DAFTAR PUSTAKA

Achoukhi, I., El Hammoudani, Y., Haboubi, K., Benaabidate, L., Bourjila, A., El Boudammoussi, M., Moudou, M., Faiz, H., Touzani, A., & Dimane, F. (2024). Impact of microplastics on human health and aquatic species. *E3S Web of Conferences*, *527*, 1–12. https://doi.org/10.1051/e3sconf/202452702001

Agharokh, A., S. Taleshi, M., Bibak, M., Rasta, M., Torabi Jafroudi, H., & Rubio Armesto, B. (2022). Assessing the relationship between the abundance of microplastics in sediments, surface waters, and fish in the Iran southern shores. *Environmental Science and Pollution Research*, *29*(13), 18546–18558. https://doi.org/10.1007/s11356-021-17128-8

Agustinawati, Ernaningsih, & Ihsan. (2023). Komposisi jenis dan sebaran ukuran hasil yang tertangkap dengan trap net di Perairan Pantai Kec. Segeri Kab. Pangkep. *Jurnal Pelagis*, *1*(2), 182–192.

Akhbarizadeh, R., Moore, F., & Keshavarzi, B. (2018). Investigating a probable relationship between microplastics and potentially toxic elements in fish muscles from northeast of Persian Gulf. *Environmental Pollution*, *232*, 154–163. https://doi.org/10.1016/j.envpol.2017.09.028

Alqahtani, S., Alqahtani, S., Saquib, Q., & Mohiddin, F. (2023). Toxicological impact of microplastics and nanoplastics on humans: understanding the mechanistic aspect of the interaction. *Frontiers in Toxicology*, *5*(July), 1–9. https://doi.org/10.3389/ftox.2023.1193386

Anjeli, U. G., Sartimbul, A., Sulistiyati, T. D., Yona, D., Iranawati, F., Seftiyawan, F. O., Aliviyanti, D., Lauro, F. M., Matallana-Surget, S., Fanda, A. M., & Winata, V. A. (2024). Microplastics contamination in aquaculture-rich regions: A case study in Gresik, East Java, Indonesia. *Science of the Total Environment*, *927*(November 2023), 171992. https://doi.org/10.1016/j.scitotenv.2024.171992

Ardiansyah, Damar, A., Hariyadi, S., & MacHfud. (2022). Current Source and Distribution Pattern of Plastic Waste Leakage in the Estuary of Jakarta Bay. *IOP Conference Series: Earth and Environmental Science*, *950*(1). https://doi.org/10.1088/1755-1315/950/1/012057

Aryani, D., Hasanah, A. N., Haryati, S., & Pratama, R. (2024). IDENTIFIKASI MIKROPLASTIK PADA IKAN BANDENG (Chanos chanos) DAN IKAN TONGKOL (Euthynnus affinis) DI PASAR TRADISIONAL KRANGGOT, CILEGON-BANTEN. *Berita Biologi*, *23*(2), 311–319. https://doi.org/10.55981/beritabiologi.2024.4964

Athukorala, A., Amarathunga, A. A. D., De Silva, D. S. M., Bakir, A., McGoran, A. R., Sivyer, D. B., Dias, B. C. G., Kanishka, W. S., & Reeve, C. (2024). Pervasive Microplastic Ingestion by Commercial Fish Species from a Natural Lagoon Environment. *Water (Switzerland)*, *16*(20). https://doi.org/10.3390/w16202909

Atwood, E. C., Falcieri, F. M., Piehl, S., Bochow, M., Matthies, M., Franke, J., Carniel, S., Sclavo, M., Laforsch, C., & Siegert, F. (2019). Coastal accumulation of microplastic particles emitted from the Po River, Northern Italy: Comparing remote sensing and hydrodynamic modelling with in situ sample collections. *Marine Pollution Bulletin*, *138*(November 2018), 561–574. https://doi.org/10.1016/j.marpolbul.2018.11.045

Azizi, A., Setyowati, W. N., Fairus, S., Puspito, D. A., & Irawan, D. S. (2021). Microplastic pollution in the sediment of Jakarta Bay, Indonesia. *IOP Conference Series: Earth and Environmental Science*, *930*(1). https://doi.org/10.1088/1755-1315/930/1/012010

Banaee, M., Multisanti, C. R., Impellitteri, F., Piccione, G., & Faggio, C. (2025). Environmental toxicology of microplastic particles on fish: A review. *Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology*, *287*(July 2024), 110042. https://doi.org/10.1016/j.cbpc.2024.110042

Barboza, L. G. A., Dick Vethaak, A., Lavorante, B. R. B. O., Lundebye, A. K., & Guilhermino, L. (2018). Marine microplastic debris: An emerging issue for food security, food safety and human health. *Marine Pollution Bulletin*, *133*(June), 336–348. https://doi.org/10.1016/j.marpolbul.2018.05.047

Barboza, L. G. A., Lopes, C., Oliveira, P., Bessa, F., Otero, V., Henriques, B., Raimundo, J., Caetano, M., Vale, C., & Guilhermino, L. (2020). Microplastics in wild fish from North East Atlantic Ocean and its potential for causing neurotoxic effects, lipid oxidative damage, and human health risks associated with ingestion exposure. *Science of the Total Environment*, *717*, 134625. https://doi.org/10.1016/j.scitotenv.2019.134625

Bergmann, M., Gutow, L., & Klages, M. (2015). Marine anthropogenic litter. In *Marine Anthropogenic Litter*. https://doi.org/10.1007/978-3-319-16510-3

Besley, A., Vijver, M. G., Behrens, P., & Bosker, T. (2017). A standardized method for sampling and extraction methods for quantifying microplastics in beach sand. *Marine Pollution Bulletin*, *114*(1), 77–83. https://doi.org/10.1016/j.marpolbul.2016.08.055

