

BPI Review Form 070520

Book Name:	<u>Theory and Applications of Engineering Research</u>
Manuscript Number:	Ms_BP_8126E
Title of the Manuscript:	Development and Fabrication of an Autonomous Seed Sowing Robot
Type of the Article	book chapter

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PART 1: Review Comments

	Reviewer's comment	Author's comment (If agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. Authors must write his/her feedback here)
Is the manuscript important for the scientific community? Please write a few sentences explaining your answer	Yes.... technologies described in this paper relate to crop cultivation activities in agriculture. Overall, the technology described is quite interesting although it still needs to be described in more detail, how the hardware is designed, and what components are involved in each part.	
Is the title of the article suitable? Do you have any alternative Title in your mind?	Regarding the title of the article, it needs to be revised to focus more on the design. My alternative is "Design of an Autonomous Seed Sowing Robot".	
Is the abstract of the article comprehensive? If your answer is No, please provide suggestions	The abstract has not been worked on comprehensively. The abstract needs to be improved so that when read, readers can understand the contents of the article as a whole. My suggestion is : "Automation of agricultural processes provides benefits in the form of increased efficiency, productivity, healthy crops, efficient use of resources & materials, and labour cost savings. This paper introduces an autonomous seed sowing robot designed to support agricultural activities, named Agribot. The design of Agribot consists of digging part, seed filling part, seed filling into the hole, sensor-based irrigation control and driving part. Several similar robots are already available in the market, but they function separately. Agribot works in an integrated manner from dividing the land into squares with intersection points for sowing seeds, making holes, adjusting the distance between holes according to government standards, and ensuring that only one seed is released per hole with a back plate mechanism filling the hole after sowing is complete. There is also a sensor part that automatically detects obstacles and changes the path. In terms of effectiveness, a case study has illustrated the effectiveness of using this robot, making it a good fit for agriculture. Agribot provides a better solution for tilling agricultural land that has a low production rate." "	
Do you think the English quality of the article is suitable for scholarly communications? If your answer is No, please provide suggestions	Yes.. The use of English is good enough in the scientific community.	
Please provide your comments regarding the appropriateness of different sections of the manuscript.	It needs to be completed in the methods section as I noted in the manuscript. The initial section should explain the hardware design , then the functionality of each part as described in the design section , then go to the case study to give an overview of the performance of the designed system. The discussion section should include how the device works and comments on the effectiveness of what has been discussed in the case study section. The goal is for the reader to fully understand the system you have designed.	
Do you think that the references in the manuscript are proper, recent and sufficient? If you have any suggestions, please write here.	References should be added, especially taken from recent research results (approximately the last 10 years only).	

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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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