

## DAFTAR PUSTAKA

- Abbasi, S., Soltani, N., Keshavarazi, B., Moore, F., Turner, A., and Hassanaghei, M. 2018. Microplastics in different tissue of fish and prawn from Musa Estuary, Persian Gulf. *Chemosphere*. 205, 80-87. <https://doi.org/10.1016/j.chemosphere.2018.04.076>.
- Ahrendt, C., Perez-Venagas, D.J., Urbina, M., Gonzalez, C., Echeveste, P., Aldana, M., PuLgar, J., and Galban-Malagon, C. 2020. Microplastics ingestion cause intertidal lesions in the intertidal fish *Girella laevis*. *Marine Pollution Bulletin*. 151, 110795. <https://doi.org/10.1016/j.marpolbul.2019.110795>
- Alhamoruni, A., Wright, K.L., Larvin, M., and O'Sullivan, S.E. 2012. Cannabinoids mediate opposing effects on inflammation-induced intestinal permeability. *British Journal of Pharmacology*. 165 (8):2598-2610. <http://dx.doi.org/10.1111/j.1476-5381.2011.01589.x>
- Alomar, C., Sanz-Martin, M., Compa, M., Rios-Fuster, B., Alvarez, E., Ripolles, V., Valencia, J.M., and Deudero, S. 2021. Microplastics ingestion in reared aquaculture fish: Biological responses to low-density polyethylene controlled diets in *Spaurus aurata*. *Environmental Pollution*. 208, 116960. <https://doi.org/10.1016/j.envpol.2021.116960>
- Amelia, T.S.M., Khalik, W.M.A.W.M, Ong, M.C., Shao, Y.T., Pan, H., and Bhubalan, K. 2021. Marine microplastics as vectors of major ocean pollutants and its hazard to the marine ecosystem and humans. *Progress in Earth and Planetary Science*. 8,12. <https://doi.org/10.1186/s40645-020-00405-4>
- Andrady, Anthony L. 2011. Persistence of Plastic Litter in the Ocean. *Marine Anthropogenic Litter*. pp 57-72. [http://dx.doi.org/10.1007/978-3-319-16510-3\\_3](http://dx.doi.org/10.1007/978-3-319-16510-3_3)
- Asmonaite, G., Sundh, H., Asker, N., and Almoroth, C. 2018. Rainbow Trout Maintain Intestinal Transport and Barrier Functions Following Exposure to Polystyrene Microplastics. *Environmental Science and Technology*, 52, 14392-14401. <https://doi.org/10.1021/acs.est.8b04848>
- Atwood, E. C., Falcieri, F. M., Bochow, M., Matthies, M., Franke, J., Carniel, S., Selavo, M., Laforsh, C., and Siegert, F. 2019. Coastal accumulation of microplastics particles emitted from the Po River Northern Italy: Comparing remote sensing and hydrodynamic modelling with in situ sample collections. *Marine Pollution Bulletin*, 138, 561-574. <https://doi.org/10.1016/j.marpolbul.2018.11.045>
- Auta, H.S., Emenike, C.U., and Fauziah, S.H. 2017. Distribution and importance of microplastics in the marine environment: a review of the sources, fate, effects, and potential solutions. *Environment International*. 102: 165-176. <https://doi.org/10.1016/j.envint.2017.02.013>
- Azad, S. M. O. 2019. Existence of Plastic Debris in the Stomach of Some Commercial Fish Species in the Lower Gulf of Thailand. Thesis. Master of Science in Marine and Coastal Resources Management Prince of

Songkla University.

- Azad, S.M.O., Towana, P., Pradit, S., Patricia, B.G., Hue, H.T.T., and Jualaong, S. 2018. First Evidence of Existence of Micropkastics in Stomach of Some Commercial Fishes in the Lower Gulf of Thailand. *Applied Ecology and Environmental Research*. 16 (6):7345-7360. [http://dx.doi.org/10.15666/aeer/1606\\_73457360](http://dx.doi.org/10.15666/aeer/1606_73457360)
- Barboza, L.G.A., Lopes, C., Oliveira, P., Besaa, F., Otero, V., Henriques, B., Raimundo, J., Caetano, M., Vale, C., and Guilhermino, L. 2020. Microplastics in wild fish from North East Atlantic Ocean and its potential for causing neurotoxic, 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>
- Bastern.E., Haave,M., Andersen, G. L., Velle,G., Bodtke,G.,&Krafft,C. G.2021. Rapid Landscape Changes in Plastic Bays Along the Norwegian Coastline. *Original Research*. 8, 579913. <https://doi.org/10.3389/fmars.2021.579913>
- Begossi, A., Salivonchyk, S., Lopes, P. F. M., and Silvano, R. A. M. 2016. Fishers' knowledge on the coast of Brazil. *Journal of Ethnobiology and Ethnomedicine*. 12:20. <https://doi.org/10.1186/s13002-016-0091-1> .
- Berkstrom, C., Papadopoulos, M.,Jiddawi, N.S., and Norlund, L.M. 2019. Fishers' Local Ecological Knowledge (LEK) on Connectivity and Seascape Management. *Original Research*. 6 : 130-140. <https://doi.org/10.3389/fmars.2019.00130>
- Bessa, F., Kogel, T., Frias, J., and Lusher, A. 2019. Harmonized protocol for monitoring microplastics in biota. *JPI Oceans*. <http://dx.doi.org/10.13140/RG.2.2.28588.72321/1>
- Bhattacharya, P., Lin, S., Turner, P., Ke, P.C. 2010. Physical adsorption of charged plastic nanoparticles affects algal photosynthesis. *The Journal of Physical Chemistry C*. 11, 16556–16561. <https://doi.org/10.1021/jp1054759>
- Boeger, C.M., Latin, G.L., Moore S.L., and Moore, C.J. 2010. Plastic ingestion by planktivorous fishes in the North Pasific Central Gyre. *Marine Pollution Bulletin*. 60 (12), 2275-2278. <https://doi.org/10.1016/j.marpolbul.2010.08.007>
- Campanale, Claudia, Massareli, C., Savino, I., Locaputo, V., and Uricchio, V.F. 2020. A detailed review study on potential effects of microplastics and additives of concern on human health. *International Journal of Environment Research and Public Health*. 17 (4):1212. <https://doi.org/10.3390%2Fijerph17041212> .
- Carberry, M., O'Connor, W., and Thavamani, P. 2018. Trophic transfer of microplastics and mixed contaminants in the marine food web and implications for human health. *Environment International*. 115, 400-409. <https://doi.org/10.1016/j.envint.2018.03.007> .
- Cedervall, T., Hansson, L., Lard, M., Frohm, B., and Linse, S. 2012. Food chain transport of nanoparticles affects behaviour and fat metabolism in fish.

