

Review Form 1.6

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| Journal Name: | Journal of Engineering Research and Reports |
| Manuscript Number: | Ms_JERR_84084 |
| Title of the Manuscript: | MICROWAVE RADIATION TECHNOLOGY AS A NON-DESTRUCTIVE TESTING METHOD FOR DETECTING BLACK HEART IN POTATO |
| 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. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljerr.com/index.php/JERR/editorial-policy>)

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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) |
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| Compulsory REVISION comments | <p>The manuscript presents a study carried out on potato samples for testing its purity through non-destructive testing using the transmission of electromagnetic waves through it and measuring the change its di-electric properties (S_{21}). A healthy sample shall have a relatively higher S_{21} than that of a less damaged/less pure potato. Overall, the manuscript is written well and I propose some amendments to be incorporated in revised version.</p> <ol style="list-style-type: none">1. Review the paper for typographical errors. For eg: Abstract, line 5, “hearth” Also, there are technical writing issues. It needs significant clean up.2.The quality of figures is marginal. The font size is not properly visible.3. What if a randomly tested sample is already damaged, and there is no control/reference value at the operating frequency, how to decide if the tested sample is damaged or not?4. How may samples can be tested and the time required? I could not see any mention on that. Further, how this process can be used to automate testing?5. Have the authors checked repeatability of their measurements? No matter at pure/impure state of tested sample?6. How about the size of the samples? No mention on that.7. Does the surface of potato sample needs some polishing? An actual sample may exhibit dust/soil particles and/or small covers. Does it guarantee to measure adequately its di-electric property?8.More technical details on the laptop used and the experimental setup is required. I propose to add a new block diagram/update with additional details. | |
| Minor REVISION comments | See above compulsory comments | |
| Optional/General comments | See above compulsory 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) |
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| 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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| Name: | Faez Masurkar |
| Department, University & Country | City University of Hong Kong, China |