



SDI Review Form 1.6

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_36699
Title of the Manuscript:	Monotonicity and convexity properties and some inequalities involving a generalized form of the Wallis' cosine formula
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.

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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		
Minor REVISION comments	In the article under review, the authors present several monotonicity and convexity properties for the generalized Wallis cosine functions $H(x)$, and find some novel inequalities for this function. After checking the full article carefully, I find that all the mathematical computations and proofs are correct, I also think that the given results are novel and interesting. Therefore, I recommend the article to be accepted for publication in this Journal after minor revision. The following 7 recently published articles are related to the topic of the article, they should be cited in the Introduction and References of the article: [1] Z.-H. Yang, W.-M. Qian, Y.-M. Chu and W. Zhang, On rational bounds for the gamma function, J. Inequal. Appl., 2017, \textbf{2017}, Article 210, 17 pages. [2] Z.-H. Yang, W.-Zhang and Y.-M. Chu, Monotonicity and inequalities involving the incomplete gamma function, J. Inequal. Appl., 2016, \textbf{2016}, Article 221, 10 pages. [3] Z.-H. Yang and Y.-M. Chu, Asymptotic formulas for gamma function with applications, Appl. Math. Comput., 2015, \textbf{270}, 665--680. [4] T.-H. Zhao, Y.-M. Chu and H. Wang, Logarithmically complete monotonicity properties relating to the gamma function, Abstr. Appl. Anal., 2011, \textbf{2011}, Article ID 896483, 13 pages. [5] T.-H. Zhao and Y.-M. Chu, A class of logarithmically completely monotonic functions associated with a gamma function, J. Inequal. Appl., 2010, \textbf{2010}, Article ID 392431, 11 pages. [6] X.-M. Zhang and Y.-M. Chu, A double inequality for gamma function, J. Inequal. Appl., 2010, \textbf{2010}, Article ID 503782, 7 pages. [7] T.-H. Zhao, Y.-M. Chu and Y.-P. Jiang, Monotonic and logarithmically convex properties of a function involving gamma functions, J. Inequal. Appl., 2009, \textbf{2009}, Article ID 728612, 13 pages.	Thank you. [1]. We have read through this latest article but, we could not establish any direct connection with our manuscript. As a result, we are unable to cite it. [2]. We have read through this article but we could not establish any direct connection with our manuscript. As a result, we are unable to cite it. [3]. We could not access the full content of this article. However, from its abstract, we realised that, the article deals with some asymptotic formulas and double inequalities for the factorial and the gamma function in terms of the tri-gamma function. Since this is not the focus of our manuscript, we are unable to cite it. [4]. We have cited and added this article to our reference list. [5]. We have cited and added this article to our reference list. [6]. This article is not directly connected with our manuscript. As a result, we are unable to cite it. [7]. We have cited and added this article to our reference list.
Optional/General comments		