detection from bile and derived products to complement wildlife forensic enforcement. *Forensic Science International: Genetics*, 67, 102935. <https://doi.org/10.1016/j.fsigen.2023.102935>
- Fujii, K., Mita, Y., Watahiki, H., Fukagawa, T., Kitayama, T., Mizuno, N., Nakahara, H., & Sekiguchi, K. (2022). Development and validation of a SYBR green-based mitochondrial DNA quantification method by following the MIQE and other guidelines. *Legal Medicine*, 58, 102096. <https://doi.org/10.1016/j.legalmed.2022.102096>
- Gand, M., Bloemen, B., Vanneste, K., Roosens, N. H. C., & De Keersmaecker, S. C. J. (2023). Comparison of 6 DNA extraction methods for isolation of high yield of high molecular weight DNA suitable for shotgun metagenomics Nanopore sequencing to detect bacteria. *BMC Genomics*, 24(1), 438. <https://doi.org/10.1186/s12864-023-09537-5>

- George, K., Masters, A., & Dawnay, N. (2019). Development of HyBeacon® probes for the forensic detection of *Panthera*, rhinoceros, and pangolin species. *Molecular and Cellular Probes*, 48, 101450. <https://doi.org/10.1016/j.mcp.2019.101450>
- Ghimire, P. (2022). Conservation of Tiger *Panthera tigris* in Nepal: A review of current efforts and challenges. *Journal of Threatened Taxa*, 14(9), 21769–21775. <https://doi.org/10.11609/jott.7011.14.9.21769-21775>
- Gouda, S., Kerry, R. G., Das, A., & Chauhan, N. S. (2020). Wildlife forensics: A boon for species identification and conservation implications. *Forensic Science International*, 317, 110530. <https://doi.org/10.1016/j.forsciint.2020.110530>
- Green, M. R., & Sambrook, J. (2018). Analysis and Normalization of Real-Time Polymerase Chain Reaction (PCR) Experimental Data. *Cold Spring Harbor Protocols*, 2018(10), pdb.top095000. <https://doi.org/10.1101/pdb.top095000>
- Guan, Y., Li, N., Sun, L., Li, M.-C., & Li, T. (2022). Species Identification of Bovine Bone Marrow from Nonbovine Products Using Multiplex PCR Technology. *Journal of Food Quality*, 2022, 1–7. <https://doi.org/10.1155/2022/3905536>
- Gupta, N. (2019). DNA extraction and polymerase chain reaction. *Journal of Cytology*, 36(2), 116. [https://doi.org/10.4103/JOC.JOC\\_110\\_18](https://doi.org/10.4103/JOC.JOC_110_18)
- Henger, C. S., Straughan, D. J., Xu, C. C. Y., Nightingale, B. R., Kretser, H. E., Burnham-Curtis, M. K., McAloose, D., & Seimon, T. A. (2023). A new multiplex qPCR assay to detect and differentiate big cat species in the illegal wildlife trade. *Scientific Reports*, 13(1), 9796. <https://doi.org/10.1038/s41598-023-36776-z>
- Howard, J. (2014). *Guidelines for Designing Primers* (Lab Protocols 10.06; DNA Cloning and Analysis, pp. 1–6). University of California, Riverside. <https://oomyceteworld.net/protocols/primer%20designing2.pdf>
- Islam, M., Aryasomayajula, A., & Selvaganapathy, P. (2017). A Review on Macroscale and Microscale Cell Lysis Methods. *Micromachines*, 8(3), 83. <https://doi.org/10.3390/mi8030083>
- Iyengar, A. (2014). Forensic DNA analysis for animal protection and biodiversity conservation: A review. *Journal for Nature Conservation*, 22(3), 195–205. <https://doi.org/10.1016/j.jnc.2013.12.001>
- Izadpanah, M., Mohebbali, N., Elyasi Gorji, Z., Farzaneh, P., Vakhshiteh, F., & Shahzadeh Fazeli, S. A. (2018). Simple and fast multiplex PCR method for detection of species origin in meat products. *Journal of Food Science and Technology*, 55(2), 698–703. <https://doi.org/10.1007/s13197-017-2980-2>
- Jonckheere, A. I., Smeitink, J. A. M., & Rodenburg, R. J. T. (2012). Mitochondrial ATP synthase: Architecture, function and pathology. *Journal of Inherited Metabolic Disease*, 35(2), 211–225. <https://doi.org/10.1007/s10545-011-9382-9>
- Joseph, A., & Bishnoi, M. (2020). Forensic Science Interventions in Wildlife Mediated Zoonotic Outbreaks: A Systematic Review. *Journal of Communicable Diseases*, 52(04), 88–96. <https://doi.org/10.24321/0019.5138.202046>
- Joshi, A., Vaidyanathan, S., Mondol, S., Edgaonkar, A., & Ramakrishnan, U.

