

REFERENCES

- Amal, M. N. A., & Zamri-Saad, M. (2011). Streptococcosis in tilapia (*Oreochromis niloticus*): A review. *Pertanika Journal of Tropical Agricultural Science*, 34(2), 195-206.
- Anshary, H., Kurniawan, R., Sriwulan, S., Ramil, R., & Baxa, D. V. (2014). Isolation and molecular identification of the etiological agents of streptococcosis in Nile tilapia (*Oreochromis niloticus*) cultured in net cages in Lake Sentani, Papua, Indonesia. *SpringerPlus*, 3, 627. <https://doi.org/10.1186/2193-1801-3-627>
- Baleta, F. N., Bolaños, J. M., & Medrano, W. C. (2019). Assessment of tilapia cage farming practices in relation to the occurrence of fish mortalities along the fish cage belt at Magat reservoir, Philippines. *Journal of Fisheries and Environment*, 43(2), 1-13.
- Barkham, T., Zadoks, R. N., Azmai, M. N. A., Baker, S., Bich, V. T. N., Chalker, V., Chau, M. L., Dance, D., Deepak, R. N., van Doorn, H. R., Gutierrez, R. A., Holmes, M. A., Huong, L. N. P., Koh, T. H., Martins, E., Mehershahi, K., Newton, P., Ng, L. C., Phuoc, N. N., Sangwichian, O., Sawatwong, P., Surin, U., Tan, T. Y., Tang, W. Y., Thuy, N. V., Turner, P., Vongsouvath, M., Zhang, D., Whistler, T., & Chen, S. L. (2019). One hypervirulent clone, sequence type 283, accounts for a large proportion of invasive *Streptococcus agalactiae* isolated from humans and diseased tilapia in Southeast Asia. *PLoS Neglected Tropical Diseases*, 13(6), e0007421. <https://doi.org/10.1371/journal.pntd.0007421>
- B FAR. (2021). Red Tide. Retrieved on August 20, 2021, from: <https://www.bfar.da.gov.ph/redtideinfo.jsp>
- Boran, H., Terzi, E., Altinok, I., Capkin, E., & Bascinar, N. (2013). Bacterial diseases of cultured Mediterranean horse mackerel (*Trachurus mediterraneus*) in sea cages. *Aquaculture*, 396-399, 8-13. <https://doi.org/10.1016/j.aquaculture.2013.02.025>
- Boyd, C. E. (2004). Farm-level issues in aquaculture certification: Tilapia. *Report commissioned by WWF-US*. 29p. Retrieved on March 30, 2021, from <http://fisheries.tamu.edu/files/2013/09/Farm-Level-Issues-in-Aquaculture-Certification-Tilapia.pdf>
- Boyd, C. E., D'Abramo, L. R., Glencross, B. D., Huyben, D. C., Juarez, L. M., Lockwood, G. S., & Valenti, W. C. (2020). Achieving sustainable aquaculture: Historical and current perspectives and future needs and challenges. *Journal of the World Aquaculture Society*, 51(3), 578-633. <https://doi.org/10.1111/jwas.12714>
- Capkin, E., Terzi, E., & Altinok, I. (2015). Occurrence of antibiotic resistance genes in culturable bacteria isolated from Turkish trout farms and their local aquatic environment. *Diseases of Aquatic organisms*, 114(2), 127-137. <https://doi.org/10.3354/dao02852>
- Corum, O., Terzi, E., Corum, D. D., Kenanoglu, O. N., Bilen, S., & Uney, K. (2020). Pharmacokinetic/pharmacodynamic integration of marbofloxacin after oral and intravenous administration in rainbow trout (*Oncorhynchus mykiss*). *Aquaculture*, 514, 734510. <https://doi.org/10.1016/j.aquaculture.2019.734510>
- Cruz-Lacierda, E.R., De la Peña, L.D., & Lumanlan-Mayo, S.C. (2000). The use of chemicals in aquaculture in the Philippines. In J. R. Arthur, C. R. Lavilla-Pitogo, & R. P. Subasinghe (Eds.), *Use of Chemicals in Aquaculture in Asia: Proceedings of the Meeting on the Use of Chemicals in Aquaculture in Asia*, 20-22 May 1996, Tigbauan, Iloilo, Philippines (pp. 155-184). Tigbauan, Iloilo, Philippines: Aquaculture Department, Southeast Asian Fisheries Development Center.