Bessa, F., Barría, P., Neto, J. M., Frias, J. P. G. L., Otero, V., Sobral, P., & Marques, J. C. (2018). Occurrence of microplastics in commercial fish from

a natural estuarine environment. *Marine Pollution Bulletin*, *128*(February), 575–584. https://doi.org/10.1016/j.marpolbul.2018.01.044

BPS Indonesia, S. I. (2023). Catalog : 1101001. *Statistik Indonesia 2023*, *1101001*, 790. https://www.bps.go.id/publication/2020/04/29/e9011b3155d45d70823c141f/statistik-indonesia-2020.html

Budiarti, E. C. (2021). Identifikasi Mikroplastik pada Feses Manusia. *Environmental Pollution Journal*, *1*, 87–88. https://journalecoton.id/index.php/epj

Buwono, N. R., Risjani, Y., & Soegianto, A. (2021). Contamination of microplastics in Brantas River, East Java, Indonesia and its distribution in gills and digestive tracts of fish Gambusia affinis. *Emerging Contaminants*, *7*, 172–178. https://doi.org/10.1016/j.emcon.2021.08.002

Cahyani, N., Lumban Batu, D. T. F., & Sulistiono, S. (2017). Heavy Metal Contain Pb, Hg, Cd and Cu in Whiting Fish (Sillago sihama) Muscle in Estuary of Donan River, Cilacap, Central Java. *Jurnal Pengolahan Hasil Perikanan Indonesia*, *19*(3), 267. https://doi.org/10.17844/jphpi.v19i3.15090

Cordova, M. R., Purbonegoro, T., Puspitasari, R., & Hindarti, D. (2017). Assessing Contamination Level of Jakarta Bay Nearshore Sediments Using Green Mussel (Perna Viridis) Larvae. *Marine Research in Indonesia*, *41*(2), 67–76. https://doi.org/10.14203/mri.v41i2.130

Cordova, M. R., Ulumuddin, Y. I., Purbonegoro, T., Puspitasari, R., Afianti, N. F., Rositasari, R., Yogaswara, D., Hafizt, M., Iswari, M. Y., Fitriya, N., Widyastuti, E., Harmesa, Lestari, Kampono, I., Kaisupy, M. T., Wibowo, S. P. A., Subandi, R., Sani, S. Y., Sulistyowati, L., … Cragg, S. M. (2022a). Seasonal heterogeneity and a link to precipitation in the release of microplastic during COVID-19 outbreak from the Greater Jakarta area to Jakarta Bay, Indonesia. *Marine Pollution Bulletin*, *181*(July), 113926. https://doi.org/10.1016/j.marpolbul.2022.113926

Cordova, M. R., Ulumuddin, Y. I., Purbonegoro, T., Puspitasari, R., Afianti, N. F., Rositasari, R., Yogaswara, D., Hafizt, M., Iswari, M. Y., Fitriya, N., Widyastuti, E., Harmesa, Lestari, Kampono, I., Kaisupy, M. T., Wibowo, S. P. A., Subandi, R., Sani, S. Y., Sulistyowati, L., … Cragg, S. M. (2022b). Seasonal heterogeneity and a link to precipitation in the release of microplastic during COVID-19 outbreak from the Greater Jakarta area to Jakarta Bay, Indonesia. *Marine Pollution Bulletin*, *181*(March), 113926. https://doi.org/10.1016/j.marpolbul.2022.113926

Dalmau-Soler, J., Ballesteros-Cano, R., Boleda, M. R., Paraira, M., Ferrer, N., &

Lacorte, S. (2021). Microplastics from headwaters to tap water: occurrence and removal in a drinking water treatment plant in Barcelona Metropolitan area (Catalonia, NE Spain). *Environmental Science and Pollution Research*, *28*(42), 59462–59472. https://doi.org/10.1007/s11356-021-13220-1

Dawson, A. L., Kawaguchi, S., King, C. K., Townsend, K. A., King, R., Huston, W. M., & Bengtson Nash, S. M. (2018). Turning microplastics into nanoplastics through digestive fragmentation by Antarctic krill. *Nature Communications*, *9*(1), 1–8. https://doi.org/10.1038/s41467-018-03465-9

Devereux, R., Ayati, B., Westhead, E. K., Jayaratne, R., & Newport, D. (2023). "The great source" microplastic abundance and characteristics along the river Thames. *Marine Pollution Bulletin*, *191*(April), 114965. https://doi.org/10.1016/j.marpolbul.2023.114965

Dewi, I. S., Budiarsa, A. A., & Ritonga, I. R. (2015). Distribution of microplastic at sediment in the Muara Badak Subdistrict, Kutai Kartanegara Regency (in Bahasa). *Depik*, *4*(3), 121–131.

Digka, N., Tsangaris, C., Torre, M., Anastasopoulou, A., & Zeri, C. (2018). Microplastics in mussels and fish from the Northern Ionian Sea. *Marine Pollution Bulletin*, *135*(February), 30–40. https://doi.org/10.1016/j.marpolbul.2018.06.063

DLH. (2024). *Pemantauan Lingkungan Perairan Laut dan Muara Teluk Jakarta Tahun 2024 – DLH DKI Jakarta*.

