DAFTAR PUSTAKA

Akmal, Marwan, Bahri, S., Mundayana, Y., Supito, & Rahmi. (2021). *Pemberian Enzim Papain Dosis Berbeda dalam Pakan Komersial pada Pemeliharaan Benih Ikan Bandeng (Chanos chanos, Forsskal) Provision of Different Dosage Papain Enzymes in Commercial Feed on the Maintenance of Bandeng Fish Seeds (Chanos chanos, Forsskal)*. *10*(2), 208–220.

Andi Puspa Sari Idris, Fauziah Nurdin, Bustamin, Patang, Subariyanto, Marhayati, Hamzah Nur, & Nurmila. (2025). Analysis of water quality and cadmium content around Awarange beach, Barru Regency, Indonesia in relation cultivation of milkfish (Chanos chanos Forskal). *International Journal of Life Science Research Archive*, *8*(1), 010–018. https://doi.org/10.53771/ijlsra.2025.8.1.0022

Balito-Liboon, J. S., Traifalgar, R. F. M., Pagapulan, M. J. B. B., Mameloco, E. J. G., Temario, E. E., & Corre, V. L. (2018). Dietary soybean lecithin enhances growth performance, feed utilization efficiency and body composition of early Juvenile Milkfish, Chanos Chanos. *Israeli Journal of Aquaculture - Bamidgeh*, *70*(January).

Boisset, F., & Pablo Ferrer-Gallego, P. (2016). Typification of the indo-pacific seagrass enhalus acoroides (Hydrocharitaceae). *Taxon*, *65*(3), 602–604. https://doi.org/10.12705/653.11

de Verdal, H., Mekkawy, W., Lind, C. E., Vandeputte, M., Chatain, B., & Benzie, J. A. H. (2017). Measuring individual feed efficiency and its correlations with performance traits in Nile tilapia, Oreochromis niloticus. *Aquaculture*, *468*(January), 489–495. https://doi.org/10.1016/j.aquaculture.2016.11.015

Edwards, T. M., Puglis, H. J., Kent, D. B., Durán, J. L., Bradshaw, L. M., & Farag, A. M. (2024). Ammonia and aquatic ecosystems – A review of global sources, biogeochemical cycling, and effects on fish. *Science of the Total Environment*, *907*(June 2023). https://doi.org/10.1016/j.scitotenv.2023.167911

Elizondo-González, R., Quiroz-Guzmán, E., Escobedo-Fregoso, C., Magallón-Servín, P., & Peña-Rodríguez, A. (2018). Use of seaweed Ulva lactuca for water bioremediation and as feed additive for white shrimp Litopenaeus vannamei. *PeerJ*, *2018*(3). https://doi.org/10.7717/peerj.4459

Fahrizal, A., & Nasir, M. (2018). Pengaruh Penambahan Probiotik Dengan Dosis Berbeda Pada Pakan Terhadap Pertumbuhan Dan Rasio Konversi Pakan (Fcr) Ikan Nila (Oreochromis Niloticus). *Median : Jurnal Ilmu Ilmu Eksakta*, *9*(1), 69–80. https://doi.org/10.33506/md.v9i1.310

Fry, J. P., Mailloux, N. A., Love, D. C., Milli, M. C., & Cao, L. (2018). Feed conversion efficiency in aquaculture: Do we measure it correctly?

Environmental Research Letters, *13*(2). https://doi.org/10.1088/1748-9326/aaa273

Fufeng Chen, J. Qian, Yu He, Y. L. and W. Z. (2022). Could Chlorella pyrenoidosa be exploited as an alternative nutrition source in aquaculture feed? A study on the nutritional values and anti-nutritional factors. *Frontiers in Nutrition*.

Gawest Bagus Permana. (2021). Analisis Pertumbuhan Tiga Komoditas Akuatik Yang Di Budidayakan Dengan Sistem Polikultur Pada Kepadatan Berbeda. *Skripsi Umg*, □□□□□□ *49*(للعلوم رقية ا الع المجلة), 69–73.

