

## DAFTAR PUSTAKA

- Aidil, D., Zulfahmi, I., & Muliari, 2016. Pengaruh Suhu terhadap Derajat Penetasan Telur dan Perkembangan Ikan Lele Sangkuriang (*Clarias gariepinus* var. sangkuriang). *JESBIO*, 5(1), pp. 30-33.
- Bramandita, A., 2009. Pengendapan Kromium Heksavalen dengan Serbuk Besi. *Skripsi*. Bogor: Fakultas Matematika dan Ilmu Pengetahuan Alam Institut Pertanian Bogor.
- Carlson, R.M., 1989. *Pattens Foundation of Embryology*. New York: Mc. Graw Hill Books.
- Chaidir, Z., Qomariah, H., & Rahmiana, Z., 2015. Penyerapan Ion Logam Cr(III) dan Cr(VI) dalam Larutan Menggunakan Kulit Buah Jengkol (*Pithecellobium jiringa* (JACK) PRAIN.). *J. Ris. Kim.*,8(2), pp. 189-200.
- Cheung, K.H. & Gu, J.D., 2007. Mechanism of Hexavalent Chromium Detoxification by Microorganism and Bioremediation Application Potential. *International Biodeterioration & Biodegradation*, 59, pp. 8-15.
- Cholik, F., Poernomo, R.P. & Jauzi, A., 2005. *Aquakultur : Tumpuan Harapan Masa Depan Bangsa*. Jakarta: Masyarakat Perikanan Nusantara dan Taman Akuarium Air Tawar TMII.
- Dave, G. & Xiu, R., 1991. Toxicity of Mercury, Copper, Nickel, Lead, and Cobalt to Embryos and Larvae of Zebrafish, *Brachydanio rerio*. *Archives of Environmental Contamination and Toxicology*, 21, 126-134.
- Drummond, I.A., Arindam, M., Hartmut H., Marlies E., Lila S.K., Alexander F.S., Stephan C.F.N., Derek L.S., Fried Z., Zehava R., Wolfgang D., & Mark C.F., 1998. Early Development of the Zebrafish Pronephros and Analysis Mutations Affecting Pronephric Function. *Journal of Development*, 125, pp. 4655-4667.
- Drummond, I., 2003. Making a Zebrafish Kidney: a Tale of Two Tubes. *TRENDS in Cell Biology*, 13(7), pp. 357-365.
- Fujaya, Y., 2004. *Fisiologi Ikan Dasar Pengembangan Teknik Perikanan*. Cetakan Pertama. Jakarta: Rineka Putra.
- Grevatt, P.C., 1998. *Toxicology Review of Trivalent Chromium*. Washington, D.C: U.S. Environmental Protection Agency.
- Gundersen, H.J., Bendtsen, T.F., Korbo, L., Marcussen, N., Moller, A., Nielsen, K., Nyengaard, J.R., Pakkenberg, B., Sorensen, F.B., Vesterby, A., & West, M.J., 1988. Some New, Simple and Efficient Stereological Methods and Their Use in Pathological Research and Diagnosis. *APMIS*, 96, pp. 379-394.
- Hanke, N., Staggs, L., Schroder, P., Litteral, J., Fleig, S., Kaufeld, J., Pauli, C., Haller, H., & Schiffer, M., 2013. "Zebrafishing" for Novel Genes Relevant to the Glomerular Filtration Barrier. *BioMed Research International*, 2013, pp. 1-12.

- Hedianto, D.A & Purnamaningtyas, S.E., 2011. Beberapa Aspek Biologi Ikan Nilem (*Osteochilus vittatus*, Valenciennes, 1842). *Prosiding Seminar Nasional Perikanan Indonesia*, pp. 95-107.
- Hibiya, T., Yokote, M., Oguri, M., Sato, H., Takashima, F., & Aida, K., 1982. *An Atlas Fish Histology Normal And Pathological*. Tokyo.
- Ho, R.K., 1992. Cell Movements and Cell Fate during Zebrafish Gastrulation. *Journal of Development*, pp. 65-73.
- Hsu, H.J., Lin, G., & Chung, B.C., 2003. Parallel Early Development of Zebrafish Interrenal Glands and Pronephros: Differential Control by wt1 and ff1b. *Journal of Development*, 130, pp. 2107-2116.
- IARC, 2000. Chromium (VI) Compounds. *IARC Monograph*, pp. 147-168.
- International Programme on Chemical Safety (IPCS), 2013. *Inorganic Chromium(VI) Compounds*. Geneva: World Health Organization.
- Jeziarska, B., Katarzyna, L., & Malgorzata, W., 2009. The Effects of Heavy Metals on Embryonic Development of Fish. *Journal of Fish Physiology Biochemistry*, 35, pp. 625-640.
- Joutey, N.T., Sayel, H., Bahafid, W., & Ghachtouli, N.E., 2015. Mechanisms of Hexavalent Chromium Resistance and Removal by Microorganisms. *Review of Environmental Contamination and Toxicology*, 233, pp. 45-63.
- Kapur, K. & Yadav, N.A., 1982. The Effects of Certain Heavy Metal Salts on the Development of Eggs in Common Carp, *Cyprinus carpio* var. communis. *Acta Hydrochim Hydrobiol*, 10, pp. 517-522.
- Kimmel, C.B., Ballard, W.W., Kimmel, S.R., Ullmann, B., & Schilling, T. F., 1995. Stages of Embryonic Development of the Zebrafish. *Dev. Dyn.*, 203, pp. 253-310.
- Khotimah, U.C., 2015. Perkembangan Jaringan Hematopoietik *Post-larva* Ikan Nilem (*Osteochilus hasselti*) yang Dipelihara dalam Media yang Mengandung Krom Heksavalen. *Skripsi*. Purwokerto: Universitas Jenderal Soedirman Press.
- Kottelat, M. A. J., Whitten, S. N., Kartika, & Wirjoatmodjo, S., 1993. *Freshwater Fishes of Western Indonesia and Sulawesi*. Jakarta: Periplus Edition (HK) Ltd.
- Krejci, R. & Palikova, M., 2006. *Potassium dichromate* as a Reference Substance for Embryonic Tests of Toxicity in the Common Carp (*Cyprinus carpio* L.). *Acta Vet.Brno.*, 75, pp. 259-263.
- Majumdar, N.N., 1985. *Textbook of Vertebrate Embryology*. New Delhi: McGraw-Hill Publishing Company Limited.
- Majone, F., 1977. Effects of *Potassium dichromate* on Mitosis of Cultured Mammalian Cells. *International Journal of Cytology, Cytosystematics, and Cytogenesis*, 30(4), pp. 469-481.