- PLoS ONE*. 2: e32254. <https://doi.org/10.1371/journal.pone.0032254>
- Chen, K., Chen, M., and Chen, T. 2021. Plastic ingestion by fish in the coastal waters of the Hengchun Peninsula, Taiwan: Associated with human activity but no evidence. *Ecotoxicology and Environmental Safety*. 213: 112056. <https://doi.org/10.1016/j.ecoenv.2021.112056>.
- Cole, M., Lindeque, P.K., Fileman, E.S., and Halsband, C. 2013. Microplastic ingestion by zooplankton. *Environmental Science & Technology*. 47(12),6646– 6655. <https://doi.org/10.1021/es400663f>.
- Collard, France, Gilbert, B., Compere, P., Eppe, G., Das, K., Jauniaux, T., and Parmentier, E. 2017. Microplastics in livers of European anchovies (*Engraulis encrasicolus*,L.). *Environmental Pollution*. 229, 1001-1005. <https://doi.org/10.1016/j.envpol.2017.07.089>.
- Dawson, A.L., Kawaguchi, S., King, C.K., Townsend, K.A., King, R., Hutson, W.M., and Nash, S.M.B. 2018. Turning microplastics into nanoplastics through digestive fragmentation by Antarctic krill. *Nature Communication*. 9 :1001. <https://doi.org/10.1038/s41467-018-03465-9>.
- Debbarama, N., Gurjar, U.M., Ramteke, K.K., Shenoy, L., Nayak, B.B., Bhushan, S., Geethalakshmi, V., and Xavier, M. 2022. Abundance and characteristics of microplastics in gastrointestinal tracts and gills of croacker fish (*Johnius dussumieri*) from off Mumbai coastal waters of India. *Marine Pollution Bulletin*. 176, 113473. <https://doi.org/10.1016/j.marpolbul.2022.113473>.
- De Sales-Riberio, C., Brito-Cassilas, Y., Fernandez, A., and Caballero, M.J. 2020. An end to the controversy over the microscopic detection and effects of pristine microplastics and effects of pristine microplastics in fish organs. *Scientific Reports*. 10: 12434. <https://doi.org/10.1038/s41598-020-69062-3>.
- Ding, J., Zhang, S., Rezanajatovo, R.M., Zou, H., and Zhu, W. 2018. Accumulation, tissue distribution, and biochemical effects of polystyrene microplastics in freshwater fish red tilapia (*Oreochromis niloticus*). *Environmental Pollution*. 238: 1-9. <https://doi.org/10.1016/j.envpol.2018.03.001>.
- Ford, H.V., Jones, N.H., Davies, A.J., Godley, B.J., Jambeck, J.R., Napper, I.E., Suckling, C.C., Williams, G.J., Woodall, L.C., and Koldewey, H.J. 2022. The fundamental links between climate change and marine plastics pollution. *Science of the Total Environment*, 806: 150392. <https://doi.org/10.1016/j.scitotenv.2021.150392>.
- Furukawa, S., Fujita, T., Shimabukuro, M., Iwaki, M., Yamada, Y., Nakajima, Y., Nakayama, O., Makishima, M., Matsuda, M., and Shimomura, I. 2004. Increased oxidative stress in obesity and its impact on metabolic syndrome. *Research Article*. 114(12):1752-1761. <https://doi.org/10.1172/jci21625>.
- Galloway, T.S., Cole, M., and Ceri, L. 2017. Interactions of microplastics debris throughout the marine ecosystem. *Nature Ecology and Evolution*. 1(5): 116. <https://doi.org/10.1038/s41559-017-0116>.
- GESAMP. 2015. Sources, fate, and effects of microplastics in the marine environment: a global assessment. *International Maritime Organization*.

