

DAFTAR PUSTAKA

- Albaina, A., Uriarte, I., Aguirre, M., Abad, D., Iriarte, A., Villate, F., Estonba, A., 2016. Insights on the origin of invasive copepods colonizing Basque estuaries; A DNA barcoding approach. *Mar. Biodivers. Rec.* 9: 1–7. <https://doi.org/10.1186/s41200-016-0045-2>
- Alnawafleh, T., Kim, B.K., Kang, H.E., Yoon, T.H., and Kim, H.W. 2014. Stimulation of molting and ovarian maturation by methyl farnesoate in the pacific shrimp *Litopenaeus vannamei* (Boone, 1931). *Fish. Aquat. Sci.* 17(1): 115-121.
- Altaff, K., Vijayaraj, R., 2021. Micro-algal diet for copepod culture with reference to their nutritive value – a review. *Int. J. Curr. Res. Rev.* 13, 86–96. <https://doi.org/10.31782/IJCRR.2021.13705>
- Arnaud, J., Brunet, M., and Mazza, J. 1980. Comparative structure and ultrastructure of the midgut in several species of calanoid copepods. *Zoomorphologie*. 95: 213-233.
- Baek, S.Y., Jang, K.H., Choi, E.H., Ryu, S.H., Kim, S.K., Lee, J.H., Lim, Y.J., Lee, J., Jun, J., Kwak, M., Lee, Y.S., Hwang, J.S., Maran, B.A.V., Chang, C.Y., Kim, I.H., Hwang, U.W. 2016. DNA barcoding of metazoan zooplankton copepods from South Korea. *PLoS One* 11: 1–20. <https://doi.org/10.1371/journal.pone.0157307>
- Bell, M.V., Dick, J.R., Anderson, T.R., Pond, D.W. 2007. Application of liposome and stable isotope tracer techniques to study polyunsaturated fatty acid biosynthesis in marine zooplankton. *Journal Of Plankton Research*. 29(5): 417-422. <https://doi.org/10.1093/plankt/fbm025>
- Beyrend-Dur, D., Kumar, R., Rao, T.R., Souissi, S., Cheng, S.H., Hwang, J.S. 2011. Demographic parameters of adults of *Pseudodiaptomus annandalei* (Copepoda: Calanoida): Temperature-salinity and generation effects. *Journal of Experimental Marine Biology and Ecology* 404: 1–14. <https://doi.org/10.1016/j.jembe.2011.04.012>
- Blanda, E., Drillet, G., Huang, C., Hwang, J., Kring, J., Henrik, H., Allan, T., Su, H., and Winding, B., 2017. An analysis of how to improve production of copepods as live feed from tropical Taiwanese outdoor aquaculture ponds. *Aquaculture*. 479: 432–441.
- Blanda, E., Drillet, G., Huang, C.C., Hwang, J.S., Jakobsen, H.H., Rayner, T.A., Su, H.M., Wu, C.H., and Hansen, B.W., 2015. Trophic interactions and

- productivity of copepods as live feed from tropical Taiwanese outdoor aquaculture ponds. *Aquaculture*. 445:11–21.
- Borst, D.W., Laufer, H., Landau, M., Chang, E.S., Hertz, W.A., Baker, F.C., and Schooley, D.A., 1987. Methyl farnesoate and its role in crustacean reproduction and development. *Insect. Biochem.* 17:1123–1127.
- Boulangé-lecomte, C., Xuereb, B., Trémolet, G., Du, A., Giusti, N., Olivier, S., Legrand, E., Forget-leray, J., 2017. Controversial use of vitellogenin as a biomarker of endocrine disruption in crustaceans: New adverse pieces of evidence in the copepod *Eurytemora affinis*. *Comparative Biochemistry and Physiology*, Part C. 201: 66–75.
- Bradford, M.M., 1976. A rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein-dye-binding. *Anal. Biochem.* 72: 248-254.
- Brunet, M., Arnaud, J. and Mazza, J. 1994. Gut structure and digestive cellular processes in marine Crustacea. *Oceanogr. Mar. Biol. Ann. Rev.* 32: 335–367.
- Bucklin, A. and Wiebe, P.H. 1998. Low mitochondrial diversity and small effective population sizes of the copepods *Calanus finmarchicus* and *Nannocalanus minor*: possible impact of climatic variation during recent glaciation. *Journal of Heredity*. 89: 383–392.
- Bucklin, A., Frost, B.W. and Kocher, T.D. 1995. Molecular systematics of six *Calanus* and three *Metridia* species (Calanoida: Copepoda). *Marine Biology*. 121: 655-664.
- Bucklin, A., Frost, B.W., Bradford-Grieve, J., Allen, L.D., Copley, N.J. 2003. Molecular systematic and phylogenetic assessment of 34 calanoid copepod species of the Calanidae and Clausocalanidae. *Marine Biology*. 142: 333–343. <https://doi.org/10.1007/s00227-002-0943-1>
- Bucklin, A., Ortman, B.D., Jennings, R.M., Nigro, L.M., Sweetman, C.J., Copley, N.J., Sutton, T., Wiebe, P.H. 2010. A “Rosetta Stone” for metazoan zooplankton: DNA barcode analysis of species diversity of the Sargasso Sea (Northwest Atlantic Ocean). *Deep-Sea Research Part II*. 57: 2234–2247. <https://doi.org/10.1016/j.dsr2.2010.09.025>
- Caramujo, M.J., De Carvalho, C.C.C.R., Silva, S.J., Carman, K.R. 2012. Dietary carotenoids regulate astaxanthin content of copepods and modulate their susceptibility to UV light and copper toxicity. *Mar. Drugs*. 10: 998–1018. <https://doi.org/10.3390/md10050998>
- Castellani, C. 2019. Copepods. *Encyclopedia of Ocean Sciences* (Third Edition), 1: 533-545. <https://doi.org/10.1016/B978-0-12-409548-9.11609-4>

