

SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	<a href="#">Journal of Advances in Biology &amp; Biotechnology</a>
Manuscript Number:	Ms_JABB_126203
Title of the Manuscript:	DNA Barcoding assisted authentication of polyherbal formulation – Triphala
Type of Article :	Original Research Article

PART 2:

FINAL EVALUATOR’S comments on revised paper (if any)	Authors’ response to final evaluator’s comments
<p>As I have mentioned in my last revision, the BLAST search for the primers used in the study shows that these are not species specific. Since the researchers presented that they have successfully amplified the specific amplicon with specific primers, the primers might be species specific when there are mixture of only three species of Trifala churna. If the Trifala contains adulteration of plant part of some other species, then the primer may not work as species specific.</p> <p>I would like to suggest to perform some more experiments with adding other species as adulteration in the Trifala churna as negative controls.</p>	<p>Thank you for your valuable feedback. As per your comments, Species authenticating primers are designed with respect to ITS regions of <i>Terminelia bellirica</i>, <i>Terminalia chebula</i> and <i>Phyllanthus emblica</i>. When the sequences of the amplicons obtained with these primers were subjected to BLAST analysis, sequences show the most similarity with their respective species as compared to other species as ITS are unique in each sub species. The primers were even proven efficient in differentiating two closely related species of Triphala i.e. Terminalia bellirica and Terminalia chebula belonging to a same genus. According to the BLAST results, The primer pair designed for <i>T. bellirica</i> gave amplicon that was found to be specific to <i>T.bellirica</i> and not to <i>T. chebula</i>. The same was true for the primers designed for <i>T. chebula</i>. So in our humble opinion, there is no need to further carry out experiments on adulterants in the Triphala churna. The designed primers were found to be efficient with respect to identifying the component species of Triphala.</p>