



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_14099
Title of the Manuscript:	Variations in $\delta^{13}\text{C}$ rates and Crassulacean acid metabolism of six different <i>Coleus</i> species
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.

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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)
Compulsory REVISION comments	Variations in $\delta^{13}\text{C}$ rates and Crassulacean acid metabolism of six different <i>Coleus</i> species is a descriptive paper with no tested hypothesis. Nevertheless, experimentally properly conducted and of some interest for researchers in the CAM field. Title: no need for the word different and crassulacean does not require capital letter. 1) Second cited reference is not appropriate and the information is slightly out of date, see Smith & Winter 1996; Reinert & Blankenship 2010; Simpson 2010. 2) The choice of the forth reference is not clear. 3) Some language review is required; ex. (line 33) "CAM plants <u>are possessing</u> high efficiency in water utilization"... (line 34) "They have <u>scotoactive</u> stomata," ... (line 42, 46 and elsewhere) "the present study" is not an English expression.	Word different has been removed and the capital letter from Crassulacean has been changed to crassulacean. Second reference has been changed to Fernanda R, Robert, 2010 Changed to Christopher & Holtum, 1996 Sentence has been changed to CAM plants possess high efficiency Changed to " CAM plants contain scotoactive stomata" Changed to In our investigation



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	(line 83) <u>1g</u> of leaf tissue was cut into small pieces <u>was</u> boiled in”... (line 160) ...”facilitates ~~the~~ water uptake.” (line 163) ...”<i>Coleus aromaticus</i> and <i>C. ambonicus</i> <u>have shown</u> high levels. (line 88) <u>0.9 ml</u> of supernatant solution”... 4) Once again, fifth reference is not appropriate. It is neither the original paper nor a review paper. 5) Incorrect information: ... “stomata, which opens <u>only</u> during night”... author(s) should refer to the four phases of CAM. 6) Author(s) cite two types of CAM (line 31) – should call it three. 7) Incorrect nomenclature and missing reference and: “Genus <i>Coleus</i> belongs to family <u>Labiatae</u> and is popular CAM plant in India”... (line 38). 8) Which sps? So far author(s) mentioned only the genus (line 41).	Changed to <u>1g</u> of leaf tissue was cut into small pieces, boiled in”... The was removed Sentence was corrected Sentence was corrected Reference was changed Only has been deleted Changed Paragraph comprising the significance of <i>coleus</i> species was added. Genus <i>Coleus</i> comprises several species popular for their medicinal and horticultural properties. Among them, six species were considered for this study.
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	9) Author(s) should mention that CAM has been described in at least two genera of the Lamiaceae. 10) “Six <i>Coleus</i> species namely <i>aromaticus</i>,”... should be: Six <i>Coleus</i> species namely <i>C. aromaticus</i>... (line 49). 11) Light conditions in Cambridge?! Check information: ...“12h natural photoperiod [~~Irradiance (400-700 nm)~~ of <u>1600-1800 $\mu\text{moles m}^{-2}\text{s}^{-1}$</u>] (line 50). 12) Should be capital Delta Roman character ($\Delta^{13}\text{C}$) (line 59). 13) Cite properly - according to AUTHOR (YEAR): ...“according to [7]”... (line 59); the same in line 71, 77, 87, 106. 14) What was the statistical treatment of the data? 15) At what time samples were collected for titratable acidity? 16) Requires space: “<i>C.aromaticus</i> and <i>C.ambonicus</i>”... (line 114).	Description added in the introduction. Changed. Sentence has been changed. Changed Citation and repetition was changed. Under each figure and table the statistical analysis has been mentioned. Time has been mentioned Space was given.
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	17) Figures 1 and 2 do not show the correlation as stated in: “A significant variation in the stable isotope levels was observed among the <i>Coleus</i> species which is correlated with”... (line 115). 18) <i>Coleus</i> plants are ~~exhibiting~~ NAD(P)-ME type of photosynthesis carbon”... (line 119). 19) ...”~~were possessing better~~ photosynthetic performance”... should be instead, SHOWED HIGHER (line 125). 20) ...” PEP carboxylase that fixes nocturnal CO₂ discriminates less against ¹³C than Rubisco.” PEPC actually discriminates slightly in favour of ¹³C (line 134). 21) ...”will be similar to that of C₄ plants.” Actually, ¹³C values are between C₃ and C₄ plants (line 136). 22) ...”with other <i>Coleus</i> species.” Should be: with THE other <i>Coleus</i> species (line 142) Again in line 147. 23) Statement in line 143-4 requires reference. 24) ...”oxalo acetic”... is one word (line 145). 25) Data in the paper alone does not support the statement of line 147-9; requires comparison with the literature. 26) Statement starting on line 163 requires reference. Again line 168.	Figure 1 has been re-drawn. Changed. Sentence was changed Changed Sentence has been changed. Added. Reference has been cited. Changed in the text. Statement has been included along with the supportive citation. Reference was provided.
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	27) Conclusion section needs to be rewritten. First sentence is not a conclusion of the paper (line 183), nor is the third sentence. 28) General: - several double and missing spaces between words; - references list is not standardized. 29) Table 1: ...”each <u>point is</u>”... - should be: each <u>value represents</u> 30) Figure 2: wrong choice of graph type, data is for each sps, so it should be a bar graph or non-connected points.	Conclusion has been re-written omitting the first and third sentences. Spaces have been reduced and reference list has been re-done. Figure 2 has been redrawn using bar graph.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		