Gono, C. M. P., Ahmadi, P., Hertiani, T., Septiana, E., Putra, M. Y., & Chianese, G. (2022). A Comprehensive Update on the Bioactive Compounds from Seagrasses. *Marine Drugs*, *20*(7), 1–37. https://doi.org/10.3390/md20070406

Hadline Kiruba. V and Priscilla suresh. (2025). Nutritional Evaluation of Sea Grass and Fish Meal as an Alternative Feeding Ingredient for Sustainable Aquaculture Development. *Uttar Pradesh Journal of Zoology*, *46*(10), 152–166. https://doi.org/10.56557/upjoz/2025/v46i104974

Haixia Li, Zhang, J., Ge, X., Chen, S., & Ma, Z. (2023). The Effects of Short-Term Exposure to pH Reduction on the Behavioral and Physiological Parameters of Juvenile Black Rockfish (Sebastes schlegelii). *Biology*, *12*(6). https://doi.org/10.3390/biology12060876

Hussain, M., Hassan, H. U., Siddique, M. A. M., Mahmood, K., Abdel-Aziz, M. F. A., Laghari, M. Y., Abro, N. A., Gabol, K., Nisar, Rizwan, S., & Halima. (2021). Effect of varying dietary protein levels on growth performance and survival of milkfish Chanos chanos fingerlings reared in brackish water pond ecosystem. *Egyptian Journal of Aquatic Research*, *47*(3), 329–334. https://doi.org/10.1016/j.ejar.2021.05.001

Hutabarat, J., Wahyu Nilamsari, K., Rachmawati, D., & Prakoso Adi, B. (2021). Growth Performance and Survival Rates of Milkfish (Chanos chanos) Fed Diets Supplemented with Pineapple Extract. *J Aquac Res Development*, *12*(6), 637.

Ilmani, A. H., & Handayani, L. (2020). Ritme kebiasaan makan ikan bandeng (Chanos chanos forskal) selama 24 jam pada tambak ekstensif. *Jurnal Ilmu Hewani Tropika*, *9*(2), 75–79.

Ilyas, A. P., & Fahruddin, M. (2025). Addition of Seagrass Flower Waste in Food to Growth Rate and Survival Rate of Koi Fish (Cyprinus rubrofuscus). *Habitus Aquatica*, *6*(1), 37–42. https://doi.org/10.29244/haj.6.1.37

IMTIAZ KASHANI, SHAHAB-UDIN, KACHHI, K. K., FATIMA, A., & MENGAL,

E. (2022). Juvenile Milkfish , Chanos chanos (Forsskal , 1775) in seawater tanks. *SINDH UNIVERSITY RESEARCH JOURNAL (SCIENCE SERIES)*, *54*(02), 90–96.

Iskandar, R., & Elrifadah. (2015a). Pertumbuhan dan Efisiensi Pakan Ikan Nila (Oreochromis niloticus) Yang Diberi Pakan Buatan Berbasis Kiambang. *Jurnal Ziraa"ah*, *40*(1), 18–24.

Iskandar, R., & Elrifadah, E. (2015b). PERTUMBUHAN DAN EFISIENSI PAKAN IKAN NILA (Oreochromis niloticus)YANG DIBERI PAKAN BUATAN BERBASIS KIAMBANG. *Ziraa'Ah*, *40*(1), 18–24.

Kadharusman, M. M., Syahputra, R. A., Kurniawan, R., Hadinata, E., Tjandrawinata, R. R., Taslim, N. A., Romano, R., Santini, A., & Nurkolis, F. (2025). Seagrass Enhalus acoroides extract mitigates obesity and diabetes via GLP-1, PPARγ, SREBP-1c modulation and gut microbiome restoration in diabetic zebrafish. *Diabetology and Metabolic Syndrome* , *17*(1). https://doi.org/10.1186/s13098-025-01823-4

Kajbaf, K., Overturf, K., & Kumar, V. (2024). Integrated alternative approaches to select feed-efficient rainbow trout families to enhance the plant protein utilization. *Scientific Reports*, *14*(1), 1–14. https://doi.org/10.1038/s41598-024-54218-2

Khumujam, S. D., Dasgupta, S., Srivastava, P. P., Sahu, N. P., & Varghese, T. (2024). Interactive effects of dietary saponin with cholesterol and tannin on growth and biochemical responses in Labeo rohita (Hamilton, 1822) fingerlings. *Aquaculture International*, *32*(4), 4141–4157. https://doi.org/10.1007/s10499-023-01368-1

Kurniasih, Subandiyono, & Pinandoyo. (2015). PENGARUH MINYAK IKAN DAN LESITIN DENGAN DOSIS BERBEDA DALAM PAKAN TERHADAP PEMANFAATAN PAKAN DAN PERTUMBUHAN IKAN MAS (Cyprinus carpio). *Journal of Aquaculture Management and Technology*, *4*(3), 22–30.

