

Aquaculture International Author Pre-submission Checklist

<https://link.springer.com/journal/10499>

Please fill in the below questionnaire and upload the file during submission in the [Manuscript Submission System](#) in the **'Related files'** section. For questions please [Contact the journal](#).



Category	Question	Minimum Requirement	Requirement Met: Yes / No / NA	If No, Provide Justification
1. Scope or Alignment to Aquaculture International	Does the study fall within the scope of Aquaculture International?	Studies must conform to the journal scope which can be found here		
2. Experimental Design & Replication	Have you included at least three independent replicate holding units (e.g. tanks, cages, ponds) per treatment?	$n \geq 3$ independent units; pseudoreplication is not acceptable.		
	Have you clearly stated the number of replicates for each assay, experiment, or measurement type in your Methods section and in respective table and/or figure legends?	Replication information must be transparent and consistently reported.		
	Are measurements based on independent biological and experimental-unit replicates, rather than pooled samples?	If pooling was used, is a clear statistical justification provided, including how variance and inference were addressed?		
3. Experimental Duration	Was the trial long enough to show measurable or meaningful biological effects (e.g. for a typical growth trial \approx 2.5-3.0 fold increase)?	Duration must allow clear and interpretable outcomes.		
4. Randomisation & Controls	Were experimental units randomly assigned and appropriate control groups included?	Randomisation and valid controls are required.		

5. Statistical Analysis	Are your statistical methods appropriate to the experimental design and clearly described, including all relevant factors? Have you clearly stated which statistical tests were used, why those tests were chosen, and (where applicable) how the assumptions of the chosen tests were assessed (e.g. normality and homogeneity of variances)?	Statistical approach must be justified and properly applied.		
6. Reporting of Variability	Do you report variation (SD, SEM, or CI) for results?	Variation must be shown for all main outcomes.		
7. Sample Size	Is your sample size sufficient to support robust conclusions?	Justification of adequate replication is required.		
8. Nutrition / Feed Trial Studies	For nutrition studies, do you have ≥ 3 rearing units per treatment and report feeding rate, initial weight, final weight, weight gain, FCR, and survival? Are measured (not assumed or calculated) proximate composition data provided for all diets?	Essential parameters (including nutrient profiles of all the diets) must be fully reported, unless there are IP or other commercial restrictions.		
9. Health / Pathology / Challenge studies	For disease studies, do you include proper controls and ≥ 3 replicate tanks or units?	Replication and validated diagnostics are required.		
10. Microbiome / Metabarcoding Studies	For metabarcoding studies, do you include ≥ 6 samples per treatment group and report sequencing/bioinformatics details?	$n \geq 6$; methods and pipelines fully described. Sequencing data should be deposited in a public repository.		
11. Physiology / Stress / Immunology Studies	Are assays validated and linked to aquaculture relevance (e.g. growth, health, performance)?	Must demonstrate applied significance.		
12. Genetics / Breeding Studies	Does your design include enough populations/families/individuals/genetic markers to yield statistically significant genetic parameters estimates with quantifiable SE/CI?	Replication and aquaculture context required. While minimum design requirements can vary between experiments, acceptable precision during genetic parameters estimation/genome wide association study is often not achieved when less than 60-80 families and/or 3,000-5,000 genetic markers are used.		
13. Water Quality / System Engineering studies	Do you provide full system description and ≥ 3 replicates per treatment?	Sufficient detail and replication required.		

14. Methodological Transparency	Are your methods described in enough detail (or with adequate citations to explanatory sources) for replication by others? Do you detail the experimental design (e.g. fully randomized, blocked, Latin square)?	Full reproducibility is required.		
15. Ethical Approval	Have you stated institutional and, where required, national-level approval (e.g. Home Office licence, EU Directive 2010/63/EU, or equivalent)?	All studies must comply with national legislation. Please see also Research involving animals, their data or biological material		
16. Data Availability (FAIR)	Are relevant datasets deposited in recognised repositories (e.g. NCBI, ENA, Dryad) and described in accordance with FAIR principles (Findable, Accessible, Interoperable, Reusable)?	Public data deposition and accessibility required. Please see also Research Data Policy and Data Availability Statements > Data Repositories > Data repository guidance		
17. Data Integrity	Are data values (e.g. growth, FCR, etc) realistic and consistent with your methods and results?	Data must be credible and internally coherent. Please see also Research Data Policy and Data Availability Statements > Data Repositories > "... Sharing your data in a repository promotes the integrity, discovery and reuse of your research..." . Please see also Ethical Responsibilities of Authors		
18. Author Approval	Have all authors agreed to be listed as a co-author and approved the final version of the manuscript for submission?	All authors must agree to be listed as a co-author and must have approved the final version of the manuscript for submission. Please see also Author principles		
19. Line and Page Numbers	Does the manuscript have line and page numbers?	Line and page numbers are required for reviewer purposes.		
20. Citations and References	Have you followed journal guidelines in terms of citation and reference style?	See Submission Guidelines .		