- 1020-4873. <http://dx.doi.org/10.13140/RG.2.1.3803.7925> .
- Gola, D., Tyagi, P.K., Arya, A., Chauhan, N., Agarwal, M., Singh, S.K., and Gola, S. 2021. The impact of microplastics on marine environment: a review. *Environmental Nanotechnology, Monitoring & Management*. 16 , 100552. <https://doi.org/10.1016/j.enmm.2021.100552> .
- Gonzales-Ortegon, E., Sendra, M., Sparaventi,E., Leal, R.F.S., de los Rios, I., Baldo, F., Gonzalez-Fernandez,D., and Yeste, M.P. 2022. Coastal gradients of small microplastics and associated pollutants influenced by estuarine sources. *Marine Pollution Bulletin*. 174,113292. <https://doi.org/10.1016/j.marpolbul.2021.113292>
- Goyette, P., Labbe, C., Trinh, T., Xavier, R.J., and Rioux, J.D. 2007. Molecular pathogenesis of inflammatory bowel disease: genotypes, phenotypes and personalized medicine. *Review Article*. 39 (3) :177-199. <https://doi.org/10.1080/07853890701197615>
- Guo, J., Huang, X., Xiang, I., Wang, Y., Li, Y., Li, H., Cai, Q., Mo, C., and Wong, M. 2020. Soyrce, migration and toxicology of microplastics in soil. *Environment International*. 137, 105265. <https://doi.org/10.1016/j.envint.2019.105263> .
- Guyen, O., Gokdag, K., Jovanovic., B., and Kideys, A.E. 2017. Microplastics litter composition of the Turkish territorial waters of the Mediterranean Sea, and its occurrence in the gastrointestinal tract of fish. *Environmental Pollution*. 223: 286-294. <http://dx.doi.org/10.1016/j.envpol.2017.01.025> .
- Haave,M., Gomeiro, A., Schinheit, J. Nilsen, H., and Olsen, A.B. 2021. Documentation of Microplastics in Tissues of Wild Coastal Animals. *Original Research*. 9: 575058. <https://doi.org/10.3389/fenvs.2021.575058> .
- Hastuti, A. R., Lumbanbatu, D. T. F., and Wariatno, Y. 2019. The presence of microplastics in digestive tract of commercial fishes off Pantai Indah Kapuk coast, Jakarta, Indonesia. *Biodiversity Journal of Biological Diversity*. 20(5): 1233-1242. <http://dx.doi.org/10.13057/biodiv/d200513> .
- Hidalgo-Ruz, V., Gutow, L., Thompson, R.C., and 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>
- Howat, W. J., and Wilson, B.A. 2014. Tissue fixation and the effects of molecular fixatives on downstream staining procedures. *Methods*. 70(1):12-9.. <https://doi.org/10.1016/j.ymeth.2014.01.022> .
- Huang, J., Wen, B., Zhu, J., Zhang, Y., Gao, J., Chen, Z. 2020. Exposure to microplastics impairs digestive performance, stimulates immune response and induce microbiota dysbiosis in the gut of juvenile guppy (*Poecilia reticulata*). *Science of the Total Environment*.733: 138929. <https://doi.org/10.1016/j.scitotenv.2020.138929> .
- Ismail, M. R., Lewaru, M. W., and Prihadi, D. J. 2019. Microplastics ingestion by fish in the Pangandaran Bay, Indonesia. *World News of Natural*

- Sciences*. 23, 173- 181. <https://www.researchgate.net/project/Project-Marine-Tourism> .
- Jabeen, K., Li, B., Chen, Q., Su, L., Wu, C., Hollert, H., and Shi, H. 2018. Effects of virgin microplastics on goldfish (*Carassius auratus*). *Chemosphere*. 213, 323- 332. <https://doi.org/10.1016/j.chemosphere.2018.09.031> .
- Jeong, C., Kang, H., Lee, M., Kim, D., Han, J., Hwang, D., Souissi, S., Lee, S., Shin, K., Park, H.G., and Lee, J. 2017. Adverse effects of microplastics and oxidative stress-induced MAPK/Nrf2 pathway-mediated defense mechanisms in the marine copepod *Paracyclops nana*. *Scientific Reports*. 7:41323. <https://www.nature.com/articles/srep41323#citeas> .
- Jiang, L., Carter, B. R., Feely, R.A., Lauvset, S.K., and Olsen, A. 2019. Surface ocean Ph and buffer capacity: past, present and future. *Scientific Reports*. 9 : 18624. <https://www.nature.com/articles/s41598-019-55039-4#citeas> .
- Jovanovic, Boris. 2017. Ingestion of microplastics by fish and its potential consequences from a physical perspective. *Integrated Environmental Assessment and Management*. 13 (3): 510-515. <https://doi.org/10.1002/ieam.1913> .
- Jovanovic, B., Gokdag, K., Guven, O., Emre, Y., and Whitley, E.M 2018. Virgin microplastics are not causing imminent to fish after dietary exposure. *Marine Pollution Bulletin*, 130, 123-131. <https://doi.org/10.1016/j.marpolbul.2018.03.016> .
- Kang, H., Byeon, E., Jeong, H., Kim, M., Chen, Q., and Lee, J. 2020. Different effects of nano- and microplastics on oxidative status and gut microbiota in the marine medaka *Oryzias latipes*. *Journal of Hazardous Materials*. 405 : 124207. <http://dx.doi.org/10.1016/j.jhazmat.2020.124207> .
- Kanhai, L.D.K., Gardfeldt, K., Lyashevskaya, O., Hasselov, M., Thompson, E.C., and O'Connor, I. 2018. Microplastics in sub-surface waters of the Arctic Central Basin. *Marine Pollution Bulletin*. 130 :8-18. <https://doi.org/10.1016/j.marpolbul.2018.03.011> .
- Karami, A., Golieskardi, A., Choo, C.K., Romano, N., Ho, Y.B., Salamatinia, B. 2017. A high-performance protocol for extraction of microplastics in fish . *Science of the Total Environment*. 578, 485-494. <https://doi.org/10.1016/j.scitotenv.2016.10.213> .
- Karbalaei, S., Golieskardi, A., Hamzah, H.B., Abdulwahid, S., Hanachi, P., Walker, T.R., and Karami, A. 2019. Abundance and characteristics of microplastics in commercial marine fish from Malaysia. *Marine Pollution Bulletin*. 148: 5-15. <http://dx.doi.org/10.1016/j.marpolbul.2019.07.072> .
- Kazour, M., Terki, S., Rabhi, K., Jeema, S., Khalaf, G., Amara, R. 2019. Sources of microplastics pollution in the marine environment: Importance of wastewater treatment plant and coastal landfill. *Marine Pollution*