Maharani, S. D., Amin, M., & Lamid, M. (2023). Potency of formulated diets with different protein on feed consumption, feed conversion ratio, feed efficiency and nutrient retention of scalloped spiny lobster (Panulirus homarus). *IOP Conference Series: Earth and Environmental Science*, *1273*(1). https://doi.org/10.1088/1755-1315/1273/1/012075

Marimuthu, V., Shanmugam, S., Sarawagi, A. D., Kumar, A., Kim, I. H., & Balasubramanian, B. (2022). A glimpse on influences of feed additives in aquaculture. *eFood*, *3*(1–2), 1–10. https://doi.org/10.1002/efd2.6

Muhammadar, A. A., Firdus, F., Muchlisin, Z. A., Samadi, S., Sarong, M. A., Boihaqi, B., Sartira, S., Sahidir, I., & Batubara, A. S. (2021). Effect of dietary protein level on growth, food utilization, food conversion and survival rate of giant trevally (Caranx ignobilis). *F1000Research*, *10*, 78.

https://doi.org/10.12688/f1000research.28359.1

Nikita Punia a, D. S. and P. (2024). *Approaches to Use Anti-nutritional Factors Containing Plant Based Protein-rich Aquafeeds*. *45*(7), 72–82. https://doi.org/10.56557/UPJOZ/2024/v45i73977

NINGSIH, O., & AFFANDI, R. I. (2023). Teknik Pembesaran Kepiting Bakau (Scylla Sp.) Dengan Sistem Apartemen. *Ganec Swara*, *17*(3), 840. https://doi.org/10.35327/gara.v17i3.520

Omnes, M.-H., Le Goasduff, J., Le Delliou, H., Le Bayon, N., Quazuguel, P., & Robin, J. H. (2017). Effects of dietary tannin on growth, feed utilization and digestibility, and carcass composition in juvenile European seabass (Dicentrarchus labrax L.). *Aquaculture Reports*, *6*, 21–27. https://doi.org/https://doi.org/10.1016/j.aqrep.2017.01.004

Prajayati, V. T. F., Hasan, O. D. S., & Mulyono, M. (2020). Magot Flour Performance in Increases Formula Feed Efficiency and Growth of Nirwana Race Tilapia (Oreochromis sp.). *Jurnal Perikanan Universitas Gadjah Mada*, *22*(1), 27. https://doi.org/10.22146/jfs.55428

Rachmawati, D., Elfitasari, T., Chilmawati, D., & Yuniarti, T. (2024). The effect of phytase enzyme in feed on growth performance, protein digestibility, feed utilization efficiency, mineral content, and body nutrient composition in Nile tilapia (Oreochromis niloticus) fingerlings. *AACL Bioflux*, *17*(5), 2096–2108.

Ratnawati, Nessa, N., Jompa, J., & Rappe, R. A. (2019). Fruits of Enhalus acoroides as a source of nutrition for coastal communities. *IOP Conference Series: Earth and Environmental Science*, *235*(1). https://doi.org/10.1088/1755-1315/235/1/012073

Rodde, C., Vandeputte, M., Allal, F., Besson, M., Clota, F., Vergnet, A., Benzie, J. A. H., & de Verdal, H. (2020). Population, Temperature and Feeding Rate Effects on Individual Feed Efficiency in European Sea Bass (Dicentrarchus labrax). *Frontiers in Marine Science*, *7*(October), 1–11. https://doi.org/10.3389/fmars.2020.578976

