



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	Ms_AJEA_23411
Title of the Manuscript:	Dry mass of shoot and nodulation of the pigeon pea fertilized with reactive rock phosphate in the Cerrado Oxisol, Brazil
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Having done all the correction except the statistical analysis. Statistical analysis used by the authors did not fit the experimental design. Regression analysis is used to estimate the relationships among variables, relationship between a dependent variable and one or more independent variables. Once you subjected your data to ANOVA in a completely randomized design, treatment means (0,100, 200, 300, 400, 500 and 600 mgdm⁻³) supposed to be separated by least significant difference (LSD), Duncan multiple range test), if you collect your data on interval basis e.g. a week or 2 weeks interval. You applied 0,100, 200, 300, 400, 500 and 600 mgdm⁻³, but you got 430 mgdm⁻³ P dose that supported shoot dry mass. Did authors apply this treatment? Furthermore, authors did not provide physico-chemical properties of rock phosphate used in the experiment.	The authors request reconsideration of the correction suggested by a statistical method used on this paper, they consider it a consistent method. The regression analysis can also be used when treatments are quantitative. For example, amount of water or amount of fertilizer. In the book " Estatística aplicada a experimentos agrônômicos e florestais ", the authors Frederico Pimentel-Gomes and Carlos Henrique Garcia , ISBN 85-7133-014 -X. In Chapter 06 there is the following statement: "When there are quantitative factors with more than two levels, it is usual to seek a functional connection between the levels of these factors and the variable under study, such as productivity." In addition, there are a lot of papers in the literature where researchers use this tool and can serve as an example such as: Example 01: "Water use efficiency of marandu palisadegrass as affected by nitrogen and sulphur rates", available on: http://dx.doi.org/10.1590/S1806-66902014000100002 Example 02: "Phosphorus in soil and soybean growth as affected by phosphate fertilization and cover crop residues" available on: http://dx.doi.org/10.1590/S0100-204X2004001200010 Example 03: "Potassium fertilizer management for sugar cane" available on: http://dx.doi.org/10.1590/S0100-06832010000400013 Example 04: Dry mass, nutrient concentration and accumulation in safflower (<i>Carthamus tinctorius</i> L.) influenced by nitrogen and potassium fertilizations" available on: http://www.cropt.com/anicesio_9_6_2015_552_560.pdf Example 05: "Soil Water Availability on Growth and Development of Safflower Plants" available on: http://dx.doi.org/10.4236/ajps.2015.613207 The other correction suggestions were accepted.