Erlangga, E., Ezraneti, R., Ayuzar, E., Adhar, S., Salamah, S., & Lubis, H. B. (2022). Identifikasi Keberadaan Mikroplastik Pada Insang dan Saluran Pencernaan Ikan Kembung (Rastrelliger sp) di TPI Belawan. *Jurnal Kelautan: Indonesian Journal of Marine Science and Technology*, *15*(3), 206–215. https://doi.org/10.21107/jk.v15i3.11746

Feng, Z., Zhang, T., Li, Y., He, X., Wang, R., Xu, J., & Gao, G. (2019). The accumulation of microplastics in fish from an important fish farm and mariculture area, Haizhou Bay, China. *Science of the Total Environment*, *696*. https://doi.org/10.1016/j.scitotenv.2019.133948

Fleury, J. B., & Baulin, V. A. (2021). Microplastics destabilize lipid membranes by mechanical stretching. *Proceedings of the National Academy of Sciences of the United States of America*, *118*(31), 1–8. https://doi.org/10.1073/pnas.2104610118

Franzellitti, S., Canesi, L., Auguste, M., Wathsala, R. H. G. R., & Fabbri, E. (2019). Microplastic exposure and effects in aquatic organisms: A

physiological perspective. *Environmental Toxicology and Pharmacology*, *68*(November 2018), 37–51. https://doi.org/10.1016/j.etap.2019.03.009

Gadi, D. S., Dawa, U. P. L., Lakapu, M. M., Bulan, R. E., & Teul, M. K. (2024). Mikroplastik Pada Air Tambak Dan Partikel Garam "Krosok" Di Ud. Abraham Desa Oli'o Kabupaten Kupang. *Journal of Marine Research*, *13*(3), 587–594. https://doi.org/10.14710/jmr.v13i3.44202

GESAMP. (2015). Sources, fate and effects of microplastics in the marine environment: a global assessment". *Reports and Studies GESAMP*, *90*, 96. issn: 1020-4873%5Cnhttp://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/pdf/GESAMP_microplastics full study.pdf

Gokul, T., Kumar, K. R., Veeramanikandan, V., Arun, A., Balaji, P., & Faggio, C. (2023). Impact of particulate pollution on aquatic invertebrates. *Environmental Toxicology and Pharmacology*, *100*(April), 104146. https://doi.org/10.1016/j.etap.2023.104146

Guo, J. J., Huang, X. P., Xiang, L., Wang, Y. Z., Li, Y. W., Li, H., Cai, Q. Y., Mo, C. H., & Wong, M. H. (2020). Source, migration and toxicology of microplastics in soil. *Environment International*, *137*(September 2019), 105263. https://doi.org/10.1016/j.envint.2019.105263

Guo, X., & Wang, J. (2019). The chemical behaviors of microplastics in marine environment: A review. *Marine Pollution Bulletin*, *142*(February), 1–14. https://doi.org/10.1016/j.marpolbul.2019.03.019

Hahladakis, J. N., Velis, C. A., Weber, R., Iacovidou, E., & Purnell, P. (2018). An overview of chemical additives present in plastics: Migration, release, fate and environmental impact during their use, disposal and recycling. *Journal of Hazardous Materials*, *344*, 179–199. https://doi.org/10.1016/j.jhazmat.2017.10.014

Hamdhani, H., Ghitarina, G., Eryati, R., & Eppehimer, D. E. (2024). Occurrence of Microplastic Ingestion by Commercial Fish Species from the Pangempang Estuary in Indonesia. *Trends in Sciences*, *21*(7). https://doi.org/10.48048/tis.2024.7762

Hamed, M., Martyniuk, C. J., Lee, J. S., Shi, H., & Sayed, A. E. D. H. (2023). Distribution, abundance, and composition of microplastics in market fishes from the Red and Mediterranean seas in Egypt. *Journal of Sea Research*, *194*(February), 102407. https://doi.org/10.1016/j.seares.2023.102407

Hantoro, I., Löhr, A. J., Van Belleghem, F. G. A. J., Widianarko, B., & Ragas, A.

M. J. (2024). Characteristics of microplastics pollution in important commercial coastal seafood of Central Java, Indonesia. *Environmental Advances*, *17*(July). https://doi.org/10.1016/j.envadv.2024.100574

Hasan, V., Andraini, N. E., Isroni, W., Sari, L. A., Nafisyah, A. L., Dewi, N. N., Putri, D. N. A., Prasasti, T. A. B., Ramadhani, A. A., Daniel, K., South, J., Vieira, L. O., Ottoni, F. P., Maftuch, Faqih, A. R., Wirabuana, P. Y. A. P., Tamam, M. B., & Valen, F. S. (2023). Fish diversity of the Bengawan Solo River estuary, East Java, Indonesia. *Biodiversitas*, *24*(4), 2207–2216. https://doi.org/10.13057/biodiv/d240433

Hasibuan, N. H., Suryati, I., Leonardo, R., Risky, A., Ageng, P., & Addauwiyah, R. (2020). Analisa Jenis, Bentuk Dan Kelimpahan Mikroplastik Di Sungai Sei Sikambing Medan. *Jurnal Sains Dan Teknologi: Jurnal Keilmuan Dan Aplikasi Teknologi Industri*, *20*(2), 108. https://doi.org/10.36275/stsp.v20i2.270

Hastuti, A. R., Lumbanbatu, D. T. F., & Wardiatno, Y. (2019). The presence of microplastics in the digestive tract of commercial fishes off pantai Indah Kapuk coast, Jakarta, Indonesia. *Biodiversitas*, *20*(5), 1233–1242. https://doi.org/10.13057/biodiv/d200513

Hidalgo-Ruz, V., Gutow, L., Thompson, R. C., & Thiel, M. (2012). Microplastics in the marine environment: A review of the methods used for identification and quantification. *Environmental Science and Technology*, *46*(6), 3060–3075. https://doi.org/10.1021/es2031505

Hidayati, N. V., Rachman, F. O. B., Muslih, Hidayat, R. R., Meinita, M. D. N., Hendrayana, Husni, I. A., Andriyono, S., & Sanjayasari, D. (2023). Microplastics contamination in commercial fish landed at Lengkong Fish Auction Point, Central Java, Indonesia. *Journal of Water and Land Development*, *58*, 70–78. https://doi.org/10.24425/jwld.2023.146599