- Chen, Q., Sheng, J., Lin, Q., Gao, Y., Lv, J. 2006. Effect of salinity on reproduction and survival of the copepod *Pseudodiaptomus annandalei* Sewell, 1919. *Aquaculture*. 258: 575–582. <https://doi.org/10.1016/j.aquaculture.2006.04.032>
- Cheng, S.H., Lee, C.H., Dahms, H.U., and Hwang, J.S., 2008. Homosexual mating in the planktonic copepod *Pseudodiaptomus annandalei* (Copepoda: Calanoida). *J. Crusta-cean. Biol.* 28: 580–582.
- Cheol-Seung, J. I., O. Takaoka, A. K. Biswas, M. Seoka, K. Ozaki, J. Kohbara, M. Ukawa, S. Shimeno, H. Hosokawa, & K. Takii. 2008. Dietary utility of enzyme-treated fish meal for juvenile Pacific bluefin tuna *Thunnus orientalis*. *Asian Fisheries Science*. 74: 54-61.
- Chu, F-L. E., Lund, E.D., Litteal, P.R., Ruck, K.E., Harvey, E., Le Coz, J-R., Marty, Y., Moal, J., and Soudant, P. 2008. Sterol production and phytosterol bioconversion in two species of heterophic protest, *Oxyrrhis marina* and *Gyrodinium dominans*. *Marine Biology*. 15(2):155-169.
- Conceicao L.E.C., Yufera M., Makridis P., Morais S., and Dinis M.T. 2010. Live feeds for early stages of fish rearing. *Aquaculture Research*. 41: 613-640.
- Cousin, J.C.B., Baudin-Laurencin, F. and Gabaudan, J., 1987. Ontogeny of enzymatic activities in fed and fasting turbot, *Scophthalmus maximus* L. *J. Fish Biol.* 30, 15–33. <https://doi.org/10.1111/j.1095-8649.1987.tb05728.x>
- Creuzburg, D., Westerlund, S.A, and Hoffmann, K.H. 2007. Ecdysteroid levels in *Daphnia magna* during a molt cycle: Determination by radioimmunoassay (RIA) and liquid chromatography-mass spectrometry (LC-MS). *Gen. Comp. Endocrinol.* 151: 66-71.
- Dabrowski, K., Glogowski, J., 1977. Studies on the role of exogenous proteolytic enzymes in digestion processes in fish. *Hydrobiologia* 54, 129–134. <https://doi.org/10.1007/BF00034986>
- Degeest, B. and De Vuyst, L., 2000. Correlation of activities of the enzymes α -phosphoglucomutase, UDP-galactose 4-epimerase, and UDP-glucose pyrophosphorylase with exopolysaccharide biosynthesis by *Streptococcus thermophilus* LY03. *Appl. Environ. Microbiol.* 66, 3519–3527. <https://doi.org/10.1128/AEM.66.8.3519-3527.2000>
- Delbare, D., Dhert, P. and Lavens, P., 1996. Zooplankton. In: Lavens, P., Sorgeloos, P. (Eds.), Manual on the production and use of live food for aquaculture. FAO Fish. Tech. Pap., 361. Rome, Italy :FAO. , pp. 252-282.
- Dhert, P. 1996. Rotifers. In Manual on The Production and Use of Live Food for Aquaculture, edited by Lavens, P and Sorgeloos, P. FAO Fisheries Technical

- Paper. Food and Agriculture Organization of the United Nations, Rome, Italia. (<http://www.fao.org>).
- Drillet, G. and Lombard, F. 2015. A first step towards improving copepod cultivation using modelling: the effects of density, crowding, cannibalism, tank design and strain selection on copepod egg production yields. *Aquac. Res.* 46, 1638–1647. doi: 10.1111/are.12317
- Drillet G, Frovel, S., Sichlau, M.H., Jepsen, P.M., Hojgaard, J.K., Joarder, A.K., Hanses, B.W. 2011. Status and recommendations on marine copepod cultivation for use as live feed. Review. *J. Aquaculture.* 315: 155-166.
- Drillet, G., Hansen, B.W., Kiørboe, T. 2011. Resting egg production induced by food limitation in the calanoid copepod *Acartia tonsa*. *Limnol. Oceanogr.* 56: 2064–2070. <https://doi.org/10.4319/lo.2011.56.6.2064>
- Drillet, G., Jørgensen, N.O.G., Sørensen, T.F., Ramløv, H., Hansen, B.W., 2006. Biochemical and technical observations supporting the use of copepods as live feed organisms in marine larviculture. *Aquac. Res.* 37: 756–772.
- Dur, G., Souissi, S. 2018. Ontogenetic optimal temperature and salinity envelopes of the copepod *Eurytemora affinis* in the Seine estuary (France). *Estuar. Coast. Shelf Sci.* 200: 311–323. <https://doi.org/10.1016/j.ecss.2017.11.008>
- Dur, G., Souissi, S., Schmitt, F.G., Beyrend-Dur, D., Hwang, J.J. 2011. Mating and Mate Choice in *Pseudodiaptomus annandalei* (Copepoda: Calanoida). *Journal Experimental Marine Biology and Ecology* 402: 1-11.
- Dur, G., Souissi, S., Schmitt, F., Cheng, S.H., and Hwang, J.S., 2010. The different aspects in motion of the three reproductive stages of *Pseudodiaptomus annandalei* (Copepoda, Calanoida). *J. Plankton. Res.* 32: 423–440.
- _____. 2012. Sex Ratio and Mating Behavior in the Calanoid Copepod *Pseudodiaptomus annandalei*. *Zoological Studies* 51(5): 589-597.
- Eda, H. 1991. Summary of research activities on the field of rearing technology of larvae during the period of April 24, 1989 to April 23, 1991 (2 Years). The strengthening the research and development of coastal aquaculture project (ATA-379). Japan International Corporation Agency.
- Eisfeld S.M. and Niehoff, B. 2007. Gonad morphology, oocyte development and spawning cycle of the calanoid copepod *Acartia clausi*. *Hergol. Mar. Res.* 61: 193-201.
- Eri, S. 2016. Analyses of regulative strategies of moulting, reproduction and embryo development by ecdysteroids in a crustacean. Dissertation. Sokendai (The Graduate University for Advance Studies). 104 pp.

- Escalante, P.D.L.R., 2012. Morphometric differences in two calanoid sibling species, *Boeckella gracilipes* and *B. titicacae* (Crustacea, Copepoda). *Iheringia, Série Zoologia*, Porto Alegre, 102: 459–464.
- Eyun, S., Lee, Y.-H., Suh, H.-L., Kim, S., Soh, H.Y. 2007. Genetic Identification and Molecular Phylogeny of *Pseudodiaptomus* Species (Calanoida, Pseudodiaptomidae) in Korean Waters. *Zoological Science* 24: 265–271. <https://doi.org/10.2108/zsj.24.265>
- Farhadian, O., Md Yusoff, F., Arshad, A. 2014. Effects of salinity, temperature, light intensity and light regimes on production, growth and reproductive parameters of *Apocyclops dengizicus*. *Iran. J. Fish. Sci.* 13: 30–46.
- Fahardian, O., Yusoff, F.M., and Mohamed, S. 2008. Nutritional values of *Apocyclops dengizicus* (Copepoda: Cyclopoida) fed *Chaetoceros calcitrans* and *Tetraselmis tetraele*. *Aquaculture research* 40:74-82.
- Felsenstein, J. 1985. Confidence limits on phylogenies: An approach using the bootstrap. *Evolution* 39: 783–791. <http://www.jstor.org/stable/2408678>.
- Folmer, O., Black, M., Hoeh, W., Lutz, R., Vrijenhoek, R. 1994. DNA primers for amplification of mitochondrial cytochrome c oxidase subunit I from diverse metazoan invertebrates. *Molecular Marine Biology and Biotechnology* 3: 294–299. <https://doi.org/10.1071/ZO9660275>
- Freese, D.T., Kreibich, B. and Neihoff. 2012. Characteristic of Digestive Enzyme Of Calanoid Copepod Species From Different Latitudes In Relation To Temperature, pH and Food. *J. Comparative Biochemistry and Physiology*, Part B. 162: 66-72.
- Gatten, R.R, Sargent, J.R, Forsberg, T.E.V., O'Hara, S.C.M, and Corne, E.D.S. 1980. On the nutrition and metabolism of zooplankton. XIV. Utilization of wax esters by *Calanus helgolandicus* during maturation and reproduction. *J. Mar. Biol. Assoc. U.K.*, 60: 391-399.
- Giesecke, R., González, H.E. 2004. Mandible characteristics and allometric relations in copepods: A reliable method to estimate prey size and composition from mandible occurrence in predator guts. *Rev. Chil. Hist. Nat.* 77: 607–616. <https://doi.org/10.4067/S0716-078X2004000400004>
- Gilbert, L.I., Bollenbacher, W.E., and Granger, N.A. 1980. Insect endocrinology: regulation of endocrine glands, hormone titer, and hormone metabolism. *Ann. Rev. Physiol.* 42: 493-510.
- Glencross, B. D. 2009. Exploring the nutritional demand for essential fatty acids by aquaculture species. *Rev. Aquac.* 1, 71–124. doi: 10.1111/j.1753-5131.2009.01006.x