- (2013). Connectivity of Tiger (*Panthera tigris*) Populations in the Human-Influenced Forest Mosaic of Central India. *PLoS ONE*, 8(11), e77980. <https://doi.org/10.1371/journal.pone.0077980>
- Jun, J., Han, S. H., Jeong, T.-J., Park, H. C., Lee, B., & Kwak, M. (2011). Wildlife forensics using mitochondrial DNA sequences: Species identification based on hairs collected in the field and confiscated tanned Felidae leathers. *Genes & Genomics*, 33(6), 721–726. <https://doi.org/10.1007/s13258-011-0080-7>
- Kanthiswamy, S. (2024). Review: Wildlife forensic genetics—Biological evidence, DNA markers, analytical approaches, and challenges. *Animal Genetics*, 55(2), 177–192. <https://doi.org/10.1111/age.13390>
- Karlen, Y., McNair, A., Perseguers, S., Mazza, C., & Mermod, N. (2007). Statistical significance of quantitative PCR. *BMC Bioinformatics*, 8(1), 131. <https://doi.org/10.1186/1471-2105-8-131>
- Kementrian Lingkungan Hidup dan Kehutanan. (2019). *Panduan Identifikasi Satwa Liar Dilindungi*.
- Kim, J.-H., Antunes, A., Luo, S.-J., Menninger, J., Nash, W. G., O'Brien, S. J., & Johnson, W. E. (2006). Evolutionary analysis of a large mtDNA translocation (numt) into the nuclear genome of the *Panthera* genus species. *Gene*, 366(2), 292–302. <https://doi.org/10.1016/j.gene.2005.08.023>
- King, L. M., & Wallace, S. C. (2014). Phylogenetics of *Panthera*, including *Panthera atrox*, based on craniodental characters. *Historical Biology*, 26(6), 827–833. <https://doi.org/10.1080/08912963.2013.861462>
- Kitpipit, T., & Linacre, A. (2012). The complete mitochondrial genome analysis of the tiger (*Panthera tigris*). *Molecular Biology Reports*, 39(5), 5745–5754. <https://doi.org/10.1007/s11033-011-1384-z>
- Kitpipit, T., Tobe, S. S., Kitchener, A. C., Gill, P., & Linacre, A. (2012). The development and validation of a single SNaPshot multiplex for tiger species and subspecies identification—Implications for forensic purposes. *Forensic Science International: Genetics*, 6(2), 250–257. <https://doi.org/10.1016/j.fsigen.2011.06.001>
- Koetsier, G., & Cantor, E. (2019). *A Practical Guide to Analyzing Nucleic Acid Concentration and Purity with Microvolume Spectrophotometers* (Technical Note 7/19; pp. 1–8). New England Biolabs, Inc.
- Kurland, J., Pires, S. F., McFann, S. C., & Moreto, W. D. (2017). Wildlife crime: A conceptual integration, literature review, and methodological critique. *Crime Science*, 6(1), 4. <https://doi.org/10.1186/s40163-017-0066-0>
- Lambret-Frotté, J., Perini, F. A., & De Moraes Russo, C. A. (2012). Efficiency of Nuclear and Mitochondrial Markers Recovering and Supporting Known Amniote Groups. *Evolutionary Bioinformatics*, 8, EBO.S9656. <https://doi.org/10.4137/EBO.S9656>
- Lee, W., Lee, Y., Kim, H., Akimoto, S.-I., & Lee, S. (2014). Developing a new molecular marker for aphid species identification: Evaluation of eleven candidate genes with species-level sampling. *Journal of Asia-Pacific Entomology*, 17(3), 617–627. <https://doi.org/10.1016/j.aspen.2014.06.008>
- Linacre, A. M. T., & Tobe, S. S. (2013). *Wildlife DNA Analysis: Applications in Forensic Science* (1st ed.). Wiley. <https://doi.org/10.1002/9781118496411>