Hiwari, H., Purba, N. P., Ihsan, Y. N., Yuliadi, L. P. S., & Mulyani, P. G. (2019). Kondisi sampah mikroplastik di permukaan air laut sekitar Kupang dan Rote , Provinsi Nusa Tenggara Timur Condition of microplastic garbage in sea surface water at around Kupang and Rote , East Nusa Tenggara Province. *Masyarakat Biodiversitas Indonesia*, *5*(2), 165–171. https://doi.org/10.13057/psnmbi/m050204

Hossain, S. M., Saifullah, A. S. M., Uddin, M. J., & Hasibur Rahaman, M. (2024). Assessment of microplastics in coastal ecosystem of Bangladesh. *Ecotoxicology and Environmental Safety*, *281*(June), 116622. https://doi.org/10.1016/j.ecoenv.2024.116622

Hosseinpour, A., Chamani, A., Mirzaei, R., & Mohebbi-Nozar, S. L. (2021).

Occurrence, abundance and characteristics of microplastics in some commercial fish of northern coasts of the Persian Gulf. *Marine Pollution Bulletin*, *171*(June), 112693. https://doi.org/10.1016/j.marpolbul.2021.112693

Huang, Y., & Xu, E. G. (2022). Black microplastic in plastic pollution: undetected and underestimated? *Water Emerging Contaminants and Nanoplastics*, *1*(3), 1–7. https://doi.org/10.20517/wecn.2022.10

Iqbal, M., Yustian, I., Setiawan, A., & Setiawan, D. (2018). *Ikan-Ikan Di Sungai Musi Dan Pesisir Timur Sumatera Selatan*.

Irwanto, E., Redjeki, S., Endrawati, H., & Sabdono, A. (2024). Mikroplastik pada Karang Keras di Perairan Pantai Jepara. *Buletin Oseanografi Marina*, *13*(1), 113–121. https://doi.org/10.14710/buloma.v13i1.42363

James, K., Vasant, K., Sikkander Batcha, S. M., Padua, S., Jeyabaskaran, R., Thirumalaiselvan, S., Vineetha, G., & Benjamin, L. V. (2021). Seasonal variability in the distribution of microplastics in the coastal ecosystems and in some commercially important fishes of the Gulf of Mannar and Palk Bay, Southeast coast of India. *Regional Studies in Marine Science*, *41*, 101558. https://doi.org/10.1016/j.rsma.2020.101558

Kadac-Czapska, K., Knez, E., & Grembecka, M. (2024). Food and human safety: the impact of microplastics. *Critical Reviews in Food Science and Nutrition*, *64*(11), 3502–3521. https://doi.org/10.1080/10408398.2022.2132212

Kapp, K. J., & Yeatman, E. (2018). Microplastic hotspots in the Snake and Lower Columbia rivers: A journey from the Greater Yellowstone Ecosystem to the Pacific Ocean. *Environmental Pollution*, *241*, 1082–1090. https://doi.org/10.1016/j.envpol.2018.06.033

Karami, A., Golieskardi, A., Ho, Y. Bin, Larat, V., & Salamatinia, B. (2017). Microplastics in eviscerated flesh and excised organs of dried fish. *Scientific Reports*, *7*(1), 1–9. https://doi.org/10.1038/s41598-017-05828-6

Khatami, A. M., Yonvitner, & Setyobudiandi, I. (2019). Karakteristik Biologi Dan Laju Eksploitasi Ikan Pelagis Kecil Di Perairan Utara Jawa. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, *11*(3), 637–651. https://doi.org/10.29244/jitkt.v11i3.19159

Kholis, M. N., Wahju, R. I., . M., & . J. (2018). Struktur Ukuran Dan Hubungan Panjang Berat Ikan Kurau Di Pulau Bengkalis. *ALBACORE Jurnal Penelitian Perikanan Laut*, *2*(2), 197–208. https://doi.org/10.29244/core.2.2.197-208

Kholis, M. N., Wahju, R. I., & Mustaruddin, M. (2017). Keragaan Aspek Teknis Unit Teknologi Penangkapan Ikan Kurau Di Pambang Pesisir Kabupaten Bengkalis Provinsi Riau. *Jurnal Teknologi Perikanan Dan Kelautan*, *8*(1), 67–79. https://doi.org/10.24319/jtpk.8.67-79

Koongolla, J. B., Lin, L., Yang, C. P., Pan, Y. F., Li, H. X., Liu, S., & Xu, X. R. (2022). Microplastic prevalence in marine fish from onshore Beibu Gulf, South China Sea. *Frontiers in Marine Science*, *9*(July), 1–8. https://doi.org/10.3389/fmars.2022.964461

Kovač Viršek, M., Palatinus, A., Koren, Š., Peterlin, M., Horvat, P., & Kržan, A. (2016). Protocol for Microplastics Sampling on the Sea Surface and Sample Analysis. *Journal of Visualized Experiments : JoVE*, *118*, 1–9. https://doi.org/10.3791/55161

Kusmita, R., Sunarni, S., & Saleky, D. (2024). Pertumbuhan dan Mortalitas Ikan Kuro (Eleutheronema tetradactylum) yang Didaratkan di Pelabuhan Perikanan Nusantara Kabupaten Merauke. *Bioscientist : Jurnal Ilmiah Biologi*, *12*(1), 305. https://doi.org/10.33394/bioscientist.v12i1.9407

Kuttykattil, A., Raju, S., Vanka, K. S., Bhagwat, G., Carbery, M., Vincent, S. G. T., Raja, S., & Palanisami, T. (2023). Consuming microplastics? Investigation of commercial salts as a source of microplastics (MPs) in diet. *Environmental Science and Pollution Research*, *30*(1), 930–942. https://doi.org/10.1007/s11356-022-22101-0