- Goetze E. 2005. Global population genetic structure and biogeography of the oceanic copepods *Eucalanus hyalinus* and *E. spinifer*. *Evolution* 59: 2378–2398.
- _____. 2003. Cryptic speciation on the high seas; global phylogenetics of the copepod family Eucalanidae. *Proceedings of the Royal Society B: Biological Sciences* 270: 2321–2331. <https://doi.org/10.1098/rspb.2003.2505>
- Golez, M.S.N., Takahashi, T., Ishimarul, T. and Ohnol, A. 2004. Post embryonic development and reproduction of *Pseudodiaptomus annandalei* (Copepoda:Calanoida). *Plankton. Biol. Ecol.* 51: 15–25.
- Gong J, Ye H, Xie Y, Yang Y, Huang H, Li S and Zeng C. 2015. Ecdysone receptor in the mud crab *Scylla paramamosain*: a possible role in promoting ovarian development. *J Endocrinol.* 224: 273-287
- Graeve,M., Kattner, G., and Hagen,W. 1994. Diet-induced changes in the fatty acid composition of arctic herbivorous copepods: experimental evidence of trophic markers. *J. Exp. Biol. Ecol.* 182: 97–110.
- Guittarda, E., Blais, C., Maria, A., Parvy, J., Pasricha, S., Lumb, C., Lafont, R., Daborn, P.J., and Dauphin-Villemant, C. 2011. CYP18A1, a key enzyme of *Drosophila* steroid hormone inactivation, is essential for metamorphosis. *Dev. Biol.* 349: 35-45
- Hall, T. 1999. BioEdit: a user-friendly biological sequence alignment editor and analysis program for Windows 95/98/NT. *Nucleic Acids Symposium Series* 41: 95–98.
- Han, J.,Won, E.-J., Kim, H.-S., Nelson, D.R., Lee, S.J., Park, H.G., and Lee, J.-S. 2015. Identification of the full 46 cytochrome P450 (CYP) complement and modulation of CYP ex- pression in response to water accommodated fractions (WAFs) of crude oil in the cyclopoid copepod *Paracyclops nana*. *Environ. Sci. Technol.* 49: 6982–6992.
- Harvey, M.G., Aleixo, A., Ribas, C.C. and Brumfield, R.T. 2017. Habitat association predicts genetic diversity and population divergence in Amazonian birds. *American Naturalist.* 190: 631-648.
- Hassett, R.P., 2004. Supplementation of a diatom diet with cholesterol can enhance copepod egg-production rates. *Limnol. Oceanogr.* 49: 488–494. <https://doi.org/10.4319/lo.2004.49.2.0488>
- He, X., Yang, X., Lu, B., and Zhang, J., 2016. Journal of Experimental Marine Biology and Ecology Maternal investment in the offspring of *Pseudodiaptomus annandalei* under nitrogen deficiency. *J. Exp. Mar. Bio. Ecol.* 485:102–111.

- Heissenberger, M.J., Watzke, M.J., and Kainz. 2010. Effect of nutrition on Fatty acid profiles of riverine, lacustrine, dan aquaculture-raised salmonids of pre-alpine habitats. *Hydrobiologia* 650: 243-254.
- Henrik, B., Altin, D., Hessen, K.M., Dahl, U., Breitholtz, M., Nordtug, T., and Olsen, A.J., 2008. Expression of ecdysteroids and cytochrome P450 enzymes during lipid turnover and reproduction in *Calanus finmarchicus* (Crustacea : Copepoda). *General and Comparative Endocrinology* 158:115–121.
- Hickman, C.P.Jr., Robert, L.S., and Larson, A. 1998. Role of enzyme In Biology of animal. 7thed. WBC/McGraw-Hill. USA. pp.40-42
- Himawan, Y., Alimuddin, Nirmala, K., Imron, Haryadi, J., 2021. Biochemical responses and genetic expressions of synthetic common carp populations exposed to high-ammonia rearing environment. *Indones. Aquac. J.* 16, 13–19. <https://doi.org/10.15578/IAJ.16.1.2021.13-19>
- Homola, E. and Chang, E.S. 1997. Distribution and regulation of ester-ases that hydrolyze methyl farnesoate in *Homarus americanus* and other crustaceans. *Gen. Comp. Endocrinol.* 106: 62-72.
- Hopkins, P.M. 2009. Crustacean ecdysteroid and their receptor. In Ecdysteroid: Structure and Fungtions, Eddited by Smagge, G. Gent Universiti. Belgium. 603 p.
- Hunyadi, A., Herke, I., Lengyel, K., Bathori, M., Kele, Z., Simon, A., Toth, G., and Szendrei, K. 2016. Ecdysteroid-containing food supplements from *Cyanotis arachnoidea* on the European market: evidence for spinach product counterfeiting. Scientific report. *Nature* 6: 37322, p.1-8.
- Huys, R. and Boxshall, G.A. 1991. Copepod evolution. The Ray Society, London. 468 pp.
- Hwang, D., Lee, K., Han, J., Gi, H., Lee, J., Lee, Y., and Lee, J. 2010. Comparative Biochemistry and Physiology, Part C Molecular characterization and expression of vitellogenin (Vg) genes from the cyclopoid copepod , *Paracyclopina nana* exposed to heavy metals. *Comp. Biochem. Physiol. Part C.* 151: 360–368.
- Hwang, D.S., Lee, K.W., Han, J., Park, H.G., Lee, J., Lee, Y.M., Lee, J.S., 2010. Molecular characterization and expression of vitellogenin (Vg) genes from the cyclopoid copepod, *Paracyclopina nana* exposed to heavy metals. *Comp. Biochem. Physiol. C Toxicol. Pharmacol.* 151: 360–368. <https://doi.org/10.1016/j.cbpc.2009.12.010>
- Hwang, J.S., Kumar, R., Hsieh, C.H., Kuo, A.Y., Souissi, S., Hsu, M.H., Wu, J.T., Liu, W.C., Wang, C.F., and Chen, Q.C. 2010. Patterns of zooplankton