- Bulletin*. 146, 608-618.  
<https://doi.org/10.1016/j.marpolbul.2019.06.066>.
- Kazour, Maria. 2020. Active and passive biomonitoring for microplastics assessment in two highly polluted aquatic environments: case study of the Seine estuary and the Labense coast. *National Council for Scientific Research LEBANON*.
- Kerubo, J.O., Onyari, J. M., Muthumbi, A.W.N., Andersson, D. R., and Kimani, E.N. 2021. Microplastics Polymers in Surface Waters and Sediments in the Creeks Along the Kenya Coast, Western Indian Ocean (WIO). *European Journal of Sustainable Development Research*. 6(1) :em0177. <http://dx.doi.org/10.21601/ejosdr/11433>.
- Khattab, Y., Mohammadein, A., Al Maliki, J. S., Hussein, N. A., and Tantawy, E.M. 2022. Preliminary screening of microplastics contamination in different marine fish species of Taif market, Saudi Arabia. *Research Article*. 17 : 333-343. <https://doi.org/10.1515/biol-2022-0034>.
- Kolandhasamy, P., Su, L., Li, J., Qu, X., Jabeen, K., Shi, H. 2018. Adherence of microplastics o soft tissue of mussels: a novel way to uptake microplastics beyond ingestion. *Science of the Total Environment*. 610-611: 635-640. <https://doi.org/10.1016/j.scitotenv.2017.08.053>.
- Koongolla, J.B., Lin, L., Pan, Y., Yang, C., Sun, D., Liu, S., Xu, X., Maharana, D., Huang J., and Li, H., 2020. Occurance of microplastics in gastrointestinal tract and gills of fish from Beibu Gulf, South China Sea. *Environmental Pollution*. 258:113734.  
<https://doi.org/10.1016/j.envpol.2019.113734>.
- Kuhn, S., Rebolledo, E.L., and Franeker, J.A. 2015. Deleterious effects of litter on marine life. Chapter 4. *Marine Anthropogenic Litter*. pp.75-116.  
[http://dx.doi.org/10.1007/978-3-319-16510-3\\_4](http://dx.doi.org/10.1007/978-3-319-16510-3_4).
- Labreton, L.C-M., Greer, S.D., and Borrero. 2012. Numerical modelling of floating debris in the world's oceans. *Marine Pollution Bulletin*. 64 , 653-661.  
<https://doi.org/10.1016/j.marpolbul.2011.10.027>.
- Lima, A.R.A., Costa, M.F., and Barletta, M. 2014. Distribution patterns of microplastics within the plankton of a tropical study. *Environmental Research*. 132 , 146-155. <https://doi.org/10.1016/j.envres.2014.03.031>.
- Limonta, G., Manica, A., Benkhalqu, A., Bertolucci, C., Abelli, L., Fossi, M.C., and Panti, C. 2019. Microplastics ondiuce transcriptional changes, immune response and behavioral alterations in adult zebrafish. *Scientific Reports*. 9: 15775. <https://www.nature.com/articles/s41598-019-52292-5#citeas>.
- Liu, Fan., Olesen, K.B., Borregard, A.R., and Vollertsen, J. 2019. Microplastics in urban and highway strimwater retention ponds. *Science of the Total Environment*. 671,992-1000.  
<https://doi.org/10.1016/j.scitotenv.2019.03.416>.
- Lu, Y., Zhang, Y., Deng, Y., Jiang, W., Zhao, Y., Geng, J., Ren, H., 2016. Uptake and accumulation of polystyrene microplastics in zebrafish (*Danio rerio*) and toxiceffects in liver. *Environmental Science Technology*. 50 (7) : 4054-4060. <https://doi.org/10.1021/acs.est.6b00183>.

