

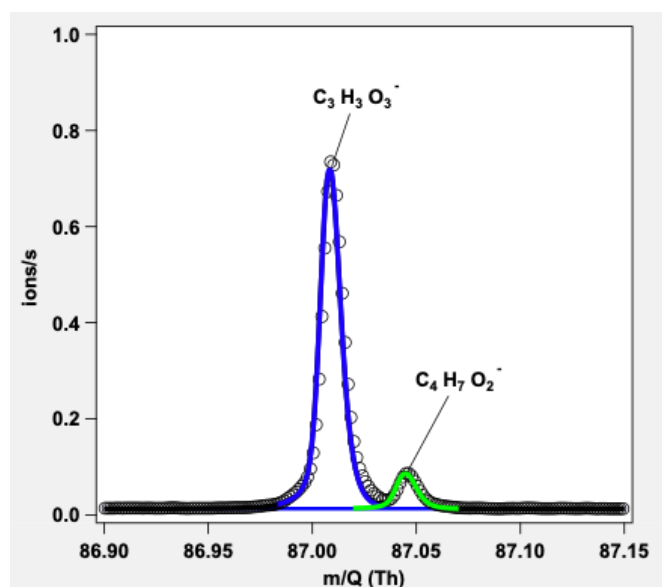
Supplement of

**Pyruvic acid in the boreal forest: first measurements and impact on
5 radical chemistry**

Philipp G. Eger et al.

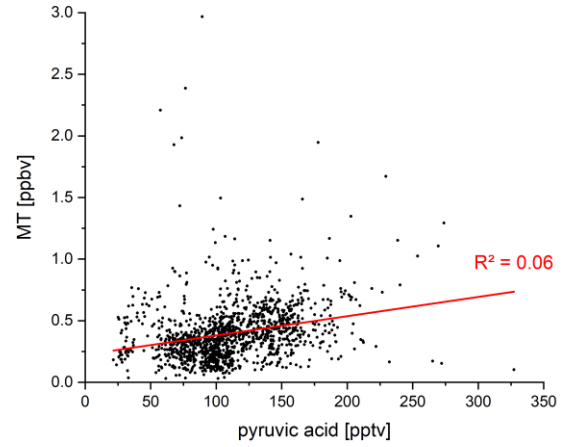
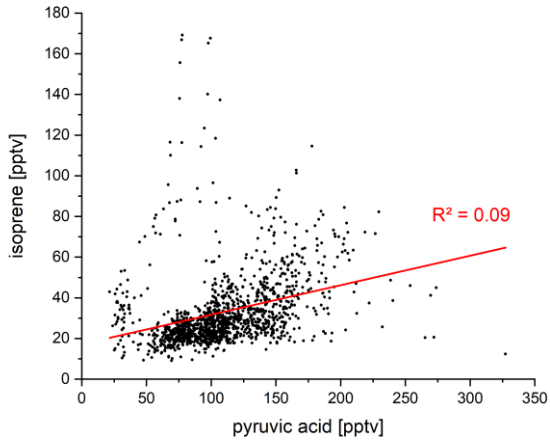
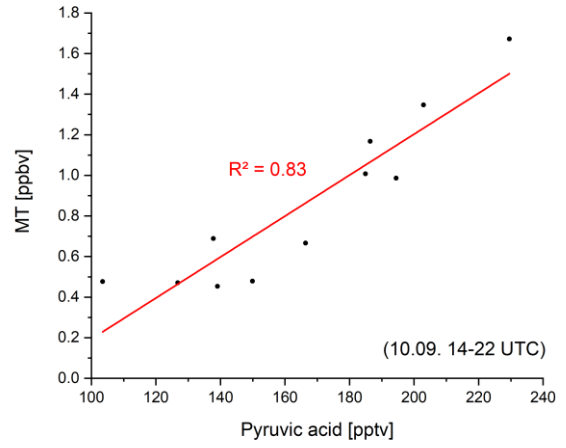
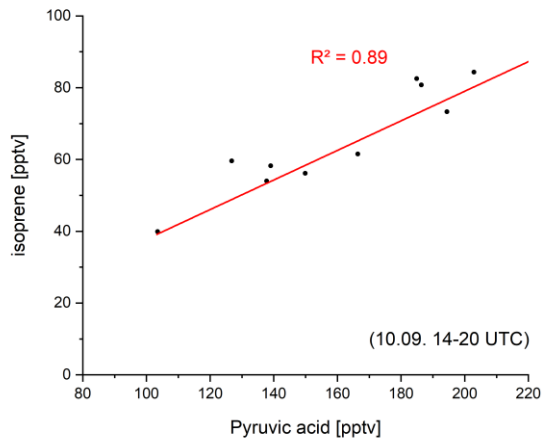
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15 **Figure S1:** Signals measured by the HR-L-ToF-CIMS for the ions detected at m/z 87.008 (assigned to pyruvic acid) and 87.045 (assigned to butanoic acid).

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Figure S2: Upper panel: Correlation plots of pyruvic acid and isoprene / monoterpenes (MT) for 10 September 2016 (air mass influenced by sawmill). Lower panel: Correlation plots of pyruvic acid and isoprene / MT for the whole IBAIRN campaign.

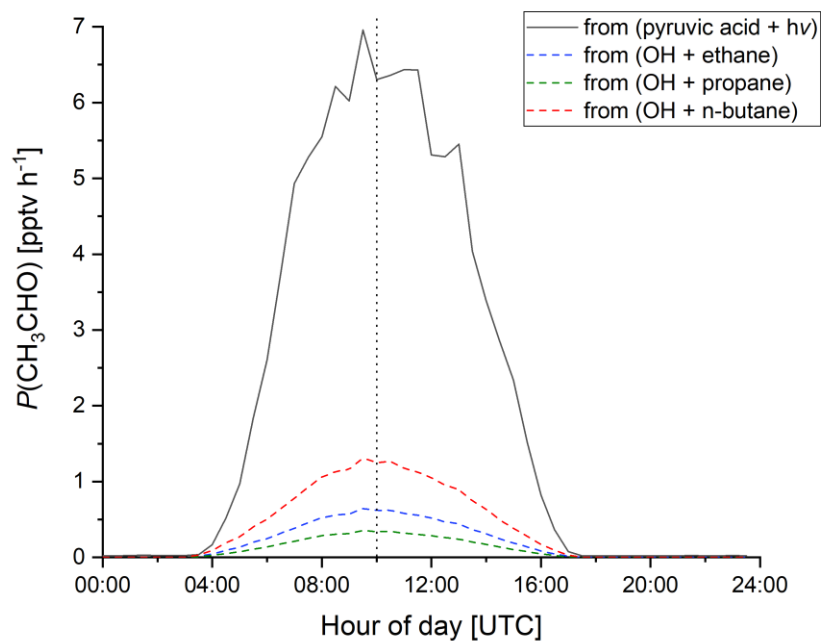


Figure S3: Acetaldehyde (CH_3CHO) production rates over the diel cycle based on measurements (median diel profiles for IBAIRN) of pyruvic acid and J_{pyr} (assuming a photolysis yield of $\phi = 0.2$), calculated OH and estimated mixing ratios of alkanes from literature data (see manuscript). The dashed vertical line indicates solar noon.