- Liu, Y.-C., Sun, X., Driscoll, C., Miquelle, D. G., Xu, X., Martelli, P., Uphyrkina, O., Smith, J. L. D., O'Brien, S. J., & Luo, S.-J. (2018). Genome-Wide

- Evolutionary Analysis of Natural History and Adaptation in the World's Tigers. *Current Biology*, 28(23), 3840-3849.e6. <https://doi.org/10.1016/j.cub.2018.09.019>
- Löfström, C., Josefson, M. H., Hansen, T., Søndergaard, M. S. R., & Hoorfar, J. (2015). 9—Fluorescence-based real-time quantitative polymerase chain reaction (qPCR) technologies for high throughput screening of pathogens. In A. K. Bhunia, M. S. Kim, & C. R. Taitt (Eds.), *High Throughput Screening for Food Safety Assessment* (pp. 219–248). Woodhead Publishing. <https://doi.org/10.1016/B978-0-85709-801-6.00009-5>
- Lopez, J. V., Yuhki, N., Masuda, R., Modi, W., & O'Brien, S. J. (1994). Numt, a recent transfer and tandem amplification of mitochondrial DNA to the nuclear genome of the domestic cat. *Journal of Molecular Evolution*, 39(2), 174–190. <https://doi.org/10.1007/bf00163806>
- Luo, S., Johnson, W. E., & O'Brien, S. J. (2010). Applying molecular genetic tools to tiger conservation. *Integrative Zoology*, 5(4), 351–362. <https://doi.org/10.1111/j.1749-4877.2010.00222.x>
- Luo, S.-J., Kim, J.-H., Johnson, W. E., Walt, J. V. D., Martenson, J., Yuhki, N., Miquelle, D. G., Uphyrkina, O., Goodrich, J. M., Quigley, H. B., Tilson, R., Brady, G., Martelli, P., Subramaniam, V., McDougal, C., Hean, S., Huang, S.-Q., Pan, W., Karanth, U. K., ... O'Brien, S. J. (2004). Phylogeography and Genetic Ancestry of Tigers (*Panthera tigris*). *PLoS Biology*, 2(12), e442. <https://doi.org/10.1371/journal.pbio.0020442>
- Maddocks, S., & Jenkins, R. (2017a). Designing and Ordering Your Polymerase Chain Reaction Primers. In *Understanding PCR* (pp. 11–30). Elsevier. <https://doi.org/10.1016/B978-0-12-802683-0.00002-2>
- Maddocks, S., & Jenkins, R. (2017b). Quantitative PCR. In *Understanding PCR* (pp. 45–52). Elsevier. <https://doi.org/10.1016/B978-0-12-802683-0.00004-6>
- Maroju, P. A., Yadav, S., Kolipakam, V., Singh, S., Qureshi, Q., & Jhala, Y. (2016). Schrodinger's scat: A critical review of the currently available tiger (*Panthera Tigris*) and leopard (*Panthera pardus*) specific primers in India, and a novel leopard specific primer. *BMC Genetics*, 17(1), 37. <https://doi.org/10.1186/s12863-016-0344-y>
- McKiernan, H. E., & Danielson, P. B. (2017). Molecular Diagnostic Applications in Forensic Science. In *Molecular Diagnostics* (pp. 371–394). Elsevier. <https://doi.org/10.1016/B978-0-12-802971-8.00021-3>
- Melchionda, F., Pesaresi, M., Alessandrini, F., Onofri, V., & Turchi, C. (2025). Developmental validation of a multiplex qPCR assay for simultaneous quantification of nuclear and mitochondrial DNA. *Forensic Science International: Genetics*, 74, 103164. <https://doi.org/10.1016/j.fsigen.2024.103164>
- Meszaros, E. (2022, March 24). *How to design primers for PCR*. Integra-Biosciences. <https://www.integra-biosciences.com/united-kingdom/en/blog/article/how-design-primers-pcr>
- Mitra, I., Roy, S., & Haque, I. (2018). Application of Molecular Markers in Wildlife DNA Forensic Investigations. *Journal of Forensic Science and Medicine*, 4(3).
- Moore, M. K., Baker, B. W., Bauman, T. L., Burnham-Curtis, M. K., Espinoza, E.