- Mandia, S., Netti, M., & Putra, S., 2013. Analisis Histologis Ginjal Ikan Asang (*Osteochilus hasselti*) di Danau Maninjau dan Singkarak, Sumatera Barat. *Jurnal Biologi Universitas Andalas*, 2(3), pp. 194-200.
- Merck KGaA, 2012. *Potassium dichromate (Kalium Dikromat)*. [Online]. Terdapat di: <http://gatotsadewo.staff.ugm.ac.id/image/msds/kalium%20dichromat.pdf> [Diakses pada 1 April 2017].
- Narwiyani, S., 2011. Lethal Concentration 50% (LC-50) Empat Isolat *Edwardsiella tarda* pada Ikan Air Tawar di Indonesia. *Jurnal Sains Veteriner*, 29(1), pp. 51-54.
- Negara, A., 2003. Penggunaan Analisis Probit untuk Pendugaan Tingkat Kepekaan Populasi *Spodoptera exigua* terhadap Deltametrin di Daerah Istimewa Yogyakarta. *Jurnal Informatika Pertanian*, 12.
- Nguyen, L.T.H. & Janssen, C.R., 2002. Embryo-Larval Toxicity Tests with the African Catfish (*Clarias gariepinus*): Comparative Sensitivity of Endpoints. *Archives of Environmental Contamination and Toxicology*, 42, pp. 256-262.
- Ningrum, P.Y., 2006. Kandungan Logam Berat Pb serta Struktur Mikroanatomi Branchia, Hepar, dan Musculus Ikan Belanak (*Mugil cephalis*) di Perairan Cilaca. Skripsi. Universitas Negeri Surakarta.
- Nirmala, K., Hastuti, Y.P., & Yuniar, V., 2012. Toksisitas Merkuri (Hg) dan Tingkat Kelangsungan Hidup, Pertumbuhan, Gambaran Darah, dan Kerusakan Organ pada Ikan Nila *Oreochromis niloticus*. *Jurnal Akuakultur Indonesia*, 11(1), pp. 38-48.
- Nugraha, F., 2004. Embriogenesis dan Perkembangan Larva Ikan *Rainbow (Glossolepis incisus)*. Skripsi. Bogor: Fakultas Perikanan dan Ilmu Kelautan Institut Pertanian Bogor.
- Oyen, F.G.F., 1993. Aluminium and Water Acidity. Effect on Early Development and Juveniles of the Carp, *Cyprinus carpio*. Tesis. Netherland: University of Nijmegen.
- Rohyati, 2005. Perkembangan Sistem Saraf Embrio Ikan Nilem yang Diinkubasikan pada Temperatur  $23^{\circ}\text{C}\pm 1$  dan  $27^{\circ}\text{C}\pm 1$ . Skripsi. Purwokerto: Fakultas Biologi Universitas Jenderal Soedirman.
- Rombough, P.J., & Garside, E.T., 1980. Cadmium Toxicity and Accumulation in Eggs and Alevins of Atlantic Salmon *Salmo salar*. *Journal of Zoology*, 60, pp. 2006-2014.
- Rossi, S.C. & Wetterhanhn, K.E., 1989. Chromium(V) is Produced upon Reduction of Chromate by Mitochondrial Electron Transport Chain Complexes. *Journal of Carcinogenesis*, 10(5), pp. 913-920.
- Sander, V. & Davidson, A.J., 2014. Kidney Injury and Regeneration in Zebrafish. *Seminars in Nephrology*, 34(4), pp. 437-444.