- distribution along the marine, estuarine, and riverine portion of the Danshuei ecosystem in Northern Taiwan. *Zool. Stud.* 49: 335–352.
- Indarti, E., Majid, M.I.A., Hashim, R., Chong, A. 2005. Direct FAME synthesis for rapid total lipid analysis from fish oil and cod liver oil. *J. Food Compos. Anal.* 18: 161–170. <https://doi.org/10.1016/j.jfca.2003.12.007>
- Isnansetyo, A. and Kurniastuty. 1995. Teknik kultur fitoplankton dan zooplankton. Kanisius. Yogyakarta. 116p.
- Jancarik, A. 1964. Die Verdauung der Hauptnahrstoffe beim Karpfen. *Z. Fischerei Deren Hilfswiss.* 12: 601-684.
- Jeong, H.G., Soh, H.Y., Suh, H.L. (2014) Morphological and genetic differentiation of heteromorphy in *Labidocera rotunda* (Copepoda, Calanoida, Pontellidae). *Zootaxa* 3764: 181–191. <https://doi.org/10.11646/zootaxa.3764.2.5>
- Jiang, H., Ren, F., Sun, J., He, L., Li, W., Xie, Y., Wang, Q., 2010. Molecular cloning and gene expression analysis of the leptin receptor in the Chinese mitten Crab *Eriocheir sinensis*. *PLoS One* 5. <https://doi.org/10.1371/journal.pone.0011175>
- Johnson, M.W. 1948. The Postembryonic Development of the Copepod *Pseudodiaptomus euryhalinus* Johnson, and Its Phylogenetic. *Transactions of the American Microscopical Society.* 67 (4): 319-330.
- Joyce, S. Y., Chew, L.L., Ng, C.C., Goh, H.C., Lehet, P., Chong, V.C. (2017) Heat shock response and metabolic stress in the tropical estuarine copepod *Pseudodiaptomus annandalei* converge at its upper thermal optimum. *Journal of Thermal Biology* 74: 14-22. <https://doi.org/10.1016/j.jtherbio.2017.11.016>.
- Junaka Z.P.F. 2015. Variasi morfologis dan genetik hasil persilangan ikan lele (*Clarias* sp.) Populasi Mesir, Paiton dan Sangkuriang. Tesis. Program Studi Biologi, Program Pascasarjana Fakultas Biologi, Universitas Gadjah Mada.
- Kalkovski, S., 2011. Digestive enzymes in fish larvae and juveniles implication and applications to formulated diets. *Aquaculture* 200:181-201.
- Kaminski, S.M., Bersano, J.G.F., Freire, C.A., 2014. Euryhalinity of the estuarine copepod *Pseudodiaptomus richardi* and its high potential to be employed as live food in aquaculture. *Aquaculture* 424–425, 63–70. <https://doi.org/10.1016/j.aquaculture.2013.12.034>
- Kasturirangan, I.R. 1963. A key for the identification of the more common planktonic copepoda of indian coastal waters. Council of scientific & industrial research. New Delhi. 87pp.

- Kato, Y., Kobayashi, K., Oda, S., Tatarazako, N., Watanabe, H., and Iguchi, T. 2007. Cloning and characterization of the ecdysone receptor and ultraspiracle protein from the water flea *Daphnia magna*. *J Endocrinol.* 193: 83-194.
- Kimura, M. 1980. A simple method for estimating evolutionary rates of base substitutions through comparative studies of nucleotide sequences. *Journal of Molecular Evolution* 16: 111–120. <https://doi.org/10.1007/BF01731581>.
- Knot, S.M., Boersma, R., and Saborowski. 2006. Microassays for a set of enzymes in individual small marine copepods. *Comparative Biochemistry and Physiology*, part A. 145: 406-411.
- Knowlton, N. 1993. Sibling species in the sea. *Annual Review of Ecology and Systematics* 24: 189–216. <https://doi.org/10.1146/annurev.es.24.110193.001201>
- _____. 2000. Molecular genetic analyses of species boundaries in the sea. *Hydrobiologia* 420: 73–90. <https://doi.org/10.1023/A:1003933603879>
- König, A., Yatsenko, A.S., Weiss, M., and Shcherbata, H.R. 2011. Ecdysteroids affect *Drosophila* ovarian stem cell niche formation and early germline differentiation. *J. EMBO.* 30: 1549-1562.
- Kreibich, T., Saborowski, R., Hagen, W., and Niehoff, B. 2008. Short-term variation of nutritive and metabolic parameters in *Temora longicornis* females (Crustacea, Copepoda) as a response to diet shift and starvation. *Helgol. Mar. Res.* 62: 241-249.
- Kumar, S., Srivastava, A., and Chakrabarti, R., 2005. Study of digestive proteinases and proteinase inhibitors of *Daphnia carinata*. *Aquaculture* 243: 367–372.
- Kumar, S., Stecher, G., Li, M., Knyaz, C., Tamura, K. 2018. MEGA X: Molecular evolutionary genetics analysis across computing platforms. *Molecular Biology and Evolution* 35: 1547–1549. <https://doi.org/10.1093/molbev/msy096>
- Kurokawa, T., Shiraishi, M., and Suzuki, T. 1998. Qualification of exogenous protease derived from zooplankton in the intensive of Japanese sardine *Sardinops melanoticus* larvae. *Aquaculture* 161:491-499.
- Kuz'mina, V. V., Golovanova, I.L. 2004. Contribution of prey proteinases and carbohydrases in fish digestion. *Aquaculture* 234: 347–360. <https://doi.org/10.1016/j.aquaculture.2003.11.011>
- Lafont, R. 2000. The endocrinology of invertebrates. *Ecotoxicology* 9: 42–57
- Laufer, H., Borst. D., Baker, F.C., Reuter, C.C., Tsai, L.W., Schooley, L.W., Carrasco, C., and Sinkus, M. 1987. Identification of a juvenile hormone-like compound in a crustacean. *Science* 235: 202– 205.

