

**ICAR-CICFR (formerly ICAR-DCFR) Publications- 2022**

1.	<b>Akhtar, M.S., Tripathi, P.H. and Ciji, A., 2022.</b> Light spectra influence the reproductive performance and expression of immune and anti-oxidative defense genes in endangered golden mahseer ( <i>Tor putitora</i> ) female brooders. <i>Aquaculture</i> , 547, p.737355. <a href="https://doi.org/10.1016/j.aquaculture.2021.737355">https://doi.org/10.1016/j.aquaculture.2021.737355</a>
2.	<b>Baruah, D., Sarma, D., Patiyal, R.S., Shahi, N., Akhtar, M.S., Haldar, R.S., Pandey, P.K., Posti, R., Singh, B. and Mishra, A., 2022.</b> Recreational fisheries in Uttarakhand. <i>Aquaculture Asia Magazine</i> , 26(4), pp.13-20. <a href="https://enaca.org/?id=1243">https://enaca.org/?id=1243</a>
3.	<b>Bhat, R.A.H., Khangembam, V.C., Thakuria, D., Pant, V., Tandel, R.S., Tripathi, G. and Sarma, D., 2022.</b> Antimicrobial activity of an artificially designed peptide against fish pathogens. <i>Microbiological research</i> , 260, p.127039. <a href="https://doi.org/10.1016/j.micres.2022.127039">https://doi.org/10.1016/j.micres.2022.127039</a>
4.	<b>Bhat, R.A.H., Tandel, R.S., Dash, P., Nazir, M.I., Yousuf, D.J., Bhat, I.A., Ganie, P.A., Gargotra, P. and Siva, C., 2022.</b> Computational analysis and functional characterisation of <i>Tor putitora</i> toll-like receptor 4 with the elucidation of its binding sites for microbial mimicking ligands. <i>Fish &amp; shellfish immunology</i> , 130, pp.538-549. <a href="https://doi.org/10.1016/j.fsi.2022.09.046">https://doi.org/10.1016/j.fsi.2022.09.046</a>
5.	<b>Bhat, R., Tandel, R. and Pandey, P.K., 2022.</b> Alternatives to antibiotics for combating the antimicrobial resistance in aquaculture. <i>Indian J Animal Health</i> , 61, pp.01-18. <a href="https://doi.org/10.36062/ijah.2022.spl.01322">https://doi.org/10.36062/ijah.2022.spl.01322</a>
6.	<b>Bhat, R.A.H., Thakuria, D., Tandel, R.S., Khangembam, V.C., Dash, P., Tripathi, G. and Sarma, D., 2022.</b> Tools and techniques for rational designing of antimicrobial peptides for aquaculture. <i>Fish &amp; shellfish immunology</i> , 127, pp.1033-1050. <a href="https://doi.org/10.1016/j.fsi.2022.07.055">https://doi.org/10.1016/j.fsi.2022.07.055</a>
7.	<b>Bhatt P., R.S. Patiyal, B.C. Pathak and A.K. Giri (2022).</b> Temporal study of physicochemical characteristics and qualitative plankton diversity of a river Kosi, a tributary of West Ramganga in reference to the habitat of <i>Garra gotyla gotyla</i> . <i>Asian Pacific Journal of Health Sciences</i> , 9(1): 136–141. <a href="https://doi.org/10.21276/apjhs.2022.9.1.19">https://doi.org/10.21276/apjhs.2022.9.1.19</a>
8.	<b>Chandra S., R. Posti and P.A. Ganie (2022).</b> Strengthening the resilience of hilly scheduled caste communities by promoting responsible natural fish farming. <i>ENVIS Bulletin, Himalayan Ecology</i> , 30: 50–53
9.	<b>Chanu, K.V., Thakuria, D., Pant, V., Bisht, S. and Tandel, R.S., 2022.</b> Development of multiplex PCR assay for species-specific detection and identification of <i>Saprolegnia parasitica</i> . <i>Biotechnology Reports</i> , 35, p.e00758. <a href="https://doi.org/10.1016/j.btre.2022.e00758">https://doi.org/10.1016/j.btre.2022.e00758</a>
10.	<b>Ciji, A., Akhtar, M.S., Dubey, M.K., Pandey, A., Tripathi, P.H., Kamalam, B.S., Rajesh, M. and Sharma, P., 2022.</b> Comparative assessment of egg and larval quality traits of progeny from wild-collected and captive-matured brooders of endangered golden mahseer, <i>Tor putitora</i> : A prelude to quality broodstock development and seed production. <i>Aquaculture</i> , 552, p.737949. <a href="https://doi.org/10.1016/j.aquaculture.2022.737949">https://doi.org/10.1016/j.aquaculture.2022.737949</a>
11.	<b>Debbarma, S., Acharya, A., Mangang, Y.A., Monsang, S.J., Choudhury, T.G., Parhi, J. and Pandey, P.K., 2022.</b> Immune-biochemical response and immune gene expression profiling of <i>Labeo rohita</i> fingerlings fed with ethanolic tea leaf extracts and its survivability against <i>Aeromonas hydrophila</i> infection. <i>Fish &amp; shellfish immunology</i> , 130, pp.520-529. <a href="https://doi.org/10.1016/j.fsi.2022.09.027">https://doi.org/10.1016/j.fsi.2022.09.027</a>
12.	<b>Ganie, P.A., Posti, R., Kunal, K., Kunal, G., Sarma, D. and Pandey, P.K., 2022.</b> Insights into the morphometric characteristics of the Himalayan River using remote sensing and GIS techniques: a case study of Saryu basin, Uttarakhand, India. <i>Applied Geomatics</i> , 14(4), pp.707-730. <a href="https://doi.org/10.1007/s12518-022-00461-z">https://doi.org/10.1007/s12518-022-00461-z</a>
13.	<b>Gargotra P., D. Kaippily, C. Pradhan, P.A. Ganie and S. Korath (2022).</b> Dietary potential of guar meal to replace soy meal on the survival and growth of <i>Cyprinus carpio</i> (Linnaeus, 1748) spawn. <i>The Pharma Innovation</i> , 11(12): 455–463.