- Safer, A.M.A., Tytler, P., & El-Sayed, N., 1982. The Structure of the Head Kidney in the Mudskipper, *Periophthalmus koelreuteri* (Pallas). *Journal of Morphology*, 174, pp. 121-131.
- Sfakianakis, D.G., Renieri, E., Kentouri, M., & Tsatsakis, A.M., 2015. Effect of Heavy Metals on Fish Larvae Deformities. *Environmental Research*, 137, pp. 246-255.
- Shazili, N.A.M. & Pascoe, D., 1986. Variable Sensitivity of Rainbow Trout (*Salmo gairdneri*) Eggs and Alevins to Heavy Metals. *Bulletin Environmental Contamination and Toxicology*, 36, pp. 468-474.
- Siswanto, A.A., 2006. Pengaruh Temperatur terhadap Perkembangan dan Pertumbuhan Embrio dan Larva Ikan Nilem (*Osteochilus hasselti* C.V). *Skripsi*. Purwokerto: Fakultas Biologi Universitas Jenderal Soedirman.
- Soeminto & Wijayanti, G.E., 2010. *Struktur dan Perkembangan Hewan*. Purwokerto: Fakultas Biologi Universitas Jenderal Soedirman.
- Stouthart, A.J.H.X., Spanings, F.A.T., Lock, R.A.C., & Wendelaar Bonga, S.E., 1994. Effects of Low Water pH on Lead Toxicity to Early Life Stages of the Common Carp (*Cyprinus carpio*). *Aquatic Toxicology*, 30, pp. 137-151.
- Stouthart, A.J.H.X., Spanings, F.A.T., Lock, R.A.C., & Wendelaar Bonga, S.E., 1995. Effects of Water pH on Chromium Toxicity to Early Life Stages of the Common Carp (*Cyprinus carpio*). *Aquatic Toxicology*, 32, pp. 31-42.
- Sudarsana, E., Onny, S., & Suhartono, 2013. Hubungan Riwayat Paparan Kromium dengan Gangguan Fungsi Ginjal pada Pekerja Pelapisan Logam di Kabupaten Tegal. *Jurnal Kesehatan Lingkungan Indonesia*, 12(1).
- Sukra, Y. L. Rahardjo, & Djuwita, I., 1989. *Embriologi I*. Pusat Antar Universitas Ilmu Hayat. Bogor: Institut Pertanian Bogor.
- Sumantadinata, K., 1983. *Pengembangbiakan Ikan-Ikan Peliharaan di Indonesia*. Edisi ke-2. Bogor: P.T. Sastra Hudaya.
- Susa, N., Ueno, S., Furukawa, Y., Ueda, J., & Sugiyama, M., 1997. Potent Protective Effect of Melatonin on Chromium(VI)-Induces DNA Single-Strand Breaks, Cytotoxicity, and Lipid Peroxidation in Primary Cultures of Rat Hepatocytes. *Journal of Toxicology and Applied Pharmacology*, 144, 377-384.
- Thisse, C., Thisse, B., Schilling, T.F., & Postlethwait, J.H., 1993. Structure of the Zebrafish *snail1* Gene and its Expression in Wildtype, Spadetail and No Tail Mutant Embryos. *Journal of Development*, 119, pp. 1203-1215.
- Tytler, P., 1988. Morphology of the Pronephros of the Juvenile Brown Trout, *Salmo trutta*. *Journal of Morphology*, 195, pp. 189-204.
- Ville, C.A., Warner, F.W., & Robert, B.D., 1988. *Zoologi Umum*. Jakarta: Erlangga.
- Warga, R.M. & Kimmel, C.B., 1990. Cell Movements during Epiboly and Gastrulation in Zebrafish. *Journal of Development*, 108, pp. 569-580.

- Wijayanti, G.E., Setyawan, P., & Kurniawati, D.I., 2017. A Simple Paraffin Embedded Protocol for Fish Egg, Embryo, and Larvae. *Scripta Biologica*, 4(2), pp. 85-89.
- Wireshpathi, E.A.M.O., Raharjo, & Widowati, B., 2012. Pengaruh Kromium Heksavalen (VI) terhadap Tingkat Kelangsungan Hidup Ikan Nila (*Oreochromis niloticus*). *LenteraBio*, 1(2), pp. 75-79.
- Wulandari, A., Soeminto, & Wijayanti, G.E., 2009. The Dynamic or Testicular Activity of the Hard-Lipped Barb (*Osteochilus hasselti* C.V.) Under Extended Photoperiod. *Biosfera*, 26(3), pp. 143-148.
- Yilmaz, S., Turan, C., & Toker, T., 2010. Uptake and Distribution of Hexavalent Chromium in Tissues (Gill, Skin, and Muscle) of Freshwater Fish *Oreochromis aureus*. *Journal of Environment Chemistry and Ecotoxicology*, 2(3), pp. 28-33.
- Zhou, W., Rudrick, C.B., Frank, B., Christoph, E., & Friedhelm, H., 2010. Characterization of Mesonephric Development and Regeneration Using Transgenic Zebrafish. *American Journal of Renal Physiology*, 299.