Lamichhane, G., Acharya, A., Marahatha, R., Modi, B., Paudel, R., Adhikari, A., Raut, B. K., Aryal, S., & Parajuli, N. (2023). Microplastics in environment: global concern, challenges, and controlling measures. *International Journal of Environmental Science and Technology*, *20*(4), 4673–4694. https://doi.org/10.1007/s13762-022-04261-1

Lehtiniemi, M., Hartikainen, S., Näkki, P., Engström-Öst, J., Koistinen, A., & Setälä, O. (2018). Size matters more than shape: Ingestion of primary and secondary microplastics by small predators. *Food Webs*, *17*, e00097. https://doi.org/10.1016/j.fooweb.2018.e00097

Lestari, C. S., Warsidah, & Nurdiansyah, S. I. (2019). Identification and Density of Microplastics in Sediment in Mempawah Mangrove Park (MMP), Mempawah Regency, West Kalimantan. *Jurnal Laut Khatulistiwa*, *2*(3), 96–101. www.jurnal-untan.ac.id/lk

Li, B., Liang, W., Liu, Q. X., Fu, S., Ma, C., Chen, Q., Su, L., Craig, N. J., & Shi, H. (2021). Fish Ingest Microplastics Unintentionally. *Environmental Science and Technology*, *55*(15), 10471–10479. https://doi.org/10.1021/acs.est.1c01753

Li, Y., Sun, Y., Li, J., Tang, R., Miu, Y., & Ma, X. (2021). Research on the influence of microplastics on marine life. *IOP Conference Series: Earth and Environmental Science*, *631*(1). https://doi.org/10.1088/1755-1315/631/1/012006

Lie, S., Suyoko, A., Effendi, A. R., Ahmada, B., Aditya, H. W., Sallima, I. R., Arisudewi, N. P. A. N., Hadid, N. I., Rahmasari, N., & Reza, A. (2018). Measurement of microplastic density in the Karimunjawa National Park, Central Java, Indonesia. *Indo Pacific Journal of Ocean Life*, *2*(2), 54–58. https://doi.org/10.13057/oceanlife/o020203

Lin, L., Ma, L. S., Li, H. X., Pan, Y. F., Liu, S., Zhang, L., Peng, J. P., Fok, L., Xu, X. R., & He, W. H. (2020). Low level of microplastic contamination in wild fish from an urban estuary. *Marine Pollution Bulletin*, *160*(September), 111650. https://doi.org/10.1016/j.marpolbul.2020.111650

Lozano, Y. M., Gordillo-Rocha, H., Waldman, W. R., & Rillig, M. C. (2024). Photodegradation modifies microplastic effects on soil properties and plant performance. *Journal of Applied Ecology*, *61*(1), 13–24. https://doi.org/10.1111/1365-2664.14514

Lusher, A. L., Welden, N. A., Sobral, P., & Cole, M. (2017). Sampling, isolating and identifying microplastics ingested by fish and invertebrates. *Analytical Methods*, *9*(9), 1346–1360. https://doi.org/10.1039/c6ay02415g

Mahamud, A. G. M. S. U., Anu, M. S., Baroi, A., Datta, A., Khan, M. S. U., Rahman, M., Tabassum, T., Tanwi, J. T., & Rahman, T. (2022). Microplastics in fishmeal: A threatening issue for sustainable aquaculture and human health. *Aquaculture Reports*, *25*(June), 101205. https://doi.org/10.1016/j.aqrep.2022.101205

Mao, R., Hu, Y., Zhang, S., Wu, R., & Guo, X. (2020). Microplastics in the surface water of Wuliangsuhai Lake, northern China. *Science of the Total Environment*, *723*, 137820. https://doi.org/10.1016/j.scitotenv.2020.137820

Massos, A., & Turner, A. (2017). Cadmium, lead and bromine in beached microplastics. *Environmental Pollution*, *227*, 139–145. https://doi.org/10.1016/j.envpol.2017.04.034

Maulana, M. R., Saiful, S., & Muchlisin, Z. A. (2023). Microplastics contamination in two peripheral fish species harvested from a downstream river. *Global Journal of Environmental Science and Management*, *9*(2), 1–10. https://doi.org/10.22034/gjesm.2023.02.09

McNeish, R. E., Kim, L. H., Barrett, H. A., Mason, S. A., Kelly, J. J., & Hoellein,

T. J. (2018). Microplastic in riverine fish is connected to species traits. *Scientific Reports*, *8*(1), 1–12. https://doi.org/10.1038/s41598-018-29980-9

Mohamed Nor, N. H., & Obbard, J. P. (2014). Microplastics in Singapore's coastal mangrove ecosystems. *Marine Pollution Bulletin*, *79*(1–2), 278–283. https://doi.org/10.1016/j.marpolbul.2013.11.025

Muchlis, N., Prihatiningsih, & Restiangsih, Y. H. (2021). Biological characteristics of silver sillago (Sillago sihama Forsskal) in Bombana Water, South East Sulawesi. *IOP Conference Series: Earth and Environmental Science*, *674*(1). https://doi.org/10.1088/1755-1315/674/1/012010

Namira, N., Daud, A., Mallongi, A., Amqam, H., Wahyu, A., & Irwandy. (2023). Risk Analysis of Microplastic Exposure Through Consumption of Anadara Granosa at Coastal Area. *Pharmacognosy Journal*, *15*(4), 558–562. https://doi.org/10.5530/pj.2023.15.119

NAPA INDONESIA. (2020). *Financing System Change to Radically Reduce Plastic Pollution in Indonesia: A Financing Roadmap Developed by the Indonesia National Plastic Action Partnership*. *November*. https://pacecircular.org/sites/default/files/2021-03/NPAP-Indonesia-Financing-Roadmap %281%29.pdf

