



**SDI Review Form 1.6**

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	2013_IJPSS_6870
Title of the Manuscript:	Irrigation strategies for optimizing water table contribution to soil moisture storage and water use of pepper in a humid tropical zone of Nigeria
Type of the 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>)



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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)
<b>Compulsory</b> REVISION comments	<p>The study itself is an interesting topic, especially it tried to examine the contribution of groundwater to the ET of a pepper crop grown in dry seasons. However, there are some concerns need to be addressed before considering for publication:</p> <ol style="list-style-type: none"> <li>1. English writing needs improvement.</li> <li>2. "Water table" should be "groundwater"</li> <li>3. For MM section, the method that is not used in this study should be deleted, such as Lines149-162. Detailed information should be supplied with the root sampling and monitoring the growth and final yield of the crop.</li> <li>4. Mis-understanding and calculation of potential ET and actual ET, which undermines the credibility of the results from this study. There are also mistakes in the equation development (Lines 164-188) and the definition of CWSI.</li> </ol> <p>The FAO equation calculate the reference ET, called ETo. Potential ET for a certain crop can be calculated using the reference ET (ETo) multiplied by crop coefficient, Kc, to get the potential ET of the crop (ETp). For actual ET of a crop (ETa), you must directly do the measuring, or to calculate it from ETo, but the crop coefficient must be corrected with the soil moisture conditions. Without water deficit, the ETp can be taken as the actual ET, but when there is water deficit, actual ET is generally lower than the ETp.</p> <p>Personally I think it might not be possible to accurately estimate the groundwater contributions to ET just using the FAO equations</p>	<p>The English writing is improved</p> <p>"Water table" is corrected to read "groundwater"</p> <p>The methodologies that were not used in this study were deleted, such as Lines149-162.</p> <p>Detailed information is supplied with the root sampling and monitoring the growth and final yield of the crop.</p> <p>The mistakes in the calculation of potential ET and actual ET rectified</p> <p>The mistakes in the equation development (Lines 164-188) and the definition of CWSI were corrected.</p> <p>The errors in the FAO equation for calculation of evapotranspiration are regretted and corrected</p> <p>Thus the reference ET, called ETo. Potential ET for a certain crop can be calculated using the reference ET (ETo) multiplied by crop coefficient, Kc, to get the potential ET of the crop (ETp).</p> <p>Potential ET of the crop (ETp) is substituted for ETo in the text throughout</p> <p>The actual ET of the crop (ETa) was directly measured and also calculated from ETo using the crop coefficient kc. the crop coefficient was corrected with the soil moisture conditions. Without water deficit, the ETp can be taken as</p>



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	<p><b>to calculate the actual ET just use the Kc from the FAO book. If the authors want to do so, they must use equations to calculate the real Kc based on the canopy size and soil moisture conditions.</b></p>	<p>the actual ET, but when there is water deficit, actual ET is generally lower than the ETp.</p> <p>The real Kc was calculated based on the canopy size and soil moisture conditions</p>
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		