Romadhona Putri, W., Harris, H., & Kusuma Haris, R. bayu. (2019). KOMBINASI MAGGOT PADA PAKAN KOMERSIL TERHADAP PERTUMBUHAN, KELANGSUNGAN HIDUP, FCR DAN BIAYA PAKAN IKAN PATIN SIAM (Pangasius hypophthalmus). *Jurnal Ilmu-ilmu Perikanan dan Budidaya Perairan*, *14*(1). https://doi.org/10.31851/jipbp.v14i1.3364

Setyoningrum, D., Yamindago, A., Hikmah Julinda Sari, S., & Maftuch, M. (2020). Phytochemical Analysis and in vitro Antibacterial Activities of Seagrass Enhalus acoroides against Staphylococcus aureus. *Research Journal of Life Science*, *7*(2), 85–91. https://doi.org/10.21776/ub.rjls.2020.007.02.2

Siddik, M. A. B., Francis, P., Rohani, F., Azam, M. S., Mock, T. S., & Francis, D. S. (2023). *Seaweed and Seaweed-Based Functional Metabolites as Potential Modulators of Growth , Immune and Antioxidant Responses , and Gut Microbiota in Fish*.

Sohair Y. Saleh, Nehal A. Younis, A. H. S. and H. G. G. (2025). *The role of Moringa oleifera in enhancing fish performance and health: a comprehensive review of sustainable aquaculture applications. 49*. https://doi.org/10.1007/s11259-025-10889-4

Surbakti, J. A., Dewi, I. A. L., Alamsjah, M. A., & Lamid, M. (2022). Growth of milkfish (Chanos chanos forsskal) maintained in multitrophic seafarming with different water exchange systems. *Ecology, Environment and Conservation*, *28*, S47–S51. https://doi.org/10.53550/eec.2022.v28i05s.009

Susanto, T., Sudaryono, A., & Pinandoyo, P. (2018). PENAMBAHAN EKSOGEN ENZIM PENCERNAAN DALAM PAKAN BUATAN UNTUK MENINGKATKAN PERTUMBUHAN DAN EFESIENSI PEMANFAATAN PAKAN IKAN BANDENG (Chanos chanos). *Sains Akuakultur Tropis : Indonesian Journal of Tropical Aquaculture*, *1*(1), 42–51. https://doi.org/10.14710/sat.v1i1.2455

Tri Yusufi Mardiana , Linayati Linayati, Mada Widi Nugraha, Nila Oktaviani, Muhammad Zulkham Yahya, Silvianita Khoirun Nisa, Hasanudin Asyari, Muhammad Aji Bagus Pamungkas1, Kayla Maharani, B. D. M. (2025). *Efektifitas penambahan tepung jinten hitam (Nigella sativa L.) pada pakan terhadap kinerja pertumbuhan benih ikan bandeng (Chanos chanos)*. 136–142. https://doi.org/10.14710/sat.v9i2.26986

Tuapattinaya, P. M. J., & Rumahlatu, D. (2016). Analysis of Flavonoid Levels of Enhalus acoroides in Different Coastal Waters in Ambon Island , Indonesia. *International Journal of Applied Biology*, *3*(1), 70–80. http://journal.unhas.ac.id/index.php/ijoab

Ukwa, U. D., Saliu, J. K., & Akinsanya, B. (2023). Phytochemical profiling and anthelmintic potential of extracts of selected tropical plants on parasites of fishes in Epe Lagoon. *Scientific Reports*, *13*(1), 1–10. https://doi.org/10.1038/s41598-023-48164-8

Wang, Z., Pu, D., Zheng, J., Li, P., Lü, H., Wei, X., Li, M., Li, D., & Gao, L. (2023). Hypoxia-induced physiological responses in fish: From organism to tissue to molecular levels. *Ecotoxicology and Environmental Safety*, *267*(June), 115609. https://doi.org/10.1016/j.ecoenv.2023.115609

Widya Kirana Wibowo, S., & Diana Chilmawati. (2023). *Jurnal Sains Akuakultur Tropis D e p a r t e m e n A k u a k u l t u r Feeds on the Feed Consumption , Feed Efficiency and Growth Rate of Red Tilapia*. *7*, 1–10.

