



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2014_AJEA_13087
Title of the Manuscript:	Analysis of Seed Vigor Responses in Soybean to Invasive Silver Carp (<i>Hypophthalmichthys molitrix</i>) Protein Hydrolysate Treatments
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>)



SDI Review Form 1.6

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	Author should mention and explore antioxidant property of peptides and free a.a released from FPH as certainly such property may have impact on the seed vigour. From my point of view, objective of paper should not be to produce FPH from invasive silver carp, as authors have used established protocol and a number of citation are available. Author should explain that why author specifically mention proline/glu/asp in relation to seed vigour, as data shows that other free a.a are present in significant amount more or less similar.	We thank the reviewer for the suggestion. The phenolic content/activity of our samples seems to indicate possible antioxidant activity (see lines 277-281); however, further antioxidant activity assays are required to make more concrete conclusions. We have now added this statement in our concluding remarks (lines 366-367). Thank you for your comment. The production of the FPH using various factors (ie. E/S ratio, length of hydrolysis etc.) are what lend the peptides their unique characteristics and free amino acid profile. Therefore, it is important to focus on the production of the FPH. Also, our goal was to create a value-added product in the form of FPH, from an invasive, underutilized fish species. Pro, Glu and Asp have all been found to elicit the proline-linked pentose phosphate pathway (PPP), and thus contribute more substantially to seedling vigor than other free amino acids. This is why we chose to focus predominately on these three as opposed to other free amino acid contents. The effect of the other aa present in higher amounts would need to be evaluated on a separate, future study.
<u>Minor</u> REVISION comments	I suggest that author should read and correct certainly avoidable typographical errors e.g Aim: to Produce/To produce 2.3 SDS-PAGE 2.5 Seed treatment I suggest that author should mention as a control actual buffer used for FPH preparation rather than distilled water.	Thank you for your revisions, these have been completed. There was no buffer used for FPH preparation. The FPH were prepared in distilled water as described by Liceaga-Gesualdo and Li-Chan (1999), line 69.
<u>Optional/General</u> comments	This paper is a good attempt to link application of fish waste products for agriculture purpose, at the same time manuscript need more revision and discussion to enhance the impact of paper.	Thank you for your comments and suggestions. We believe the revisions have been made and our discussion has sufficient depth for the scope of this manuscript.