



SDI Review Form 1.6

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_39824
Title of the Manuscript:	Drought stress effects on plant water relations, growth, fruit quality and osmotic adjustment of Tomato (Lycopersicon esculentum Mill) under subtropical condition
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. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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



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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 paper presents a study demonstrating that water deficit stress can improve fruit quality in tomato by way of increase in sugars and some important acids. The paper was found to be scientifically robust in terms of the experimental work. The results concur with similar studies in the same species and in other fruits. Please find below some comments on the manuscript: Title: The scientific name for tomato currently used is <i>Solanum lycopersicum</i>, whereas <i>Lycopersicon esculentum</i> was previously used, recent evidence points to tomato being part of the genus <i>Solanum</i> (for example please see paper by Asamizu and Ezura, 2009, which can be accessed here https://www.cabdirect.org/cabdirect/abstract/20093075084) Introduction: Line 32-33: Please include a citation Line 40: In the botanical sense tomato is classified as a fruit as opposed to vegetable Materials and Methods Line 226-227: How was this achieved? Plates 4-7: These are results and need to be in the Results section. The pictures could be compressed into one figure for better visualisation and comparison of the different cultivars and also reduce the length of the manuscript. Line 299: It would be helpful to write out a summary of the procedures for the different assays even when a citation has been included. Results and Discussion The different subheadings for Results and Discussion (eg line 432 and 464) are not necessary as the main heading already states what the section is about. Line 426: Same set of results should not be presented twice. The results have to be presented in the form of a table or figure but not both. In this case a figure works best as it gives visual comparison of the different moisture regimes. Fig 1 and 2: Please include error bars and indicate significant differences on the figures. Table 3: This table is not easily comprehensible. The different heights are for which cultivars? It may not be necessary to include the table as the differences can be easily picked up from Fig 1 and 2. Table 5: It would be easier to compare the parameters across the different cultivars in different moisture regimes ie table 4 and table 5 combined. As it stands it is not clear what the figures in table 5 represent or how they were obtained. Line 498: This was for which moisture regime? Line 499: For which cultivar? Table 6 and 7: Please see earlier comment under table 5. Line 601: This was for which cultivar? The way in which the results are presented does not adequately address the main aim of the study, which was to “find out a suitable drought resistant tomato variety out of seven varieties commonly cultivated in Bangladesh, to evaluate fruit quality and sustain growth and solute accumulation with minimum use of water”. Only two figures (fig 1 and 2) show performance of the cultivars under the different regimes, the rest of the results do not	Included but we could use <i>Lycopersicon esculentum</i> Mill as there is no scientific reason to change the scientific name of Tomato (in my opinion). Its not required to explain. The manuscript will be unnecessarily larger in size. These are the basic soil test done in the laboratory. Done Done In my opinion both table and figure could be used to make it clear We can use this type of graph Mentioned in line 500



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	indicate this but rather show the cultivars without indicating the moisture regimes under which the values were obtained. This makes it virtually impossible to tell from the results which are the best performing cultivar.	
Minor REVISION comments	Materials and Methods Line 89-90: The statement reads more like an objective, it could perhaps be placed in the introduction Line 105: Please rephrase to correct tense Line 138: The varieties used have been previously mentioned in the same section. It would be useful to avoid repetition as much as possible Line 148: Please rephrase to give clearer meaning Line 190: Brackets have to be in the appropriate place ie immediately ,before the abbreviation Line 296-297: What equipment was used to grind the samples? Line 357-359: These statements were made previously in the same section (line 299-301) Line 411: Please mention the software package and version.	
Optional/General comments	The paper was found to be quite strong as far as the literature review and experimental work are concerned. Presentation of the results however needs much improvement in order to adequately support the conclusions. A thorough proofreading exercise is also recommended to eliminate minor grammatical errors.	