Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	**Ms_JEAI_41818**
Title of the Manuscript:	**Limitation of relative transpiration and growth of Arabic coffee in response to water deficit**
Type of the Article	**Original Research Article**

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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.
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SDI Review Form 1.6

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)*
Compulsory REVISION comments	Figures 1, 2, 3, should be after 4, 5, 6, adapting the discussion that needs re-organization. Eq. 1 and 2 are wrong (give negative values) and the expression "relative transpiration" here is also wrong. Relative transpiration is always necessarily without dimensions, cannot be a difference (a negative one). Word "regimes" should be replaced by "treatments"; "levels" should be replaced by "periods" (P1, P2, P3). Several not clear paragraphs. Main parts to be re-written: lines 35-42, 99-109, 142-158, 242-247, 280-314 (remove 280-284, 303-307, quite unclear, many repetitions). Lines 226-232 (apparent contradiction) should be re-organized and better written. There are too many references, for too basic concepts (e.g. lines 129-130). Too many basic concepts are too much repeated (e.g. lines 280-284 repeated idea). The discussion is insufficient. Results should be related to the well-known depletion factor concept (p), see for instance FAO 56. The shape of the lines can be discussed in relation to literature and physical meaning. Conclusion too simple and incomplete, the mn has some interesting results that are not explicit here in the conclusion (as the percentages shown in figures 1 to 3) and some of the comments about. References need completion (e.g. 29), verification of norms, avoiding repetition (e.g. 9, 34, 44 are the same).	
Minor REVISION comments	Too many due to poor English. I jump the worst parts with too many corrections. Here are only some suggestions: Line 15 - Where is ref 1? CONAB is ref 2. Line 16 - Estimates for the 2018 harvest correspond to… …. bags. Which quantity means "bag" in this context? (lines 16, 20, 22, 35) Line 17 – avoid coma in numbers, this is not international notation. Line 18- with Coffea arabica Line 21 – not species, but commodity Line 23 – an increase is expected… Line 24, near future, … Line 33 – drought, irrigation scheduling becomes fundamental. … (not irrigation technique) Lines 35 – 42 – I find several uncorrected/unclear statements. I suggest: Estimating crop water requirements is a key factor. The actual fraction of the available soil water (FASW) indicates the actual volume of water that can be extracted by plants, per unit of area, and in a certain moment, in relation to the total available soil water and can be used to estimate irrigation depth and to express the effect of soil water deficit on….when it occurs. (or even FTSW, less common). Lines 54-55 – I suggest: …289.0 m) with Coffee arabica, 'IAC-144'. Line 57 – delete "three levels"; may be use: "applied during three different periods". Line 74/75 – …was performed according to … … by Novais et al. …and the soil water retention curve … Line 79 – "was carried out" move to the end of the sentence. Line 80 – relace verified by followed? Line 83 – are at maximum rate (not potential). Lines 86/87/88 – correct English! Line 91 – Line 94 – the soil reached (not the plant) Line 97 – variation? Line 99 – as demonstrated ??? This is incorrect (eq), see above. Do you mean DTT and ADT? Correct equations. Several nonsense details. Line 112- romove "by the sweating of the day" and correct the word plot. How pots can make a plot? Line 128 – replace was used by we used. Line 140 – analysis. Line 148 – eq 5, again negative outputs, why? Lines 152-157 – not fully clear for the reader, may be an example? Is this the equation used for the stress coefficient in FAO 56? Line 182 – do not use "epochs" (also line 243), make reference to data (figure or table). Line 184 – the work of… Do you mean Ribeiro or reference 19? Line 188 versus 190 – explain: less efficient or early closure??? Line 209 – indicate values per order P1, P2 and P3 like the order of Figures.	

	Line 210 – FATS? In Figures 1, 2 and 3 eventually do not refer a precise value that is a bit subjective depending on your line but rather indicate an interval. In fig 2a, for example, say a threshold between 0.7 and 0.6 instead of 0.81. In all figure captions replace the word seasons by periods. Line 222 - refer to fig 3. Line 224/5 – … to resist to long water restriction periods contributing… but ensuring water savings. Line 250 – when submitted. Line 292 – …corroborate those found by (this paragraph suggest this comment: of course! and this is for introduction not to be repeated again here). Line 323 – water scarcity or deficit, not variation. Line 326 – the plants later submitted to stress (P3)…	
Optional/General comments	This is a useful and honest old style (weighing pots) study about the effects of a stress cycle on soil water deficit, transpiration and selected growth variables, on young coffee plants. Major revision is necessary. Figures too small, not visible enough (captions too big). English needs revision.	

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