

## DAFTAR PUSTAKA

- Afandi, S., Harianto, A., dan Ihsan, M.F. (2017). *Mycoplasma caprineum subsp. capripneumoniae* and Carp Interstitial Nephritis and Gill Disease Virus Co-Infection as The Causative Agent of Myocarpioribaviral Disease in *Pangasianodon hypophthalmus* in Indonesia. *Aquaculture International*. 25(6): 1467-1477.
- Anis, M.Y. dan Hariani, D. (2019). Pemberian Pakan Komersial dengan Penambahan EM4 (Effective Microorganisme 4) untuk Meningkatkan Laju Pertumbuhan Lele (*Clarias sp.*). *Jurnal Riset Biologi dan Aplikasinya*. 1(1): 1-8.
- Armando, E., Lestiyani, A., dan Islamy, R.A. (2021). Potential Analysis of Lemna sp. Extract as Immunostimulant to Increase Non-Specific Immune Response of Tilapia (*Oreochromis niloticus*) against *Aeromonas hydrophila*. *Research Journal of Life Science*. 8(1): 40-47.
- Boyd, C.E. (2014). *Water Quality in Aquaculture*. Hoboken: John Wiley & Sons.
- Budidaya, D.J. (2024). *Produksi Perikanan Budidaya Ikan Lele*. Dipetik Januari 16, 2024, dari <https://statistik.kkp.go.id/home.php?m=total&i=2#panel-footer>
- Budidaya, D.J. (2024). *Volume Ekspor Hasil Perikanan Menurut Komoditas*. Dipetik Januari 16, 2024, dari <https://statistik.kkp.go.id/home.php?m=eksim&i=211#panel-footer-kpda>
- Campbell, T.W. and Grant, K.R. (2022). *Exotic Animal Hematology and Cytology (5th Edition)*. Hoboken: Wiley Blackwell.
- Chen, H., Yuan, G., Su, J., and Liu, X. (2019). Hemotological Analysis of *Ctenopharyngodon idella*, *Megalobrama amblycephala* and *Pelteobagrus fulvidraco*: Morphology, Ultrastructure, Cytochemistry and Quantification of Peripheral Blood Cells. *Fish and Shellfish Immunology*. 90: 376-384.
- Diatin, I., Shafruddin, D., Hude, N., Sholihah, M., and Mutsmir, I. (2021). Production Performance and Financial Feasibility Analysis of Farming Catfish (*Clarias gariepinus*) Utilizing Water Exchange System, Aquaponic, and Biofloc Technology. *Journal of the Saudi Society of Agricultural Sciences*. 20: 344-351.
- Effendi, H. (2004). *Hematologi Ikan*. Bogor: IPB Press.
- El-Fiky, A F., El-Sayed, A.M., and Abdel-Hamid, A. M. (2014). Effect of Water Temperature on Some Hematological Parameters of African Catfish (*Clarias gariepinus*) Fingerlings. *Journal of Applied Aquaculture*. 26(4): 435-445.
- El-Fiky, F.A., El-Sayed, A.F., and Abdel-Tawwab, M. (2023). Impact of Temperature on Hematological and Biochemical Parameters of *Clarias gariepinus* (Burchell, 1822) Fingerlings. *Aquaculture Reports*. 27.

- El-Sayed, A.F. (2006). Haematological and Biochemical Parameters of *Clarias gariepinus* (Burchell, 1822) Fingerlings Reared in Different Culture Systems. *Journal of Applied Ichthyology*. 22(2): 144-148.
- Esmaeili, M. (2021). Blood Performance: A New Formula for Fish Growth and Health. *Biology (Basel)*. 10(12): 1236-1259.
- Evans, D.H., Piermarini, P.M., and Choe, K.P. (2018). Dehydration in Fish. *Journal of Comparative Physiology B*. 188(4): 433-458.
- Fassah, D.M., dan Khotijah, L. (2016). Pengimbuhan Vitamin-E dalam Ransum Kaya Asam Lemak Tidak Jenuh Terhadap Profil Darah Induk Domba Laktasi. *Jurnal Veteriner*. 17(3): 430-439.
