Review Form 1.6

Journal Name:	**Asian Journal of Fisheries and Aquatic Research**
Manuscript Number:	**Ms_AJFAR_82342**
Title of the Manuscript:	**Beneficial Implications of Probiotics in Fresh Water Fish Aquaculture: A Review**
Type of the Article	**Review Article**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments	**Title** **I suggest changing the title to: "The possibility of using probiotics in the aquaculture of freshwater fish"** **Abstract** **Line 13-14: In the Abstract, I suggest to write a briefly arguing why the use of probiotics may be beneficial in animal production - in general. The value of " total production value of inland" - is not an important factor here. The unique features of probiotics, their commercial forms, types, etc. are important (it is worth developing in the Introduction). The second part of this paragraph, talking about the problems in fish farming, is definitely more important. From this they propose to "go out" in their deliberations. I suggest you study the publications on this topic. Ultimately, these works may also concern species other than fish.** **Line 36: Did you mean "feed conversion ratio"? If not what you meant by "feed efficiency"?** **Line 37-39: Please specify what complex compounds the author / authors thinks about in the context of these enzymes. Do all enzymes work on sugars, fats and proteins. I don't think? Please clarify this in the context of the products of these reactions. This is important information. What are the products of these reactions and what does this mean for the body, etc. Refine this information.** **Line 53-56: What did the authors mean by "some improve"? Either the additive affects something or it doesn't. It can't affect a little. I think so.** **Line 62: Are these the only benefits? Yes, that's the main benefit of using probiotics, but there are others as well. Also, what do you mean by "enhancing the properties"? Please clarify what we mean when we say "viability in high populations of around 106 - 108 cfu / ml, why should the reader guess what the Authors meant?** **Line 65: Who is?** **Line 66: Who is? Who can?** **Line 65: Who can?** **This passage looks copied because the personal forms of verbs do not match the noun. Please correct this text.** **Line 66: What enzymes do we mean? Please specify.** **Line 71: I propose to replace this sentence as follows: Probiotic microorganisms can interact according to certain patterns. Irianto […] distinguishes 3 basic models of probiotics, which are characterized by: 1. suppression of the population ……, 2. change… .. 3. stimulation of immunity… ...** **Line 74: Edit - remove the redundant dot.** **Line 75: Similar remark as above.** **Line 76-77: Can we talk about the mechanism of action of prebiotics in the case of water quality? Their influence indirectly influences the water quality in the body of water. Please clarify this.** **Line 77-78: Improving rearing performance is also not a mechanism. It is an effect of an action, not a mechanism. The mechanism is different. Do you know what is a correctly mechanism of this reaction? Please specify in a short information.** **Line 82: Bacillus is successfully used in breeding other farm animals, e.g. poultry. Please write about it as well, because this type of microorganismsis not dedicated only to shrimps or fish. I propose to quote a publication on this subject, with the annotation that Bacillus is perfect for improving the health and efficiency of rearing, for example, poultry. We cannot restrict its use to aquaculture. Proposed work to be cited: Abramowicz K, Krauze M, Ognik K. 2020. Use of Bacillus subtilis PB6 enriched with choline to improve growth performance, immune status, histological parameters and intestinal microbiota of broiler chickens. Anim Prod Sci. 60 (5): 625–634.** **Line 88-90: This sentence is incomprehensible. What did you mean?**	

	Line 100-101: This sentence is incomprehensible. Please elaborate on this idea and what substances do you mean. This is important. **Line 104-105: This is not the definition of a fermentation reaction. Please clarify this.** **Line 107-108: As above** **Line 108-110: What main compounds does fermented feed contain? It needs to be described.** **Line 113: Quote: ... "digestibility of fish" - what do the authors mean?** **Line 113-114: From this sentence it can be concluded that the chemical conversion of sugars into lactic acid leads to the production of enzymes. So I ask what are this enzymes? In what biochemical process are these enzymes produced? What are these enzymes responsible for? It's an interesting theory. Alternatively, I propose to correct this in the text.** **Line 126: I propose to change the title of the chapter to: Effectiveness of using probiotics in freshwater fish farming.** **Line 181: Is the word "degradation" correct here? Please use a word that defines a chemical reaction of this process.** **Line 195: Is the word "safer" adequate in the context of this sentence?** **Line 212-213: Please check if this sentence is grammatically correct?** **Line 224-225: Please quote and show this research. This is a valuable aspect yours of research.** **Line 242: Specify what are "fish plants"? Give examples.** **Line 249: What does… "smooth the digestive system" mean?** **Line 319: Did the paper mention commercial forms of probiotics used in aquaculture? If not, please complete it.**	
Minor REVISION comments	Basically, the manuscript is interesting, although it still requires some refinement and reflection. The authors use simple sentences and mental abbreviations, sometimes not fully understood by the reader. I believe that the substantive revision of the manuscript will make it eligible for consideration for publication in the **Asian Journal of Fisheries and Aquatic Research. Importantly, this work has a valuable practical aspect**.	
Optional/General comments		

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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