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SDI Review Form 1.6

Journal Name:	**Asian Research Journal of Agriculture**
Manuscript Number:	**Ms_ARJA_37992**
Title of the Manuscript:	**Detection of Dichlorvos Residue in Cowpea Grains, Six Months after Application Using High Performance Liquid Chromatography**
Type of the Article	

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)

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	**The subject is important to agricultural practices in Africa, but I would like to know the MRL value of dichlorvos in cowpea, African value or Codex etc.** **The detection and quantification limits of LC technique should be demonstrated to work well to MRL limit.** **The fortification study should be described to guarantee the chromatographic analysis.** **It was not clear the method for extraction and purification of the sample for dichlorvos analysis in cowpea.** **Which days after application of pesticide were evaluated? Only after 6 months and the "zero"?** **Why the samples were 4 kg and 1 kg, explain it?**	In cowpea, the mean concentration range from 0.001 to 0.108 mg/kg^{-1} for organochlorine pesticides, 0.002 to 0.015mg/kg^{-1} for organophosphorus pesticides and 0.001–0.039mg/kg^{-1} for pyrethroids pesticides. Inserted in the discussion. The Dichlorvos detection was achieved at 214 nm and at a retention time of 2.163 and 2.283 minutes. The study was conducted only to detect for either the presence or absence of the Dichlorvos after six months of storage. Six months after, 50g of the dichlorvos treated and untreated cowpea seeds were measured and each put in a 250ml conical flask after which 100ml of methanol was added in each flask, the treated cowpea was washed using the methanol to extract the expected dichlorvos residues from the cowpea. The mixture was then used for the screening exercise. Yes, a day to application and 6 months after application We used 4kg/4ml of dichlorvos to exactly simulate the dosage being applied on cowpea for storage by marketers in the said market.
Minor REVISION comments		
Optional/General comments		