



**SDI Review Form 1.6**

|                          |  |
|--------------------------|--|
| Journal Name:            | <a href="#">International Journal of Plant &amp; Soil Science</a>  |
| Manuscript Number:       | 2015_IJPSS_16725   |
| Title of the Manuscript: | Establishment of organogenesis protocol for genetic modification of 'yellow pitaya' Selenicereus megalanthus |
| 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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



**SDI Review Form 1.6**

**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) |
|-------------------------------------|--|---|
| <b>Compulsory</b> REVISION comments |  |   |
| <b>Minor</b> REVISION comments      | <p><b>Title</b></p> <p>I suggest add the family which belongs to the species focus of the study in the title: Establishment of organogenesis protocol for genetic modification of 'yellow pitaya' <i>Selenicereus megalanthus</i> (Cactaceae)</p> <p><b>Abstract</b></p> <p>Line 11 - Correct succsfully ~ successfully</p> <p><b>Keywords</b></p> <p>Line 15 - Correct the specie name <i>Selinicereus megalanthus</i> ~ <i>Selenicereus megalanthus</i></p> <p>Line 15 - I suggest add (Cactaceae) in the Keywords</p> <p><b>Introduction</b></p> <p>Line 20 - Verify the citation (Wu et al., 2006) in the list of references, because it is incomplete. Complete reference, please, correct: Wu, L.C.,</p> |   |



SDI Review Form 1.6

|  |  |  |
|--|--|--|
|  | <p>Hsu, H.W., Chen, Y.C., Chiu, C.C., Lin, Y.I. and Ho, J.A. 2006. Antioxidant and antiproliferative activities of red pitaya. Food Chemistry, 95: 319–327.</p> <p>Line 23 - The correct name of red pitaya is <i>Hylocereus polyrhizus</i> (F.A.C. Weber) Britton &amp; Rose. Correct (<i>H. polyrhizus</i>) ~ <i>H. polyrhizus</i></p> <p>Line 29 - Verify the reference (Jacobs, 1999). In the reference list, this reference is different from others. Please, standardize all references.</p> <p>Line 31 - “but its flesh is pleasantly sweet”, Do you mean... but its "fleshy pulp" is pleasantly sweet?</p> <p>Lines (32-34) - Add references about the descriptive of the specie.</p> <p>Line 33 - In the phrase: “It is an epiphyte, and its aerial roots attach themselves to various types of supports”. Please, exemplify types of supports.</p> <p>Lines (33-34) - “The fruit is ovoid, spiny and yellow”. After this phrase, you can add information about the seeds, for example: The fruit is ovoid, spiny and yellow, with <u>numerous</u> small black seed embedded in a white pulp.</p> |  |
|--|--|--|



**SDI Review Form 1.6**

|  |   |  |
|--|---|--|
|  | <p>Line 36 - In the citation (Elobeidy 2006), add (,) inside the parentheses.</p> <p>Lines (42-43) - In the phrase: “The shoot proliferation and somatic embryogenesis in yellow pitaya have been previously reported”. It is important to cite studies showing that.</p> <p>Lines (43-46) - In the phrase: “Infante (1992), who used epicotyls as explants in a culture medium containing various combinations of naphthaleneacetic acid (NAA) and 6-benzyladenine (BA). Clarify. Whose were the epicotyls? is yellow pitaya? Another plant?</p> <p>Line 46 - “Pendal and co-workers (2002) used the thidiazuron (TDZ)”. Same remark of the previous comment. Is pitaya too?</p> <p>The citations (Infante, 1992 and Pendal et al., 2002) aren't included in the reference list. Please add.</p> <p>Line 47 - Maybe you can change the phrase “Objective of the current study is to develop” ... for “In the present study we develop the organogenesis protocol in yellow pitaya by means for application in genetic modification of the germplasm”</p> |  |
|--|---|--|



SDI Review Form 1.6

|  |  |  |
|--|--|--|
|  | <p><b>Material and Methods</b></p> <p>Lines (52-53) “Seeds of yellow pitaya were obtained from mature fruits bought at Harrods that sold as a produce of Colombia”.</p> <p>-What is Harrods? market? City?</p> <p>- How many fruits bought?</p> <p>I suggest start the phrase that way: Seeds of <i>Selenicereus megalanthus</i> (K. Schum. ex Vaupel) Moran .... rather than ... Seeds of yellow pitaya and cite the authors of specie.</p> <p>Line 53 - “The collected seeds”... The seeds were not collected, the seeds were bought. Please, replace (collected), because you can spend a false impression to the reader or another option: “The seeds were thoroughly washed”...you can remove (collected)</p> <p>Lines (53-56) - Is a pattern procedure the washing of seeds?? Please, cite reference.</p> <p>Line 59 - A total of 200 seeds were randomly divided into two groups. The 200 seeds were removed of a only fruit? Specify the number of fruits of which the seeds were removed.</p> <p>Do you know the average number of seeds of a yellow pitaya? Could add this information in the part that describes the species.</p> |  |
|--|--|--|