- O., Ferrell, C. S., Frankham, G. J., Frazier, K., Giles, J. L., Hawk, D., Rovie-Ryan, J. J., Johnson, R. N., Knott, T., Kornfield, I. L., Lindquist, C., Lord, W. D., Morgan, K. L., O'Brien, R. C., Ogden, R., ... Webster, L. M. I. (2021). The Society for Wildlife Forensic Science standards and guidelines. *Forensic Science International: Animals and Environments*, *1*, 100015. <https://doi.org/10.1016/j.fsiae.2021.100015>
- Muangkram, Y., Wajjwalku, W., Amano, A., & Sukmak, M. (2018). The novel primers for mammal species identification-based mitochondrial cytochrome *b* sequence: Implication for reserved wild animals in Thailand and endangered mammal species in Southeast Asia. *Mitochondrial DNA Part A*, *29*(1), 62–72. <https://doi.org/10.1080/24701394.2016.1238902>
- Munir, M. A., & Inayatullah, A. (2021). Comparison of real time PCR and conventional PCR by identifying genomic DNA of bovine and porcine. *Jurnal Kimia Terapan Indonesia*, *23*(2), 63–71. <https://doi.org/10.14203/inajac.v23i2.491>
- Murakami, M. (2013). Evaluation of DNA Plasmid Storage Conditions. *The Open Biotechnology Journal*, *7*(1), 10–14. <https://doi.org/10.2174/1874070701307010010>
- Mwale, M., Dalton, D. L., Jansen, R., De Bruyn, M., Pietersen, D., Mokgokong, P. S., & Kotzé, A. (2017). Forensic application of DNA barcoding for identification of illegally traded African pangolin scales. *Genome*, *60*(3), 272–284. <https://doi.org/10.1139/gen-2016-0144>
- Nittu, G., Shameer, T. T., Nishanthini, N. K., & Sanil, R. (2022). The tide of tiger poaching in India is rising! An investigation of the intertwined facts with a focus on conservation. *GeoJournal*, *88*(1), 753–766. <https://doi.org/10.1007/s10708-022-10633-4>
- Olwagen, C. P., Downs, S. L., Nunes, M. C., & Madhi. (2022). The Pitfalls of Cut-off Values in Real-time, Quantitative PCR: Should Target Density or Amplification Cycle Threshold be used for Interpreting qPCR Results? *Journal of Bioprocessing & Biotechniques*, *12*(8), 1–2. <https://doi.org/10.37421/2155-9821.2022.12.530>
- O'Neill, M., McPartlin, J., Arthure, K., Riedel, S., & McMillan, N. (2011). Comparison of the TLDA with the Nanodrop and the reference Qubit system. *Journal of Physics: Conference Series*, *307*, 012047. <https://doi.org/10.1088/1742-6596/307/1/012047>
- Oppili, P. (2016, February 25). Fake tiger skin agents go online, make a killing. *The Times of India*. <https://timesofindia.indiatimes.com/city/chennai/Fake-tiger-skin-agents-go-online-make-a-killing/articleshow/51117914.cms>
- Ouso, D. O., Otiende, M. Y., Jeneby, M. M., Oundo, J. W., Bargul, J. L., Miller, S. E., Wambua, L., & Villinger, J. (2020). Three-gene PCR and high-resolution melting analysis for differentiating vertebrate species mitochondrial DNA for biodiversity research and complementing forensic surveillance. *Scientific Reports*, *10*(1), 4741. <https://doi.org/10.1038/s41598-020-61600-3>
- Pawluczyk, M., Weiss, J., Links, M. G., Egaña Aranguren, M., Wilkinson, M. D., & Egea-Cortines, M. (2015). Quantitative evaluation of bias in PCR amplification and next-generation sequencing derived from metabarcoding samples. *Analytical and Bioanalytical Chemistry*, *407*(7), 1841–1848.

- <https://doi.org/10.1007/s00216-014-8435-y>
- Pfaffl, M. W. (2004). Quantification strategies in real-time PCR. In S. A. Bustin (Ed.), *A-Z of quantitative PCR* (pp. 87–112). International University Line.
- Pires, S. F., & Olah, G. (2022). Wildlife Crime: Issues and Promising Solutions. *Animals*, 12(14), 1736. <https://doi.org/10.3390/ani12141736>
- Prasetyo, M. A. A.-G., & Sanjaya, G. E. (2023). *Identifikasi DNA Daging Babi dan Daging Sapi menggunakan Metode Polymerase Chain Reaction dalam Industri Makanan*. 9(2).