- Duremdesz, R. C., & Lio-Po, G. D. (1988). Isolation and identification of *Pseudomonas fluorescens* from hatchery-reared tilapia fry (*Oreochromis niloticus* Linnaeus). *SEAFDEC Asian Aquaculture*, 10(2), 9.
- El-Sayed, A. F. M. (2019). *Tilapia culture*. Academic Press.
- Guerrero III, R. D. (2019). Farmed tilapia production in the Philippines is declining: What has happened and what can be done. *Philippine Journal of Science*, 148(2), 11-15.
- Jantrakajorn, S., Maisak, H., & Wongtavatchai, J. (2014). Comprehensive investigation of Streptococcosis outbreak in cultured Nile tilapia, *Oreochromis niloticus*, and Red Tilapia, *Oreochromis* sp., of Thailand. *Journal of the World Aquaculture Society*, 45(4), 392-402. <https://doi.org/10.1111/jwas.12131>
- Karki, H., Mustafa, A., Master, A., & Dhawale, S. (2013). Antibiotic resistant bacteria in the gut of hatchery-reared Tilapia and Coho Salmon. *Universal Journal of Microbiology Research*, 1, 43-46. <https://doi.org/10.13189/ujmr.2013.010303>
- Kayansamruaj, P., Areechon, N., & Unajak, S. (2020). Development of fish vaccine in Southeast Asia: A challenge for the sustainability of SE Asia aquaculture. *Fish & Shellfish Immunology*, 103, 73-87. <https://doi.org/10.1016/j.fsi.2020.04.031>
- Kayansamruaj, P., Soontara, C., Unajak, S., Dong, H. T., Rodkhum, C., Kondo, H., & Areechon, N. (2019). Comparative genomics inferred two distinct populations of piscine pathogenic *Streptococcus agalactiae*, Serotype Ia ST7 and Serotype III ST 283, in Thailand and Vietnam. *Genomics*, 111, 1657-1667. <https://doi.org/10.1016/j.ygeno.2018.11.016>
- Langaoen, A. F., Manzano, V. J. V., Requilman, E. M. R., Tabardillo, J. M., Maningas, M. B. B., & Calugay, R. J. (2018). Antibiotic-resistant bioluminescent *Vibrios* from Philippine aquacultured *Chanos chanos* and

- Oreochromis niloticus*. *Aquaculture, Aquarium, Conservation & Legislation (AACL) Bioflux*, 11(2), 505-515.
- Legario, F. S., Choresca Jr, C. H., Turnbull, J. F., & Crumlish, M. (2020). Isolation and molecular characterization of streptococcal species recovered from clinical infections in farmed Nile tilapia (*Oreochromis niloticus*) in the Philippines. *Journal of Fish Diseases*, 43(11), 1431-1442. <https://doi.org/10.1111/jfd.13247>
- Li, Y., Liu, L., Huang, P. R., Fang, W., Luo, Z. P., Peng, H. L., & Li, A. X. (2014). Chronic streptococcosis in Nile tilapia, *Oreochromis niloticus* (L.), caused by *Streptococcus agalactiae*. *Journal of Fish Diseases*, 37(8), 757-763. <https://doi.org/10.1111/jfd.12146>
- Limbauan, J. (2018). *Pathogenicity and antimicrobial susceptibility of bacteria isolated from kidney, liver, and brain of Nile tilapia (Oreochromis niloticus) stocked in intensive cage farming systems in Taal Lake, Batangas*. [M.S. Thesis. De La Salle University].
