Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	**Ms_IJPSS_53537**
Title of the Manuscript:	**Mineralization and decomposition of four types of compost based on biomass of Sida cordifolia L. in a sandy soil in the semi-arid zone of Niger**
Type of the Article	**Original Research Article**

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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.
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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)*
Compulsory REVISION comments	**Title** **Write *Sida cordifolia* in italic** **Abstract** ~~This is a food of the body of bio and compost. Generally, this use has been taken into account in the quality, decomposition and release of nutrients from these organic materials. This study of the decomposition and mineralization of nutrients of four types of composts (M1P, M2P, M1H and M2H) a dune soil~~ **Put the objective before the locality study.** **Indicate the number of the replications.** ~~The decomposition and mineralization of the main elements (nitrogen, phosphorus and potassium) allow the synchronization between the release of nutrients from these composts and the nutrient requirements of millet in a sandy soil.~~ **Regain the conclusion.** **Introduction** **Line 28:** (Voortman, 2010). **Put the coma always between the author and the date.** **Line 35:** (Hayashi *et al.*, 2008). **Put *et al*. in italic** **Line 35:** The fertilizer recommendation in Niger is 200 kg ha^{-1} of NPK compound (15-15-15. Indicate the plant. **You can talk the millet importance in the Niger economics.** **Material and methods** **Indicate the figure 1 spring.** The percentage of dry weight after sampling was determined using the formula: **(1)** $Ps\ (\%) = 100 \times \frac{P_t}{P_0}$ where: Ps (%) = Dry weight percentage; Pt = Compost weight at t time; P0 = Initial weight of compost in the bag. The rate of release of nutrients following decomposition was calculated using the following	All the corrections suggested by the reviewer have been thoroughly rectified and revised.

formula:

(2) $T_n\ (\%) = 100\ \mathbf{x}\ \frac{C_0\,P_0 - C_t\ P_t}{C_0\,P_0}$ where:

Tn (%)=Nutrient Release Rate,

C0=Initial Concentration of Chemicals (N, P, K) from Compost,

Ct=Concentration of chemicals (N, P, K) compost at t time,

Pt=Weight of compost at t time, P0=Initial weight of compost in the bag.

The decomposition model and decomposition rate constant (k) of each type of compost were determined through the data that were modelled using a single exponential model described by (Olson 1963):

(3) $M_t = M_0 e^{-kt}$ where:

Mt = dry weight remaining of the compost at time t,

M0 = initial dry weight of the compost.

The time required for the compost to lose half its initial weight (t_{50}) was calculated using the formula described by (Fening et al. 2010):

(4) $t_{50} = \frac{-\ln(0{,}5)}{k}$, where K is the decomposition factor.

You can put in the data collection party.

Results

Humidity, temperature and rainfall

You cite the figure 2 in the text.

Physical and chemical composition of soil at the experimental site

You can cite the table 1 before the table 2.

Discussions

Line 289: Ammonium and potassium are not strongly chemically bound in the soil (Andrist-Rangel *et al.*, 2007). Ammonium and potassium are therefore strongly exposed to leaching.

Line 306: The recommendation by Tabo *et al.* (2007) is to apply 2 g diammonim phosphate $hill^{-1}$ corresponding to an N input of 3.6 kg N ha^{-1}.

Line 329: compost (Suge *et al.*, 2011, Badar *et al*,. 2015). Studies by (Esse *et al.*, 2001, Fatondji *et al*., 2009)

Line 336: Bationo *et al.* (2007) reported that soil organic carbon is a sustainable land management index.

Conclusion

	Ok **References** **Line 367: add the page** **Line 377: Add the page** **Line 397 and 399: Add the page** **Line 407: put the consulting date**	
Minor REVISION comments	The document contains fewer faults. However, there are imperfections that the author must take into account in perfecting the document	
Optional/General comments	The author must take all the notes into account in order to complete his document	

PART 2:

	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)***
Are there ethical issues in this manuscript?	***(If yes, Kindly please write down the ethical issues here in details)***	