



SDI Review Form 1.6

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_38439
Title of the Manuscript:	The Effect of Storage Environments and Duration on Seed Germination of Amaranth (<i>Amaranthus cruentus</i>)
Type of the Article	Original Research Article

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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:

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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	I send the result of the Ms reviewed as follow The authors submitted the Ms titled "Effect of Storage Environments and Duration on Seed Germination of Amaranth (<i>Amaranthus cruentus</i>)" for possible publication. In introduction say, Amaranth (<i>Amaranthus cruentus</i> L.) is a plant cultivated from the tropics; its leaves are rich in vitamins and minerals like Vitamins A and C, iron and calcium. Due to the high demand of the leaves for food, the availability of quality seeds for sustainable production becomes a big challenge. The conservation of amaranth seeds is important in order to guarantee seed supply. The longevity of seed during storage controlled by several factors like, nature of the seeds, temperature of the storage environment, seed moisture content, storage duration and relative humidity. Seed moisture content, time of storage and temperature are important factor influencing seed viability during storage for conservation of germplasm. Interruption of energy supply results fluctuation in temperature and relative humidity of the container. Therefore, their aim was to investigate the influence of three different storage environments conditions: ambient (control), short and medium term storage conditions at different storage duration on germination of amaranth seeds. The results indicate that the overall performance of amaranth seed lot depended on the combined effect of amaranth accession, storage duration and environments, on germination of amaranth seeds. They concluded that amaranth seeds could be stored safely for up to sixteen months with over 70% viability at a temperature range of 15.07 to 20.300C and relative humidity of 26.88 to 50.67% or -8.180C to 3.100C and relative humidity of 42.72 to 72.10% with at least twelve hours power supply to the storage environments. In addition, the seeds stored in containers-airtight such as aluminum cans to maintain seed moisture content. Finally, the lowest germination percentage observed for seed stored under ambient conditions. I suggest also to include "The significantly lower mean germination at fourth month in storage, suggests that amaranth seeds exhibited after-harvest dormancy. That may overcome after some periods during storage." Therefore, The Ms will be published at the Journal, may be English need to be improved. The results are original, the Ms is well written.	
Minor REVISION comments		
Optional/General comments		

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