

Interactive comment on “Combined effects of ozone and drought stress on the emission of biogenic volatile organic compounds from *Quercus robur* L.” by Arianna Peron et al.

Arianna Peron et al.

arianna.peron@uibk.ac.at

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Dear Valerio Ferracci, we appreciate your comment.

In our experiment, isoprene emissions are standardized for temperature (30 °C), and we do not expect a large variation caused by short-term changes in temperature. The temperature effect observed in ecosystem scale studies is therefore largely normalized for in our experiments. In field campaigns, isoprene emissions are often observed to stay high during progressive drought and this as you point out has often been ascribed to a compensation by increasing leaf temperatures during drought.

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We also note that leaf temperatures remained quite constant in our experiments despite stomata closing. Our interpretation of this is the vigorous mixing of air in the chamber (and thus the boundary layer conductance going to infinity) so that most of the energy is exchanged as sensible heat and stomatal closure does not affect leaf temperature a lot. This could be the explanation for lack of elevated emissions and the observed continuous decrease in isoprene emission. Under field conditions, as in the three cited manuscripts this might be different.

Arianna Peron and Thomas Karl

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