

**Review Form 3**

Journal Name:	<b>Journal of Scientific Research and Reports</b>
Manuscript Number:	<b>Ms_JSRR_123192</b>
Title of the Manuscript:	<b>Development of ExG, ExR, ExGR, HSV, CIELAB images from RGB images using image segmentation algorithm in computer vision-based herbicide spraying applications</b>
Type of the Article	<b>Research article</b>

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This article showcases UpToDate relevant techniques for weed management in large scale agricultural fields, which is a grave concern in the present scenario where increased crop yield is of utmost importance courtesy the post-Covid population explosion. To overcome the drawbacks of traditional techniques, the authors have come up with the use of recent color indices and models to facilitate more accurate findings and detections. Moreover, as future implications, the authors will be coming up with relevant ML and AI methodologies allowing remote and more reliable detection procedures thereby smoothening the job of farmers.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Inclusion of precise findings in concise form is recommended in abstract.	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	This article focuses on the importance and relevance of various color indices derived from RGB images in overcoming the inability to distinguish between weeds and soil by greyscale imaging techniques. Post using a Logitech C270 webcam to capture images of plants and then image processing by Python algorithms, the authors implemented different color models for the study, among which, HSV and CIELAB color models were found to offer better segmentation results under various lighting parameters. Hence, besides confirming different color indices useful for weed detection in precision agriculture, this article also pinpoints the best suitable model for perfect sedimentation.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. -	Kindly include more recent and relevant references.	
<u>Minor</u> REVISION comments  Is the language/English quality of the article suitable for scholarly communications?	Yes	
<u>Optional/General</u> comments		

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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