- Fazio, F. (2019). Fish Hematology Analysis as An Important Tool of Aquaculture: A Review. *Aquaculture*. 500: 237242.
- Guyton, A.C. and Hall, J.E. (2011). *Textbook of Medical Physiology (12th Edition)*. Philadelphia: Saunders Elsevier.
- Harikrishnan, R., Balasundaram, C., and Heo, M.S. (2011). Effect of Dietary Protein and Lipid Levels on Growth, Hematology, and Immune Response of Juvenile African Catfish (*Clarias gariepinus*). *Aquaculture*. 317: 137-144.
- Hinton, D.E. and Lakshmanan, G. (2023). The Role of the Labyrinth in Oxygen Homeostasis. *Respiratory Physiology & Neurobiology*. 300.
- Ighwela, K.A., Ahmad, A., and Abol-Munafi, A.B. (2012). Haematological Changes in Nile Tilapia (*Oreochromis niloticus*) Fed with Varying Dietary Maltose Levels. *World Journal of Fish and Marine Sciences*. 4(4): 376-381.
- Iswanto, B., Suprpto, R., dan Marnis, H. (2019). Perbandingan Karakterisasi Biometrik Ikan Lele Dumbo dengan Ikan Lele Afrika (*Clarias gariepinus* Burchell, 1822). *Berita Biologi*. 18(2): 223-232.
- Kumar, R., and Banerjee, T.K. (2016). Arsenic Induced Hematological and Biochemical Responses in Nutritionally Important Catfish *Clarias batrachus* (L.). *Toxicology Reports*. 3: 148-152.
- Kurniawan, A. dan Mulyani, S. (2023). Pengaruh Kadar Protein Pakan terhadap Pertumbuhan dan Kualitas Air pada Ikan Lele Dumbo (*Clarias gariepinus*). *Jurnal Ilmiah Perikanan dan Kelautan*. 11(1): 77-84.
- Kurniawan, A., Sulistianto, B., and Supramono, H. (2020). The Effect of Water Quality Deterioration on Hematological Parameters of the African Catfish (*Clarias gariepinus*). *IOP Conference Series: Earth and Environmental Science*. 546.
- Lucas, J.S., Southgate, P.C., and Tucker, C.S. (2019). *Aquaculture: Farming Aquatic Animals and Plants (Third Edition)*. Stoneville: Wiley-Blackwell.

- Lukman, M. dan Syahputra, A. (2018). Struktur dan Fungsi Labirin pada Ikan Lele Dumbo (*Clarias gariepinus*). *Jurnal Ilmiah Perikanan dan Kelautan*. 10(2): 127-134.
- Manik, R.R., Handoco, E., Tambunan, L.O., Tambunan, J., dan Sitompul, S. (2022). Sosialisasi Pembenihan Ikan Lele (*Clarias sp.*) dengan Menggunakan Pemijahan Semi Buatan di Desa Aras Kabupaten Batu Bara. *Mattawang: Jurnal Pengabdian Masyarakat*. 3(1): 47-51.
- Manna, S.K., Das, N., Bera, A. K., Baitha, R., Maity, S., Debnath, D., Panikkar, P., Nag, S.K., Sarkar, S.D., Das, K.B., Patil, P.K. (2021). Reference Haematology and Blood Biochemistry Profiles of Striped Catfish (*Pangasianodon hypophthalmus*) in Summer and Winter Seasons. *Aquaculture Reports*. 21: 1-6.
- Marsuki, N.A. (2022). Analisis Morfometrik Ikan Nila (*Oreochromis niloticus*) Hasil Budidaya Tambak dan Hasil Pancingan Masyarakat di Sungai Jeneberang, Kelurahan Pangkabinanga, Kabupaten Gowa. *Proyek Ikhtiologi*. 1-5.
- Megarani, D.V., Hardian, A.B., Arifianto, D., Santosa, C.M., & Salasia, S.I.O. (2020). Comparative Morphology and Morphometry of Blood Cells in Zebrafish (*Danio rerio*), Common Carp (*Cyprinus carpio carpio*), and Tilapia (*Oreochromis niloticus*). *Journal of the American Association for Laboratory Animal Science*. 59(6): 673-680.