Nugraha, B. (2020). Status Perikanan Dan Kondisi Habitat Perairan Teluk Jakarta. *Jurnal Riset Jakarta*, *13*(1), 17–28. https://doi.org/10.37439/jurnaldrd.v13i1.17

Oza, J., Rabari, V., Yadav, V. K., Sahoo, D. K., Patel, A., & Trivedi, J. (2024). A Systematic Review on Microplastic Contamination in Fishes of Asia: Polymeric Risk Assessment and Future Prospectives. *Environmental Toxicology and Chemistry*, *43*(4), 671–685. https://doi.org/10.1002/etc.5821

Pan, Z., Zhang, C., Wang, S., Sun, D., Zhou, A., Xie, S., Xu, G., & Zou, J. (2021). Occurrence of microplastics in the gastrointestinal tract and gills of fish from Guangdong, South China. *Journal of Marine Science and Engineering*, *9*(9). https://doi.org/10.3390/jmse9090981

Pannetier, P., Morin, B., Le Bihanic, F., Dubreil, L., Clérandeau, C., Chouvellon, F., Van Arkel, K., Danion, M., & Cachot, J. (2020). Environmental samples of microplastics induce significant toxic effects in fish larvae. *Environment International*, *134*(November 2019), 105047. https://doi.org/10.1016/j.envint.2019.105047

Pedrotti, M. L., Bruzaud, S., Dumontet, B., Elineau, A., Petit, S., Grohens, Y., Voisin, P., Crebassa, J., & Gorsky, G. (2014). Plastic fragments on the

surface of Mediterranean waters. *CIESM Workshop Monograph*, *46*(June), 18–21.

Permatasari, R. D., & Radityaningrum, D. A. (2020). Kajian Keberadaan Mikroplastik Di Wilayah Perairan: Review. *Seminar Nasional Sains Dan Teknologi Terapan VIII*, 499–506.

Phaksopa, J., Sukhsangchan, R., Keawsang, R., Tanapivattanakul, K., Thamrongnawasawat, T., Worachananant, S., & Sreesamran, P. (2021). Presence and characterization of microplastics in coastal fish around the eastern coast of Thailand. *Sustainability (Switzerland)*, *13*(23), 1–12. https://doi.org/10.3390/su132313110

Pothiraj, C., Amutha Gokul, T., Ramesh Kumar, K., Ramasubramanian, A., Palanichamy, A., Venkatachalam, K., Pastorino, P., Barcelò, D., Balaji, P., & Faggio, C. (2023). Vulnerability of microplastics on marine environment: A review. *Ecological Indicators*, *155*(July). https://doi.org/10.1016/j.ecolind.2023.111058

Pratiwi, A. I., Umroh, U., & Hudatwi, M. (2024). Analisis Kelimpahan Mikroplastik Pada Ikan Yang Didaratkan Di Pantai Rebo Kabupaten Bangka. *Jurnal Perikanan Unram*, *13*(3), 621–633. https://doi.org/10.29303/jp.v13i3.601

Primus, A., & Azman, S. (2022). Quantification and Characterisation of Microplastics in Fish and Surface Water at Melayu River, Johor. *IOP Conference Series: Materials Science and Engineering*, *1229*(1), 012014. https://doi.org/10.1088/1757-899x/1229/1/012014

Priscilla, V., & Patria, M. P. (2019). Comparison of microplastic abundance in aquaculture ponds of milkfish Chanos chanos (Forsskal, 1775) at Muara Kamal and Marunda, Jakarta Bay. *IOP Conference Series: Earth and Environmental Science*, *404*(1). https://doi.org/10.1088/1755-1315/404/1/012027

Putri, I. M. (2012). Makanan ikan bilis (Thryssa hamiltonii, Gray 1835)di perairanPantai Mayangan, Jawa Barat. *Jurnal Iktiologi Indonesia*, *12*(1), 93–97.

Rochman, C. M., Brookson, C., Bikker, J., Djuric, N., Earn, A., Bucci, K., Athey, S., Huntington, A., McIlwraith, H., Munno, K., Frond, H. De, Kolomijeca, A., Erdle, L., Grbic, J., Bayoumi, M., Borrelle, S. B., Wu, T., Santoro, S., Werbowski, L. M., … Hung, C. (2019). Rethinking microplastics as a diverse contaminant suite. *Environmental Toxicology and Chemistry*, *38*(4), 703–711. https://doi.org/10.1002/etc.4371

Rohalin, W. M., Yaakub, N., & Fazdil, N. M. (2019). Level of Zinc and Lead in Freshwater Fishes in Balok River, Pahang, Malaysia. *UIJRT | United International Journal for Research & Technology |*, *01*(01), 2582–6832.

Ruan, H., Li, M., Li, Z., Huang, J., Chen, W., Sun, J., Liu, L., & Zou, K. (2020). Comparative analysis of complete mitochondrial genomes of three gerres fishes (Perciformes: Gerreidae) and primary exploration of their evolution history. *International Journal of Molecular Sciences*, *21*(5), 1–20. https://doi.org/10.3390/ijms21051874

Rusman, A., & Hidayati, N. V. (2022). Pemanfaatan Mikroorganisme untuk Biodegradasi Mikroplastik. *Maiyah*, *1*(1), 66. https://doi.org/10.20884/1.maiyah.2022.1.1.6655

Saeedi, M. (2024). How microplastics interact with food chain: a short overview of fate and impacts. *Journal of Food Science and Technology*, *61*(3), 403–413. https://doi.org/10.1007/s13197-023-05720-4

Said, M. (2019). *342-Article Text-722-1-10-20200123*. *12*(September), 83–91.