- Laufer, H., Demir, N., Pan, X., Stuart, J.D., and Ahl, J.S. 2005. Methyl farnesoate controls adult male morphogenesis in the crayfish, *Procambarus clarkii*. *J. Insect. Physiol.* 51: 379–384.
- Lauff, M., Hofer, R., 1984. Proteolytic enzymes in fish development and the importance of dietary enzymes. *Aquaculture* 37, 335–346. [https://doi.org/10.1016/0044-8486\(84\)90298-9](https://doi.org/10.1016/0044-8486(84)90298-9)
- Le Vay, L.D.A., Puello-Cruz, A.C., Sangha, R.S., and Ngamphongsai, C. 2001. Digestion in relation to feeding strategies exhibit by crustacean larvae. *Comp. Biochem. Physiol.* 128: 621–628.
- Lee, C.E. 2000. Global phylogeography of a cryptic copepod species complex and reproductive isolation between genetically proximate "populations". *Evolution* 54: 2014–2027.
- Lee, S.H., Lee, M.C., Puthumana, J., Park, J.C., Kang, S., Hwang, D.S., Shin, K.H., Park, H.G., Souissi, S., Om, A.S., Lee, J.S., Han, J. 2017. Effects of salinity on growth, fatty acid synthesis, and expression of stress response genes in the cyclopoid copepod *Paracyclops nana*. *Aquaculture* 470: 182–189. <https://doi.org/10.1016/j.aquaculture.2016.12.037>
- Lee, K., Hwang, D., Rhee, J., Ki, J., Gi, H., Ryu, J., Raisuddin, S., and Lee, J., 2008. Comparative Biochemistry and Physiology , Part B Molecular cloning , phylogenetic analysis and developmental expression of a vitellogenin (Vg) gene from the intertidal copepod *Tigriopus japonicas*. *Comparative Biochemistry and Physiology* 150: 395–402.
- Livak, K.J., and Schmittgen, T.D. 2001. Analysis of relative gene expression data using real time quantitative PCR and the $2^{-\Delta\Delta C_t}$ method. *Methods* 25: 402–408.
- Low, J.S.Y., Lee, L., Ching, C., Chin, H., and Lehet, P., 2018. Heat shock response and metabolic stress in the tropical estuarine copepod *Pseudodiaptomus annandalei* converge at its upper thermal optimum. *J. Therm. Biol.* 74: 14–22.
- Mak, A.S.C., Choi, C.L., Tiu, S.H.K., Hui, J.H.L., He, J.G., Tobe, S.S., Chan, S.M., 2005. Vitellogenesis in the red crab *Charybdis feriatus*: Hepatopancreas-specific expression and farnesoic acid stimulation of vitellogenin gene expression. *Mol. Reprod. Dev.* 70: 288–300. <https://doi.org/10.1002/mrd.20213>
- Martin-Creuzburg, D., and Von Elert, E. 2004. Impact of 10 dietary sterols on growth and reproduction of *Daphnia galeata*. *Journal of Chemical Ecology* 30(3): 483–499.
- Matsui, H., Sasaki, T., Kobari, T., Waqalevu, V., Kikuchi, K., Ishikawa, M., Kotani, T. 2021. DHA accumulation in the polar lipids of the euryhaline copepod

- Pseudodiaptomus inopinus* and its transfer to red sea bream *pagrus major* larvae. *Front. Mar. Sci.* 8: 1–15. <https://doi.org/10.3389/fmars.2021.632876>
- Mauchline, J., 1998. *The Biology of Calanoid Copepods*. Elsevier Academic Press, San Diego, California, USA. 710 pp.
- McKinnon, D., Duggan, S., Nichol, P.D., Rimmer, M.A., Semmens, G., Robin, B., 2003. The potential of tropical paracalanoid copepods as live feeds in aquaculture. *Aquaculture* 223: 89–106.
- Mejri, S.C., Tremblay, R., Audet, C., Wills, P.S., Riche, M., 2021. Essential Fatty Acid Requirements in Tropical and Cold-Water Marine Fish Larvae and Juveniles. *Front. Mar. Sci.* 8. <https://doi.org/10.3389/fmars.2021.680003>
- Melianawati, R., 2016. Peran pakan alami anggota kopepoda dan rotifera pada pertumbuhan larva dan produksi benih ikan kerapu sunu *Plectropomus leopardus* (lecepede 1802): kajian morfologi, hormolal dan enzimatis. Disertasi. Fakultas Biologi. Universitas Gadjah Mada. 211 p.
- Melianawati, R., Rarastoeti, P., Nyoman, P., Pudji, A., 2015. The effect of various kind of live feeds to digestive enzymes activity of coral trout *Plectropomus leopardus* (Lacepède, 1802) larvae. *Int. J. Fish. Aquat. Stud.* 3, 83–88.
- Michalec, F.G., Holzner, M., Hwang, J.S., Souissi, S. 2012. Three dimensional observation of salinity-induced changes in the swimming behavior of the estuarine calanoid copepod *Pseudodiaptomus annandalei*. *J. Exp. Mar. Bio. Ecol.* 438: 24–31. <https://doi.org/10.1016/j.jembe.2012.09.013>
- Michels, J., Vogt, J., Simon, P., Gorb, S.N. 2015. New insights into the complex architecture of siliceous copepod teeth. *Zoology* 118: 141–146. <https://doi.org/10.1016/j.zool.2014.11.001>
- Miller, A.E.M. and Heyland, A. 2009. Endocrine interactions between plant and animals exogenous hormone sources for the evolution of hormone signaling. *General of the comparative and endocrinology journal* 166(3): 455-61.
- Molejon, O.G.H., and Alvarez-Lajonchere, L. 2003. Culture experiments with *Oithona aculata* Farran, 1913 (Copepoda: Cyclopoida), and its advantages as food for marine fish larvae. *Aquaculture* 219: 471–483.
- Moon, S.Y., Youn, S.H., Oh, H.J., Soh, H.Y., Choi, S.D., Yoon, H.S. 2015 Description of postembryonic developmental stages of *Pseudodiaptomus koreanus* soh, Kwon, Lee & yoon, 2012 (Copepoda, Calanoida, Pseudodiaptomidae). *Crustaceana* 88 (12-14): 1387–1419. <https://doi.org/10.1163/15685403-00003499>
- Mount, D.W. *Bioinformatic; Genome and secquence analysis*. Gold Harbor Laboratory Perss. 564p.