- Prediger, E. (2024, April 8). *How to design primers and probes for PCR and qPCR* [Education]. Iddtdna. <https://www.idtdna.com/pages/education/decoded/article/designing-pcr-primers-and-probes>
- Priyono, D. S., Al Khairi, H., Ula, A. L., & Arisuyanti, T. (2025). From confiscation to conservation: Wildlife DNA forensic for species identification of confiscated Felidae in Indonesia. *Forensic Science International*, 367(112362), 1. <http://dx.doi.org/10.1016/j.forsciint.2024.112362>
- Pusparini, W., Batubara, T., Surahmat, F., Ardiantiono, Sugiharti, T., Muslich, M., Amama, F., Marthy, W., & Andayani, N. (2018). A pathway to recovery: The Critically Endangered Sumatran tiger *Panthera tigris sumatrae* in an ‘in danger’ UNESCO World Heritage Site. *Oryx*, 52(1), 25–34. <https://doi.org/10.1017/S0030605317001144>
- Quantabio. (2023). *Real-Time quantitative PCR Optimization Guide* (Optimization Guide MK-AN-0010 REV 01). Quantabio, LLC. [https://www.quantabio.com/wp-content/uploads/2023/01/MK-AN-0010\\_REV\\_01\\_RT-qPCR\\_Optimization\\_Guide\\_0621\\_lr.pdf](https://www.quantabio.com/wp-content/uploads/2023/01/MK-AN-0010_REV_01_RT-qPCR_Optimization_Guide_0621_lr.pdf)
- Ricci, U., Ciappi, D., Carboni, I., Centrone, C., Giotti, I., Petti, M., Alice, B., & Pelo, E. (2024). Looking into the Quantification of Forensic Samples with Real-Time PCR. *Genes*, 15(6), 759. <https://doi.org/10.3390/genes15060759>
- Roche. (2002). *Optimization of Reactions to Reduce Formation of Primer Dimers* (Techinal Note LC 1; pp. 1–8).
- Ruijter, J. M., Barnewall, R. J., Marsh, I. B., Szentirmay, A. N., Quinn, J. C., Van Houdt, R., Gunst, Q. D., & Van Den Hoff, M. J. B. (2021). Efficiency Correction Is Required for Accurate Quantitative PCR Analysis and Reporting. *Clinical Chemistry*, 67(6), 829–842. <https://doi.org/10.1093/clinchem/hvab052>
- Ruiz-Villalba, A., Ruijter, J. M., & Van Den Hoff, M. J. B. (2021). Use and Misuse of Cq in qPCR Data Analysis and Reporting. *Life*, 11(6), 496. <https://doi.org/10.3390/life11060496>
- Saadat, S., Pandya, H., Dey, A., & Rawtani, D. (2022). Food forensics: Techniques for authenticity determination of food products. *Forensic Science International*, 333, 111243. <https://doi.org/10.1016/j.forsciint.2022.111243>
- Sabu, M. M., Pasha, S. V., Reddy, C. S., Singh, R., & Jaishanker, R. (2022). The effectiveness of Tiger Conservation Landscapes in decreasing deforestation in South Asia: A remote sensing-based study. *Spatial Information Research*, 30(1), 63–75. <https://doi.org/10.1007/s41324-021-00411-8>
- Sarri, C., Stamatis, C., Sarafidou, T., Galara, I., Godosopoulos, V., Kolovos, M., Liakou, C., Tastsoglou, S., & Mamuris, Z. (2014). A new set of 16S rRNA universal primers for identification of animal species. *Food Control*, 43, 35–

41. <https://doi.org/10.1016/j.foodcont.2014.02.036>
- Sharma, R. K., & Jhala, Y. V. (2011). Monitoring tiger populations using intensive search in a capture–recapture framework. *Population Ecology*, 53(2), 373–381. <https://doi.org/10.1007/s10144-010-0230-9>
- Sigma-Aldrich. (2010). *Glossary of Parameters*. Sigma-Aldrich. [https://www.gene-quantification.de/oligo\\_architect\\_glossary.pdf](https://www.gene-quantification.de/oligo_architect_glossary.pdf)
- Sihotang, M., Sophian, A., Purba, M., & Wilasti, Y. (2022). Development of Rat Meat Detection Using Mt-atp6 *Rattus norvegicus* Gene Genetic Marker. *Current Applied Science and Technology*, 23(1). <https://doi.org/10.55003/cast.2022.01.23.006>
- Sutlovi, D., & Gojanovi, M. D. (2007). Rapid Extraction of Human DNA Containing Humic Acid. *Croat. Chem. Acta*.
