

Review Form 3

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

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PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>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.</p>	<p>The manuscript discusses a comparative study of image segmentation algorithms for weed detection, which is interesting, relevant, and within the scope of the journal. However, in its present form, the manuscript suffers from several major issues and weaknesses. Many important details are missing or vague, requiring the author's attention before publication.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The current title does not fit the manuscript, as the manuscript does not provide any details about the computer vision-based herbicide spraying application. It only focuses on RGB image segmentation algorithms for weed detection. Therefore, the title should be 'Comparative Study of Image Segmentation Algorithms for Weed Detection.'</p>	
<p>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.</p>	<p>Including more specific details about RGB segmentation performance results using different color indices for weed detection, in the abstract would be helpful.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Needs improvement</p>	
<p>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.</p>	<p>Many critical experimental details for the practical implementation of the proposed approach are missing. The manuscript should include the dataset size, the equations used for calculating color indexes, and both the qualitative and quantitative performance parameters for image segmentation.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<p>The discussion section in the present form is relatively weak and should be strengthened with more details and justifications. Moreover, the manuscript could be substantially improved by citing more relevant literature as follows:</p> <ol style="list-style-type: none"> 1. Image processing based real-time variable-rate chemical spraying system for disease control in paddy crop. <i>Artificial Intelligence in Agriculture</i> 4, 21-30. 2. Image processing algorithms for in-field cotton boll detection in natural lighting conditions. <i>Artificial Intelligence in Agriculture</i> 5, 142-156. 3. Robust index-based semantic plant/background segmentation for RGB-images. <i>Computers and electronics in agriculture</i> 169, 105201 	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Needs improvement</p>	
<p><u>Optional/General</u> comments</p>		

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PART 2:

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

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