



**SDI Review Form 1.6**

|                          |                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| Journal Name:            | <a href="#">American Journal of Experimental Agriculture</a>                                          |
| Manuscript Number:       | 2015_AJEA_18307                                                                                       |
| Title of the Manuscript: | EFFECT OF WATER AVAILABILITY ON THE ESTABLISHMENT, GROWTH, DEVELOPMENT AND YIELD OF OIL PALM IN GHANA |
| 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**

|                                     | <b>Reviewer's comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Author's comment</b> (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 is focusing on the effect of <b>water availability</b> on the establishment, growth, development and yield of oil palm in Ghana. I am of the opinion that the aspect of water availability was not well established in this study. Mind you, there are lots of factors that can have an effect on the establishment, growth, development and yield of crops, for example, temperature, soil type, evaporations, water quality and many more. The biggest question here is “how did the author isolated water availability? And leave all other factors that can affect the growth of oil palm? Of course there is a way to do that and the author must explain it clearly.</p> <p>Isolating one factor out of a wide range of factors requires a well strategized plan. The whole concept of this study is based on the assumptions but not fact that indeed water availability played a major role in the establishment of an oil palm. In order to be sure if indeed the water availability has played a significant role in the establishment of oil palm at different period of time, the author was supposed to have clearly indicated the amount of water supplied to the crops and provide the soil</p> | <p>The title has been changed to suite the experiment done since soil moisture content was not measured directly.</p> <p>All other factors remain the same. The only variable we varied was the rainfall and transplanting month. All the plant were on the same environment and the planting materials too were of the same type (same parent). Even though temperature, soil type, evaporations, water quality and many more contribute to growth of oil palm, they were of the same soil and environment and they are therefore not considered as a major factor in this study</p> |



**SDI Review Form 1.6**

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                    |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | <p>moisture measurements results since not all of water from rainfall or any other type of irrigation are absorbed by the crops. In order to know this, one need to have an idea of the moisture content of the soil at various periods. The author was also supposed to have run the correlation analysis where by the relationship between either amount of water applied or soil moisture and the measured parameters are established. This would have given us an idea of how much water was used at a certain point of time and their contributions to the growth development and establishment of the oil palm. Without this information, it is absolutely impossible to can conclude that water availability had an effects on the establishment of oil palm. One can ask a question and say what about the effect of temperature, soil type, water quality, fertilization and other chemicals applied?</p> | <p>This work does not actually measure water used by the palm, it studied the monthly rainfall and crop establishment.</p> <p>Temperature, soil type, evaporations, water quality and many more are not major factors in the same environment.</p> |
| <b><u>Minor</u></b> REVISION comments   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                    |
| <b><u>Optional/General</u></b> comments | <p>My suggestions are that the paper sent back to the author in order to address all the queries that I have indicated and do all the corrections as indicated on the text. Consult a statistician who will help you in correlations analysis. I strongly believe that this will change the whole complex of your study where most of the results did not showing any significant differences.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                    |