- Mu C, Song W, Li R, Chen Y, Hao G and Wang C .2014. Identification of differentially expressed proteins relating to ovary development in *Portunus trituberculatus*. *Aquacult.* 426: 148-153
- Mulyadi and Sidabalok, C.M. 2010. Pengaruh musim terhadap keragaman dan kelimpahan kopepoda (Krustacea) di perairan mangrove estuari T. N. Ujung kulon, Banten. *Berk.Penelt. Hayati* 15:191-197.
- Nagaraju, G.P.C. 2007. Is methyl farnesoate a crustacean hormone?. *Aquaculture* 272: 39–54.
- _____. 2011. Reproductive regulators in decapod crustaceans : an overview. *The Journal of Experimental Biology* 214: 3-16.
- Neves G. P., Boxshall, G. A., Previattelli, D., Nogueira, M. G., and da Rocha, C. E. F., 2015. Identification guide to some Diaptomide species (Crustacea, Copepoda, Calanoida, Diaptomidae) of de la Platta River Bason (South America). *Zookeys* 497: 1-111.
- Nicolai, O., Aarbakke, S., Bucklin, A., Halsband, C., Norrbin, F., 2014. Comparative phylogeography and demographic history of five sibling species of *Pseudocalanus* (Copepoda : Calanoida) in the North Atlantic Ocean. *J. Exp. Mar. Bio. Ecol.* 461: 479–488.
- Niehoff, B., Kreibich, T., Saborowski, R., and Hagen, W. 2015. Feeding History Can Influence Physiological Responses of Copepods: an Experimental Study Comparing Different Cohorts Of *Temora longicornis* From The Southerv North Sea. *Journal Of Experimental Marine Biology and Ecology* 469: 143-149.
- Nielsen, B.L.H., Gréve, H.V.S., Hansen, B.W. 2021. Cultivation success and fatty acid composition of the tropical copepods *Apocyclops royi* and *Pseudodiaptomus annandalei* fed on monospecific diets with varying PUFA profiles. *Aquac. Res.* 52: 1127–1138. <https://doi.org/10.1111/are.14970>
- Nishida, S., Rumengan, I.F.M. 2005. A new spesies of *Pseudodiaptomus* (Kopepoda : Calanoida : Pseudodiaptomidae) from the coastal waters of Sulawesi , Indonesia. *Plankton Biology and Ecology* 52(1) :27–32.
- Noyon, M., Froneman, P.W. 2013. Estuarine, Coastal and Shelf Science Variability in the egg production rates of the calanoid copepod, *Pseudodiaptomus hessei* in a South African estuary in relation to environmental factors. *Estuar. Coast. Shelf Sci.* 135: 306–316. <https://doi.org/10.1016/j.ecss.2013.10.024>
- Ohs, C.L., Chang, K.L., Grabe, S.W., DiMaggio, M.A., Stenn, E. 2010. Evaluation of dietary microalgae for culture of the calanoid copepod *Pseudodiaptomus pelagicus*. *Aquaculture* 307: 225–232. <https://doi.org/10.1016/j.aquaculture.2010.07.016>

- Palma, R., 1978. Slide-Mounting of lice: A detailed description of the Canada balsam technique. *New Zeal. Entomol.* 6, 432–436. <https://doi.org/10.1080/00779962.1978.9722313>
- Partridge, G. J. 2013. Close-cycle hatchery production of tuna. pp. 457-497. In G. Allan and G. Burnell (Eds). *Advances in aquaculture hatchery technology*. Woodhead Publishing Limited. Cambridge, UK.
- Payne, A.H and Hales, D.B. 2004. Overview of steroidogenic enzymes in the pathway from cholesterol to active steroid hormones. *Endocr. Rev.* 25: 947-970.
- Payne, M.F., and Rippingale, R.J., 2000. Evaluation of diets for culture of the Calanoid Copepod *Gladioferens imparipes*. *Aquaculture* 187: 85-96.
- _____. 2001. Intensive cultivation of the calanoid copepod *Gladioferens imparipes*. *Aquaculture* 201 (3-4): 329-342. [https://doi.org/10.1016/S0044-8486\(01\)00608-1](https://doi.org/10.1016/S0044-8486(01)00608-1)
- Petryk A, Warren, J.T, Marques, G., Jarco, M.P, Gilbert, L.I., Kahler, J., Parvy, J, Li, Y., Dauphin-Villemant, C., and O'Connor, M.B. 2003. Shade is the Drosophila P450 enzyme that mediates the hydroxylation of ecdysone to the steroid insect molting hormone 20-hydroxyecdysone. *PNAS* 100: 3773-13778.
- Phelps, R.P., Sumiarsa, G.S., Lipman, E.E., Lan, H., Moss, K.K., and Davis, A.D. 2005. Intensive and extensive production techniques to provide copepod nauplii for feeding larval red snapper *Lutjanus campechanus*. In: Lee, C.S., Bryen, P.J.O., Marcus, N.H. (Eds.), *Copepods in aquaculture*. Blackwell, UK, 151–168 pp.
- Puthumana, J., Lee, M.C., Han, J., Kim, H.S., Hwang, D.S., Lee, J.S., 2017. Ecdysone receptor (*EcR*) and ultraspiracle (*USP*) genes from the cyclopoid copepod *Paracyclopina nana*: Identification and expression in response to water accommodated fractions (WAFs). *Comp. Biochem. Physiol. Part - C Toxicol. Pharmacol.* 192, 7–15. <https://doi.org/10.1016/j.cbpc.2016.11.002>
- Rasdi, N.W., Qin, J.G. (2016). Improvement of copepod nutritional quality as live food for aquaculture: A review. *Aquac. Res.* 47: 1–20. <https://doi.org/10.1111/are.12471>
- Rasdi, N.W.R, Qin, J.G., and Li, Y. 2015. Effect of Dietary microalgae on fatty acids and digestive enzymes in copepod *Cyclopina kassignete*, a potential live food for fish larvae. *J. Aquaculture research.* 1-11. doi:10.1111/are.12778
- Rayner, T.A., Jørgensen, N.O.G., Blanda, E., Wu, C.H., Huang, C.C., Mortensen, J., Hwang, J.S., Hansen, B.W. 2015. Biochemical composition of the promising live feed tropical calanoid copepod *Pseudodiaptomus annandalei*

- (Sewell 1919) cultured in Taiwanese outdoor aquaculture ponds. *Aquaculture* 441: 25–34. <https://doi.org/10.1016/j.aquaculture.2015.01.034>.
- Reddy, Y.R., Radhakrishna, Y. 1982. Redescription and / or remarks on four species of *Pseudodiaptomus* Herrick (Copepoda : Calanoida) from South India. *Hydrobiologia* 87: 255–271.
- Rhe, J.S., Raisuddin, S., Lee, K.W., Seo, J.S., Ki, J.S., Kim, I.C., Park, H.G., Lee J.S. 2009. Heat shock protein (Hsp) gene responses of the intertidal copepod *Tigriopus japonicus* to environmental toxicants. *Comp. Biochem. Physiol. Toxicol. Pharmacol.* 149(1): 104112.
- Rocha, G.M., Féres, J.C., Esteves, B.S., Sterza, J.M., 2019. First record of the non-native copepod *Pseudodiaptomus trihamatus* wright, 1937 (Copepoda, calanoida) in Rio de Janeiro state, Brazil. *Brazilian J. Biol.* 79, 361–364. <https://doi.org/10.1590/1519-6984.183672>
- Rodriguez, A., Le Vay, L., Mourente, G., and Jones, D.A. 1994. Biochemical composition and digestive enzyme activity in larvae and postlarvae of *Penaeus japonicus* during herbivorous and carnivorous feeding. *Mar. Bio.* 118: 45-51.
- Sambrook, J., Fritschi, E.F., and Maniatis, T. 1989. Molecular Cloning: A Laboratory Manual. New York: Cold Spring Harbor Laboratory Press.
- Sainath, S.B., and Reddy, P.S. 2011. Effect of selected biogenic amines on reproduction in the fresh water edible crab, *Oziotelphusa senex senex*. *Aquaculture* 313:144-148
- Saitou, N., Nei, M., 1987. The neighbor-joining method: a new method for reconstructing phylogenetic trees. *Mol. Biol. Evol.* 4: 406–425. <https://doi.org/10.1093/oxfordjournals.molbev.a040454>
- Sakaguchi, S., and Ueda, H. 2011. Morphological divergence of *Pseudodiaptomus inopinus* Burchardt, 1913 (copepod; calanoida) between the Japan sea and Pacific coasts of Western Japan. *Plankton Benthos Res.* 6(2): 124-128.
- _____. 2018. Genetic analysis on *Pseudodiaptomus inopinus* (Copepoda, calanoida) species complex in Japan: Revival of the species name of *P. Japonicus* Kikuchi, 1928. *Plankton and Benthos Research* 13: 173–179. <https://doi.org/10.3800/pbr.13.173>
- _____. 2010. A new species of *Pseudodiaptomus* (Copepoda: Calanoida) from Japan, with notes on the closely related *P. inopinus* Burckhardt, 1913 from Kyushu Island. *Zootaxa* 2623, 52-68.
- Santhanam, P., Jeyaraj, N., Jothiraj, K., Ananth, S., Dinesh Kumar, S., Pachiappan, P., 2018. Assessing the efficacy of marine copepods as an alternative first feed for larval production of tiger shrimp *penaeus monodon*. *Basic Appl. Zooplankt.*