Wijianto, W., Fahrurrozi, A., Firstiany, D., & Khoiroh, N. (2023). Pengaruh

Pemberian Ekstrak Daun Mangrove Api-api (Avicennia sp.) pada Pakan Terhadap Pertumbuhan Bobot dan FCR ikan bandeng (Chanos chanos). *Jurnal Penyuluhan Perikanan dan Kelautan*, *17*(1), 27–38. https://doi.org/10.33378/jppik.v17i1.391

Yu, S., Cui, L., van Tussenbroek, B. I., Wu, Y., Zhu, F., Gaitán-Espitía, J. D., & Jiang, K. (2024). Frequent Flowering but Low Reproductive Success of the Dioecious Seagrass Enhalus acoroides (L.f.) Royle in Li'an lagoon, China. *Estuaries and Coasts*, *47*(6), 1694–1701. https://doi.org/10.1007/s12237-024-01399-8

Akmal, Marwan, Bahri, S., Mundayana, Y., Supito, & Rahmi. (2021). *Pemberian Enzim Papain Dosis Berbeda dalam Pakan Komersial pada Pemeliharaan Benih Ikan Bandeng (Chanos chanos, Forsskal) Provision of Different Dosage Papain Enzymes in Commercial Feed on the Maintenance of Bandeng Fish Seeds (Chanos chanos, Forsskal)*. *10*(2), 208–220.

Andi Puspa Sari Idris, Fauziah Nurdin, Bustamin, Patang, Subariyanto, Marhayati, Hamzah Nur, & Nurmila. (2025). Analysis of water quality and cadmium content around Awarange beach, Barru Regency, Indonesia in relation cultivation of milkfish (Chanos chanos Forskal). *International Journal of Life Science Research Archive*, *8*(1), 010–018. https://doi.org/10.53771/ijlsra.2025.8.1.0022

Balito-Liboon, J. S., Traifalgar, R. F. M., Pagapulan, M. J. B. B., Mameloco, E. J. G., Temario, E. E., & Corre, V. L. (2018). Dietary soybean lecithin enhances growth performance, feed utilization efficiency and body composition of early Juvenile Milkfish, Chanos Chanos. *Israeli Journal of Aquaculture - Bamidgeh*, *70*(January).

Boisset, F., & Pablo Ferrer-Gallego, P. (2016). Typification of the indo-pacific seagrass enhalus acoroides (Hydrocharitaceae). *Taxon*, *65*(3), 602–604. https://doi.org/10.12705/653.11

de Verdal, H., Mekkawy, W., Lind, C. E., Vandeputte, M., Chatain, B., & Benzie, J. A. H. (2017). Measuring individual feed efficiency and its correlations with performance traits in Nile tilapia, Oreochromis niloticus. *Aquaculture*, *468*(January), 489–495. https://doi.org/10.1016/j.aquaculture.2016.11.015

Edwards, T. M., Puglis, H. J., Kent, D. B., Durán, J. L., Bradshaw, L. M., & Farag, A. M. (2024). Ammonia and aquatic ecosystems – A review of global sources, biogeochemical cycling, and effects on fish. *Science of the Total Environment*, *907*(June 2023). https://doi.org/10.1016/j.scitotenv.2023.167911

Elizondo-González, R., Quiroz-Guzmán, E., Escobedo-Fregoso, C., Magallón-Servín, P., & Peña-Rodríguez, A. (2018). Use of seaweed Ulva lactuca for water bioremediation and as feed additive for white shrimp

Litopenaeus vannamei. *PeerJ*, *2018*(3). https://doi.org/10.7717/peerj.4459

Fahrizal, A., & Nasir, M. (2018). Pengaruh Penambahan Probiotik Dengan Dosis Berbeda Pada Pakan Terhadap Pertumbuhan Dan Rasio Konversi Pakan (Fcr) Ikan Nila (Oreochromis Niloticus). *Median : Jurnal Ilmu Ilmu Eksakta*, *9*(1), 69–80. https://doi.org/10.33506/md.v9i1.310

Fry, J. P., Mailloux, N. A., Love, D. C., Milli, M. C., & Cao, L. (2018). Feed conversion efficiency in aquaculture: Do we measure it correctly? *Environmental Research Letters*, *13*(2). https://doi.org/10.1088/1748-9326/aaa273

Fufeng Chen, J. Qian, Yu He, Y. L. and W. Z. (2022). Could Chlorella pyrenoidosa be exploited as an alternative nutrition source in aquaculture feed? A study on the nutritional values and anti-nutritional factors. *Frontiers in Nutrition*.