- Liu, G., Zhu, J., Chen, K., Gao, T., Yao, H., Liu, Y., & Lu, C. (2016). Development of *Streptococcus agalactiae* vaccines for tilapia. *Diseases of Aquatic Organisms*, 21(122), 163-170. <https://doi.org/10.3354/dao03084>
- Lulijwa, R., Rupia, E. J., & Alfaro, A. C. (2020). Antibiotic use in aquaculture, policies and regulation, health and environmental risks: a review of the top 15 major producers. *Reviews in Aquaculture*, 12(2), 640-663. <https://doi.org/10.1111/raq.12344>
- Miao, W., & Wang, W. (2020). Trends of aquaculture production and trade: Carp, tilapia, and shrimp. *Asian Fisheries Science*, 33(1), 1-10. <https://doi.org/10.33997/j.afs.2020.33.S1.001>
- Niu, G., Wongsathein, D., Boonyayatra, S., & Khattiya, R. (2019). Occurrence of multiple antibiotic resistance and genotypic characterization in *Edwardsiella tarda* isolated from cage-cultured hybrid red tilapia (*Oreochromis* sp.) in the Ping River, Northern Thailand. *Aquaculture Research*, 50(12), 3643-3652. <https://doi.org/10.1111/are.14322>
- Öztürk, R. Ç., & Altınok, İ. (2014). Bacterial and viral fish diseases in Turkey. *Turkish Journal of Fisheries and Aquatic Sciences*, 14(1), 275-297. https://doi.org/10.4194/1303-2712-v14_1_30
- Pakingking, R., Palma, P., & Usero, R. (2015). Quantitative and qualitative analyses of the bacterial microbiota of tilapia (*Oreochromis niloticus*) cultured in earthen ponds in the Philippines. *World Journal of Microbiology and Biotechnology*, 31(2), 265-275. <https://doi.org/10.1007/s11274-014-1758-1>
- Pakingking, R., Palma, P., & Usero, R. (2020). *Aeromonas* load and species composition in tilapia (*Oreochromis niloticus*) cultured in earthen ponds in the Philippines. *Aquaculture Research*, 51(11), 4736-4747. <https://doi.org/10.1111/are.14820>
- Perera, R. P., Johnson, S. K., Collins, M. D., & Lewis, D. H. (1994). *Streptococcus iniae* associated with mortality of *Tilapia nilotica* × *T. aurea* hybrids. *Journal of Aquatic Animal Health*, 6(4), 335-340. [https://doi.org/10.1577/1548-8667\(1994\)006<0335:SIAWMO>2.3.CO;2](https://doi.org/10.1577/1548-8667(1994)006<0335:SIAWMO>2.3.CO;2)
- Primavera, J. H. (1993). A critical review of shrimp pond culture in the Philippines. *Reviews in Fisheries Science*, 1(2), 51-201. <https://doi.org/10.1080/10641269309388539>
- PSA. (2019). Fisheries statistics of the Philippines 2016-2018. PSA CVEA Building, East Avenue, Diliman Quezon City, Philippines.