Sari, M. M., Inoue, T., Harryes, R. K., Wayan Koko Suryawan, I., Yokota, K., Notodarmojo, S., & Priyambada, I. B. (2022). Potential of Recycle Marine Debris in Pluit Emplacement, Jakarta to Achieve Sustainable Reduction of Marine Waste Generation. *International Journal of Sustainable Development and Planning*, *17*(1), 119–125. https://doi.org/10.18280/ijsdp.170111

Sathish, M. N., Jeyasanta, I., & Patterson, J. (2020). Occurrence of microplastics in epipelagic and mesopelagic fishes from Tuticorin, Southeast coast of India. *Science of the Total Environment*, *720*(17217022032003), 137614. https://doi.org/10.1016/j.scitotenv.2020.137614

Seno, M. D. A. Y., Tampus, A. D., Orbita, R. R., Orbita, M. L. S., & Lacuna, M. L. D. G. (2024). Presence of microplastic among commercially important Pelagic fish in Zamboanga Peninsula and Agusan del Norte, Philippines. *AACL Bioflux*, *17*(6), 3027–3040.

Shim, W. J., Hong, S. H., & Eo, S. (2018). Marine microplastics: Abundance, distribution, and composition. In *Microplastic Contamination in Aquatic Environments: An Emerging Matter of Environmental Urgency*. Elsevier Inc. https://doi.org/10.1016/B978-0-12-813747-5.00001-1

Sinaga, A. A. A., Wahyuningsih, H., & Berliani, K. (2023). Population Study of Kedukang Fish (Hexanematichthys sagor) in The Waters of Percut River, Percut Sei Tuan District, Deli Serdang Regency, North Sumatera. *Jurnal Penelitian Pendidikan IPA*, *9*(12), 11517–11527.

https://doi.org/10.29303/jppipa.v9i12.5814

Sinaga, J., Sulistiono, & Mashar, A. (2024). Length-weight relationship and condition factor of sagor catfish (Hexanematichthys sagor Hamilton, 1822) in the coastal waters Muara Angke and surrounding area, Jakarta Bay. *IOP Conference Series: Earth and Environmental Science*, *1410*(1). https://doi.org/10.1088/1755-1315/1410/1/012001

Singkam, A. R., Yani P, A., & Fajri, A. (2020). Keragaman Ikan Laut Dangkal Provinsi Bengkulu. *Jurnal Enggano*, *5*(3), 424–438. https://doi.org/10.31186/jenggano.5.3.424-438

Strungaru, S. A., Jijie, R., Nicoara, M., Plavan, G., & Faggio, C. (2019). Micro-(nano) plastics in freshwater ecosystems: Abundance, toxicological impact and quantification methodology. *TrAC - Trends in Analytical Chemistry*, *110*, 116–128. https://doi.org/10.1016/j.trac.2018.10.025

Su, L., Deng, H., Li, B., Chen, Q., Pettigrove, V., Wu, C., & Shi, H. (2019). The occurrence of microplastic in specific organs in commercially caught fishes from coast and estuary area of east China. *Journal of Hazardous Materials*, *365*(July 2018), 716–724. https://doi.org/10.1016/j.jhazmat.2018.11.024

Sulaiman, B., Woodward, J. C., & Shiels, H. A. (2023). Riverine microplastics and their interaction with freshwater fish. *Water Biology and Security*, *2*(4), 100192. https://doi.org/10.1016/j.watbs.2023.100192

Sulistiono. (2011). *Reproduksi Ikan Rejung (Sillago sihama Forsskal) di perairan Mayangan, Subang, Jawa Barat*. *11*(1), 55–65.

Susanti, N. K. Y., Mardiastuti, A., & Hariyadi, S. (2022). Microplastics in fishes as seabird preys in Jakarta Bay Area. *IOP Conference Series: Earth and Environmental Science*, *967*(1). https://doi.org/10.1088/1755-1315/967/1/012033

Sutkar, P. R., Gadewar, R. D., & Dhulap, V. P. (2023). Recent trends in degradation of microplastics in the environment: A state-of-the-art review. *Journal of Hazardous Materials Advances*, *11*(July), 100343. https://doi.org/10.1016/j.hazadv.2023.100343

Syabina, Z., & Prawiro, J. (2024). Analisis Pengelolaan Kebersihan Dalam Meningkatkan Keputusan Wisatawan di Pantai Tanjung Pasir Tangerang. *Jurnal Pariwisata Dan Perhotelan*, *2*(1), 14. https://doi.org/10.47134/pjpp.v2i1.3368

Syafei, L. S. (2021). Length-weight relationship and condition factor of tropical

sand goby, Acentrogobius caninus (Valenciennes 1837) from Pabean Bay, West Java, Indonesia. *E3S Web of Conferences*, *322*. https://doi.org/10.1051/e3sconf/202132201021

Syafei, L. S., Siregar, R. S., Rahardjo, M. F., & Simanjuntak, C. P. H. (2019). Diet composition and trophic niche similarities of engraulid fishes in Pabean bay, Indramayu, Indonesia. *IOP Conference Series: Earth and Environmental Science*, *404*(1). https://doi.org/10.1088/1755-1315/404/1/012056

Takarina, N. D., Chuan, O. M., Adiwibowo, A., Jeffery, F. N. A., Zamri, N. Z. A. B. N. M., & Adidharma, M. A. (2024). Microplastic contamination in different tissues of commercial fish in estuary area. *Global Journal of Environmental Science and Management*, *10*(4), 1917–1932. https://doi.org/10.22034/gjesm.2024.04.25

Tarigan, A., Bakti, D., & Desrita, D. (2017). Tangkapan dan tingkat kematangan gonad Ikan selar kuning (Selariodes leptolepis) di Perairan Selat Malaka. *Acta Aquatica: Aquatic Sciences Journal*, *4*(2), 44. https://doi.org/10.29103/aa.v4i2.300

Thushari, G. G. N., & Senevirathna, J. D. M. (2020). Plastic pollution in the marine environment. *Heliyon*, *6*(8), e04709. https://doi.org/10.1016/j.heliyon.2020.e04709

Titrawani, Elvyra, R., & Sawalia, R. U. (2013). Analisis Isi Lambung Ikan Senangin (Eleutheronema tetradactylum Shaw) di Perairan Dumai. *Al-Kauniyah*, *6*(2), 85–90.