- Mlay, P.S., Seth, M., Balthazary, S.T., Chibunda, R.T., Phiri, E.C., & Balemba, O.B. (2007). Total Plasma Proteins and Hemoglobin Levels as Affected by Worm Burden in Freshwaterfish in Morgoro, Tanzania. *Livestock Research for Rural Development*. 19(19): 1-8.
- Muchlisin, Z.A., Amrullah, dan Nisa, C. (2018). Pertumbuhan dan Reproduksi Lele Dumbo (*Clarias gariepinus*) yang Dipelihara dalam Wadah Hapa di Kolam Air Deras. *Jurnal Ilmiah Perikanan dan Kelautan*. 10(1): 51-58.
- Mulyani, S., dan Yuniarti, N. (2021). Identifikasi Penyakit Ikan Lele Dumbo (*Clarias gariepinus*) di Kabupaten Sleman, Yogyakarta. *Jurnal Ilmiah Peternakan dan Veteriner*. 10(2): 107-114.
- Nanda, A.P., dkk. (2018). Pengaruh Salinitas Air dan Pemberian Pakan Terhadap Total Eritrosit dan Hemoglobin Ikan Lele Dumbo (*Clarias gariepinus*). *Jurnal Sains dan Teknologi Kelautan*. 10(1): 1-7.
- Ndobe, P. N., et al. (2019). The Effect of Body Size and Water Temperature on Hemoglobin and Red Blood Cell Count of *Clarias gariepinus* (Burchell, 1822). *International Journal of Fisheries and Aquatic Research*. 7(1): 1-6.
- Nisa, F. dan Oktaviani, R. (2022). Pengaruh Pemberian Probiotik *Lactobacillus sp.* terhadap Pertumbuhan dan Ketahanan Ikan Lele Dumbo (*Clarias*

- gariepinus*) terhadap Penyakit *Aeromonas hydrophila*. *Jurnal Sains dan Teknologi Peternakan*. 14(1): 81-88.
- Noga, E.J. (2010). *Fish Disease: Diagnosis and Treatment*. Hoboken, NJ: Wiley-Blackwell.
- Nurhayati, Setiowati, R., dan Linggawati, A. (2014). Karakteristik Hematologi Ikan Lele Sangkuriang (*Clarias gariepinus*). *Jurnal Online Mahasiswa Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Andalas*. 1(1): 1-7.
- Oliveira, M.A. and Soares, M. J. (2000). Blood Parameters of The African Catfish (*Clarias gariepinus*) in A Tropical Reservoir. *Aquaculture Research*. 32(12): 1119-1127.
- Olufeagba, S.O., Afolayan, T.A., and Faturoti, E.O. (2022). Haematological and Biochemical Responses of African Catfish (*Clarias gariepinus*) to Different Water Temperatures. *Journal of Applied Ichthyology*. 38(2): 384-392.
- Poedjiadi, A. dan Supriyanti, T. (2009). *Dasar-dasar Biokimia (Edisi Revisi)*. Jakarta: Penerbit Buku Kedokteran EGC.
- Puente-Marin, S., Thwaite, R., Mercado, L., Coll, J., Roher, N., and Ortega-Villaizan, M.D. (2019). Fish Red Blood Cells Modulate Immune Genes in Response to Bacterial Inclusion Bodies Made of TNF $\alpha$  and a G-VHSV Fragment. *Frontiers in Immunology*. 10(1055): 1-11.
- Riche, M. (2007). Analysis of Refractometry of Determining Total Plasma Protein in Hybrid Striped Bass (*Morone chrysops  $\times$  *M. saxatilis*) at Varipus Salinities. *Aquaculture*. 264: 279-284.*
- Roberts, R.J. (2012). *The Skeletogenesis of Fishes*. Dordrecht: Springer Science & Business Media.
- Saparuddin. (2019). Respon Hematologi Ikan Nila (*Oreochromis niloticus*) pada Suhu Pemeliharaan yang Berbeda. *SAINTIFIK: Jurnal Matematika, Sains, dan Pembelajarannya*. 5(2): 121-126.