Gawest Bagus Permana. (2021). Analisis Pertumbuhan Tiga Komoditas Akuatik Yang Di Budidayakan Dengan Sistem Polikultur Pada Kepadatan Berbeda. *Skripsi Umg*, □□□□□□ *49*(للعلوم رقية ا الع المجلة), 69–73.

Gono, C. M. P., Ahmadi, P., Hertiani, T., Septiana, E., Putra, M. Y., & Chianese, G. (2022). A Comprehensive Update on the Bioactive Compounds from Seagrasses. *Marine Drugs*, *20*(7), 1–37. https://doi.org/10.3390/md20070406

Hadline Kiruba. V and Priscilla suresh. (2025). Nutritional Evaluation of Sea Grass and Fish Meal as an Alternative Feeding Ingredient for Sustainable Aquaculture Development. *Uttar Pradesh Journal of Zoology*, *46*(10), 152–166. https://doi.org/10.56557/upjoz/2025/v46i104974

Haixia Li, Zhang, J., Ge, X., Chen, S., & Ma, Z. (2023). The Effects of Short-Term Exposure to pH Reduction on the Behavioral and Physiological Parameters of Juvenile Black Rockfish (Sebastes schlegelii). *Biology*, *12*(6). https://doi.org/10.3390/biology12060876

Hussain, M., Hassan, H. U., Siddique, M. A. M., Mahmood, K., Abdel-Aziz, M. F. A., Laghari, M. Y., Abro, N. A., Gabol, K., Nisar, Rizwan, S., & Halima. (2021). Effect of varying dietary protein levels on growth performance and survival of milkfish Chanos chanos fingerlings reared in brackish water pond ecosystem. *Egyptian Journal of Aquatic Research*, *47*(3), 329–334. https://doi.org/10.1016/j.ejar.2021.05.001

Hutabarat, J., Wahyu Nilamsari, K., Rachmawati, D., & Prakoso Adi, B. (2021). Growth Performance and Survival Rates of Milkfish (Chanos chanos) Fed Diets Supplemented with Pineapple Extract. *J Aquac Res Development*, *12*(6), 637.

Ilmani, A. H., & Handayani, L. (2020). Ritme kebiasaan makan ikan bandeng (Chanos chanos forskal) selama 24 jam pada tambak ekstensif. *Jurnal Ilmu Hewani Tropika*, *9*(2), 75–79.

Ilyas, A. P., & Fahruddin, M. (2025). Addition of Seagrass Flower Waste in Food to Growth Rate and Survival Rate of Koi Fish (Cyprinus rubrofuscus). *Habitus Aquatica*, *6*(1), 37–42. https://doi.org/10.29244/haj.6.1.37

IMTIAZ KASHANI, SHAHAB-UDIN, KACHHI, K. K., FATIMA, A., & MENGAL, E. (2022). Juvenile Milkfish , Chanos chanos (Forsskal , 1775) in seawater tanks. *SINDH UNIVERSITY RESEARCH JOURNAL (SCIENCE SERIES)*, *54*(02), 90–96.

Iskandar, R., & Elrifadah. (2015a). Pertumbuhan dan Efisiensi Pakan Ikan Nila (Oreochromis niloticus) Yang Diberi Pakan Buatan Berbasis Kiambang. *Jurnal Ziraa"ah*, *40*(1), 18–24.

Iskandar, R., & Elrifadah, E. (2015b). PERTUMBUHAN DAN EFISIENSI PAKAN IKAN NILA (Oreochromis niloticus)YANG DIBERI PAKAN BUATAN BERBASIS KIAMBANG. *Ziraa'Ah*, *40*(1), 18–24.

