


Scientist Profile

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| Name | Dr. Ciji Alexander |  |
| Designation | Scientist (Senior scale), ARS | |
| Qualification | M.F.Sc, PhD | |
| Email Address | ciji.alexander@icar.gov.in cijialex83@gmail.com | |
| Professional experience (Years) | 09 years | |
| Area of Research Expertise | Fish Nutrition, Broodstock nutrition, Immunomodulation and stress mitigation in fish. | |
| Google scholar link | https://scholar.google.com/citations?hl=en&user=O_sKPW8AAAAJ | |
| ORCID ID | 0000-0001-6407-7590 | |
| Awards/ Recognitions | <div>1. Conferred “Jawaharlal Nehru Award for outstanding doctoral thesis research in Agricultural and allied sciences-2013” by the Indian Council of Agricultural Research (ICAR), New Delhi.</div> <div>2. Received “Dr. Karunasagar Best Post-Graduate Thesis (Ph.D. – Indian category) Award for the year 2013” by the Professional Fisheries Graduate Forum (PFGF).</div> <div>3. Received “Kerala Agricultural University Endowment Fish Processing Best Student Award” of B.F.Sc 2001 batch.</div> <div>4. Awarded with “Kerala Agricultural University Merit Scholarship” for pursuing under graduation.</div> <div>5. Awarded with “CIFE Fellowship” for pursuing post graduation and PhD programmes in ICAR-Central Institute of Fisheries Education, Mumbai.</div> | |
| Publication (no.) | Research papers | 51 |
| | Review papers | 03 |
| | Books | 01 (Authored) |
| | Book chapters | 09 |
| | Scientific popular articles | 10 |
| | Others: | |
| | Technical bulletins and leaflets | 05 |
| | NCBI Genbank submissions | 50 |
| | Patent (filed) | 01 |
| | Technology commercialized | 01 |

**Projects
(Institutional
1/ External)**

Institutional Projects:

1. Nutritional intervention for improving reproductive competence and larval quality traits of golden mahseer, *Tor putitora* in captivity (Project code: AQ 21b; 2020-2023; PI).
2. Endocrine aspects of growth and maturation in snow trout, *Schizothorax richardsonii* (2015-2019, PI)
3. Optimizing reproductive and spawning performance of golden mahseer (*Tor putitora*) for upscaling its seed production in captivity (Project code: AQ 16d; 2018-2022; Co-PI).
4. Unravelling thermal and size dependent fertility traits of male golden mahseer brooders in captive conditions (Project code: AQ18-SP10; 2022-2025; Co-PI).
5. Development and validation of cost effective feed formulation for rainbow trout based on commercial scale industrial by-products (Project code: AQ 21a; 2018-2021; Co-PI).
6. Formulation, development and validation of efficient broodstock feed for rainbow trout (Project code: AQ 21c; 2020-2023; Co-PI).
7. Development and validation of cost effective commercial rainbow trout feeds and nutrient sensitive feed management strategies (Project code: AQ 21d; 2021-2024; Co-PI).
8. Nutrient mediated metabolic regulation of growth and well being in snow trout, *Schizothorax richardsonii* (Project code: AQ 17b; 2015-2019; Co-PI)
9. Photo-thermal manipulations for gonadal development of golden mahseer in captivity (Project code AQ16a; 2014-2018, Co-PI).

Externally Funded Projects:

1. Immunomodulation in golden mahseer (*Tor putitora*) broodstock in captive conditions (BT/PR26920/AAQ/3/884/2017; 2018-2021, Co-PI).
2. Development of climate resilient rainbow trout and innovative trout farming strategies to mitigate climatic stressors (2017-2025, Co-PI).
3. Outreach activity-3: Nutrient profiling and evaluation of fish as a dietary component (Outreach activity-3 for 12th plan) (2014-2018, Co-PI).

