Biogeosciences Discuss., 10, C3796–C3797, 2013 www.biogeosciences-discuss.net/10/C3796/2013/
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Interactive comment on "UV-induced carbon monoxide emission from living vegetation" by D. Bruhn et al.

Anonymous Referee #1

Received and published: 28 July 2013

Overall, this paper presents important and useful results. The dependence of CO emission on UV radiation intensity is worthwhile data.

One scientific issue not fully addressed is the background CO emission of the plexiglass containers during solar irradiation. A control experiment without plant matter should be carried out. Another issue is that the experimental section does not describe how the excised leaves were handled. Where they kept hydrated by placing the stem in water? On page 5, it is unclear if the value 4437 is for the net emission or the dark uptake. There is some confusion in the discussion about UV vs visible light. The authors indicate that UV was not included in estimates, but some studies cited did utilize full spectrum sunlight, which included solar UV. How is it that data from those studies does not accurately account for UV radiation? The regression line presented in Figure

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4 seems to include all data points for both species. However, the two species seem to have very different behaviors. These data should not be pooled for the regression.

One typographical error was noted in the references: "Zapp" should be "Zepp". The authors should carefully check all references to be sure no other errors are present.

Interactive comment on Biogeosciences Discuss., 10, 9373, 2013.