

## Review Form 1.7

Journal Name:	<b>International Journal of Environment and Climate Change</b>
Manuscript Number:	<b>Ms_IJECC_103343</b>
Title of the Manuscript:	<b>Alterations in carbohydrate metabolism and modulation of thermo-tolerance in tomato under heat stress.</b>
Type of the Article	<b>Review Article</b>

### 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. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalijecc.com/index.php/IJECC/editorial-policy> )

### 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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript) yes</li> <li>2. <b>Is the title of the article suitable?yes</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive? yes</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b> Yes but the conclusions need some additions</li> <li>5. <b>Do you think the manuscript is scientifically correct? yes</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. yes</b></li> </ol> <p><b>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</b></p>	<ol style="list-style-type: none"> <li>1. Heat stress plays an important role in plant growth and development ,during heat stress, plants undergo metabolic reprogramming to adapt to the unfavorable conditions. One of the prominent changes observed is an increased accumulation of soluble sugars, such as sucrose, glucose, and fructose. The accumulation of soluble sugars also enhances the stability of membranes and proteins, protecting cellular structures from damage caused by heat-induced denaturation.Heat stress also affects the partitioning and metabolism of starch, the major carbohydrate storage form in plants.Furthermore, altered carbohydrate metabolism influences various signaling pathways involved in plant thermotolerance. Heat stress triggers the activation of specific genes and proteins involved in heat shock responses and heat stress signaling pathways.</li> <li>2. Based on the conclusions of the research, the authors need to add a description of suggestions and added value for other researchers or readers.</li> </ol>	
<p><b>Minor</b> REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications? <b>There are some typos and format errors need to be checked.</b></p>		
<p><b>Optional/General</b> comments</p>		

### PART 2:

	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)
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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**Reviewer Details:**

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