

Review Form 1.7

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_113340
Title of the Manuscript:	Effect of the micro-organism-based biofertiliser Tokyo 8 on the growth and development of maize (Zea mays L.) in farmers' fields in southern Côte d'Ivoire
Type of the Article	

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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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>Yes the manuscript is important for scientific community. Especially for field corn in Cote d'voire where soil fertility is degrading.</p> <p>Effect of microbial fertilizer Tokyo 8 on the growth and development of a field corn hybrid (Zea mays L.) in southern Côte d'Ivoire</p> <p>Yes.</p> <p>Yes they are appropriate</p> <p>Sound correct, but not enough</p> <p>Need update some references</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Yes, English language of the article is suitable.</p>	
<p>Optional/General comments</p>	<p>1) In the introduction section, “ with production estimated at 1,120 million tonnes for the 2019-2020 season [3](need update data from USDA and FAO?).”</p> <p>2) In the study area: Data of soil analysis in the study area should be presented here ?</p> <p>3) In 3.1.1 Plant material: The experiment focused on the LG501 hybrid maize variety (Should indicate single-cross, three-way or double-cross hybrids ? just say LG501 maize hybrid that is enough, do not say hybrid maize variety, because variety refers to open pollinated maize variety, not hybrid).</p> <p>4). In 3.1.2 Fertilisers used. Description of Biofertilizer Tokyo 8 should include its composition of micro-organisms, enzymes, trace elements and nutrients , and manufacturer’s instruction for users. Similar description for the synthetic fertiliser NKP (12-22-22) is more specific as possible. Do not place the picture of fertilizer bag in this article. Because they look like advertisement for the manufacturer.</p> <p>5). 3.2.2 Setting up and running the trial. Each micro-plot consisted of 4 rows, each bearing 52 bunches (Should be minimum 6 rows, more rows are better in fertilizer experiment, because border rows affect a lot to experiment error. Another attention is how to maintain uniform plant density from emergence to harvest, otherwise effects a lot to error of experiment).</p> <p>6). 3.2.3 Data collection. The quantitative variables were measured on twenty (20) marked plants selected at random (Should be consecutively) from each microplot. If you select at random, you can select vigorous plants only.</p> <p>7). Method for measurement of dry grain yield (14% moisture) needs to mention. In grain yield of maize, shelling percentage is very important criteria indicating stress tolerance at kernel setting period for final harvest yield. If you have this kind of data, please supplement them.</p>	

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	<p>8). 4.1.1 Changes in plant height as a function of treatment. Omit ""as a function of treatment"". Normally, when reading a function, I would find a formula of mathematic function. The same to other subsection title, omit phrase of ""as a function of treatment""</p> <p>9). 4.1.4 Vigour index. Theoretically, T0 should be least vigorous ? Why in intermediate vigorous ? Author should explain.</p> <p>10). 4.2.2 Number of fresh ears as a function of treatment. The number of ears per plant (per plot ?, check it please) varied significantly from one treatment to another.</p> <p>11). 4.2.3 Average fresh ear weight by treatment. The Fig.15 means soil fertility is fertile. So average fresh ear weight is no different among T0, T1, T2, T3 and T4?</p> <p>12). 4.2.5 Dry yield in kg/ha as a function of treatment (Should be tone/ha ???) The mass grain yield (tone/ha?) of dry maize kernels without ears was a function of treatment (Fig.17). By contrast, the lowest yield was recorded in treatment T2 with 1.8 kg/ha. Treatments T0 and T4 recorded 2.04 and 2.17 kg/ha respectively (tone/ha ?).</p> <p>13). 4.2.6 Correlation between growth parameters and yield components. (Why not included dry grain yield ?).</p> <p>14). 5. DISCUSSION. no data of composition for supporting this biofertilizer Tokyo 8? ; The biofertiliser diluted to 75% gave (fresh or dry grain ?) yields similar to those of the chemical NPK fertiliser (12 22 22). - However, unlike chemical fertilisers, which have a negative impact on the environment, plants and human health, biofertilisers have the advantage of improving physico-chemical properties and boosting beneficial soil micro-organisms (no data supporting for this comment ?).</p> <p>15. 6. CONCLUSION. The results showed that, like NPK, the biofertiliser improves maize growth parameters and (dry grain ?) yield components. It provides the mineral elements (No data supporting for this remarks ?) required for maize growth and development. It also stimulates improved bioavailability of nutrients in the soil, as well as the microbiological activity in the soil that underpins the plant's development (No data supporting for this conclusion ?).</p>	
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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?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	

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