SDI Review Form 1.6

Journal Name:	**Journal of Experimental Agriculture International**
Manuscript Number:	**Ms_JEAI_40901**
Title of the Manuscript:	**Salinity and salicylic acid on growth, phytomass and gas exchange of Ocimum basilicum L.**
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.
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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	The Authors submitted the Ms "**Salinity and salicylic acid on growth, phytomass and gas exchange of** *Ocimum basilicum* **L."** for possible publication at the Journal. After reviewing the Ms, indicate that I recommend the publication in the Journal after a major revision. I made some suggestion to the author as follow: Please change the Title as "Salicylic acid effect on *Ocimum basilicum* L. during growth in salt stress and its relationship between phytomass and gas exchange. Before Line 11, change conclusion by "Our results show that 1 mM of salicylic acid applied during the basil plants growth in saline stress conditions, affected positively to biomass and gas exchange." The line 20, "basil cab be affected by soil salinity and irrigation water [3]." Change by "basil plant growth are affected by salinity of soil and the salinity of water used for irrigation". In Line 23-24, after "carminative," add, "Used as" before stomatal and antispasmodic tonic and vermifuge [4,5]. In Line, 25-26, change "Many strategies are being used to reduce the deleterious effects of salts on plants, among them the use of salicylic acid, a phenolic derivative," change by "Many strategies used to reduce the deleterious effects of salts on plants; one of them is salicylic acid, a phenolic derivative," In Line 32-33, change "The objective of this work was to evaluate the attenuating effect of salicylic acid on the gas exchange, growth and phytomass of basil (*Ocimum basilicum* L. cv. Cinnamon) plants submitted to saline stress." By "Our aim of this investigation was to study the effect of salicylic acid on basil (*Ocimum basilicum* L. cv. Cinnamon) plants when growth stressed by salts, and to quantify its effect on gas exchange and phytomass." In Line 81, delete However, and start as "The results show that when basil plants were irrigated with saline …". Line 82, after analyzed. Start with "Figure 1 show that plant height… up to leave area decreases proportional as the electrical conductivity of irrigation water increases". In Fig. 1 D leaf area represented by LA or LF, clarify. In Line 90-91 change "The plant height decreased linearly as a function of ECw, with a decrease of By "The plant height decreased linearly 1.85%, per unit increase in salinity (dS m-1), that is as ECw increases 1- 6 dS m-1." In Line 91-92 change "reporting that at 49 days after" by "found that after 49 days of transplanting," In Line 99, re-write "The stem diameter had reduced to ECw at 5.96 dS m-1," as follow "The stem diameter of basil plant from control 8.6 mm was reduced to 6.4 mm when it treated with increasing value of ECw from 0 to 5.96 dS m-1" In Lines 104-106 change the redaction of "In showed in the Fig 2 the fresh masses of the root by "The Figure 2 showed that fresh masses of the following parameters from basil plant decreases: root length, stem length, leaf size, inflorescence and the total fresh mass of them as ECw increased from 1 to 6 dS m-1." In Line 115, delete "For up to m-1." In Lines 115 to re-write as follow "It is known that the salts decreases the growth of roots of the plants, decreases drastically the amount of root hair, affecting the absorption of water and nutrients; consequently, affecting the growth of plants [14]. The root, as an organ of absorption, has great importance in the responses to the saline stress, in physiological and metabolic terms. In this organ is synthesized abscisic acid (one of the signaling hormones of stress) that cause changes in the hydraulic conductivity and stomatal opening. Thus, the relationship between salinity and root growth is complex. Other important stressor to plants is the ratio of Na: Ca that affect growth of plants through inhibiting root biomass [16]. In Line 123 to 126 may be delete up to best result. In Line,132-133 the phrase "Regarding the application of SA, growth and fresh phytomass did not show differences, however, their values showed in Table 2." Re-write as "Table 2 show that when salicylic acid was applied of basil plants, during growth, in stressed conditions. The following parameters: number leaves, stem diameter, leaf area, root fresh mass, stem fresh mass, leaf fresh mass, inflorescence fresh mass and total fresh mass of basil plants, all of them increases as SA concentrations increases up to 1 mM. In addition higher concentration of SA had adverse effect.". However, basil plant height show a minor positive response to SA applied almost at all concentration. In Line 139 to 146, delete up to solar energy. In Line 149, add after effects, "as shown here in Table 2". In Line 150 to 157 change the phrase as "Contrary to our results, Mohammadzadeh et al. [5] found no-significant effect when SA was applied on four basil genotypes growing in salt stress environment, evaluated on fresh mass of root and shoot. In Line 158 to 161, re-write as "Figure 3 show that when the basil plants grown in salt stress condition, and then irrigated with water as increasing in electrical conductivity; the stomatal conductance (gs), the transpiration rate, the liquid photosynthesis rate, and internal carbon concentration, increases in a parabolic way when ECw increases from 1 to 6 dS · m-1. In addition, vapor pressure deficit and water use efficiency decreases as ECw increases from 1 to 3 dS · m-1 and then increases again. However, the intrinsic carboxylation efficiency suffer a minor changes when ECw increases." In Line 173 to 212 I sugest to the authors to use for discussion the results in the new version of the Ms. In conclusion Line 120 add 1. For a better growth of basil (*Ocimum basilicum* cv. Cinnamon) plants in salinity land, we postulate to use our results found here.	
Minor REVISION comments		
Optional/General comments		

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