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Interactive Comment

Interactive comment on "Sesquiterpene emissions from vegetation: a review" by T. R. Duhl et al.

Anonymous Referee #1

Received and published: 14 December 2007

Sesquiterpenes have drawn a lot of attention lately, due to their high potential to form secondary organic aerosols and thus affecting climate change. Sesquiterpenes are very reactive towards hydroxyl radicals and ozone, their atmospheric lifetime is only a few minutes and therefore they cannot be measured in the ambient air samples, but they have to be measured from the emission.

The current manuscript reviews the published studies of sesquiterpene emission rates. The review shows that quite little is known about sesquiterpene emission rates and why they are emitted. The published results can also turn out to be misleading since stress effects and seasonality seem to play an important role and the measurements have not always covered the whole growing season or a year. The sesquiterpene emissions need a lot more work and the current manuscript is helpful for those planning new research on the topic, therefore I recommend publication of the manuscript.

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Detailed comments: -Table 2 lists the plants that have been measured, but it would be helpful if the table would indicate the measurement period i.e. if the measurements cover the whole growing season or if it is only a one day measurement that can turn out be quite misleading. -The calculations of emission rates according to the function of plant is not very useful, it really tells nothing and could be removed.

Interactive comment on Biogeosciences Discuss., 4, 3987, 2007.

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