- Sutlovic, D., Gamulin, S., Definis-Gojanovic, M., Gugic, D., & Andjelinovic, S. (2008). Interaction of humic acids with human DNA: Proposed mechanisms and kinetics. *ELECTROPHORESIS*, 29(7), 1467–1472. <https://doi.org/10.1002/elps.200700699>
- Svec, D., Tichopad, A., Novosadova, V., Pfaffl, M. W., & Kubista, M. (2015). How good is a PCR efficiency estimate: Recommendations for precise and robust qPCR efficiency assessments. *Biomolecular Detection and Quantification*, 3, 9–16. <https://doi.org/10.1016/j.bdq.2015.01.005>
- Swango, K. L., Timken, M. D., Chong, M. D., & Buoncristiani, M. R. (2006). A quantitative PCR assay for the assessment of DNA degradation in forensic samples. *Forensic Science International*, 158(1), 14–26. <https://doi.org/10.1016/j.forsciint.2005.04.034>
- Taylor, S. C., Nadeau, K., Abbasi, M., Lachance, C., Nguyen, M., & Fenrich, J. (2019). The Ultimate qPCR Experiment: Producing Publication Quality, Reproducible Data the First Time. *Trends in Biotechnology*, 37(7), 761–774. <https://doi.org/10.1016/j.tibtech.2018.12.002>
- ThermoScientific. (2009). *QPCR Optimization & Troubleshooting Guide*. Thermo Fischer Scientific Inc. <https://assets.thermofisher.com/TFS-Assets/BID/Product-Guides/D13002~.pdf>
- Tikalova, E., Votrubova, J., Kufnerova, J., Formanova, D., Rihova, P., Vankova, L., & Vanek, D. (2019). Busting the myths: DNA typeability after 48 hours of boil. *Forensic Science International: Genetics Supplement Series*, 7(1), 79–82. <https://doi.org/10.1016/j.fsigss.2019.09.031>
- Van Holm, W., Ghesquière, J., Boon, N., Verspecht, T., Bernaerts, K., Zayed, N., Chatzigiannidou, I., & Teughels, W. (2021). A Viability Quantitative PCR Dilemma: Are Longer Amplicons Better? *Applied and Environmental Microbiology*, 87(5), e02653-20. <https://doi.org/10.1128/AEM.02653-20>
- Van Pelt-Verkuil, E., Van Belkum, A., & Hays, J. P. (2008). *Principles and Technical Aspects of PCR Amplification*. Springer Netherlands. <https://doi.org/10.1007/978-1-4020-6241-4>
- Vandesompele, J., De Paepe, A., & Speleman, F. (2002). Elimination of Primer–Dimer Artifacts and Genomic Coamplification Using a Two-Step SYBR Green I Real-Time RT-PCR. *Analytical Biochemistry*, 303(1), 95–98. <https://doi.org/10.1006/abio.2001.5564>
- Verma, S. K., & Singh, L. (2003). Novel universal primers establish identity of an enormous number of animal species for forensic application. *Molecular*

- Ecology Notes*, 3(1), 28–31. <https://doi.org/10.1046/j.1471-8286.2003.00340.x>
- Vipin, Sharma, V., Sharma, C. P., Kumar, V. P., & Goyal, S. P. (2016). Pioneer identification of fake tiger claws using morphometric and DNA-based analysis in wildlife forensics in India. *Forensic Science International*, 266, 226–233. <https://doi.org/10.1016/j.forsciint.2016.05.024>
- Wetton, J. H., Tsang, C. S. F., Roney, C. A., & Spriggs, A. C. (2004). An extremely sensitive species-specific ARMs PCR test for the presence of tiger bone DNA. *Forensic Science International*, 140(1), 139–145. <https://doi.org/10.1016/j.forsciint.2003.11.018>
- Wilson, L., & Boratto, R. (2020). Conservation, wildlife crime, and tough-on-crime policies: Lessons from the criminological literature. *Biological Conservation*, 251, 108810. <https://doi.org/10.1016/j.biocon.2020.108810>
- Wong, R., & Krishnasamy, K. (2022). *TIGER TRAFFICKING ANALYSIS FROM JANUARY 2000 TO JUNE 2022*. Trade Records Analysis of Flora and Fauna in Commerce.
- Wong, R. W. Y. (2016). The Organization of the Illegal Tiger Parts Trade in China. *British Journal of Criminology*, 56(5), 995–1013. <https://doi.org/10.1093/bjc/azv080>
- Xue, H.-R., Yamaguchi, N., Driscoll, C. A., Han, Y., Bar-Gal, G. K., Zhuang, Y., Mazak, J. H., Macdonald, D. W., O'Brien, S. J., & Luo, S.-J. (2015). Genetic Ancestry of the Extinct Javan and Bali Tigers. *Journal of Heredity*, 106(3), 247–257. <https://doi.org/10.1093/jhered/esv002>