



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2013_AJEA_7190
Title of the Manuscript:	VARIABILITY IN REACTIONS OF GROUNDNUTS VARIETIES TO GROUNDNUT ROSETTE VIRUS ISOLATES FROM UGANDA
Type of the 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.

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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)
<u>Compulsory</u> REVISION comments	Use either Landrace or local cultivar not both Correct nomenclature of the cultivars used are: Serenut 1 red denoted as Serenut 1R Serenut 4 tan denoted as Serenut 4T Serenut 1R is very susceptible to Groundnut Rosette Disease (GRD) and it is not recommended where disease pressure and vector populations are high unless the farmer is able to spray against the vector beginning 2 weeks upto harvest Egoromoit is susceptible to the GRD but more tolerant than Serenut 1R Serenut 4T (ICG 12991) is NOT resistant to GRD (Minja et al. 1999) but to the vector Aphids (<i>Aphis craccivora</i>) (Padgham et al. 1990, Naidu et al. 1999c). Read Waliyar et al., 2007 pg 21 (check suggested literature below) Currently we are seeing its resistance to the vector even	The use of landrace has been adopted The correct nomenclature has been adopted ie Serenut1R and Serenut4T Point noted This observation is supported by our findings in Table 2 ie for the two trials Egoromoit performed better than Serenut 1R in terms of plant height, leaf area index and number of seeds, respectively. Point noted and the references included



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	breaking down under high vector population signifying probable existence of biotypes Aphids colony rearing: The plants used for rearing the aphid colony needed to routinely be monitored for freedom from groundnut rosette disease symptoms and tested by a triple-antibody sandwich enzyme linked immunosorbent assay (TAS-ELISA) for the presence of GRAV. I did not see this in the methodology unless implied For the aphid transmission, the infested plant needed to be tested for the presence of all the rosette complex (Sat RNA, GRV and GRAV). Remember Expression of rosette disease symptoms in groundnut does not necessarily indicate the presence of the aphid transmissible GRAV in the plant. Epidemiologically, diseased plants lacking GRAV are 'dead ends' for the spread of the rosette disease (Naidu and Kimins, 2007) 115: what is the severity scale used? Is it 0-9? 119-122: Pant height I guess you meant plant height. Please do indicate the unit measure 131-134: you concluded that chlorotic rosette predominates basing on samples from 3 districts in Uganda (out of the current over 100 districts). I suggest you base your conclusion on the samples worked on not generalizing it for the entire Uganda. For instance Serenut 4T and Egoromoit have pale green leaves (unlike Serenut 1R which	This was implied It was not possible to test for the presence of the different rosette complex due to lack of facilities but this can done in the subsequent studies. The scale used is 0-9 as described by Kalule et al 2010 This has been corrected. It is plant height and the unit is cm This has been revisited taking into consideration the sampled areas.
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	has dark green leaves) and the resultant rosette symptom types are usually pale green and many tend to deduce it to be chlorotic. Additionally, Sat RNAvariants are responsible for rosette disease symptomatology. What if in your sampling you picked only the variant responsible for the chlorotic rosette type. It will surely give you the chlorotic /yellow rosette type. I insist that donot generalize but stick your inference based on the sample size Review these current literature : 1. Waliyar F, Kumar PL, Ntare BR, Monyo E, Nigam SN, Reddy AS, Osiru M and Diallo AT. 2007. A Century of Research on Groundnut Rosette Disease and its Management. Information Bulletin no. 75. Patancheru 502 324, Andhra Pradesh, India: International Crops Research Institute for the Semi-Arid Tropics. 40 pp. ISBN 978-92-9066-501-4. Order code: IBE 075. 2. Naidu, R. A. and. Kimmins F. M. 2007. The Effect of Groundnut rosette assistor virus on the Agronomic Performance of Four Groundnut (<i>Arachis hypogaea</i> L.) Genotypes. J. Phytopathology 155, 350–356 3. Okello, D. K., Monyo, E., Deom C.M., Ininda, J., & Oloka, H. K. 2013. Groundnuts production guide for Uganda: Recommended practices for farmers. National Agricultural Research Organisation, Entebbe. ISBN: 978-9970-401-06-2	The conclusion based on samples used
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<u>Minor</u> REVISION comments	I suggest that the author desists from repeatedly using reinforcing words like 'infact' Severity rating per variety: Was Severity rating per variety done? Pot sizes: Why was a 2kg pot used instead of a 5-10kgs one since elements of pod yields was reflected. I imagine many pegs could not anchor since they could not reach the soil	This has been handled Yes, Severity scoring was done per variety This was an oversight which was overlooked
<u>Optional/General</u> comments	The finding that groundnut varieties reacted differently to the rosette virus isolates is quiet important and applicable in the rosette resistance breeding	