



SDI Review Form 1.6

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	2013_IJPSS_8562
Title of the Manuscript:	Effect of "Dextril" (C ₁₁ H ₁₈ Cl ₂ O ₇ P) as growth retardant on tomato seedlings quality
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)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	<p>Dear Authors,</p> <p>Although I rank the manuscript as requiring only minor revisions, in order to improve the quality of presentation, I recommend the below comments to be strongly considered.</p> <p>The manuscript will benefit if the authors agree to do the following revisions:</p> <p>Title: Effect of "Dextril" (C11 H18Cl2O7P) as growth retardant on tomato seedlings quality"</p> <p>Please, remove the formula from the title. Instead, the chemical structure of "Dextril" should be shown in section Material and methods.</p> <p>I suggest the following title, which in my opinion better describes the reported work: <i>"Effect of the retardant "Dextril" on the quality of tomato seedlings grown at high temperature conditions"</i></p> <p>Abstract</p> <p>Adequately reflect the content of the manuscript.</p> <p>However, the language needs improvement. I suggest the following re-structuring of the text. The Latin name of tomato is recently accepted as <i>Solanum lycopersicum</i>.</p>	<p>I did my best to correct what the reviewers asked.</p>



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	<p><i>"The effect of different concentrations of the growth retardant "Dextril" (C11 H18Cl2O7P) on tomato (Solanum lycopersicum) cv. Huda F1 seedlings quality was studied. The experiments were undertaken in the agricultural station Alexandria, Egypt in year 2010. Tomato seedlings were sprayed with "Dextril" in concentrations 0.02, 0.04, 0.06, 0.08 and 0.1% at a stage when the second true leaf appeared. The treatment was done with aim to promote seedlings tolerance to heat stress during summer – autumn period and possibly to limit stem growth and elongation. The results showed that treatments with 0.02, 0.04 and 0.06% "Dextril" improved seedlings quality and decreased stem height by 30, 32, and 35% respectively as compared to water sprayed control, whereas 0.08 and 0.1% of the retardant showed toxic effects. In addition, the application of "Dextril" resulted in increase of stem diameter and fresh and dry weight of shoots but did not affect leaf number as compared to the control. The results indicate that the spraying with low concentrations of 'Dextril' is promising measure for improving the stress response and developmental characteristics of tomato seedlings grown under high temperature conditions."</i></p> <p>Introduction</p> <p>The pertinent information is included.</p> <p>The last sentence about the aim of reported research is incomplete and could be improved: "Purpose of the present investigation was to examine the retarding effects of Dextril on tomato seedlings quality and their tolerance toto what? after planting shock" (planting <u>shock</u> is inappropriate terminology).</p>	
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	<p>I suggest the following correction: <i>"The purpose of the present investigation was to examine the effect of the retardant "Dextril" on tomato seedlings quality and their tolerance to high temperature stress."</i></p> <p>Material and methods</p> <p>Please, show the formula of Dextril here, instead in the title and indicate the producer. I suppose the dilutions have been done with water – this should be mentioned.</p> <p>Please, explain how the adaptation has been assessed: "6- Degree of adaptation after planting". What is "adapting degree" –Results and discussion, Table 4? - Percent of surviving plants or those that formed leaves or something else?</p> <p>Add description of the protocol for SEM (please, refer to the below comments on section Results and discussion).</p> <p>Statistical analysis</p> <p>Please, indicate the program and the test by which data processing has been done. Are presented data an average of all replicates? Have the experiments been repeated and how many times? I would expect at least three replications of the whole experiment!</p> <p>Results and discussion</p> <p>SEM images (Fig. 1) are great and very representative. However, if they are taken by the authors of this manuscript, in section Material and methods, the protocol for SEM should be described (or at least a</p>	
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	<p>reference according to which the imaging has been performed). If the images are taken from another published source (authored by the same or other authors), then the source reference including the permission (if required) from the relevant publisher should be clearly indicated.</p> <p>In tables 2 and 3, please, indicate what the same letters mean: <i>e.g. values indicated with same letters are not significantly different</i> or something like that; has the comparison between the values been done for each column etc.</p> <p>Conclusions This sentence is unclear: "Where supply of low concentrations of Dextril (0.02 and 0.04%) may produce plants with desired characters could support field conditions."</p> <p>I would suggest the following revision of this section:</p> <p><i>"This investigation has produced results suggesting that "Dextril" could be used for enhancing the tolerance of tomato seedlings to high temperature stress. Treatments with low concentrations (0.02 and 0.04%) of the retardant were found beneficial for controlling the growth and for improving the overall quality. The obtained data have strong potential for practical application at field conditions."</i></p> <p>Language English language is good, but at some places the sentences or phrases are not quite properly structured.</p>	
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	I would advise the authors to do again grammar check or consult with native English speaking colleague.	
<u>Optional/General</u> comments	<p>Strengths of the manuscript This manuscript describes valuable findings with potential for practical application, namely about the administration of the retardant “Dextril” for improving the stress tolerance of tomato seedlings grown under conditions of high temperature. The experimental design is properly built, the physiological properties determining the growth and developmental effects of “Dextril” are well chosen. Tables and figures adequately present the results. Results are consistently described and Discussion and references cited are relevant to the reported data. Conclusions are supported by the data presented and discussed inside the manuscript.</p> <p>Weaknesses There are some shortcomings that should be corrected (please, see the comments in the field Minor revisions).</p>	