- Luis, C.S., Oliveira, M., Riberio, F., Rocha, T.L., Futter, M.N. 2018. Studies of the effects of microplastics on aquatic organisms: What do we know and where should we know and where should we focus our efforts in the future?. *Science of the total environment*. 645, 1029-1039.  
<https://doi.org/10.1016/j.scitotenv.2018.07.207> .
- Lusher, Amy. 2015. Chapter 10 Microplastics in the marine environment, distribution, interactions and effects. *Marine Anthropogenic Litter* (pp.245-307). [http://dx.doi.org/10.1007/978-3-319-16510-3\\_10](http://dx.doi.org/10.1007/978-3-319-16510-3_10) .
- Ma, Hui., Pu, S., Liu, S., Bai, Y., Mandal, S., and Xing, B. 2020. Microplastics in aquatic environments: Toxicity to trigger ecological consequences. *Environmental Pollution*. 201: 1124089.  
<https://doi.org/10.1016/j.envpol.2020.114089> .
- McNeish, R.E., Kim, L.E., Barret, H.A., Mason, S.A., Kelly, J.J., and Hoellein, T.J. 2018. Microplastic in riverine fish is connected to species traits. *Scientific Reports*. 8 (1) :11639.  
<https://www.nature.com/articles/s41598-018-29980-9> .
- Maaghlood, H., Houssa, R., Ouansafi, S., Bellali, F., El Bouqdaoui, K., Charouki, N., and Fahde, A. 2020. Ingestion of microplastics by pelagic fish from the Moroccan Central Atlantic coast. *Enviromental Pollution*. 261, 114194. <https://doi.org/10.1016/j.envpol.2020.114194> .
- Markic, A., Niemand, S., Bridson, J.H., Mazouni-Geartner, N., Geartner, J., Eriksen, M., and Bowen, M. 2018. Double trouble in the South Pasific subtropical gyre: increased plastic ingestion by fish in the oceanic accumulatic zone. *Marine Pollution Bulletin*. 136,547-546.  
<https://doi.org/10.1016/j.marpolbul.2018.09.031> .
- Masura, J., Baker, J., Foster, G., and Arthur, C., Herring, C., and Editor, T. 2015. Laboratory methods nfor the analysis of microplastics in the marine environment. *Recommendation for quantifying synthetis particles in waters and sediments*. NOAA Marine Debris Program.
- Mirad, A., Yoswaty, D., and Thamrin. 2020. Identification Microplastics Waste in Seawater and The Digestive Organs of Senangin Fish (*E.tetradactylum*) at Dumai City Sea Waters. *Asian Journal of Aquatic Sciences*. 3: 248-259. <https://doi.org/10.31258/ajaoas.3.3.248-259> .
- Mistri, M., Sfriso, A.A., Casoni, E., Nicoli, M., Vaccaro, C., and Munari, C. 2022. Microplastic accumulation in commercial fish from the Adriatic Sea. *Marine Pollution Bulletin*. 174: 113279.  
<https://doi.org/10.1016/j.marpolbul.2021.113279> .
- Mohsen, M., Wang, Q., Zhang, L., Sun, L., Lin, C., and Yang, H. 2019. Microplastics ingestion by the farmed sea cucumber *apostichopus japonicas* in China. *Environmental Pollution*, 245, 1071-1078.  
<https://doi.org/10.1016/j.envpol.2018.11.083> .
- Movahedinia, A., Abtahi, B., and Bahmani, M. 2012. Gill histopathological lesions of the Sturgeons. *Asian Journal of Animal and Veterniary Advances* . 7 : 710- 717.
- Nahib, I., dan Sutrisno, D.2010. Prediksi pola sebaran fishing ground nelayan di perairan selatan Yogyakarta. *Majalah Ilmiah Globe*. 12: 9-20.