14.	<b>Gladju, J., Kamalam, B.S. and Kanagaraj, A., 2022.</b> Applications of data mining and machine learning framework in aquaculture and fisheries: A review. <i>Smart Agricultural Technology</i> , 2, p.100061. <a href="https://doi.org/10.1016/j.atech.2022.100061">https://doi.org/10.1016/j.atech.2022.100061</a>
15.	<b>Goswami, M., Kumar, A.P., Patil, G.S., George, T., Nath, R., Bhuyan, R.N., Siva, C., Laskar, M.A. and Sumer, S., 2022.</b> Molecular identification of ornamental loaches (Cypriniformes,

	Cobitoidei) of North East India using mitochondrial genes. <i>Animal Gene</i> , 26, p.200136. <a href="https://doi.org/10.1016/j.angen.2022.200136">https://doi.org/10.1016/j.angen.2022.200136</a>
16.	<b>Jethi, R., Khulbe, R.K., Vasudeo, C.G. and Kant, L., 2022.</b> Farmers' Varietal Preferences and Impact of Farmers Participatory Wheat Seed Production in North Western Himalayan Region. <i>Indian Journal of Extension Education</i> , 58(4), pp.155-158. <a href="https://doi.org/10.48165/IJEE.2022.58431">https://doi.org/10.48165/IJEE.2022.58431</a>
17.	<b>Jha, P.N., Mallik, S.K., Saxena, A., Shahi, N., Das, P., Giri, A.K. and Pandey, P.K., 2022.</b> Leaf powder of <i>Eupatorium odoratum</i> enhances non-specific immune response and resistance to <i>Aeromonas hydrophila</i> infection in <i>Cyprinus carpio</i> (Linn. 1758). <i>Indian Journal of Animal Research</i> , 56(7): 880–886. <a href="https://doi.org/10.18805/IJAR.B-4884">https://doi.org/10.18805/IJAR.B-4884</a>
18.	<b>Manju Lekshmi, N., Sreekanth, G.B., Singh, N.P., Ratheesh Kumar, R. and Pandey, P.K., 2022.</b> Effect of environmental variables on the growth of Asian green mussel <i>Perna viridis</i> (Linnaeus, 1758), in two different aquaculture systems in Goa, west coast of India. <i>Indian Journal of Fisheries</i> , 69(3), pp.43-50. <a href="https://doi.org/10.21077/ijf.2022.69.3.115352-06">https://doi.org/10.21077/ijf.2022.69.3.115352-06</a>
19.	<b>Mallik, S.K., Kala, K., Shahi, N., Pathak, R., Das, P., Patil, P.K. and Pandey, P.K., 2022.</b> Determination of lethal dose of <i>Aeromonas hydrophila</i> RTMCX1 and in vitro efficacy of oxytetracycline hydrochloride in golden mahseer, <i>Tor putitora</i> (Hamilton, 1822). <i>Indian Journal of Animal Research</i> , 56(7): 887–892. <a href="https://doi.org/10.18805/IJAR.B-4865">https://doi.org/10.18805/IJAR.B-4865</a>
20.	<b>Miljanović, A., Bhat, R.A.H., Tandel, R.S., Pavić, D., Grbin, D., Dent, M., Marijanović, Z., Jerković, I., Pedisić, S., Maguire, I. and Bielen, A., 2022.</b> Bioactive compounds in fluid propolis preparations inhibit different life stages of pathogenic oomycetes <i>Aphanomyces astaci</i> and <i>Saprolegnia parasitica</i> . <i>Aquaculture</i> , 552, p.737982. <a href="https://doi.org/10.1016/j.aquaculture">https://doi.org/10.1016/j.aquaculture</a>
21.	<b>Patil P.K., S.S. Mishra, P.K. Pradhan, S.K. Manna, J.T. Abraham, H.G. Solanki, N. Shahi, P. Swain, S.N. Sahoo, S. Avunje, K.S.R. Sharma, R. Geetha, R. Priyadharshini, V.T. Nagaraju, K. Paniprasad, A. Kumar, D. Debnath, P. Panikkar, A. Ramalingam, R.A. Raja, R. Saraswathy, T. Bhuvanewari, S.K. Mallik, N. Sood, C.B. Kumar, K. Nandiath, N.K. Sanil, S.P. Vinoth, S.V. Alavandi, K.K. Vijayan, K.P. Jithendran and J. Jena (2022).</b> Usage pattern of chemicals, biologicals and veterinary medicinal products in Indian aquaculture. <i>Reviews in Aquaculture</i> , 14(4): 2038–2063. <a href="https://doi.org/10.1111/raq.12688">https://doi.org/10.1111/raq.12688</a>
