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PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	**2013_AJEA_3590**
Title of the Manuscript:	**Effect of Seed Storage Periods, Conditions and Materials on Germination of Some Soybean Seed Cultivars**

General guideline for Peer Review process is available in this link:
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- This form has total 7 parts. Kindly note that you should use all the parts of this review form.

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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 authors conducted a massive storage experiment involving cultivars, storage conditions, and storage containers. Seed was stored for 12 months and samples were taken after 3, 6, 9 and 12 months to determine quality (assessed by four tests). While the data provide some information that might be useful to assess storability of seeds at this location, the results cannot be generalized to other locations or conditions and therefore, in my opinion, they make no new contribution to the literature and I cannot recommend this work for publication.** **The deficiencies that limit the contribution of this work include:** **1. It is well known that the factors that determine the storability of soybean seed are the initial quality (standard germination and seed vigor), seed moisture, and air temperature. No information is presented on seed moisture concentration or the air temperature and relative humidity of the ambient storage environment. The temperature and relative humidity of the ambient storage environment would affect the moisture concentration of the seeds in the cloth bag, but probably not in the plastic bag. The temperature of the ambient storage environment would determine the difference**	Storage periods, storage condones, package materials results can be generalized and applied under any conditions: 1-Appling each factor under study tested independent and the obtained results can be applicable and the same for these interactions. 2- Pls not that electrical conductivity was presented in another article titled " Kandil, A. A.; A. E. Sharief and M.S. Sheteiwy (2013). Effect of Seed Storage Periods, Conditions and Materials on Seed Quality of Some Soybean Cultivars. International Journal of Agriculture Sciences,5(1): 339-346. 3- The studied varieties differed in oil and protein content hen it will be

	between the 10C storage and the ambient storage. The initial seed quality would affect the rate of decline and, if it varied among cultivars, the cultivar differences in storability. Initial seed quality is very much a function of environmental conditions during seed development, so one cannot reach any conclusions about cultivar differences in seed storability after testing only one seed lot per cultivar. **These data represent simply what happened in this experiment, and without the data outlined above, it is not possible to make any general projections to other seed lots stored in other environments. The vast volume of published work on soybean seed storage makes one wonder why more experiments are needed.** **2. The germination index appears to be a simple expression of germination as a percent of the control. This not an independent measure of seed quality. Energy of germination and emergence rate (usually calculated from daily germination counts) are measures of seed vigor, but use of stronger vigor tests (electrical conductivity or accelerated-aging germination) would have been helpful.** **In summary, it is impossible to attach any broad meaning to these results because important parameters in the experiment were not measured. A repeat of this experiment probably would produce very different results. Given the extensive literature on storage of soybean seeds, I do not believe this work will make a significant contribution to the**	differed in its ability for storage.

	literature and I cannot recommend it for publication.	
Optional/General comments		