Review of: "A Study for Estimation of Greenhouse Gas Emissions of Cotton in Central Greece"

Tessema Toru[1]

1 Haramaya University

Potential competing interests: No potential competing interests to declare.

Comments

General comments

- The document has serious language problem (grammar, incomplete sentences, lack of using appropriate technical terms)
- Descriptions about the study area are presented without any citations though data was used from other sources.
- Results are not well discussed
- There is a mix up between method and results
- The depth of the research is shallow

Title

Review on “A Study for Estimation of Greenhouse Gas Emissions of Cotton in Central Greece”

Suggested title: Components and driving factors for Greenhouse gas emission from cotton cultivation in central Greece

Abstract:

The interest of the study is to identify the main components and driving factors of greenhouse gas (GHG) emissions. Therefore, the abstract should be articulated accordingly.

Introduction:

Issues related to the aim of the study are not well explored

Material and Methods

- There has to be a clear demarcation between material and methods. First indicate the material part and then detail explanation of the methods employed.
- The geographical coordinates of the study area should be indicated for easy understanding of global readers.
- “The plots resembled each other in terms of soil structure, climatic conditions, and topography” it is part of the method (criteria for selection of the study area). It should not be part of the material.
- It would have been good if table 1 is presented in graphical form: temperature in line graph and rainfall in bar graph but

all together. This makes the paper more attractive and easily understood by readers

- Table 2 is part of result and discussion. It might be obtained from secondary sources or from own investigation

Land preparation part:

- Incomplete sentences, there are also issues which are not technical such as “destroy weeds, harrowing to cover pesticides, and herbicides?

Fertilizer application

- 300-450 kg N-P-K (20-10- 10) per hectare at sowing (via the sowing machine) and another 250-350 kg N-P-K (20-10-10)
- Cultivation Practices: There are no citations provided for all the cultivation practices mentioned
- Table 3 is result
- Soil types for irrigation: Check the way how the sentence is constructed. It says “The soil in the plot’s region is characterized as fine texture with good drainage and organic matter less than 1.72% and PH ranging between 7.3-8.5”. You can say: The soil in the study area has a fine texture with good drainage and has low organic matter (> 1.72%) and alkaline (7.3 -8.5).

Data collection

1. How the 12 farmers were selected? (What was the sampling procedure used)
2. Check this sentence. It has different meaning “The**farmers of the sample plots** were contacted individually to provide the information.
3. Farm data was collected through a questionnaire divided into five groups…it should be five categories [T1] .
4. The mentioned categories (groups) should be presented precisely. Data that was collected in each categories should be presented separately and in appropriately way
5. In group 1 (Cultivation details), the cultivation area, quantity of fresh product (whole plant) [T2] and the quantity of final product were noted. Group 1 was also provided with data on waste management[T3] . Ftesh product and whole plant are different. Why data on waste management is provided? How it is related with your questionnaire survey?
6. In group 2, soil characteristics were recorded, such as soil texture (clay, silty, sandy, etc.), soil organic matter, soil moisture, soil drainage as “good”, and finally, the soil pH was noted[T4] .How could it be possible to gather such basic information through questionnaire unless you have used some sort of ratings or laboratory work?
7. Estimation of GHG emissions during the cultivation phase Cool farm tool[T5] (https://coolfarmtool.org/) was used in order to calculate greenhouse emissions. Cool Farm is a calculating tool for estimating greenhouse gas emissions, carbon footprint in a field based on yield and marketable yields, crop area, fertilizer applications (type and rate), number of applications of pesticides… Please use technical terms. Eg. Better if you write as frequency of application of pesticides Instead of number of applications of pesticides

Result and discussion

- It would have been good if the main components and driving factors are first identified and presented as indicated in your objective.
- Figure1a and Figure 1b: Please check the values indicated on the graphs. Eg. 198,9 or 198.9
- Figure 2 is presented in both word and pie chart formats. Instead of repeating the same issue in word and chart format better if you can elaborate and discuss what is presented in the chart.
- Results are not well discussed.

Conclusions

- A conclusion is a concluding remark about the findings of your study
- Don’t mix up conclusion with discussion. Literally conclusion is not the part to be discussed.

My conclusion

The paper has serious editorial and technical problems

.