



SDI Review Form 1.6

PART 1:

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	2013_BJAST_5738
Title of the Manuscript:	Physiological Effects on Re-Growth of Forage Sorghums Ratoon Crop under Varying Salinity and Irrigation Frequency
Type of the Article	Research Paper

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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)
<u>Compulsory</u> REVISION comments	The manuscript entitled „Physiological effects on re-growth of forage sorghums ratoon crop under varying salinity and irrigation frequency“ represents a nice physiological study on two forage sorghum varieties Speedfeed and KFS4 subjected to various levels of salinity (0, 5, 10 and 15 dS m⁻¹). The effect of salinity on leaf water potential, chlorophyll content, photosynthesis-related parameters (net photosynthetic rate, stomatal conductance) and stomatal characteristics (stomata density, stomata width, stomata length, stomata width to length ratio). All data are presented in the form of two tables and six figures. Statistical treatment of the data is also given. The main results obtained by data analysis are summarized in Conclusion section. Overall, I have no major comments on the manuscript.	Thanks
<u>Minor</u> REVISION comments	I have only some minor revision comments. 1/ Two different criteria for evaluation of salinity stress are used in the manuscript. The first is conductivity of plant growth medium (dS m⁻¹) which is directly associated with a given concentration of sodium chloride. The second is	1. Two sorghum varieties are genetically different, and have different potential and capacity. 2. The missing references were added 3. Grammar mistakes throughout the manuscript corrected



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	leaf water potential which is dependent upon plant material under the given salinity level (sodium chloride concentration). Maybe that I have not understood this clearly, but I would greatly appreciate if any clear information on leaf water potential in both sorghum varieties under all sodium chloride levels used in the experiment (0, 5, 10, 15 dS m⁻¹) could be given in the manuscript. Maybe that it is already given in Table 1 but I have not understood Table 1 arrangement clearly (how the data on the individual physiological characteristics are distinguished according to the two sorghum varieties?). 2/ I have noticed that the list of references is incomplete. It ends with the reference "Poljakoff-Mayber and Lerner 1999" and the following references are missing there. "Rhodes et al. 2002", "Salisbury 1927", "Shabala et al. 1998", "Thimmaiah 2002", "Yurtseven et al. 2002". Similarly, in the manuscript text, I have noticed that the reference "Fouman, 2003" (section Materials and methods, line 57) should be cited as "Fouman et al. 2003" since there are three authors according to the reference list. 3/ I have found some minor grammar mistakes throughout the manuscript. For example, in Abstract, line 13, the sentence starting with "Salinity and irrigation frequency significantly ($P \leq 0.05$) affected leaf water potential, chlorophyll content, photosynthetic rate, stomatal conductance and stomatal size." should be in an active form instead of a passive form used in the manuscript.	4. Information on salinity of tap water is not given in the study of Anand et al. 2000
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	There are also some typing mistakes in the manuscript such as “frequenciey” instead of “frequency” (Abstract, line 22). Furthermore, there are some formal mistakes such as the rule that plant scientific names should be written in italics which is not carried out in some cases (Discussion, line 230 – <i>Vicia faba</i>). I recommend a linguistic revision of the manuscript. 4/ Just out of curiosity – in Discussion, line 240, the work of Anand et al. (2000) is cited where the effects of tap water and water of salinity of 4 dS m⁻¹ are compared. I would recommend to add the information on salinity of the tap water in dS m⁻¹ to the sentence for comparison (if the information on salinity of tap water is given in the study of Anand et al. 2000).	
<u>Optional/General</u> comments	I think that as the whole, the manuscript represent a nice physiological study carried out on two different forage sorghum varieties with respect to their salinity response. I can recommend the manuscript for publication after a minor revision of the items suggested above.	Thank you so much