Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	**Ms_ARJOM_47277**
Title of the Manuscript:	**How the fractional-order improve and extend the well-known competitive exclusion principle in the chemostat model with n species competing for a single resource, for any set of increasing growth rates?**
Type of the Article	**Original Research 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:

(http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline)

SDI Review Form 1.6

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	**This paper discusses a fractional-order mathematical model for *n* species competing in a chemostat for a single resource. The global dynamics is studied for any set of increasing growth functions. The results obtained generalize and improve the well-known competitive exclusion principle in the chemostat. Overall, this paper gives significant results on solving the fractional-order mathematical model of the growth of *n* species, however, the presentation of the paper shall be further improved. Some comments are given as follow:** **1. The title of the paper is too long. It is suggested to revise the title.** **2. Abstract is too short, less information. Please add more detail.** **3. The font size of figures is larger than the font size of the text. Please check.** **4. Please add a citation for the model defined in (1.1).** **5. In Page 101, see "… zero in 0…", what does it mean? Suppose it is "…zero at 0…".** **6. In Page 101, see "The present article is a contribution to this question." What does "this question" refer to? It is not clearly described.** **7. In the research article, do not use the first person pronoun in the text. Please revise.** **8. In Page 102, please add a citation to "… the Caputo fractional derivative …" before Equation (2.1).** **9. In Page 102, please add a citation to "The Laplace transform …" before Equation (2.2).** **10. In Page 102, please add a citation to "Recall the Mittag-Leffler function…" before Equation (2.3).** **11. In Page 103, see Equation (2.7), what does the notation *I* stand for?** **12. In Page 104, what does Definition 1 use for? It is suggested to write a sentence in the text to mention for what Definition 1 is used for.** **13. In Page 104, please add a citation to "Competitive Exclusion Principle".** **14. In Page 109, see "the growth rates …", Does the growth rate function in term of *I* or *s*?** **15. Some references are not cited in the text, Please check.** **16. There are some grammatical mistakes, please do the correction carefully.**	1. The title is modified. 2. The Abstract is modified. 3. The font size of figures is modified 4. A citation was added for the model defined in (1.1). 5. In Page 101, "… zero in 0 modified by equal zero at $s=0$ 6. In Page 101, "The present article is a contribution to this question." 7. Modified by to the question of "competitive exclusion principle". 8. The first person was modified by the third one 9. A citation was added to "Competitive Exclusion Principle". 10. In Page 109, "the growth rates …", in term of *s*? 11. References were revised. 12. Grammatical mistakes were revised
Minor REVISION comments		
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)*	