- Obbard, R.W. 2018. Microplastics in polar regions: the role of long range transport. *Current Opinion Environmental Science & Health*. 1:24–29. <https://doi.org/10.1016/j.coesh.2017.10.004> .
- Patria, M.P, Santoso, C.A., and Tsabita, N. 2020. Microplastic by Periwinkle Snail *Littoraria scarba* and mangrove crab *Metopograpsus quadridentata* in Pramuka Island, Jakarta Bay, Indonesia. *Sains Malaysiana*. 9 : 21252-2158. [http://www.ukm.my/jsm/malay\\_journals/jilid49bil9\\_2020/KandunganJilid49Bil9\\_2020.html](http://www.ukm.my/jsm/malay_journals/jilid49bil9_2020/KandunganJilid49Bil9_2020.html) .
- Pattiaratchi, C., van der Mheen, M., Schlundt, C., Narayanaswamy, B.E., Sura, A., Hajbane, S., White, R., Kumar, N., Fernandes, M., and Wijeratne, S. 2022. Plastics in the Indian Ocean-sources transport, distribution, and impacts. *Ocean Sci*. 18, 1-28. <https://doi.org/10.5194/os-18-1-2022> .
- Pauly, D., and Zeller, D. 2015. Catch reconstructions reveal that global marine fisheries catches are higher than reported and declining. *Nature communications*. 7 : 10244. <https://www.nature.com/articles/ncomms10244#citeas> .
- Pirsaheb, M., Hossini, H., Makhdoumi, P., 2020. Review of microplastic occurrence and toxicological effects in marine environment: Experimental evidence of inflammation. *Process Safety and Environmental Protection*. 142 : 1-14. <https://doi.org/10.1016/j.psep.2020.05.050> .
- Prakoso, Aditha Agung. 2018. Identifikasi dan Pentahapan Zona Aktivitas Wisata Pantai Selatan DIY. *Jurnal Arsitektur dan Perencanaan*. 1: 240-249. <http://dx.doi.org/10.31101/juara.v1i2.781> .
- Prinz, Natalie and Korez, Spela. 2020. Understanding how microplastics affect marine biota on the cellular level is important for assessing ecosystem function ; a review. *YOUMARES 9- The Oceans: Our Research, Our Future*, pp 101-119. [https://doi.org/10.1007/978-3-030-20389-4\\_6](https://doi.org/10.1007/978-3-030-20389-4_6) .
- Qiao, R., Sheng, C., Lu, Y., Zhang, Y., Ren, H., and Lemos, B. 2019. Microplastics induce intestinal inflammation, oxidative stress, and disorders of metabolome and microbiome in zebrafish. *Science of the Total Environment*. 662: 246-253. <https://doi.org/10.1016/j.scitotenv.2019.01.245> .
- Ragusa, A., Svelato, A., Santacroce, C., Catalano, P., Notarstefano, V., Carnevali, O., Papa, F., Rongioletti, M.C.A., Baicco, F., Draghi, S., D'Amore, E., Rinaldo, D., Matta, M., and Giorgini, E. 2021. Plasticenta: first evidence of microplastics in human placenta. *Environment International*. 146 : 106274. <https://doi.org/10.1016/j.envint.2020.106274> .
- Ratucoreh, C.Y., and Retnoaji, B. 2018. The Growth and Histology Structure of Indonesian Eel (*Angilla bicolor bicolor* McClelland, 1844) Fed with Microalgae. *AIP Conference Proceedings*. 2002 (1) : 020009. <http://dx.doi.org/10.1063/1.5050105> .
- Rebolledo, E.L.B., Franeker, A.V., Jansen, O.E., and Brasseur, S.M.J.M. 2013. Plastic ingestion by harbor seals (*Phoca vitulina*) in the Netherland.



- Marine Pollution Bulletin*. 67 (1-2):200-202.  
<https://doi.org/10.1016/j.marpolbul.2012.11.035> .
- Rochman, C.M., Hoh, E., Kurobe, T., and Teh, S.J. 2013. Ingested plastic transfers hazardous chemicals to fish and induces hepatic stress. *Scientific Reports*. 3:326. <https://doi.org/10.1038/srep03263> .
- Rodrigues, D., Antunes, J., Otero, V., Sobral, P., and Costa, M. H. 2020. Distribution Patterns of Microplastics in Sewawater Surface at a Portuguese Estuary and Marine Park. *Original Research*. 8: 582217. <http://dx.doi.org/10.3389/fenvs.2020.582217> .
- Sahubawa, Latif. 2015. Kajian sebaran potensi ekonomi sumber daya kelautan di pantai selatan Daerah Istimewa Yogyakarta sebagai upaya percepatan investasi. *Jurnal Teknosains*. 4: 101-198.  
<https://jurnal.ugm.ac.id/teknosains/article/download/7953/6153> .
- Sales-Ribeiro, D. D., Brito-Casillas, Y., Fernandez, A., and Caballero, M. J. 2020. An end to the controversy over the microscopic detection and effects of pristine microplastics in fish organs. *Scientific reports*. 10 :12434. <https://doi.org/10.1038/s41598-020-69062-3> .
- Saliu, F., Montano, S., Leoni, B., and Lasagni, M. 2019. Microplastics as a threat to coral reef environments: detection of phthalate esters in neuston and scleractinian corals from the Faafu Atoll, Maldives. *Marine Pollution Bulletin*. 142,234-241.  
<https://doi.org/10.1016/j.marpolbul.2019.03.043> .
- Sarasita, D., Yunanto, A., and Yona, D. 2019. Kandungan mikroplastik pada empat jenis ikan ekonomis penting di perairan Selat Bali. *Jurnal Iktiologi Indonesia* . 20 (1):1-12.  
<http://jurnal-iktiologi.org/index.php/jii/article/download/508/pdf/> .
- Savoca, M., Tyson, C.W., McGill, M., and Siager, C.J. 2017. Odours from marine plastics debris induce food search behaviour in a forage fish. *Proceedings B The Royal Society*. 284 (1860): 20171000. <http://dx.doi.org/10.1098/rspb.2017.1000> .
- Sawalman, R., Zamani, N.P., Werorilangi, S., and Ismet, M.S. 2021. Spatial and temporal distribution of microplastics in the surface waters of Barranglompo Island, Makassar. 4th International Synposium on *Marine Science and Fisheries*. 860 : 012098.  
<http://dx.doi.org/10.1088/1755-1315/860/1/012098> .
- Scudo, A., Liebmann, B., Corden, C., Tyrer, D., Kreissig, J., and Warwick, O. 2017. Intentionally added microplastics in products. Amec Foster Wheeler Environment & Infrastructure UK Limited.  
<https://ec.europa.eu/environment/chemicals/reach/pdf/39168%20Intentionally%20added%20microplastics%20-%20Final%20report%2020171020.pdf> .
- Sendra, m., Pereiro, P., Yeste, M.P., Mercado, L., Figueras, A., Novoa, B. 2021. Size matters: Zebrafish (*Danio rerio*) as a model to study toxicity of nanoplastics from cells to the whole organism. *Environmental Pollution*. 268 ,115769. <https://doi.org/10.1016/j.envpol.2020.115769> .