Tran, T. T., Tran, H. D., Chu, N. H., & Ta, T. T. (2018). Habitat segregation of Gerres japonicus and G. limbatus in early stages in the Tien Yen estuary, Northern Vietnam. *Academia Journal of Biology*, *40*(4). https://doi.org/10.15625/2615-9023/v40n4.13532

Turner, A. (2018). Black plastics: Linear and circular economies, hazardous additives and marine pollution. *Environment International*, *117*(April), 308–318. https://doi.org/10.1016/j.envint.2018.04.036

Valsan, G., Warrier, A. K., Anusree, S., Tamrakar, A., Rangel-Buitrago, N., & Chand, J. (2024). Seasonal variations in microplastics in a coastal wetland in southwest India as well as their risks to Sillago sihama and Gerres filamentosus. *Environmental Monitoring and Assessment*, *196*(12), 1–21. https://doi.org/10.1007/s10661-024-13400-9

Vázquez-Rowe, I., Ita-Nagy, D., & Kahhat, R. (2021). Microplastics in fisheries

and aquaculture: implications to food sustainability and safety. *Current Opinion in Green and Sustainable Chemistry*, *29*, 100464. https://doi.org/10.1016/j.cogsc.2021.100464

Wael, P., Kotania, T., Seram, K., & Barat, B. (2025). *Komposisi dan Struktur Komunitas Ikan pada Ekosistem Mangrove Perairan*. *2*, 34–48. https://www.researchgate.net/publication/364651406

Wang, J., Li, Y., Lu, L., Zheng, M., Zhang, X., Tian, H., Wang, W., & Ru, S. (2019). Polystyrene microplastics cause tissue damages, sex-specific reproductive disruption and transgenerational effects in marine medaka (Oryzias melastigma). *Environmental Pollution*, *254*, 113024. https://doi.org/10.1016/j.envpol.2019.113024

Wang, Jian, S., Zhang, S., Wu, D., Wang, J., Gao, M., Sheng, J., & Hong, Y. (2022). Enrichment of polystyrene microplastics induces histological damage, oxidative stress, Keap1-Nrf2 signaling pathway-related gene expression in loach juveniles (Paramisgurnus dabryanus). *Ecotoxicology and Environmental Safety*, *237*(January), 1–11. https://doi.org/10.1016/j.ecoenv.2022.113540

Wang, W., Zhang, J., Qiu, Z., Cui, Z., Li, N., Li, X., Wang, Y., Zhang, H., & Zhao, C. (2022). Effects of polyethylene microplastics on cell membranes: A combined study of experiments and molecular dynamics simulations. *Journal of Hazardous Materials*, *429*(January), 128323. https://doi.org/10.1016/j.jhazmat.2022.128323

Wardani, E. F., & Miftakhi, D. R. (2021). BIOEDUSAINS: Jurnal Pendidikan Biologi dan Sains. *BIOEDUSAINS: Jurnal Pendidikan Biologi Dan Sains*, *4*(2), 372–385.

Winiarska, E., Jutel, M., & Zemelka-Wiacek, M. (2024). The potential impact of nano- and microplastics on human health: Understanding human health risks. *Environmental Research*, *251*(P2), 118535. https://doi.org/10.1016/j.envres.2024.118535

Wright, L. S., Napper, I. E., & Thompson, R. C. (2021). Potential microplastic release from beached fishing gear in Great Britain's region of highest fishing litter density. *Marine Pollution Bulletin*, *173*(PB), 113115. https://doi.org/10.1016/j.marpolbul.2021.113115

Xiao, Y., Tian, Y., Xu, W., & Zhu, J. (2024). Photodegradation of Microplastics through Nanomaterials: Insights into Photocatalysts Modification and Detailed Mechanisms. *Materials*, *17*(11). https://doi.org/10.3390/ma17112755

Yanti, D. I. W., Masengi, M., & Penina Palemba, Y. (2023). Analisis Hubungan Panjang Berat Pada Ikan Selar Kuning Selaroides leptolepis di Pangkalan Pendaratan Ikan (PPI), Kota Sorong. *Nekton*, *3*(2), 122–132. https://doi.org/10.47767/nekton.v3i2.402

Yuan, J., Ma, J., Sun, Y., Zhou, T., Zhao, Y., & Yu, F. (2020). Microbial degradation and other environmental aspects of microplastics/plastics. *Science of the Total Environment*, *715*, 136968. https://doi.org/10.1016/j.scitotenv.2020.136968

Zandieh, M., Griffiths, E., Waldie, A., Li, S., Honek, J., Rezanezhad, F., Van Cappellen, P., & Liu, J. (2024). Catalytic and biocatalytic degradation of microplastics. In *Exploration* (Vol. 4, Issue 3). https://doi.org/10.1002/EXP.20230018

Zeng, Q., Chen, Y. jia, Liu, M., & Wang, C. (2024). Characteristics of the complete mitochondrial genome of Gerres limbatus (Cuvier, 1830) (Perciformes: Gerreidae). *Mitochondrial DNA Part B: Resources*, *9*(4), 419–422. https://doi.org/10.1080/23802359.2024.2333571