22.	<b>Rajesh M., B.S. Kamalam, P. Sharma, V.C. Verma, A. Pandey, M.K. Dubey, A. Ciji, M.S. Akhtar, N. Pandey, D. Sarma and S.J. Kaushik (2022).</b> Evaluation of a novel methanotroph bacteria meal grown on natural gas as fish meal substitute in rainbow trout, <i>Oncorhynchus mykiss</i> . <i>Aquaculture Research</i> , 53(6): 2159–2174. <a href="https://doi.org/10.1111/are.15735">https://doi.org/10.1111/are.15735</a>
23.	<b>Rathod V., R. Kumar, M.S. Akhtar, T.K. Shah, A. Ciji, D.R. Mahavadiya, S. Vagh and U.R. Gurjar (2022).</b> Effect of temperature on growth performance and immuno-biochemical changes in endangered golden mahseer, <i>Tor putitora</i> (Hamilton, 1923). <i>Journal of Thermal Biology</i> , 108: 103300. <a href="https://doi.org/10.1016/j.jtherbio.2022.103300">https://doi.org/10.1016/j.jtherbio.2022.103300</a>
24.	<b>Sarma D., D. Mohan, R. Posti, M. Arya and P.A. Ganie (2022).</b> The mighty mahseers of the genera <i>Tor</i> , <i>Neolissochilus</i> and <i>Naziritor</i> : A review on resource distribution, biology, ecotourism and conservation. <i>Indian Journal of Fisheries</i> , 69(4): 146–169. <a href="https://doi.org/10.21077/ijf.2022.69.4.125074-20">https://doi.org/10.21077/ijf.2022.69.4.125074-20</a>
25.	<b>Shahi N., S.K. Mallik and D. Sarma (2022).</b> Muscle growth in targeted knockout common carp ( <i>Cyprinus carpio</i> ) <i>mstn</i> gene with low off-target effects. <i>Aquaculture</i> , 547: 737423. <a href="https://doi.org/10.1016/j.aquaculture.2021.737423">https://doi.org/10.1016/j.aquaculture.2021.737423</a>
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27.	<b>Sharma S., H.C.S. Bisht, N.N. Pandey and B.K. Vishwakarma (2022).</b> Herbal feed additives for gonadal maturity and breeding performance of female snow trout ( <i>Schizothorax richardsonii</i> ) in captive condition. <i>Asian Pacific Journal of Health Sciences</i> , 9(1): 110–114. <a href="https://doi.org/10.21276/apjhs.2022.9.1.25">https://doi.org/10.21276/apjhs.2022.9.1.25</a>
28.	<b>Sonti S., K. Tyagi, A. Pande, R. Daniel, A.L. Sharma and M. Tyagi (2022).</b> Crossroads of drug abuse and HIV infection: neurotoxicity and CNS reservoir. <i>Vaccines</i> , 10(2): 202. <a href="https://doi.org/10.3390/vaccines10020202">https://doi.org/10.3390/vaccines10020202</a>

29.	<b>Thakuria D., V.C. Khangembam, V. Pant, R.A. Bhat, R.S. Tandel, C. Siva, A. Pande and P.K. Pandey (2022).</b> Anti-oomycete activity of chlorhexidine gluconate: molecular docking and in vitro studies. <i>Frontiers in Veterinary Science</i> , 9: 909570. <a href="https://doi.org/10.3389/fvets.2022.909570">https://doi.org/10.3389/fvets.2022.909570</a>
30.	<b>Tripathi P.H., A. Pandey, A. Ciji, V. Pande, M. Rajesh, B.S. Kamalam and M.S. Akhtar (2022).</b> Molecular characterization of four innate immune genes in <i>Tor putitora</i> and their comparative transcriptional abundance during wild- and captive-bred ontogenetic developmental stages. <i>Fish and Shellfish Immunology Reports</i> , 3: 100058. <a href="https://doi.org/10.1016/j.fsirep.2022.100058">https://doi.org/10.1016/j.fsirep.2022.100058</a>