



SDI FINAL EVALUATION FORM 1.1

PART 1:

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 Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Corrections attempted by the author are not up to the mark. Tolerant variety (GLP 1127) have on par grain yield kg ha⁻¹ with few recommended resistant varieties, but not mentioned in conclusion part. Based on the present study conducted in different location indicated different resistance response. It may be due to Genotype x environmental effects/interactions. However, there are different races of the insects (<i>Ophiomyia</i> spp). Which particular race of the insect the genotype/variety showed resistance is unknown. In one season one variety may give resistance against one race another season another one then how we can recommend the varieties based on this study is questionable? Suggestion that the study may be conducted by considering one race of the insect which is most dominant in the area to get maximum benefit to the farmer. Author explained the fact that the total life cycle from egg to adult emergence varies under different environmental conditions and therefore the incidences for the three sites were different. But as per my opinion if the genotype is resistance means whatever the life cycle of the insect is concerned (short/long) it must be resistance.	(GLP 1127) is tolerant to bean stem maggot and high yielding variety according to the study and hence is recommended for farmers to use in their farms. The study was done in consideration of the three species of bean stem maggot (<i>Ophiomyia phaseoli</i>, <i>O. spencerella</i> and <i>O. centrosemantis</i>) but there is need for further studies to evaluate the type of species present in each of the sites where the study was done, this therefore forms part of my next research. Incidence for this study meant the occurrences in numbers of the bean stem maggot larvae and pupae which infested the plant and therefore if the life cycle is short means the population of the pest will be large while if it is long it means the population will be less.