- Smyth, K., and Elliot, M. 2017. Effects of changing salinity on the ecology of the marine environment. Chapter 9. Stressors in the Marine Environment. Oxford University Press.  
<http://dx.doi.org/10.1093/acprof:oso/9780198718826.003.0009> .
- Song, H., Wignall, P. B., Song, H., Dai, X., and Chu, D. 2019. Seawater Temperature and Dissolved Oxygen OVER THE Past 500 Million Years. *Journal of the Earth Science*. 30, 236-243.  
<http://dx.doi.org/10.1007/s12583-018-1002-2> .
- Su, L., Deng, H., Li, B., Chen, Q., Pettigrove, V., Wu, C., and Shi, H. 2019. The occurrence of microplastics in specific organs in commercially caught fishes from coast and estuary area of east China. *Journal of Hazardous Materials*. 365, 716-724.  
<https://doi.org/10.1016/j.jhazmat.2018.11.024>.
- Sul, J.A.I, and Costa, M.F. 2014. The present and future of microplastic pollution in the marine environment. *Environmental Pollution*. 185, 352–364.  
<https://doi.org/10.1016/j.envpol.2013.10.036>.
- Sun, X., Liang, J., Zhu, M., Zhao, Y., and Zhang, B. 2018. Microplastics in seawater and zooplankton from the Yellow Sea. *Environmental Pollution*. 242, 585-595. <https://doi.org/10.1016/j.envpol.2018.07.014>.
- Syafitri, J., Hamdani, H., Pratama, R. I., and Ismail, M.R. 2021. Microplastics Accumulation in Gastrointestinal Tract of Sea Fish Landed at TPI Gaung Pandang, west Sumatera. *Global Scientific Journals*. 9 :9.
- Syafiya, A., and Hadisusanto, S. 2019. Komunitas Makrozoobentos di Kawasan Penambangan Pasir di Sungai Progo. *Jurnal Manusia dan Lingkungan*. 26(2):52-61.  
[http://www.globalscientificjournal.com/researchpaper/Microplastic\\_Accumulation\\_in\\_Gastrointestinal\\_Tract\\_of\\_Sea\\_Fish\\_Landed\\_at\\_TPI\\_Gaung\\_Padang\\_west\\_Sumatera.pdf](http://www.globalscientificjournal.com/researchpaper/Microplastic_Accumulation_in_Gastrointestinal_Tract_of_Sea_Fish_Landed_at_TPI_Gaung_Padang_west_Sumatera.pdf).
- Syaifullah, M.D. 2015. Suhu Permukaan Laut Perairan Indonesia dan Hubungannya dengan Pemanasan Global. *Jurnal Segara*. 11:37-47.  
<http://dx.doi.org/10.15578/segara.v11i2.7356>.
- Tang, Y., Liu, Y., Chen, Y., Zhang, W., Zhao, J., He, S., Yang, C., Zhang, T., Tang, C., Zhang, C., and Yang, Z. 2021. A review: research progress on microplastics pollutants in aquatic environments. *Science of the Total Environment*. 766, 142572.  
<https://doi.org/10.1016/j.scitotenv.2020.142572>
- Tasseront, P., Zinsmeister, H., Rambonnet, L., Hiemstra, A., Siepmann, D., and van Emmerik, T. 2020. Plastic Hotspot Mapping in Urban Water Systems. *Geosciences*. 10 (9) : 342.  
<https://doi.org/10.3390/geosciences10090342> .
- Unsworth, R. K.F., McKenzie, L.J., Nordlund, L.M., and Cullen-Unsworth, L.C. 2018. A changing climate for seagrass conservation . *Current Biology Magazine*. 28(21) :R1229-R1232.  
<http://dx.doi.org/10.1016/j.cub.2018.09.027> .
- Utami, I., Resdianningsih, K., and Rahmawati, S. 2022. Temuan Mikroplastik pada Sedimen Sungai Progo dan Sungai Opak Kabupaten Bantul. *Jurnal*

*Riset Daerah*. XXII:1412-8519.

<https://ojs.bantulkab.go.id/index.php/jrd/article/view/21#:~:text=Hasil%20penelitian%20menunjukkan%20bahwa%20mikroplastik,3.729%2C67%20artikel%2Fkg>.

