



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_8458
Title of the Manuscript:	EFFECTS OF CULTIVAR AND BULB SIZE AT PLANTING ON GROWTH AND BULB YIELD OF ONION (<i>Allium cepa</i> L) IN THE NORTHERN REGION OF GHANA
Type of the Article	Research notes

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 <i>(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)</i>
Compulsory REVISION comments	The title of the manuscript considers the effect cultivar and bulb size on growth and bulb yield of onion. Because of that I do not think that in Introduction part of the paper authors need do discuss the influence of that plant on health of people. In the part Materials and methods authors give only general data about climate parameters for the region, but not for 2013 year. We can not see how real climate data, especially rainfall influence growth and yield of onion. As well as there is no any data about technology management, distance between rows and between plants in the row. Nothing about plants protection of weeds and diseases. We do not know the size of experimental unit. One year results are not enough for serious conclusions. Even before reading the text it was clear that the biggest mother bulb would get the best results in comparison with medium and smallest one. In Conclusions authors suggested farmers in the region to use big bulb size as planting materials as well as Bawku red cultivar. It is not correct because there was not significantly difference in bulb yield between Bawku red and White onion in case of big mother bulb. It means that Bawku red cultivar is privileged on the market. My observation also applies to the part of cited references. My opinion is that references are old and some new must be from recent period. Unpublished results can not be used in discussion. As well it is better to use passive than active sentences in the text. I do not want to say that authors purposely privilege the Bawku red onion cultivar, but I think it is somehow a competing interest.	The Introduction part of any write up is about, in addition to other information, the background of the topic or the subject matter under investigation. Mentioning the nutritional or health aspects of onion is not beside the point, as authors in this regard try to give some uses of the crop to lay emphasis on the importance of the crop in the diet of man. Onion is a crop and is eaten/consumed because of that the nutritional or health aspects of the crop should not be left out. In the Materials and Methods, the measurement of the individual weather parameters such as rainfall, temperature, relative humidity etc during the time of field experiment became impossible and had to stop because of equipments breakdown. We therefore had to rely on climatic data. In actual fact, the essence of the study was not to address the influence of weather/climatic factors on growth and yield. Rather the study sought to address the influence of cultivar and bulb size on growth and yield and we believe that despite equipment breakdown which resulted in our inability to take data on weather parameters during the time of experimentation, the inclusion of climatic data was not out of place.



SDI Review Form 1.6

		Comments on information on distance between rows and between plants in the row, plot dimension etc, and size of the experimental unit as raised by the reviewer have all been addressed and incorporated. The section on cultural practices addresses pests/weeds/disease control as requested by the reviewer. The study was conducted in year 2012 and repeated in 2013; means of data collected for each parameter were computed prior to entering the data into the spreadsheet for analysis. In vegetative reproduced plants, in general, the bigger the planting material the higher the yield, but this is not always true. I will urge my reviewer to read Mollah <i>et al.</i> (1997). Other authors have observed that in some geophytes or bulbous plants, even medium sized bulbs gave better results than large bulbs. In fact yield in most geophytes is controlled not only by size of planting material used but by a combination of number of factors. In addition, the biggest planting material does not necessarily have the highest reserved food/carbohydrate stored in them as compared to other planting sizes. In fact in plant physiology, rate/extent of carbohydrate partitioning, metabolism and assimilation may not necessarily also follow bulb sizes/ sizes of planting materials. In fact, the performance of planting materials, as it were, may not only be determined by the size, but also by even genetic factors; and cultivar differences may play a role in this case in most crop species. Therefore I disagree with the reviewer that even
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		before reading the text it was clear that the biggest mother bulb would get the best results in comparison with medium and smallest one. There was thus the need to determine whether size, cultivar or both of these two factors may influence the results of the study. Also the main finding of the paper suggested that the large/big bulbs of both Bawku red onion and White onion performed similarly. In fact there was no significant difference between the large bulb of Bawku red and White onion. This was raised by the reviewer, and I do agree perfectly with him, as seen from the sizes of the error bars of the yield data of big bulbs from Bawku red and White Onion. The conclusion from the study has thus been modified to take care of the reviewer's suggestion to include White onion in the recommendation of bulbs to farmers. Thank you.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		