

The manuscript “Chemical characterization of biogenic SOA generated from plant emissions under baseline and stressed conditions: inter- and intra-species variability for six coniferous species” presents an interesting study of how biogenic SOA composition is altered by herbivore stress.” The work is novel, well written, and relevant to ACP. I recommend publication after the following comments are addressed:

- I agree with a previous referee comment that more basic background info on methyl jasmonate is necessary in the introduction or in the supplemental material. Also, do the authors know at what concentrations/rates methyl jasmonate is emitted during typical stressed episodes and how the applied jasmonate concentrations compare?
- Why did the authors choose the set of m/z values listed on page 25177 for their correlations? Wouldn't using the whole organic spectra provide almost the same r^2 ?
- It's a bit unclear when GC data is available in the experiments. It's unfortunate that the only GC data presented is in the supplemental section when the differences in BVOCs could be used to interpret the changes in AMS spectra. Do the authors know of other literature where AMS spectra of BVOC SOA has been presented and can be compared?
- Much of the HR-AMS protocol for data analysis on page 25178 can be shortened or moved to supplemental section
- A-pinene SOA is often the most basic example of BVOC SOA. It would be nice (even if in just the text) to mention how meJA or the other spectra correlate to a-pinene SOA spectra. If they are similar, those spectral fingerprints may be hard to distinguish in the field.
- Increase the marker size and text size in Figure 9.
- The authors have SMPS distribution data and HR-AMS PToF data. From those, an aerosol density can be estimated and applied to the volumes listed in Table 2.