



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	Ms_AJEA_21980
Title of the Manuscript:	~~Adverse~~ Effects of Anti-nutritive Constituents of Unprocessed Jack Bean (<i>Canavalia ensiformis</i>) (L) (DC) Seed Meal on Poultry Performance.
Type of the Article	Review Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
after reading through the comments from authors I wish to come back the following ways: 1. Authors claim that the work is only on the anti-nutritive aspect of the seed but not on the availability. Authors should note that these cannot be treated separately as the uses of any ingredient will determine its availability for poultry feeding. This is a different paper from whatever they must have published earlier and must contain enough relevant information. 2. Authors claim to have addressed all the queries raised. • As I mentioned earlier, the information provided is poorly organised. The nutritive composition of the seed cannot be well discussed in the introduction and should be provided as a sub title. • Authors claim to have provided enough information on the anti-nutritive composition of the seed. This is not correct as they have only given general information on the effects of these constituents on poultry without giving any idea of the likely content of the seed and the threshold of each. • There is sufficient information on the recommendation of jack bean in poultry diets. This will be more relevant to farmers and nutritionists than the current Table providing the adverse effects of these substances. Authors need to replace the current Table with a Table giving information on the recommendation of the bean for various classes of poultry with sources. • Authors should also note that the objective of any processing methods is to reduce the level of these substances but not complete removal. • Authors claim to have emphasized the need for further research. This is only provided in the conclusion. This is not a sound practice and should be in the body of the text with emphases on areas for future research need. Authors should avoid citing in the conclusion; see (22). • As earlier mentioned authors should revise the manuscript and improve on its organization as well as the language. title has been slightly revised.	-I have now added the aspect of availability and uses of jack bean, see sub-title 2.1 and 2.2 -Citation in conclusion has been removed. -Title has been revised as suggested by the reviewer. - The nutritive composition of jack bean seed has been removed from the introduction and discussed as a sub-title, see 3. - Information on the content/level of the anti-nutritive composition of jack bean seed has been provided in the revised manuscript as new sub-title, see 5. - Table giving information on the recommendation of jack bean in poultry diets have been included in the manuscript as suggested by the reviewer, see Table 3. - The reviewer should note that complete inactivation trypsin inhibitors and haemagglutinins can be achieved and has been reported by researchers and experts who have worked on the effect of processing on anti-nutritional factors for many years. eg. Apata and Ologhobo, 1997 after cooking of jack bean, kidney bean, pigeon pea etc. Apata D.F. and Ologhobo, A.D. (1997). Trypsin inhibitor and other anti nutritional factors in tropical legume seeds. Tropical Science 37:52-59. Also the elimination of concanavalin A has also been reported. Please check the article of Udedibie and Carlini 1998. The web link is below in blue. Crack and Cook: A simple and quick process for elimination of concanavalin A (Con A) from Canavalia seeds. Animal Feed Science and Technology 74: 176-184 A.B.I. Udedibie and C.R. Carlini, "CRACK AND COOK - A SIMPLE AND QUICK PROCESS FOR ELIMINATION OF CONCAVALIN-A



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	(CON-A) FROM CANAVALIA SEEDS", <i>Animal feed science and technology</i>, 74(2), 1998, pp. 179-184 In addition, Carlini and Udedibie (1997) also reported the complete elimination of antitryptic and hemagglutinating activities of jack bean, by one of the processing methods they employed. The web link is below in blue. C.R. Carlini and A.B. Udedibie, "COMPARATIVE EFFECTS OF PROCESSING METHODS ON HEMAGGLUTINATING AND ANTITRYPTIC ACTIVITIES OF CANAVALIA-ENSIFORMIS AND CANAVALIA-BRAZILIENSISSEEDS", <i>Journal of agricultural and food chemistry</i>, 45(11), 1997, pp. 4372-4377 - Area of future research has been included in the manuscript, see the last paragraph under the sub- title: 3. The nutritive composition of jack bean seeds. .
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