- Van Cauwenberghe, L., Claessens, M., Vandegehuchte, M., and Janssen, C.R. 2015. Microlastics are taken up by mussels (*Mytilus edulis*) and lugworms (*Arenicola marina*) living natural habitats. *Environmental Pollution*. 199, 10.17. <https://doi.org/10.1016/j.envpol.2015.01.008>.
- Vignardi, C.P., Hasue, F.M., Sartorio, P.V., Cardoso, C.M., Machado, A.S.D., Passos, M.J.A.C.R., Santos, T.C.A., Nucci, T.C., Hower, T.L.R., Watanabe, I., Gomes, V., and Phan, N.V. 2015. Genotoxicity, potential cytotoxicity and cell uptake of titanium dioxide Nanoparticles in the marine fish *Trachinotus carolinus* (Linnaeus, 1766). *Aquatic Toxicology*. 158:218-29. <https://doi.org/10.1016/j.aquatox.2014.11.008>.
- Walkinshaw, C., Lindeque, P.K., Thompson, R., Tolhurst, T. And Cole, M. 2020. Microplastics and seafood: lower trophic organisms at highest risk of contamination, *Ecotoxicology and Environmental Safety*. 190: 110066. <https://doi.org/10.1016/j.ecoenv.2019.110066>.
- Wieczorek, A.M., Morrison, L., Croot, P.L., Allcock, L., MacLoughlin, E., Savard, O., Brownlow, H., and Doyle, T.K. 2018. Frequency of Microplastics in Mesopelagic Fishes from the Northwest Atlantic. *Original Research Article*. 5: 39. <http://dx.doi.org/10.3389/fmars.2018.00039>.
- Woodall, L.C., Sanchez-Vidal, A., Canals, M., Paterson, G.L., Coppock, R., Sleight, V., Calafat, A., Rogers, A.D., Narayanaswamy, B.E., Thompson, R.C. 2014. The deep sea is a major sink for microplastic debris. *Royal Society Open Science*. 1:14031. <https://doi.org/10.1098/rsos.140317>.
- Wright, S. L., Thompson, R.C., and Galloway, T.S. 2013. The physical impacts of microplastics on marine organisms: a review. *Environmental Pollution*. 178, 438-492. <https://doi.org/10.1016/j.envpol.2013.02.031>.
- Yan, M., Nie, H., Xu, K., He, Y., Hu, Y., Huang, Y., Wang, J., 2019. Microplastic abundance, distribution and composition in the Pearl River along Guangzhou city and Pearl River estuary, China. *Chemosphere*. 217, 879-886. <https://doi.org/10.1016/j.chemosphere.2018.11.093>.
- Yee, M.S., Hii, L., Looi, C.K., Lim, W., Wong, S., Kok, Y., Tan, B., Wong, C., and Leong, C. 2021. Impact of microplastics and nanoplastics on human health. *Nanomaterials*. 11(2): 496. <https://doi.org/10.3390/nano11020496>.
- Yona, D., Maharani, M.D., Cordova, M.R., Elvania, Y., dan Dharmawan, I.W.E. 2020. Analisis mikroplastik di insang dan saluran pencernaan ikan karang di tiga pulau kecil dan terluar Papua, Indonesia: kajian awal. *Jurnal Ilmu dan Teknologi Kelautan Tropis*. 2 : 495-50. <http://dx.doi.org/https://doi.org/10.29244/jitkt.v12i2.25971>.
- Yona, D., Eviatri, M.R., Wardana, D.S., Pitaloka, D.A., Ningrum, D., Fuad, M.A.F., Prananto, Y.P., Hariyan, L.I., and Isobe, A. 2022. Microplastics in organs of commercial marine fishes from five fishing

- points in Java Island, Indonesia.
- Yu, F., Yang, C., Zhu, Z., Bai, X., Ma, J. 2019. Adsorption behavior of organic pollutants and metals on micro/nanoplastics in the aquatic environment. *Science of the Total Environment*. 694, 133643. <https://doi.org/10.1016/j.scitotenv.2019.133643>.
- Yu, X., Ladewig, S., Bao, S., Toline, C.A., Whitmire, S., Chow, A.T. 2018. Occurrence and distribution of microplastics at selected coastal sites along the southeastern United States. *Science of the Total Environment*. 613-614: 298- 305. <https://doi.org/10.1016/j.scitotenv.2017.09.100>.
- Yudhantari, C.I.A.S., Hendrawan, I.G., and Puspita, N.L.P.R. 2019. Kandungan mikroplastik pada slauran penernakan ikan lemuru portolan (*Sardinella lemuru*) hasil tangkapan di Selat Bali. *Journal of marine research and technology*. 2: 48-52. <https://doi.org/10.24843/JMRT.2019.v02.i02.p10>.
- Zettler, E.R., Mincer, T.J., and Amaral-Zettler, L.A. 2013. Life in the “Plastisphere”: Microbial Communities on Plastic Marine Debris. *Environmental Science & Technology*. 47(13), 7137-7146. <https://doi.org/10.1021/es401288x>.
- Zhang, C., Wang, S., Sun, D., Pan, Z., Zhou, A., Xie, S., Wang, J., and Zou, J. 2020. Microplastics pollution in surface water from east coastal areas of Guangdong, South China and preliminary study on microplastics biomonitoring using two marine fish. *Chemosphere*. 256, 127202. <https://doi.org/10.1016/j.chemosphere.2020.127202>.
- Zhang, K., Hamidian, A.H., Tubic, A., Zhang, Y., Fangm J.K.H., Wu, C., and Lam, P.K.S. 2021. Understanding plastic degradation and microplastic formation in the environment: A review. *Environmental Pollution*. 274: 116554. <https://doi.org/10.1016/j.envpol.2021.116554>.