



**SDI Review Form 1.6**

Journal Name:	<a href="#">Annual Research &amp; Review in Biology</a>
Manuscript Number:	Ms_ARRB_40352
Title of the Manuscript:	Effect of Nitrogen Rates on Growth, Carbon Assimilation and Quality of Water Spinach (Ipomea aquatica)
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>)

**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><u>Compulsory</u></b> REVISION comments	<p>In the text CO<sub>2</sub> must be CO<sub>2</sub></p> <p>In the manuscript "the direct sunlight is always sufficient" means you conducted this experiment in a container or room. Therefore, it is quite difficult to get a real result to apply in a real condition.</p> <p>The title must be "Effect of Nitrogen Rates on Growth and Quality of Water Spinach (Ipomea aquatica)"</p> <p>Why?</p> <p>Plants obtain the gases they need through their leaves stomatal opening and closing depends on changes in the turgor of the guard cells. Plants require oxygen for respiration and carbon dioxide for photosynthesis. Nitrogen is part of the chlorophyll molecule, which gives plants their green color and is involved in creating food for the plant through photosynthesis. Leaf of nitrogen shows up as general yellowing of the plant.</p> <p>Therefore, the gas exchange rate will be different because of the different plant growth rate of nitrogen applied, which affecting plant growth. Therefore, this situation is due to that nitrogen is essential element for plant growth and development. This is quite normal to have different carbon dioxide ratios.</p>	<p>We conducted the experiment in an open field and not in container or room</p> <p>The title have been changed as requested by the reviewer</p> <p>The increase in leaf gas exchange particularly A in the current study might be due to increase in production of RuBisCO the photosynthesis enzyme that fixed CO<sub>2</sub>. As more nitrogen received by the plant there will be expected more production of RuBisCO, and more CO<sub>2</sub> will be fixed that simultaneously invreased A in the present study. This have been explained in the result and discussion</p>
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		

