

Subject: RE: Heat tolerance design

From: Inaki Garcia de Cortazar Abaui <iabai@ucsb.edu>

Date: 2016, 23 Aug

To: Parker, Amber <amber.parker@lincoln.ac.nz>; Elizabeth Wolkovich <elzab@fas.harvard.edu>; Inaki Garcia de Cortazar Abaui <iabai@ucsb.edu>; Inaki Garcia de Cortazar Abaui <iabai@ucsb.edu>; Andy Walker <awalker@ucdavis.edu>

Hi all,

Thank you for all this work you have done during my holidays!

I hope everything is going well for all of you.

I read different mails and document sent by Lizzie. Nice work!! I did some comments in the document (Amber's version).

I agree with all your proposals:

- OK with the final list of varieties. It's a pity for Mourvèdre, but I think we have enough varieties;
- with Lizzie's proposal to distribute varieties and samples in the different chambers;
- with the 5 temperature ranges proposed (I have only a question about chamber temperature variability in the tent);
- with photoshoot order (I think it is for me).

Concerning CO2 I think it is better to keep 400 ppm (around atmospheric value) in order to be near of current conditions.

Thank you again for all this work and I hope feedback will start soon. I

let you know if you need to discuss about any of these topics.

All the best,

Inaki

De: Parker, Amber [mailto:amber.parker@lincoln.ac.nz]

Envoyé: vendredi 23 août 2016 08:28

À: Elizabeth Wolkovich <elzab@fas.harvard.edu>; Inaki Garcia de Cortazar Abaui <iabai@ucsb.edu>; Inaki Garcia de Cortazar Abaui <iabai@ucsb.edu>; Andy Walker <awalker@ucdavis.edu>

Objet: RE: Heat tolerance design

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 whorls, see Figure 3 b in <<http://www.sciencemag.org/cgi/content/full/343/6177/1240>

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

Regards

Amber Parker

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

From: Elizabeth Wolkovich <[elzab@fas.harvard.edu](mailto:elzab@fas.harvard.edu)>

Sent: Tuesday, 23 August 2016 11:08 a.m.

To: Parker, Amber ; Inaki Garcia de Cortazar Abaui ; Andy Walker

Subject: Heat tolerance design

Hi all,

Attached please find the latest draft of the heat tolerance experiment on winegrape varieties. Winnie 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 24 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 CO2 out of the chambers (to avoid it getting very high with all the plants packed in)? My thought would be to keep CO2 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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Elizabeth M Wolkovich

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