

**Subject:** RE: Heat tolerance design  
**From:** "Parker, Amber" <Amber.Parker@lincoln.ac.nz>  
**Date:** 8/25/16, 10:28 PM  
**To:** Elizabeth Wolkovich <lizzie@oeb.harvard.edu>, "Inaki Garcia de Cortazar Atauri" <igarcia@avignon.inra.fr>, Andy Walker <awalker@ucdavis.edu>

Hi Lizzie,

I have had a look at this document and made some comments (see attached). In summary it looks like the design and plant preparation are progressing nicely and it's great to see the finalisation of these finer details.

I referred to a reference in my comments with regard to monitoring flower progression of inner and outer arms, see Figure 3 b in : <http://www.vitis-vea.de/admin/volltext/W0%2014%20231.pdf>

Let me know if any of my comments require further discussion, I look forward to hearing about the next stage.

Regards

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-----Original Message-----

From: Elizabeth Wolkovich [<mailto:lizzie@oeb.harvard.edu>]  
Sent: Tuesday, 23 August 2016 4:06 a.m.  
To: Parker, Amber <[Amber.Parker@lincoln.ac.nz](mailto:Amber.Parker@lincoln.ac.nz)>; Inaki Garcia de Cortazar Atauri <[igarcia@avignon.inra.fr](mailto:igarcia@avignon.inra.fr)>; Andy Walker <[awalker@ucdavis.edu](mailto:awalker@ucdavis.edu)>  
Subject: Heat tolerance design

Hi all,

Attached please find the latest draft of the heat tolerance experiment on winegrape varieties. Nicole Merrill (undergraduate intern in the lab) has helped out tremendously with a literature review and, based on that, I think we have a sense of what range of

temperatures to hit. I am proposing these five (I give means and night/day):

- Mean of 20 C – 17/23 C
- Mean of 26 C – 23/29 C
- Mean of 30 C – 27/33 C
- Mean of 34 C – 31/37 C
- Mean of 37 C – 34/40 C

My other major query is if we should scrub CO<sub>2</sub> out of the chambers (to avoid it getting very high with all the plants packed in)? My thought would be to keep CO<sub>2</sub> to 300 or 400 ppm. What do you think?

If you have time to read the full design and comment I would appreciate it.

The grapes are out of the chambers and in the greenhouse ... now we wait for budding. Once we have that we can finalize the exact varieties and replicates.

All the best,

Lizzie

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—Attachments:—

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