

Review Form 3

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_130044
Title of the Manuscript:	Viricidal activity of silicon dioxide nanoparticles against cowpea aphid borne mosaic virus
Type of the Article	Original Research Article

PART 1: 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>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	Cowpea is an annual tropical grain legume that has a vital role in human nutrition, particularly in developing countries like India. Being a cost-effective dietary protein source, it is an important nutrient. However, various viruses infect cowpea at all growth stages and significantly impact cowpea production. Among the different viruses infecting cowpea, the most detrimental is cowpea aphid-borne mosaic virus which is discussed in this article. Effective management of this virus is challenging owing to the rapid evolution of the virus leading to various strains. With the emergence of Nanophytovirology, the efficacy of silicon dioxide nanoparticles in combating this virus is evaluated in detail in this article.	
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.	The abstract section of the article is to the point and crisp sharing the accurate details proving the scientific robustness of the article. In this section, how various concentrations of SiO ₂ NPs on cowpea both pre- and post- inoculation of cowpea aphid-borne mosaic virus showed effective treatment is discussed. SiO ₂ NPs at 1000 ppm were found to be more effective than SiO ₂ NPs at 500 ppm. Reports of further validation using DAS-ELISA were also stated. All such findings shared in the abstract section gives a clear picture of the importance of SiO ₂ NPs in curing cowpea plants of this viral disease.	
Is the manuscript scientifically, correct? Please write here.	All findings of this research have been reported with accurate values and figures which curtails to the scientific robustness of the article. Moreover, accurate concentrations(ppm) of SiO ₂ NPs have been shared in particular which is definitely useful for future prospectives of this research.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	yes	
Is the language/English quality of the article suitable for scholarly communications?	yes	
<u>Optional/General</u> comments		

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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>	

Reviewer Details:

Name:	Shamayita Basu
Department, University & Country	Usha Martin University, India