Biol. 293–303. https://doi.org/10.1007/978-981-10-7953-5_12

- Siqwepu, O., Richoux, N.B., Vine, N.G. (2017). The effect of different dietary microalgae on the fatty acid profile, fecundity and population development of the calanoid copepod *Pseudodiaptomus hessei* (Copepoda: Calanoida). *Aquaculture* 468: 162–168. <https://doi.org/10.1016/j.aquaculture.2016.10.008>
- Soh, H.Y., Kwon, S.W., Lee, W., and Yoon, Y.H. 2012. A new *Pseudodiaptomus* (Copepoda, Calanoida) from Korea supported by molecular data. *Zootaxa* 3368:229–244.
- Soh, H.Y., Suh, H., Yu, O.H., Ohtsuka, S. 2001. The first record of two demersal calanoid copepods, *Pseudodiaptomus poplesia* and *P. nihonkaiensis* in Korea, with remarks on morphology of the genital area. *Hydrobiologia* 448: 203–215.
- Srinui, K., Nishida, S., Ohtsuka, S. 2013 A new species of *Pseudodiaptomus* (Crustacea, Copepoda, Calanoida, Pseudodiaptomidae) from the Prasae River Estuary, Gulf of Thailand. *Zookeys* 338:39–54. <https://doi.org/10.3897/zookeys.338.5531>
- Støttrup, J.G. 2006. Review on the Status and Progress in Rearing Copepods for Marine Larviculture. Advantages and Disadvantages. Among Calanoid, Harpacticoid and Cyclopoid Copepods. Editores by Suárez, L.E.C., Marie. D.R., Salazar, M.T., López, M.G.N, Cavazos, D.A.V., Cruz, A.P., Ortega. A.G., Avances en Nutrición Acuicola VIII. Simposium Internacional de Nutrición Acuicola. 15 - 17 Noviembre. Universidad Autónoma de Nuevo León, Monterrey, Nuevo León, México.
- Subramoniam, T. 2000. Crustacean ecdysteroid in reproduction and embryogenesis. *Comparative Biochemistry and Physiology*, Part C. 125: 135–156.
- _____. 2017. Steroidal control of vitellogenesis in crustacea: A new understanding for improving shrimp hatchery production. *Proc. Indian Natl. Sci. Acad.* 83: 595–610. <https://doi.org/10.16943/ptinsa/2017/48969>
- Subramoniam, T., and Kirubakaran, K. 2010. Endocrine regulation of vitellogenesis in lobsters. *J. Mar. Biol. Assoc. India.* 52: 229–236.
- Sun, B., Fleeger, J.W., 1995. Sustained mass culture of *Amphiascoides atopus* a marine harpacticoid copepod in a recirculating system. *Aquaculture* 136, 313–321. [https://doi.org/10.1016/0044-8486\(95\)01064-5](https://doi.org/10.1016/0044-8486(95)01064-5)
- Swetha, C.H., Sainath, S.B., Reddy, P.R., and Reddy, P.S., 2011. Reproductive Endocrinology of Female Crustaceans: *Perspective and Prospective* 1–13. doi:10.4172/2155-9910.S3-001

- Tamura, K., Nei, M., and Kumar, S. 2004. Prospects for inferring very large phylogenies by using the neighbor-joining method. *Proc. Nat. Acad. Sci. USA* 101: 11030-11035.
- Tamura, K., Stecher, G., Peterson, D., Filipski, A., and Kumar, S. 2013. MEGA 6.0.5 Molecular Evolutionary Genetics Analysis Version 6.0. *Mol. Biol. Evol.* 30: 2725-2729.
- Timofeev, N. 2008. Ecdysteroids: Usage in Medicine, Sources, and Biological Activity (Review). In Book of Functional Foods for Chronic Disease, Edited by Danik M. Martirosyan. Dallas, USA. Vol 3: 171-186.
- Tiu S, Hui J, Mak A, He J and Chan S (2006) Equal contribution of hepatopancreas and ovary to the production of vitellogenin (PmVg1) transcripts in the tiger shrimp, *Penaeus monodon*. *Aquaculture* 25: 666-674
- Tiu, S.H_K., Chan, S-M., and Tobe, S.S. 2010. The effect of farnesoic acid and 20-hydroxyecdysone on vitellogenin gene expression in the lobster *Homarus americanus*, and possible roles in the reproductive process. *General and Comparative Endocrinology* 166: 337-345.
- Tocher, D. R., Bendiksen, E. A., Campbell, P. J., and Bell, J. G. 2008. The role of phospholipids in nutrition and metabolism of teleost fish. *Aquaculture* 280, 21–34. doi: 10.1016/j.aquaculture.2008.04.034
- Toledo, J., Golez, M., Ohno, A., 2005. Studies on the use of copepods in the semi-intensive seed production of grouper *Epinephelus Coiodes*. In: Lee, C.-S., O'Bryen, P.J., Marcus, N.H. (Eds.), Copepods in aquaculture. Blackwell, Iowa. 11–24p.
- Tomy, S., Saikrithi, P., James, N., Balasubramanian, C.P., Panigrahi, A., Otta, S.K., and Ponniah, A.G. 2016. Serotonin induced changes in the expression of ovarian gene network in the Indian white shrimp, *Penaeus indicus*. *Aquaculture* 452: 239-246
- Ueda, H., Sakaguchi, S. O. 2019. *Pseudodiaptomus yamato* n. sp. (Copepoda, Calanoida) endemic to Japan, with redescription of the two closely related species *P. inopinus* Burckhardt and *P. japonicus* Kikuchi. *Plankton and Benthos Research* 14 (1): 29-38. <https://doi.org/10.3800/pbr.14.29>.
- Unal, E., Bucklin, A., Lenz, P.H., and Towle, D.W., 2013. Gene expression of the marine copepod *Calanus finmarchicus*: Responses to small-scale environmental variation in the Gulf of Maine (NW Atlantic Ocean). *J. Exp. Mar. Bio. Ecol.* 446: 76–85.
- Vaca, A., and Alfaro, J. 2000. Ovarian maturation and spawning in the white shrimp, *Penaeus vannamei*, by serotonin injection. *Aquaculture* 182:373-385.

