

Subject: RE: bud hardiness model
From: "Bogdanoff, Carl (AAFC/AAC)" <carl.bogdanoff@canada.ca>
Date: 7/29/19, 11:57 AM
To: "e.wolkovich@ubc.ca" <e.wolkovich@ubc.ca>

Hi Lizzie,

This is great having you go through the model. It looks like you caught me cheating - a little bit! For GDD numbers, I used Brad's already published GDD from Summerland (see attached GDD_2018_Oct_Final). I was lazy and probably should have used Env Canada's Penticton weather data. I've now just calculated Penticton's GDD data (also attached) and of course it is different averaging 80 GDD/season less than Summerland's. This discrepancy is likely due to Penticton having cooler minimum temperatures - the Summerland site is here at the station while Penticton's on the valley bottom at the airport.

If I use Penticton's GDD in the model and modify my GDD multipliers the model results are not quite as good (see .xlsx file tab: Env Canada Penticton GDD, columns Y to AI).

Query #2: For me, having 2 equally good scenarios never happened. The way I built this model was to focus on one issue in one year and then introduce a change. If the overall R2 for all years increased I would then keep the change. If the change helped in some years but not others I would likely modify the change to make it better or simply discard the change and try something different. My threshold for identifying an issue was when the model strayed from actual bud hardiness by more than 2C.

I hope all is going well. How long will your British invasion last?

Carl

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

From: Elizabeth M Wolkovich <wolkovic@mail.ubc.ca>
Sent: Thursday, July 25, 2019 6:30 PM
To: Bogdanoff, Carl (AAFC/AAC) <carl.bogdanoff@canada.ca>
Subject: Re: bud hardiness model

Hi Carl,

Nice timing! I started an email to you about the bud hardiness sites this morning, but did not have time to finish it before my afternoon meetings started. Yes! That's all I really asked about. If you happen to know where you got the GDD estimates that would help, but not critical at all now.

I am chipping away at progress -- it's slow going, but going.

I had one other sort of fundamental question. I was thinking today; say you find two different ways to improve the model that both equivalently yield similar levels of model improvement (R2 or such). It seems then the only way to know what is 'correct' would be to do an experiment on each improvement and/or some prior knowledge, is that about right? This is mainly a theoretical question I know, but one I was thinking about (and thinking I need to read more about hardiness).

Sounds good on Merlot!

Jonathan says hi, we're T-3 days til the family from London arrive

All the best,
Lizzie

On 7/25/19 4:27 PM, Bogdanoff, Carl (AAFC/AAC) wrote:

Hi Lizzie,

I started thinking about the hardiness model and then remembered ... You wanted the sample locations for the bud hardiness model. See attached. Was there anything else you wanted?

I hope to (in the next little while) start a new hardiness model for Merlot. I figure if I tell you I'm planning to do something then maybe I'll actually do it! I'll keep you posted and hopefully have something for you by the end of August.

All the best, say hello to Jonathan,

Carl

Carl Bogdanoff

Viticulture Biologist
viticulture

Chercheur de

Science and Technology Branch Direction générale des sciences et de la technologie

Pacific Agri-Food Research Centre Centre de recherches
agroalimentaire du Pacifique

Agriculture and Agri-Food Canada Agriculture et
Agroalimentaire**/*Canada**

P.O. Box 5000, 4200 Highway 97 Boîte postale 5000, 4200 Autoroute 97
Summerland, BC, V0H 1Z0, Canada Summerland, CB, V0H 1Z0, Canada

Email/Courriel: _Carl.Bogdanoff@Canada.ca
<<mailto:Carl.Bogdanoff@Canada.ca>>

Telephone/Téléphone: (250) 494-2124
Facsimile/Télécopieur: (250) 494-0755

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Elizabeth M Wolkovich
Forest and Conservation Sciences
University of British Columbia
3041 - 2424 Main Mall
Vancouver, BC V6T 1Z4
Office: 604-827-5246
www.temporalecology.org

— Attachments: —

GDD_2018_Oct_FINAL.pdf	430 KB
2012-2018 PENTICTON WEATHER 1.xlsx	771 KB