**SDI Review Form 1.6**

|  |  |  |
|--|--|--|
|  | <p>Line (59-60) - “The seed coats were excised and removed from the first group, while second group remained intact”. Clarify. Each group was 100 seeds?</p> <p>Line 62 - “The number of germinated seeds were recorded.” When the observations were realized? Please, inform, every day? every week?</p> <p>Line 64 - “Erlenmeyer flasks containing 30 mL of the following growth medium; i.) MSA” Correct “growth medium: i)” Please, replace ( ; ) for ( : )and remove the point after i.</p> <p>Line 66 - “ii) WPM (woody plant medium (Lloyd and McCown, 1980); MSO (MS basalt salt)”;</p> <p>MSO is a growth medium? It should be the treatment (iii). However, you have 5 treatments, because in the Figure 4 and Table 1 show five treatments.</p> <p>Line 70 - Replace “under 16h/8h (day/night) provided by cool-white fluorescent lamps” for “under 16h/8h photoperiod provided by cool-white fluorescent lamps”.</p> <p>Line 79 - “The number of branches or any changes on the plantlet was recorded.” When the records were realized? Please, inform, every day? every week?</p> |  |
|--|--|--|



SDI Review Form 1.6

|  |  |  |
|--|--|--|
|  | <p>Line 80 - “25 replicates per treatment” ... 25 replicates seeds? What is the total of excised and non-excised seeds? And what is the total for treatment?</p> <p>Line 82 - Replace: “Significance of differences between means was tested by DMRT’s Test (<math>p \leq 0.05</math>)” for “Significance of differences between means was tested by DMRT’s Test (<math>p \leq 0.05</math>) a posteriori”.</p> <p><b>Results and Discussion</b></p> <p>Lines (91-92) Review the phrase - “In most cases.” Remove or separate with ( , )</p> <p>Line 100 - “on the culture medium” Please, replace in other paragraphs of your paper: growth medium for culture medium. Keep a standard.</p> <p>Lines (102 - 103) - “The embryos was directly exposed to the culture medium and allowed the water and nutrient uptake by embryos.” Here, You can cite some study on seed physiology and discuss this result.</p> <p>Line 142 - Table 1: Effect of media types on the branching of <i>S. megalantus</i>. Correct the specie name. Replace <i>S. megalantus</i> ~ <i>S. megalanthus</i></p> |  |
|--|--|--|



SDI Review Form 1.6

|  |  |  |
|--|--|--|
|  | <p>Line 130 - “The growth of plantlets was significantly influent by the type of medium used (Fig. 4).” Replace influent ~ influenced</p> <p>Lines (133 - 135) - “On the other hand, the formation of organ on yellow pitaya was influence by the hormone added into the culture medium by the hormone added into the culture medium.” Please, inform when the hormone was added.</p> <p>Lines (138-139) - “Callogenesis was observed on explant culture in NAA containing medium for 8 weeks”. Discuss this result.</p> <p>Improve the graphics. Change the colors of the lines the graphics to a grayscale. Remove the grid within graph.</p> <p>Verify the legend and the axis of the Figure 1. Is Clorox or Chlorox? In the Figure 1 legend appears one way and axis of the graph another.</p> <p>Figures 3 and 4 are out of order. Reverse the order.</p> <p><b>Conclusions</b></p> <p>Lines (156 - 157) - “The phytormone-free MS basal salt is suitable for establishment of the culture. MSmedium with 2mg/L BAP is suitable for organogenesis that might be used as explant for</p> |  |
|--|--|--|





**SDI Review Form 1.6**

|   |  |  |
|---|--|--|
|   | genetic transformation”. And the other methods?<br>Please, cite them here too.<br><br><b>References</b><br><br>Please, standardize all references, and some citations are not in the list of references. |  |
| <b><u>Optional/General</u></b> comments |  |  |

**Reviewer Details:**

|                                  |                  |
|----------------------------------|------------------|
| Name:                            | <b>Anonymous</b> |
| Department, University & Country | <b>Brazil</b>    |