Kadharusman, M. M., Syahputra, R. A., Kurniawan, R., Hadinata, E., Tjandrawinata, R. R., Taslim, N. A., Romano, R., Santini, A., & Nurkolis, F. (2025). Seagrass Enhalus acoroides extract mitigates obesity and diabetes via GLP-1, PPARγ, SREBP-1c modulation and gut microbiome restoration in diabetic zebrafish. *Diabetology and Metabolic Syndrome* , *17*(1). https://doi.org/10.1186/s13098-025-01823-4

Kajbaf, K., Overturf, K., & Kumar, V. (2024). Integrated alternative approaches to select feed-efficient rainbow trout families to enhance the plant protein utilization. *Scientific Reports*, *14*(1), 1–14. https://doi.org/10.1038/s41598-024-54218-2

Khumujam, S. D., Dasgupta, S., Srivastava, P. P., Sahu, N. P., & Varghese, T. (2024). Interactive effects of dietary saponin with cholesterol and tannin on growth and biochemical responses in Labeo rohita (Hamilton, 1822) fingerlings. *Aquaculture International*, *32*(4), 4141–4157. https://doi.org/10.1007/s10499-023-01368-1

Kurniasih, Subandiyono, & Pinandoyo. (2015). PENGARUH MINYAK IKAN DAN LESITIN DENGAN DOSIS BERBEDA DALAM PAKAN TERHADAP PEMANFAATAN PAKAN DAN PERTUMBUHAN IKAN MAS (Cyprinus carpio). *Journal of Aquaculture Management and Technology*, *4*(3), 22–30.

Maharani, S. D., Amin, M., & Lamid, M. (2023). Potency of formulated diets with different protein on feed consumption, feed conversion ratio, feed efficiency and nutrient retention of scalloped spiny lobster (Panulirus homarus). *IOP Conference Series: Earth and Environmental Science*,

1273(1). https://doi.org/10.1088/1755-1315/1273/1/012075

Marimuthu, V., Shanmugam, S., Sarawagi, A. D., Kumar, A., Kim, I. H., & Balasubramanian, B. (2022). A glimpse on influences of feed additives in aquaculture. *eFood*, *3*(1–2), 1–10. https://doi.org/10.1002/efd2.6

Muhammadar, A. A., Firdus, F., Muchlisin, Z. A., Samadi, S., Sarong, M. A., Boihaqi, B., Sartira, S., Sahidir, I., & Batubara, A. S. (2021). Effect of dietary protein level on growth, food utilization, food conversion and survival rate of giant trevally (Caranx ignobilis). *F1000Research*, *10*, 78. https://doi.org/10.12688/f1000research.28359.1

Nikita Punia a, D. S. and P. (2024). *Approaches to Use Anti-nutritional Factors Containing Plant Based Protein-rich Aquafeeds*. *45*(7), 72–82. https://doi.org/10.56557/UPJOZ/2024/v45i73977

NINGSIH, O., & AFFANDI, R. I. (2023). Teknik Pembesaran Kepiting Bakau (Scylla Sp.) Dengan Sistem Apartemen. *Ganec Swara*, *17*(3), 840. https://doi.org/10.35327/gara.v17i3.520

Omnes, M.-H., Le Goasduff, J., Le Delliou, H., Le Bayon, N., Quazuguel, P., & Robin, J. H. (2017). Effects of dietary tannin on growth, feed utilization and digestibility, and carcass composition in juvenile European seabass (Dicentrarchus labrax L.). *Aquaculture Reports*, *6*, 21–27. https://doi.org/https://doi.org/10.1016/j.aqrep.2017.01.004

Prajayati, V. T. F., Hasan, O. D. S., & Mulyono, M. (2020). Magot Flour Performance in Increases Formula Feed Efficiency and Growth of Nirwana Race Tilapia (Oreochromis sp.). *Jurnal Perikanan Universitas Gadjah Mada*, *22*(1), 27. https://doi.org/10.22146/jfs.55428

Rachmawati, D., Elfitasari, T., Chilmawati, D., & Yuniarti, T. (2024). The effect of phytase enzyme in feed on growth performance, protein digestibility, feed utilization efficiency, mineral content, and body nutrient composition in Nile tilapia (Oreochromis niloticus) fingerlings. *AACL Bioflux*, *17*(5), 2096–2108.