- Sebastiano, F.A., Nomura, D., Sakabe, R., and Pilarski, F. (2011). Hematology and Productive Performance of Nile Tilapia (*Oreochromis niloticus*) Naturally Infected With *Flavobacterium columnare*. *Brazilian Journal of Microbiology*. 42(1): 282-289.
- Setiawan, A.E. dan Oktarina, Y. (2017). Analisis Faktor-faktor Produksi Budidaya Ikan Lele (*Clarias batrachus*) di Kecamatan Buay Madang Timur Kabupaten Oku Timur. *JASEP*. 3(2): 16-23.
- Supramono, E., Yanto, A., dan Sunarso, S. (2017). Pengaruh Pemberian Pakan Komersial yang Mengandung Tepung Daun Kelor (*Moringa oleifera*) Terhadap Pertumbuhan dan Kelulushidupan Ikan Lele Dumbo (*Clarias gariepinus*). *Jurnal Ilmu Perikanan dan Kelautan*. 18(2): 129-136.

- Supramono, H., Nugroho, A., and Astuti, E. (2016). Hematological Responses of *Clarias gariepinus* Exposed to Chronic Ammonia Stress. *Indonesian Journal of Aquatic Animal Medicine*. 6(2): 91-98.
- Thrall, M.A., Weiser, G., Allison, R.W., and Campbell, T.W. (2022). *Veterinary Hematology, Clinical Chemistry, and Cytology (Third Edition)*. Chennai: Wiley-Blackwell.
- Wee, K.L. and Shu-Chien, L. (1987). A Study on The Hematology of The African Catfish, *Clarias gariepinus* (Burchell). *Journal of Fish Biology*. 31(2): 247-257.
- Weiss, D.J. and Wardrop, K.J. (2010). *Schalm's Veterinary Hematology (Sixth Edition)*. USA: Wiley-Blackwell Publishing.
- Witeska, M. (2006). The Relationship Between Erythrocyte Size and Metabolic Rate in Fish. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*. 143(1): 115-121.
- Witeska, M., Kondera, E., Ługowska, K., and Bojarski, B. (2022). Hematological Method in Fish - Not Only for Beginners. *Aquaculture*. 547: 1-17.
- Wood, C.M., and Perry, S.F. (2007). The Effects of Hypoxia on The Morphology and Function of Red Blood Cells in Fish. *Fish Physiology*. 27: 103-122.
- Yanto, A., Supramono, E., dan Sunarso, S. (2015). Pengaruh Pemberian Pakan Komersial yang Mengandung Tepung Daun Kelor (*Moringa oleifera*) Terhadap Profil Darah Ikan Lele Dumbo (*Clarias gariepinus*). *Jurnal Ilmu Perikanan dan Kelautan*. 16(2): 123-130.
- Yanto, E., Yunita, D., & Arfah, A. (2015). Respon Imun Non-Spesifik dan Performa Pertumbuhan Lele *Clarias gariepinus* (Burchell, 1822) yang Diberi Pakan dengan Suplementasi Probiotik *Lactobacillus sp.* *Jurnal Ilmiah Perikanan dan Kelautan*. 7(2): 141-150.
- Yanto, H., Hasan, H., dan Sumarto. (2015). Studi Hematologi Untuk Diagnosa Penyakit Ikan Secara Dini di Sentra Produksi Budidaya Ikan Air Tawar Sungai Kapuas Kota Pontianak. *Jurnal Akuatika*. 6(1): 11-20.
- Yanuhar, U., Raharjo, D.W., Caesar, N.R., and Junirahma, N.S. (2021). Hematology Response of Catfish (*Clarias sp.*) as an Indicator. *Earth and Environmental Science*. 718: 1-6.
- Zuhrawati, N.A. (2014). Pengaruh Peningkatan Suhu Terhadap Kadar Hemoglobin dan Nilai Hematokrit Ikan Nila (*Oreochromis niloticus*). *Jurnal Medika Veterinaria*. 8(1): 84-86.