

Review Form 1.7

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_117046
Title of the Manuscript:	Performance of ZZ (Zamioculcas zamiifolia) cultivars on different organic potting mixture
Type of the Article	

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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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>Yes, the plant is important for ornamental purposes. Improving its propagation methods, at a low cost is important</p> <p>yes</p> <p>No, it could be improved</p> <p>Yes</p> <p>I had some relevant doubts about the method: the choice of plants within each organic substrate could have influenced the results. Authors must explain better the used methodology.</p> <p>Some references should be added</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Must be improved, some sentences are written confusingly</p>	
<p>Optional/General comments</p>	<p>(Suggestions included in the comments within the manuscript):</p> <p>The abstract should be improved</p> <p>Introduction: Add 2 paragraphs presenting the studied cultivars (shortly describe plant height, leaf color, ornamental interest, market availability, etc.)</p> <p>Methodology:</p> <ul style="list-style-type: none"> - 2 cultivars, 7 organic substrates, 3 replicates. Is the total number of plants 42? - Explain the choice of these cultivars - Explain the acronyms in the table footer <p>Garden soil and forest litter should have been analyzed (NPK content may be sufficient for plant nutrition, and garden soil is often variable in nature and composition)</p> <p>-Rooted plants: In the abstract is 'rooted cuttings'</p> <p>You must have explained with further detail the plant material used in the experiment:</p> <ul style="list-style-type: none"> - What was the size of the leaflets ? - How long ago were the cuttings prepared? - Were the leaflets all from the same part of the leaf? <ul style="list-style-type: none"> - Explain the place where the plants were maintained: greenhouse or exterior; the spacing between polybags, natural light or artificial light (shadow or full light?) - Additionally to ANOVA, a post-hoc test (Duncan ou other) allowing to separate de average values should have been done <p>Results: table 1 The table should be merged with table 2</p> <p>The acronyms should be explained at the table footer: CD?; SEm? NS? The same in all other tables</p> <p>Table I: was very concerned about these rhizomes at the beginning of the experiment. In order to compare results, ate the beginning all the plants should have the same approximate size, but this is</p>	

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	<p>not the case. Cultivars could have different sizes due to their biological differences. But the plants used in the 7 different organic substrates should have been identical. In fact, the initial vigor (rhizome size) was bigger in T5, and diminishing to T6, T7, T4 and fort the last T3. Curiously the posterior development of the plants seems to be highly correlated with initial rhizome size. Please explain better how the initial plants were produced and chosen.</p> <p>The different initial vigor greatly influenced the results and could compromise the experience. Without further explanation, I cannot understand/assess whether the distinct results with the substrate mixtures must be due to the intrinsic qualities of the substrates or the distinct size of the rhizomes used in the assay setup.</p> <p>Is Super Nova a hybrid? Description of cultivars necessary in the introduction Table 2 The table should be merged with tables 3, 4, 5 and 6, placed on a page, horizontally Explain better what is the rachis, Is it from the initial cutting or from the first developed shoot?</p> <p>Growth rate; Benefit cost ratio: the calculation formula must be added to the methodology section What factors were taken into account to calculate profits? Do plants with different sizes have different market values?</p> <p>Conclusion: It is very tempting to make this conclusion, but it may not be true: 1 - the initial size of the rhizomes influenced all subsequent results (i.e. the results may not be relevant) 2 - there was no separation of means with post-hoc tests, so it is not known whether T5 is statistically better than the others. The values presented are close enough to T6, T7, T4 and T1 for there to be no statistical differences.</p> <p>REFERENCES; suggestion to add: Thongkham, L., & Phavaphutanon, L. (2018). Effect of position and size of leaflets on rooting and rhizome formation of ZZ plant (<i>Zamioculcas zamiifolia</i> (Lodd.) Engl.) leaflet cuttings. <i>Agriculture and natural resources</i>, 52(3), 246-249. Malla, P., Kedistu, R., & Singh, D. Response of natural rooting substances on leaf cuttings of two cultivars of ZZ plant (<i>Zamioculcas zamiifolia</i>). Abdel-kadir, H. A. R. (2022). Physiological study on the propagation of <i>Zamioculcas zamiifolia</i> by spraying with growth regulators and using different growing media. <i>British Journal of Global Ecology and Sustainable Development</i>, 8, 1-8. Seneviratne, K. A. C. N., Daundasekera, W. A. M., Kulasooriya, S. A., & Wijesundara, D. S. A. (2013). Development of rapid propagation methods and a miniature plant for export-oriented foliage, <i>Zamioculcas zamiifolia</i>. <i>Ceylon Journal of Science (Bio. Sci.)</i>, 42(1), 55-62.</p> <p>Eliminate some references not cited within the manuscript</p>	
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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)
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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