



SDI Review Form 1.6

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_47469
Title of the Manuscript:	MORPHOMETRIC VARIABLES FROM THE HYDROGRAPHIC SUB-BACY OF RIO ESPINHARAS, PB / RN / PE, WITH USE OF GEOTECHNOLOGIES
Type of the Article	Original research paper

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>

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	<p>ABSTRACT AND TITLE</p> <ul style="list-style-type: none"> The Title as it is not clear and is ambiguous. Moreover, the terms such as SUB-BACY, RIO, PB / RN / PE are not clear on what they mean. A good title should precisely indicate what the study is all about. Avoid using abbreviation in titles. The author should consider revising the title as follows, ANALYSIS OF MORPHOMETRIC VARIABLES OF RIVER ESPINHARAS HYDROGRAPHIC SUB-BASIN USING GEOGRAPHIC INFORMATION SYSTEM. The abstract should be one block and not divided into sections. The current abstract should be totally revised to include – a brief and concise background information of the study, methodology/steps followed in conducting the research (the methodology as described in the abstract is not adequate), objectives of the study (not aim), results which should summarise key research findings as per stated objectives, conclusions based on study findings and recommendations. Avoid using abbreviations in the abstract, e.g. SBH etc. What should the abbreviation of sub-basin be? Should it not be SB and not SBH? Abbreviations should closely denote the acronym. Consider revising this throughout the document. The key words used in abstract do not summarise key aspects/variables in the study. Consider revising. <p>INTRODUCTION</p> <ul style="list-style-type: none"> Several paragraphs presented seemingly on literature are disjointed/not related in a cohesive manner. The author should critically discuss how reviewed literature are relating/complementing each other. The last paragraph should clearly indicate the objectives of the study (avoid the word – “work” as it is not academic). Instead of using the word, “Aim”, use the word, “objective”. The study should be revised as follows: <ul style="list-style-type: none"> i). To perform a morphometric characterisation of River Espinharas sub-basin ii). To analyse the intensity of soil use along River Espinharas sub-basin <p>The third objective, <i>to suggest mitigating measures for the areas with the greatest intensity</i></p>	



of use, using geospatial tools, should be dropped as it touches on recommendations. Instead, these recommendations should immediately be presented after the conclusion section.

MATERIALS AND METHODS

- The title of section 2.1 is unnecessarily too long. Change to read, “Characteristics of the Study Area. Only Summarise key information as relates to study area.
- Figure 001 should be captioned as Figure 1. The same format should be adopted in the entire document. Additionally, for ease of interpretation, the Figure labelling/text should be in English. The same should apply to all Figures. Also, the source of the Figure – Brazil, 2010 is not clear as it is not captured under references. Who is Brazil, 2010?
- Avoid non-academic words, e.g., river Farinha is “born”
- Sections 2.3 and 2.4 should be merged and renamed, Materials and methods.
- Under section 2.3, the author should comprehensively justify/explain why/how the following materials were used in the study (what value have they added?) -
 - i). Planialtimetric Letters from SUDENE, edited in 1985 and scanned in 1996; (SB.24 - Z - A - VI), Serra Negra do Norte - RN (SB.24 - Z - B - IV), Piancó - PB (SB.24 - Z - C - III) and Ducks-PB (SB.24-Z-D-I).
 - ii). SRTM MDE covering scenes 07_w038_1arc_v3.tiff.aux; s08_w038_1arc_v3.tif.aux;
 - iii). QGIS software including add-ons and GRASSGIS.
 - iv). Landsat 8 satellite images, resolution 30m, bands 2, 3 and 4, orbit, point 216/064, 215/065 and dates 06/08/2017, 08/15/2017 respectively
- What is SRTM MDE? And what scenes does it cover?
- What was the use of Landsat 8 satellite images? Justify why you used satellite images with a time frame difference of about 2 months in 2017.
- All abbreviations used under the methodology section, e.g, SRTM, MDE, SG, APP etc should be clearly explained/written in full at the first instance. Without this, it is difficult to comprehend what they mean.
- It is also not clear what Figure 02 is addressing. The author should first introduce the figure and then discuss what it is trying to convey. As it is, there is limited connection between it and sections such as 2.42, 2.5, 2.6 etc
- Generally, methodology should be objective driven. The author should indicate clearly how each research objective was addressed without ambiguity.

RESULTS AND DISCUSSION

- There is a mixed up in data analysis. Results and discussions should be objective driven, that is, organised to systematically clearly address each research objective. Correct this by re-organising the entire section to conform to this requirement.
- Title of Map 04 (change to Map 4 as previously suggested) should be written in English, and not Portuguese/Spanish (re-do all maps in English). Similarly, the content of all maps should be in English. What are the sources of maps 03 and 04,
- Indicate the sources of all Tables in the manuscript.
- The author has not strongly demonstrated how Geotechnologies/GIS were used in the study. For example, where are the maps generated from LANDSAT images depicted under methodology? Where is the slope map mentioned in section 3.3?
- The author should indicate in the analysis accuracy assessment of Figures 05 and 06 to show the extent to which classifications accurately represents the truth on the ground. This is mandatory in image classification/remote sensing.
- In summary, organise results and discussions per objective as follows:
 - i). Delimitation of River Espinharas Sub basin
 - ii). Morphometric characterisation of River Espinharas sub-basin
 - iii). Intensity of soil use along River Espinharas sub-basin



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	<ul style="list-style-type: none"> Section 3.5 is on recommendations. It should therefore be summarised and appear immediately after conclusion. 	
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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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