



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	Ms_AJEA_24915
Title of the Manuscript:	Evaluation of common bean (<i>Phaseolus vulgaris</i> L.) varieties for resistance to bean fly (<i>Ophiomyia</i> spp.) in Kenya
Type of the Article	Original Research 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>)



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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	Page 1, lines 32-33. Authors wrote: "with bean fly (<i>Ophiomyia</i> spp) being a common pest in all common bean producing countries". This pest seems to be a more limiting factor in tropical countries, rather than a worldwide concern. Please provide an idea of the realistic importance (rate of yield reduction, area subjected to damage, etc.) of that pest for bean production in Kenya Page 2, lines 61-62. Authors need to provide information on the number of individuals infesting the experimental units as well as the developmental stage of those individuals and the procedure used to deliver the insects onto the plants. Authors must include a sub-section of Statistical analysis within the Materials and Methods section for describing the management of the information and the statistical procedures used. (A brief description of the statistical analysis was already provided in the Abstract) Was resistance measured as a continuous scale (as implied by the 1-9 CIAT scale) or it was separated into two discrete classes? Unclear. Was the 1-9 scale only used for the screen house experiment. Was it used for the field experiments?	It is a common pest in tropical countries. Yield reduction from a potential yield of 2000 kg ha⁻¹ to less than 1000 kg ha⁻¹. The pest is common in hot areas with low soil fertility like eastern parts of Kenya. Ten pupae are used to infest one bean plant. Cotton cloth is used to deliver the pupae onto the plant. The developmental stage used is the pupa. Data collected was subjected to ANOVA using SAS program version 9.1 It was separated into two discrete classes (1-3 highly resistant, 3-5 resistant, 5-7) susceptible and 7-9 highly susceptible. Scale 1-9 was also used in the field experiment.



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	Tables 1 and 2. Authors need to point out whether the number of larvae and pupae are per plant or per plot averages.	The numbers of pupae and larvae count are per plot averages.
<u>Minor</u> REVISION comments	Authors should introduce the common term “stem maggot infestation” since the early sections of the document, even into the title if possible	As part of the corrections the term “stem maggot” was introduced even to the title
<u>Optional/General</u> comments	Conclusion “The resistant varieties were; Chelalang, Tasha, GLP 1004, KK 8, GLP 585 and KK. Therefore these varieties should be used by farmers to improve bean production in the farms.” It sounds risky to provide such a recommendation since it is based on results from only a few trials over a reduced number of genotypes evaluated	The varieties that tested positive for resistance were ; Chelalang, Tasha, GLP 1004, KK 8, GLP 585 and KK 15. The tolerant variety was GLP 1127. These varieties also had high yielding capacities and are therefore recommended for small holder farmers to use for farming purposes.