- Vidhya, K., Uthayakumar, V., Muthukumar, S., Munirasu, S., Ramasubramanian, V. 2014. The effects of mixed algal diets on population growth, egg productivity and nutritional profiles in cyclopoid copepods (*Thermocyclops hyalinus* and *Mesocyclops aspericornis*). *J. Basic Appl. Zool.* 67: 58–65. <https://doi.org/10.1016/j.jobaz.2014.08.003>
- Wainwright, G., Webster, S.G., Wilkinson, M.C., Chung, J.S., and Rees, H.H. 1996. Structure and significance of mandibular organ- inhibiting hormone in the crab, *Cancer pagurus*; involvement in multihormonal regulation of growth and reproduction. *J. biol. Chem.* 271: 12749–12754.
- Walter, C.T., 1987. Review of the taxonomy and distribution of the demersal copepod genus *Pseudodiaptomus* (Calanoida: Pseudodiaptomidae) from southern indo-west pacific waters. *Mar. Freshw. Res.* 38, 363–396. <https://doi.org/10.1071/MF9870363>
- _____. 1986a. The zoogeography of the genus *Pseudodiaptomus* (Calanoida: Pseudodiaptomidae). Proc. Second Int. Conf. Copepoda, Ottawa, Canada, 13-17 August 1984 58: 502–508.
- _____. 1986b. New and poorly known Indo-Pacific species of *Pseudodiaptomus* (Copepoda: Calanoida), with a key to the species groups. *Journal of Plankton Research* 8: 129–168. <https://doi.org/10.1093/plankt/8.1.129>.
- Walter, T.C, and Boxshall, G. 2015. *Pseudodiaptomus*. In Walter, T.C and Boxshall, G. World of copepods database. World Register of Marine Species. <http://www.marinespecies.org> (akses 11 januari 2019).
- _____. 2021. World of Copepods database. *Pseudodiaptomus* Herrick, 1884. World Register of Marine Species. Available from: <http://marinespecies.org/aphia.php?p=taxdetails&id=157680>. on 2021-02-15.
- Walter, T.C., Ohtsuka, S., Castillo, L. V, Proceedings, S., and Society, B., 2006. A new spesies of *Pseudodiaptomus* (Crustacea : Copepoda : Calanoida) from the Philippines , with a key to pseudodiaptomids from the Philippines and comments on the status of the genus Schmackeria. Proceedings of the Biological Society of Washington. *BioOne Research Evolved* 119(2): 202-221.
- Walter, T.C., Ohtsuka, S., Putchakarn, S., Pinkaew, K., Chullasorn, S., 2002. Redescription of two species of *Pseudodiaptomus* from Asia and Australia (Crustacea : Copepoda : Calanoida : Pseudodiaptomidae) with discussion of the female genital structure and zoogeography of Indo-West Pacific species. *Proc. Biol. Soc. Washingt.* 115: 650–669.

- Wang, M., Jeong, C., Li, Y., and Lee, J., 2017. Different transcriptomic responses of two marine copepods, *Tigriopus japonicus* and *Pseudodiaptomus annandalei*, to a low dose of mercury chloride (HgCl₂). *Aquat. Toxicol.* 187: 124–131.
- Wasko, A.P., Martins, C., Oliviera, C., and Foresti, F., 2003. Non-destructive Genetic Sampling in Fish, An Improved Method for DNA Extraction from Fish Fins and Scales. *Hereditas* 138: 161-165.
- Wu, C.H., Dahms, H.U., Cheng, S.H., and Hwang, J.S., 2011. Effects of food and light on naupliar swimming behavior of *Apocyclops royi* and *Pseudodiaptomus annandalei* (Crustacea, Copepoda). *Hydrobiologia* 666: 167–178.
- Xie, S. wei, Tian, L. xia, Jin, Y., Yang, H. jun, Liang, G. ying, Liu, Y. jian. (2014). Effect of glycine supplementation on growth performance, body composition and salinity stress of juvenile Pacific white shrimp, *Litopenaeus vannamei* fed low fishmeal diet. *Aquaculture* 418–419: 159–164. <https://doi.org/10.1016/j.aquaculture.2013.10.023>
- Xuereb, B., Bezin, L., Chaumot, A., Budzinski, H., Augagneur, S., Tutundjian, R., Garric, J., and Geffard, O., 2011. Vitellogenin-like gene expression in freshwater amphipod *Gammarus fossarum* (Koch, 1835): functional characterization in females and potential for use as an endocrine disruption biomarker in males. *Ecotoxicology* 20: 1286–1299.
- Yeagle, P.L. 1993. The biophysics and cell biology of cholesterol: An hypothesis for the essential role of cholesterol in mammalian cells. In L. Finegold (ed.), Cholesterol in model membranes. CRC
- Yoo, H.-B., Yang, I., Kim, J.H., Jung, I.-I., Kang, H., Jung, H., Park, I.-Y., Kim, Y.H., Park, S.-R. (2021). High-sensitivity microvolume UV absorption spectrometry for routine analysis of small-volume biological samples. *Biotechniques* 70: 251–262. <https://doi.org/10.2144/btn-2021-0005>
- Yoshiyama T, Namiki T, Mita K, Kataoka H, Niwa R. (2006). Neverland is an evolutionally conserved Rieske-domain protein that is essential for ecdysone synthesis and insect growth. *Development* 133: 2565-2575.
- Yu, Z.B., Mu, C.K., Song, W.W., Li, R.H., Chen, Y.E., and Wang, C.L., 2015. Screening of genes related to ovarian development in the swimming crab, *Portunus trituberculatus*, by suppression subtractive hybridization. *Genet. Mol. Res.* 14: 18675–18686.
- Yuwono, T. 2006. Teori dan aplikasi polymerase chain reaction: panduan eksperimen PCR untuk memecahkan masalah biologi terkini. Penerbit Andi. Yogyakarta. 239 p.



- Zavarzin, D.S. 2020. *Pseudodiaptomus japonicus* Kikuchi, 1982 (Copepoda, Pseudodiaptomidae), a brackish-water copepod formerly know as *P. inopinus* Burckhardt, 1913, on Sakhalin Island (Russian Far East). Proceedings of the Eurytemora conference, St. Petersburg, 2019. *Crustaceana* 93 (3-5): 541-547. <https://doi.org/10.1163/15685403-00004007>
- Zheng, C. cai, Wu, J. wei, Jin, Z. hong, Ye, Z. feng, Yang, S., Sun, Y. qiang, Fei, H. 2020. Exogenous enzymes as functional additives in finfish aquaculture. *Aquac. Nutr.* 26: 213–224. <https://doi.org/10.1111/anu.12995>