- Reyes, A. T. (2018). Outbreak investigation of *Aeromonas hydrophila* in tilapia grow-out farms in Minalin, Pampanga, Philippines. *International Journal of Biology, Pharmacy and Allied Sciences*, 7(8), 1464-1473. <https://doi.org/10.31032/IJBPA/2018/7.8.4493>
- Reyes, A. T. (2019). Outbreak investigation of *Pseudomonas aeruginosa* in tilapia grow-out farms in Minalin, Pampanga, Philippines. *International Journal of Fisheries and Aquatic Studies*, 7(4), 428-434
- Reyes, A. T., Fajardo, L. J., & Abando, A. K. Y. (2019). Antibiotic susceptibility of *Streptococcus agalactiae* isolated from Tilapia pond sediment in Lubao, Pampanga, Philippines. *Journal of Drug Delivery and Therapeutics*, 9(2-s), 370-375. <https://doi.org/10.22270/jddt.v9i2-s.2530>
- Rico, A., Oliveira, R., McDonough, S., Matser, A., Khatikarn, J., Satapornvanit, K., Nogueira, A. J. A., Soares, A. M. V. M., Domingues, I., & Van den Brink, P. J. (2014). Use, fate and ecological risks of antibiotics applied in tilapia cage farming in Thailand. *Environmental Pollution*, 191, 8-16. <https://doi.org/10.1016/j.envpol.2014.04.002>
- Rodger, H. D. (2016). Fish disease causing economic impact in global aquaculture. In A. Adams (Ed.), *Fish vaccines* (pp. 1-34). Springer.
- Romana-Eguia, M. R. R., Eguia, R. V., & Pakingking Jr., R. V. (2020). *Tilapia culture: The basics*. Tigbauan, Iloilo, Philippines. Aquaculture Department, Southeast Asian Fisheries Development Center.
- Sajorne, R. E., & Mabuhay-Omar, J. A. (2020). Antimicrobial property of the epidermal mucus of Tilapia *Oreochromis* spp. *The Palawan Scientists*, 12, 43-60.
- Stratev, D., & Odeyemi, O. A. (2017). An overview of motile *Aeromonas septicaemia* management. *Aquaculture International*, 25, 1095-1105. <https://doi.org/10.1007/s10499-016-0100-3>
- Su, Y., Liu, C., Deng, Y., Cheng, C., Ma, H., Guo, Z., & Feng, J. (2019). Molecular typing of *Streptococcus agalactiae* isolates of serotype Ia from tilapia in southern China.

- FEMS Microbiology Letters*, 366(13), fnz154.
<https://doi.org/10.1093/femsle/fnz154>
- Syuhada, R., Zamri-Saad, M., Ina-Salwanay, M. Y., Mustafa, M., Nasruddin, N. N., Desa, M. N. M., & Amal, M. N. A. (2020). Molecular characterization and pathogenicity of *Streptococcus agalactiae* serotypes Ia ST7 and III ST283 isolated from cultured red hybrid tilapia in Malaysia. *Aquaculture*, 515, 7354543.
<https://doi.org/10.1016/j.aquaculture.2019.734543>
- Tahiluddin, A. B., & Terzi, E. (2021). Ice-ice disease in commercially cultivated seaweeds *Kappaphycus* spp. and *Eucheuma* spp.: A review on the causes, occurrence, and control measures. *Marine Science and Technology Bulletin*, 10(3), 234-243.
<https://doi.org/10.33714/masteb.917788>
- Terzi, E. (2018). Determination of antimicrobial resistance profiles of the bacteria isolated from cultured sturgeons. *Menba Journal of Fisheries Faculty*, 4(2), 7-13.
- Terzi, E., Corum, O., Bilen, S., Kenanoglu, O. N., Atik, O., & Uney, K. (2020). Pharmacokinetics of danofloxacin in rainbow trout after different routes of administration. *Aquaculture*, 520, 734984.
<https://doi.org/10.1016/j.aquaculture.2020.734984>
- Terzi, E., Kucukkosker, B., Bilen, S., Kenanoglu, O. N., Corum, O., Özbek, M., & Parug, S. S. (2021). A novel herbal immunostimulant for rainbow trout (*Oncorhynchus mykiss*) against *Yersinia ruckeri*. *Fish & Shellfish Immunology*, 110, 55-66.
<https://doi.org/10.1016/j.fsi.2020.12.019>
- Yambot, A. V. (1998). Isolation of *Aeromonas hydrophila* from *Oreochromis niloticus* during fish disease outbreaks in the Philippines. *Asian Fisheries Science*, 10, 347-354.