**Ten
important
recent
publications**

1. **Ciji, A.**, Akhtar, M.S., Dubey, M.K., Pandey, A., Tripathi, P.H., Kamalam, B.S., Rajesh, M. and Sharma, P., 2022. Comparative assessment of egg and larval quality traits of progeny from wild-collected and captive matured brooders of endangered golden mahseer, *Tor putitora*: A prelude to quality broodstock development and seed production. *Aquaculture*, 552: 737949. <https://doi.org/10.1016/j.aquaculture.2022.737949> (IF: 5.135).
2. **Ciji, A.**, Akhtar, M.S., Tripathi, P.H., Pandey, A., Rajesh, M. and Kamalam, B.S., 2021. Dietary soy lecithin augments antioxidative defense and thermal tolerance but fails to modulate non-specific immune genes in endangered golden mahseer (*Tor putitora*) fry. *Fish and Shellfish Immunology*, 109: 34-40. <https://doi.org/10.1016/j.fsi.2020.11.031>(IF:4.622).
3. **Ciji A.**, Sharma, P., Rajesh, M., Kamalam, B.S., Sharma, A., Dash, P. and Akhtar, M.S., 2021. Intra-annual changes in reproductive indices of male and female Himalayan snow trout, *Schizothorax richardsonii* (Gray, 1832). *Aquaculture Research*, 52(1): 130-139. <https://doi.org/10.1111/are.14875> (IF: 2.184).
4. **Ciji, A.** and Akhtar, M.S., 2021. Stress management in aquaculture: a review of dietary interventions. *Reviews in Aquaculture*, 13(4): 2190-2247. <https://doi.org/10.1111/raq.12565>. (IF: 10.618)
5. **Ciji, A.** and Akhtar, M.S., 2020. Nitrite implications and its management in aquaculture: a review. *Reviews in Aquaculture*, 12(2): 878-908. <https://doi.org/10.1111/raq.12354> (IF: 10.618)
6. Akhtar, M. S., Tripathi, P. H. and **Ciji A***, 2022. Light spectra influence the reproductive performance and expression of immune and anti-oxidative defense genes in endangered golden mahseer (*Tor putitora*) female brooders. *Aquaculture*, 547: 737355. <https://doi.org/10.1016/j.aquaculture.2021.737355> (IF: 5.135)

7. Akhtar, M. S., **Ciji, A***, Tripathi, P. H. and Sharma, P., 2021. Dietary β -glucan influences the expression of testicular aquaporins, antioxidative defence genes and sperm quality traits in endangered golden mahseer, *Tor putitora* (Hamilton, 1822). *International Journal of Biological Macromolecules*. 193: 1286-1293. <https://doi.org/10.1016/j.ijbiomac.2021.10.177> (IF: 8.025)
8. Akhtar, M. S., Tripathi, P. H., Pandey, A. and **Ciji A***, 2021. Transgenerational effects of β -glucan on thermal tolerance, growth performance, and immune gene expression of endangered cyprinid *Tor putitora* progeny. *Journal of Thermal Biology*, 102: 103120. <https://doi.org/10.1016/j.jtherbio.2021.103120> (IF: 3.189)
9. Akhtar, M. S., Tripathi, P. H., Pandey, A. and **Ciji A***, 2021. β -glucan modulates non-specific immune gene expression, thermal tolerance and elicits disease resistance in endangered *Tor putitora* fry challenged with *Aeromonas salmonicida*. *Fish and Shellfish Immunology*, 119: 154-162. <https://doi.org/10.1016/j.fsi.2021.09.038> (IF:4.622)
10. Akhtar M.S., Manchi R., Kamalam B.S., **Ciji. A***, 2020. Effect of photoperiod and temperature on indicators of immunity and wellbeing of endangered golden mahseer (*Tor putitora*) broodstock. *Journal of Thermal Biology*, 93: 102694. <https://doi.org/10.1016/j.jtherbio.2020.102694> (IF: 3.189).

**Other
information
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As on August 2022:

Total citations: 854

h-index: 17

i10 index: 23