

***Interactive comment on “The combined effects of nitrification inhibitor and biochar incorporation on yield-scaled N<sub>2</sub>O emissions from an intensively managed vegetable field in southeastern China” by B. Li et al.***

**B. Li et al.**

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Thank you very much for your great support and nice comments! We are now incorporating all of your comments into the revised version to improve the manuscript. Since we have modified the manuscript according to the interactive comments of anonymous referee #1 on 3 Dec., 2014, the modifications here will be on the latest version according to your comments. Please see the following point-to-point answers with the marked-up version of the manuscript.

C8556

A corrected manuscript based on comments of both reviewers is also attached.

Thank you very much once again for your helpful comments!

Best Regards!

Zhengqin

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C8557

**Interactive comment on “The combined effects of nitrification inhibitor incorporation on yield-scaled N<sub>2</sub>O emissions from an intensively managed vegetable field in southeastern China” by B. Li et al.**

Anonymous Referee #3

The paper tries to assess the combined effects of nitrification and biochar application on yield and N<sub>2</sub>O. This is a two-year field experiment, with useful information collected within the scope of Biogeoscience. However, the manuscript suffers from some major problems.

A: Thank you very much for your great support and nice comments! We are now incorporating your comments into the revised version to improve the manuscript. Some minor modifications were made according to the interactive comments of anonymous referees. On Dec., 2014, the modifications here will be on the latest version according to your comments. Please see the following point-to-point answers with the marked-up version of the manuscript.

C8558

1. This experiment set up six treatments to study the effects of NI and biochar on

**The combined effects of nitrification inhibitor and biochar incorporation on yield-scaled N<sub>2</sub>O emissions from an intensively managed vegetable field in southeastern China**

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**Abstract:** An experiment was conducted to study the influences of nitrification inhibitor and biochar incorporation on yield-scaled N<sub>2</sub>O using the static chamber method and gas chromatography-mass spectrometry in an intensively managed vegetable field with 7 consecutive vegetable crops from 2011 to 2013 in southeastern China. With equal annual amounts of nitrogen (N) application rate (1217 kg N ha<sup>-1</sup>), three treatments under 3 biochar incorporation rates, namely, 0 t ha<sup>-1</sup> (C0), 20 t ha<sup>-1</sup> (C1), and 40 t ha<sup>-1</sup> (C2) were established. The results showed that the incorporation of biochar significantly reduced N<sub>2</sub>O emissions and increased yield-scaled N<sub>2</sub>O emissions. The incorporation of biochar also significantly reduced N<sub>2</sub>O emissions and increased yield-scaled N<sub>2</sub>O emissions. The incorporation of biochar also significantly reduced N<sub>2</sub>O emissions and increased yield-scaled N<sub>2</sub>O emissions.

C8559