

Review of: "Determination of Evapotranspiration and Crop Coefficients of Irrigated Legumes on Different Soil Types Using the FAO56 Approach"

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Potential competing interests: No potential competing interests to declare.

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Abstract

Line 9, 15, 17 change crop coefficients (CC) to Kc

Line 15, Delete RCBD

Line 18 to 20, you conclude that the outcomes of this study would enhance efficient water management practices and ultimately improve both crop and water productivity. Please concisely explain how?

Introduction

No comment

Materials and Methods

Did you measure infiltration rate? You mentioned somewhere how important it is!!

Line 9 on page 6, you mentioned irrigation was consistently applied, what type of irrigation method did you apply? Did you design an irrigation schedule? If yes, where is it?

Line 9 & 10, you explain that irrigation was applied whenever the soil water content reduced to 40% of the soil's field capacity, at an average rate of 593Mm3/ha? How did you manage it? Please provide detailed information in this regard. Concisely explain how you did it for readers.

Line 5 -22 on page 8, you talk about the water balance, but your assumptions are not clear and some of the sentences are incomplete, please revise

Line 1-8 on page 9, you estimated *LAI*, but you never showed us how the leaf area (LA) was calculated? But you have used it to estimate *LAI*???

Line 21 on page 9, you described that the Least Significant Difference (LSD) was used to separate all means at the 95%

level of confidence. Do you think this is appropriate for your treatments analysis? You better use Tukey for your treatments mean separation!!! This is the suggested technique for treatments greater than three because LSD will give you false results as it is weak for mean separation greater than three!

Results

Line 7 on page 10, line 5 on page 11, line 12 on page 13, you presented plant height, number of leaves, and water use efficiency results, but you never mentioned when, how, and why these parameters were measured in the methodology??

I didn't go through the results because of the problems in data collection and analysis methods mentioned above.

Decision: major revision