Response to Reviewer 3 Comments

I appreciate your valuable time and critical comments. I agree with your suggestions and comments. Therefore, I have revised the manuscript according to your suggestions. The revised sentences are highlighted in yellow in the revised manuscript.

The manuscript - “The Effect of Bacillus licheniformis MH48 on Control of Foliar Fungal Diseases and Growth Promotion of Camellia oleifera Seedlings in the Coastal Reclaimed Land of Korea”, evaluates the possibility of controlling the foliar fungal diseases and growth promotion of Camellia oleifera seedlings through the use of a bacteria, Bacillus licheniformis MH48. The authors concluded that the antagonistic bacteria - B. licheniformis MH48 - controlled the foliar fungal diseases and promoted the growth of C. oleifera seedlings.

In fact, plant fungal diseases are an important and growing problem in agriculture, especially for a tree so significant as the C. oleifera. The search for alternative treatments are important, so this report has relevant results for the scientific community.

However, the manuscript has some points, that need to be adjusted before publication.

General points:

- An English review is needed, for there are some grammatical typos along the text;
  ► I have performed an English review.

- The text needs to be formatted along the manuscript;
  ► I have formatted it.

Introduction:

- Why choose specifically B. cinerea, G. cingulata, P. diospyri, and P. karstenii? This should be better clarified;
  ► I have explained it as follows;

During a field survey in this study, leaves of C. oleifera seedlings were blight and died in the Saemangeum coastal reclaimed land (Figure 1D). According to the Korean Agriculture Culture Collection (KACC; Suwon, Korea), Botrytis cinerea has been found in leaves of dead
C. oleifera seedling. Foliar fungal diseases of Camellia spp. by Glomerella cingulata, Pestalotia diospyri, and Pestalotiopsis karstenii are major diseases in Korea. They are potential foliar fungal pathogens to C. oleifera seedlings. (Line 20 in Page 4 to Line 2 in Page 5)

- In the part of the antioxidant activity and bioactive compounds of tea, this reviewer advises the checking of these two reports to complete the information: doi: 10.1186/s12870-015-0574-6 and doi: 10.2174/09298673113209990158.

▶ I have reviewed these two papers and revised the manuscript as follows;

Tea (Camellia sinensis) and oil tea (Camellia oleifera) belonging to genus Camellia have been used to produce important beverages worldwide. Nutritional value and healthful properties of tea are closely related to large amounts of catechins, theanine, and caffeine [1]. Although oil tea lacks these characteristic constituents compared to tea, C. oleifera, one of the most famous woody plants for vegetable oil production, is distributed and cultivated widely in central and southern China. C. oleifera also produces a variety of secondary metabolites such as saponins and vitamins with various applications [2]. (Line 2-8 in Page 3)

Material and Methods:

- Indicate all strains used (including the considered pathogens);

▶ I have indicated all used pathogen strains as follows;

Antagonistic activities of B. licheniformis MH48 were determined by the dual culture method against foliar pathogens B. cinerea KACC 40854, G. cingulate KACC 40299, P. diospyri KACC 44400, and P. karstenii KACC 44384. These pathogens are the most important agents causing foliar fungal diseases in C. oleifera. They were purchased from KACC. (Line 19-23 in Page 6)

- How were the strains (all of them) identified? Chromogenic media and/or molecular method (e.g. PCR)? Describe and indicate the references;

▶ Foliar pathogens were purchased from the Korean Agriculture Culture Collection (KACC; Suwon, Korea). (Line 22-23 in Page 6)

- Why it was not used a reference strain of Bacillus licheniformis?

▶ The objective of this study was to investigate the control of foliar fungal diseases and growth promotion of C. oleifera seedlings in coastal reclaimed land through the use of B. licheniformis MH48. (Line 2-6 in Page 5)
Results:

- The tables and graphs need more quality;
  ► I have modified the resolution to 2000 dpi for tables and graphs.

- Legend pf Figure 5 is not right regarding the name of the species;
  ► I have revised the legend for Figure 5. (Page 30)

Discussion:

- The manuscript claims that benzoic acid is responsible for the antifungal effect on the seedlings of the experimental. But, in fact, this compound has not been evaluated and its concentration determined on the trees with the bacteria. This conclusion seems to be taken only by previous results. Either a concentration of benzoic acid has to be performed or this part needs to be rewritten, in order to reserve this fact to the readers. The same happens with auxin. Reformulate the discussion on these parts;
  ► Benzoic acid: I have revised benzoic acid’s antifungal effects in this manuscript. Benzoic acid shows antifungal activity against plant pathogens with minimum inhibitory concentration of 128 μg mL$^{-1}$ against mycelial growth. However, benzoic acid has reduced amount of 3.3 g in 40 L of bacterial culture. Therefore, benzoic acid from B. licheniformis MH48 is not likely to exhibit antifungal effects under field conditions. (Line 23 in Page 13 to Line 6 in Page 14)
  ► Auxin: In a previous study, we have found that B. licheniformis MH48 can lead to auxin accumulation in field soil. The optimal level of auxin for supporting root growth is very low, approximately 5 orders of magnitude lower than that for shoots. Park et al. [4] have explained that B. licheniformis MH48 PGPB can stimulate Camellia japonica seedling development, including nutrient content and yields in coastal areas under salt stress conditions. Therefore, auxin produced by B. licheniformis MH48 seems to promote root development of C. oleifera seedlings under field conditions. (Line 13-18 in Page 16)

- The conclusion seems to have information that belongs to the discussion. This reviewer advises a correction and a condensation of the conclusion.
  ► I have rewritten the Conclusions section (Line 1-6 in Page 17)