



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	MS: 2012/BJAST/2213
Title of the Manuscript:	COMPARATIVE STUDY ON THE EFFICACY OF SOME PLANT AQUEOUS EXTRACTS AND WAXES IN THE PRESERVATION OF SOME FRUITS AND FRUIT VEGETABLES

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 9 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

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)
Compulsory REVISION comments	The manuscript evaluates the shelf life of tomato, peppers and oranges coated with waxes or aqueous extracts. Shelf life of the products was based on the time to spoil or decay determined by visual evaluation. Although, the authors might not have expensive technologies available to determine produce quality, it would be necessary to implement the results with other information, such as weight loss, and sensory quality. The products were kept for relatively long periods at high temperatures, which range from 19 to 32°C. The combination of these temperatures with the application of natural paraffin wax or ester wax is the perfect environment to induce anaerobic respiration, inducing the appearance of off-flavours. In the industry, commercial waxes are microemulsions prepared as oil in water emulsions. The formulations don't have more than 10-18% wax. In this case, the authors just melted the waxes and directly applied them to the fruits and vegetables. This should be reconsidered since the way these waxes are applied is not recommended. Nevertheless, the results obtained from the application of the extracts seem promising and it is worthy to continue working on that area. Main concern that need to be considered is the methodology. Why the authors applied the extracts every day for 3 min? Did they dipped the control samples in water every day? In the methodology	Yes, no expensive technologies used to determine produce quality but visual assessment was conducted based on an existing protocol (see text) Combination of high temperature and alkali treatment was reported by Pao <i>et al.</i> 1999 to possess sanitizing activity on fruit surfaces. The present research added wax as part of the hurdle technology and the results as the reviewer said is promising. Therefore others (including this author) should further conduct more research to corroborate these findings. All treatments were harmonized and followed the same procedure



SDI Review Form 1.6

	there is no mention to the use of closed containers with lid (line 268) in fruits that were treated with the extracts. Were control samples stored also in similar containers? The temperature cannot be considered to be 23°C, since this is the average of a wide temperature range (from 19 to 32°C). I recommend that the authors will report the temperatures in a graph or table. Why did they use buffer preparation? In statistical analysis, ANOVA is used to determine if there are significant differences among samples. Then the differences at 5% level among means are determined by other tests, like the significance least square test, Turkey's test, Duncan test, etc . The main concern about how the methodology was performed makes this article not acceptable for publication in the present form.	Not necessary as presenting the temperature in a graph may not solve any problem. Important is the temperature used which is ambient room temperature The buffer has been reported to possess sanitizing activity. Waxing is to provide barrier against further microbial invasion of the fruit and vegetable surface ANOVA and means separation by LSD All corrections highlighted were effected (see text)
--	---	--



SDI Review Form 1.6

Minor REVISION comments		
Optional/General comments		