

Interactive comment on "Organic wastes from bioenergy and ecological sanitation as soil fertility improver: a field experiment in a tropical Andosol" by A. Krause et al.

Anonymous Referee #1

Received and published: 11 January 2016

This manuscript presents the results of a field experiment where different amendments have been studied regarding their possible use as soil fertilizers. The effects of the amendments on certain soil physico-chemical properties and the efficiency of the nutrients supplied with the amendments were evaluated over and after a growing season. The results are of interest and of certain scientific relevance, and fit the scope of the journal. But this manuscript is too descriptive and sometimes it seems more a project report than a scientific publication. The topic has been correctly introduced, but before the aim of the work is described in the final part of the introduction, a rather personalized description of previous experiments run with the materials used as amendments in the present manuscript seems a bit unconventional for this type of publications. The

C670

description of the experimental design in the Materials and Methods section is not clear enough, and relies too much in that published in previous articles. This manuscript has top stand alone and a brief description of the amendments and a much clearer description of the experimental procedure have to be added to the text. For example, the number of replicate plots per treatment is not mentioned until page 1228, some basic information about the different amendments (pH, moisture/organic matter content, etc.) cannot be found throughout the manuscript, and the description of the grass cover used with that treatment in not clear. It is also strange the fact that two of the crops (African egg and pepper) are not used or mentioned in the results and discussion of the manuscript. The latter section is too descriptive, and the text is quite difficult to read in a comprehensive way, as too many parameters are commented in too much detail. The manuscript would benefit from a summarized results and discussion section, where the main effects of the different amendments are commented as a whole for the different crops. This part of the manuscript needs to read better and to include a deeper discussion of the results, which are simply compared to previous ones in the current version of the article. The effects observed in the soil and, especially, in the different crops, have to be related to the properties of the amendments and to the changes in the soil physico-chemical properties and nutritional status. Section 3.4 (nutrient balancing) is not clear at the moment and may have to be reconsidered and rewritten by the authors in a more comprehensive way. Section 3.6 (further aspects) is somehow speculative and may have to rely on the results of the present experiment. Once the manuscript is corrected, the conclusions of the article may have to be accordingly revised. The quality of figures 2-4 may have to be also improved and make them easier to understand. Move most of the information in the figure legends to the text (M&Ms) and leave only the basic information to understand and interpret the graphs there.

Interactive comment on SOIL Discuss., 2, 1221, 2015.