Ratnawati, Nessa, N., Jompa, J., & Rappe, R. A. (2019). Fruits of Enhalus acoroides as a source of nutrition for coastal communities. *IOP Conference Series: Earth and Environmental Science*, *235*(1). https://doi.org/10.1088/1755-1315/235/1/012073

Rodde, C., Vandeputte, M., Allal, F., Besson, M., Clota, F., Vergnet, A., Benzie, J. A. H., & de Verdal, H. (2020). Population, Temperature and Feeding Rate Effects on Individual Feed Efficiency in European Sea Bass (Dicentrarchus labrax). *Frontiers in Marine Science*, *7*(October), 1–11. https://doi.org/10.3389/fmars.2020.578976

Romadhona Putri, W., Harris, H., & Kusuma Haris, R. bayu. (2019). KOMBINASI MAGGOT PADA PAKAN KOMERSIL TERHADAP PERTUMBUHAN, KELANGSUNGAN HIDUP, FCR DAN BIAYA PAKAN

IKAN PATIN SIAM (Pangasius hypophthalmus). *Jurnal Ilmu-ilmu Perikanan dan Budidaya Perairan*, *14*(1). https://doi.org/10.31851/jipbp.v14i1.3364

Setyoningrum, D., Yamindago, A., Hikmah Julinda Sari, S., & Maftuch, M. (2020). Phytochemical Analysis and in vitro Antibacterial Activities of Seagrass Enhalus acoroides against Staphylococcus aureus. *Research Journal of Life Science*, *7*(2), 85–91. https://doi.org/10.21776/ub.rjls.2020.007.02.2

Siddik, M. A. B., Francis, P., Rohani, F., Azam, M. S., Mock, T. S., & Francis, D. S. (2023). *Seaweed and Seaweed-Based Functional Metabolites as Potential Modulators of Growth , Immune and Antioxidant Responses , and Gut Microbiota in Fish*.

Sohair Y. Saleh, Nehal A. Younis, A. H. S. and H. G. G. (2025). *The role of Moringa oleifera in enhancing fish performance and health: a comprehensive review of sustainable aquaculture applications. 49*. https://doi.org/10.1007/s11259-025-10889-4

Surbakti, J. A., Dewi, I. A. L., Alamsjah, M. A., & Lamid, M. (2022). Growth of milkfish (Chanos chanos forsskal) maintained in multitrophic seafarming with different water exchange systems. *Ecology, Environment and Conservation*, *28*, S47–S51. https://doi.org/10.53550/eec.2022.v28i05s.009

Susanto, T., Sudaryono, A., & Pinandoyo, P. (2018). PENAMBAHAN EKSOGEN ENZIM PENCERNAAN DALAM PAKAN BUATAN UNTUK MENINGKATKAN PERTUMBUHAN DAN EFESIENSI PEMANFAATAN PAKAN IKAN BANDENG (Chanos chanos). *Sains Akuakultur Tropis : Indonesian Journal of Tropical Aquaculture*, *1*(1), 42–51. https://doi.org/10.14710/sat.v1i1.2455

Tri Yusufi Mardiana , Linayati Linayati, Mada Widi Nugraha, Nila Oktaviani, Muhammad Zulkham Yahya, Silvianita Khoirun Nisa, Hasanudin Asyari, Muhammad Aji Bagus Pamungkas1, Kayla Maharani, B. D. M. (2025). *Efektifitas penambahan tepung jinten hitam (Nigella sativa L.) pada pakan terhadap kinerja pertumbuhan benih ikan bandeng (Chanos chanos)*. 136–142. https://doi.org/10.14710/sat.v9i2.26986

Tuapattinaya, P. M. J., & Rumahlatu, D. (2016). Analysis of Flavonoid Levels of Enhalus acoroides in Different Coastal Waters in Ambon Island , Indonesia. *International Journal of Applied Biology*, *3*(1), 70–80. http://journal.unhas.ac.id/index.php/ijoab

Ukwa, U. D., Saliu, J. K., & Akinsanya, B. (2023). Phytochemical profiling and anthelmintic potential of extracts of selected tropical plants on parasites of fishes in Epe Lagoon. *Scientific Reports*, *13*(1), 1–10. https://doi.org/10.1038/s41598-023-48164-8