



**SDI EDITORIAL COMMENTS FORM**

<b>EDITORIAL COMMENT'S on revised paper (if any)</b>	<b>Authors' response to editor's comments</b>
<p>Some corrections are shown in the article descriptions and in red color.</p> <ol style="list-style-type: none"> <li>1. Is the data of only 1 season in order to understand the accuracy of a model in a region enough?</li> <li>2. The models using at the manuscript have very old date (1965, 1978,1990, 1992, 1994). Why not are used new models for examples;             <ol style="list-style-type: none"> <li>a- (2002) Determination of spatial water requirements at county and regional levels using crop models and GIS: An example for the State of Parana, Brazil.</li> <li>b- (2014) Modelos de regressão espacial para estimativa da produtividade da soja associada a variáveis agrometeorológicas na região do estado do paraná</li> <li>c- (2014) Simple agrometeorological models for estimating guineagrass yield in southeast brazil</li> <li>d- (2015) Agrometeorological models for forecasting yield and quality of sugarcane</li> <li>e- (2018) Regression models for prediction of corn yield in the state of Paraná (Brazil) from 2012 to 2014.</li> </ol> </li> <li>3. What is the C4 plants (line 65)?</li> <li>4. What is the By at the formula [ <math>By = (Bn * HI * (100 + U)) / 100</math> ]</li> <li>5. Picture 1 and 2 have the same data with Table 3</li> <li>6. The picture must be written english language</li> <li>7. Reviewers say ok, but the article still contains typos!</li> </ol>	<p><b>1. Is the data of only 1 season in order to understand the accuracy of a model in a region enough?</b></p> <p>In advance both models do not have a description about the amount of harvest used. From that budget, we resolve to use only one crop. Thus, according to our results, despite using only 1 harvest, in all the cities evaluated, model 2 of doorenbos and Kassab, characterized the yields closest to reality. Thus, we can have an indication of the model's precision for the study region. Remembering that the same is a study, where we would like to give an indication of the best model for our Region. So other studies are being carried out for the improvement of the same and future publications. In this way a correction was made at the conclusion of our work.</p> <p><b>2. The models using at the manuscript have very old date (1965, 1978,1990, 1992, 1994). Why not are used new models for examples</b></p> <p>As we still do not have in-depth studies of maize crop models in Mato Grosso, we use these models because they are easy to understand and apply due to the low input data requirements. As discussed in question 1, studies continue to refine these models and find other models for this region.</p> <p><b>3. What is the C4 plants (line 65)?</b></p> <p>Carbon fixation in photosynthesis occurs through different mechanisms. The plants are classified as C3, C4 or CAM according to the photosynthetic mechanisms used.</p> <p>Some plant species have developed strategies to minimize the damage caused by photorespiration. Hatch &amp; Slack, in 1966, elucidated the C4 cycle. In their studies, they observed some remarkable characteristics in plants that exhibit this photosynthetic mechanism, such as the appearance of a particular anatomy, with spatial separation between the mesophylic cells and the cells of the vascular bundle sheath (Kranz's anatomy). The main characteristic of this cycle is the mechanism of concentration of carbon in the cells of the pod, which makes RUBISCO act almost exclusively as a carboxylase, practically eliminating photorespiration. Discovered in tropical pastures, such as corn and sugar cane, the C4 cycle occurs in at least 16 families, both monkeys and eudicots, standing out in the Poaceae (corn, sugar cane, millet, sorghum, Panicum), Chenopodiaceae (Atriplex) and Cyperaceae.</p> <p>Hatch M D &amp; Slack C R. Photosynthesis by sugar-cane leaves. A new carboxylation reaction and the pathway of sugar formation. <b>Biochemical J.</b> 101:103-11, 1966.</p> <p><b>4. What is the By at the formula [ <math>By = (Bn * HI * (100 + U)) / 100</math> ]</b></p> <p>By- is the estimated potential yield. That is, it is the estimate of the maximum production yield per kg ha<sup>-1</sup></p> <p><b>5. Picture 1 and 2 have the same data with Table 3</b></p> <p>Yes! They are the same data. We brought the picture to better show the data. But if necessary, we can remove them and simply leave the table.</p> <p><b>6. The picture must be written english language</b></p> <p>the changes were already made directly in the manuscript.</p>