

## **Response to editor and reviewers (JoVE61702R1)**

### **Editorial and production comments:**

Changes to be made by the Author(s) regarding the written manuscript:

1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues.

**Response: Proof reading has been done.**

2. Please add more details to your protocol steps. Please ensure you answer the “how” question, i.e., how is the step performed?

**Response: Yes. As suggested, we have provided the additional details wherever needed.**

3. 1.2.1: Please specify the symptoms. What are the paper envelope dimensions?

**Response: The disease symptoms are specified. The envelope details are provided.**

4. 1.3.1: Break into pieces of what size? What is the size of the beaker?

**Response: the length of the root pieces is mentioned in the text. The size of the beaker is also mentioned.**

5. How much volume is used for the washes?

**Response: The volume is mentioned.**

6. 1.7.1: Please provide a citation for the infection. Is reference 9 for the infection or the isolation?

**Response: Citation for the infection is given now as asked. Reference 9 is for testing the Koch's postulate (re-isolation).**

7. 2.1.2: How is the inoculation done?

**Response: The inoculation steps are now detailed.**

8. Please specify all volumes and concentrations used throughout.

**Response: Volumes and concentrations are mentioned throughout the manuscript.**

9. 2.1.3: Please describe the mesh in more detail.

**Response: Additional details are provided in the manuscript as well as in the table.**

10. 2.2.5: Is there a generic name for SoilRite?

**Response: Details of soilrite composition is provided in the manuscript as suggested.**

11. 3.2.2: What are the jam bottles' dimensions?

**Response: The dimensions of jam bottles are provided as suggested.**

12. 3.3.2: Was a disease score developed and used here? Citation?

**Response: Yes, we developed the disease score. This was used in the data analysis. Score details are added in the supplementary figure 2c (revised figure).**

13. Please avoid numbered lists in the discussion.

**Response: No lists are provided in the discussion.**

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Changes to be made by the Author(s) regarding the video:

1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues.

**Response: Proof reading has been done.**

2. Chapter Title Cards

- 02:20 "II. - Blotting paper technique" remove the hyphen and the spaces around it, having only one space between II. and the title

**Response: As suggested, the hyphen and spaces are removed.**

- 03:53 "III. - Sick pot technique" remove the hyphen and the spaces around it, having only one space between III. and the title

**Response: As suggested, the hyphen and spaces are removed.**

- 05:43 "IV. - Conclusion" remove the hyphen and the spaces around it, having only one space between IV. and the title

**Response: As suggested, the hyphen and spaces are removed.**

### 3. Video Editing

4. • 01:24 Consider holding on this graphic for a few more moments before moving on to the next part.

**Response: As suggested, the flowchart graphic display is extended for 10 seconds more to ease the reading.**

5. • 02:50 There is a black flash frame here that should be removed / mended.

**Response: the black flash frame is removed.**

6. • 02:02 As at 01:24, consider holding on this graphic for another moment as well, so we have the chance to quickly read it.

**Response: As suggested, the flowchart graphic is extended for 10 seconds more to ease the reading.**

7. • 03:18 The words "and rinse them with autoclaved arro-" are mashed up against "take a blotting paper and fold it once"; sounds like an editing error

**Response: The sentence runs as "and rinse with autoclaved RO (water)" with period. Then, starts with "take a blotting paper and fold it once". The time between these two sentences is increased to have clear pause.**

8. • 04:26 Please eliminate "jump cuts" such as this. Use dissolves (as at 04:25) to splice visually similar clips together instead of hard cuts, which creates a distracting "jump" effect on the content in the video. Please replace this style of edit in this and other sections with the dissolve as described. Another example is at 03:27, and there may be a few more.

**Response: As suggested, the jump cuts were dissolved wherever applicable.**

9. • 05:39 The slow zoom of the root graphic restarts here

**Response: As suggested, the restarting graphic is removed.**

## Reviewers' comments:

### Reviewer #1:

#### Manuscript Summary:

The manuscript "Dry root rot disease assays in chickpea: a detailed methodology" presents the methodology for inoculation of *Macrophomina phaseolina* in order to test its pathogenicity or to select chickpea genotypes resistant to dry root rot (DRR).

The video may be useful for phytopathologists who intend to work with the fungus *M. phaseolina*. This fungus is difficult to produce inoculum and, therefore, difficult to be used in research studies in phytopathology.

#### Major Concerns:

There are two problems with the manuscript:

1. *Rhizoctonia bataticola* is an old and not valid name for this fungus and it must be named as *Macrophomina phaseolina*, which is the currently accepted name for this fungus.

Response: Fungi listed under ascomycetes and basidiomycetes divisions carry two synonyms representing the anamorph and teleomorph. Teleomorph and anamorph synonyms of dry root rot pathogen are *Macrophomina phaseolina* and *R. bataticola* respectively. Teleomorph specifies the sexual stage where sexual spores are seen, whereas anamorph specifies the asexual stage where vegetative stages like microsclerotia are seen (Agrios, 2004). In chickpea, only the microsclerotia stage is observed and pycnidial stages are not present. Hence, we would like to keep the *R. bataticola* name in our manuscript. Works of literature published on dry root rot in chickpea have been following the name *R. bataticola* (Nene et al., 1981; Sharma et al., 2015; Sinha et al., 2019; Khaliq et al., 2020)

On a related note: A similar name pattern is followed in the case of *Rhizoctonia solani*. Here, the teleomorph synonym is *Thanatephorus cucumeris*. However, *Rhizoctonia solani* has been used in the literature extensively.

2. Some small details of methodology are missing (see the text of the manuscript);

#### Minor Concerns:

Other minor comments were done in the manuscript text.

### Reviewer #2:

#### Minor Concerns:

1. English language needs to be corrected thoroughly.

Response: As suggested, the English language is corrected throughout the manuscript.

2. used update reference e.g. Abdul Khaliqa et al 2020; Integrated control of dry root rot of chickpea caused by *Rhizoctonia bataticola* under the natural field condition.

-Cite this paper to substantiate

**Response:** This reference is cited in the manuscript as suggested.