

MINUTES

NE-1020: Multistate Evaluation of Winegrape Varieties and Clones

2007 Planning Meeting

November 7-8, 2007

La Quinta Inn, Austin, TX

Day 1, Wednesday 7, 2007, La Quinta Inn Hotel

Start 8:45am

Participants:

- Penny Adams (psadams@ag.tamu.edu) - Texas Cooperative Extension
- Tom Bewick (tbewick@csrees.usda.gov) - USDA/CSREES
- Terence Bradshaw (tbradsha@uvm.edu) - University of Vermont
- Teresa Burns (thburns@ag.tamu.edu) - Texas Cooperative Extension
- Horst Caspari (Horst.Caspari@ColoState.edu) - Colorado State University
- Mark Chien (mlc12@psu.edu) - Penn State University
- Rob Crassweller (rmc7@psu.edu) - Penn State University
- Imed Dami (dami.1@osu.edu) - Ohio State University
- Paul Domoto (domoto@iastate.edu) - Iowa State University
- Anne Fennell (Anne.Fennell@sdstate.edu) - South Dakota State University
- Joe Fiola (jfiola@umd.edu) - University of Maryland
- Ed Hellman (ewhellman@ag.tamu.edu) - Texas A&M University
- Jim Kamas (j-kamas@tamu.edu) - Texas Cooperative Extension
- Steven Lerch (sdl5@cornell.edu) - NYAES, Cornell University
- Jim Luby (lubyx001@umn.edu) - University of Minnesota
- Bernd Maier (bemaier@nmsu.edu) – New Mexico State University
- Timothy Martinson (tem2@cornell.edu) - Cornell University
- Bruce McPheron (bam10@psu.edu) - Penn State University
- William Nail (William.Nail@po.state.ct.us) – Connecticut Ag. Experiment Station
- Ron Perry (perryr@msu.edu) - Michigan State University
- Fran Pontasch (fmpontasch@ag.tamu.edu) - Texas Cooperative Extension
- Paul Read (pread@unlnotes.unl.edu) - University of Nebraska
- Bruce Reisch (bir1@cornell.edu) – NYAES, Cornell University
- Paolo Sabbatini (sabbatin@msu.edu) - Michigan State University
- Sue Sim (stsim@ucdavis.edu) - University of California/FPS, Davis
- Patty Skinkis (skinkisp@hort.oregonstate.edu) - Oregon State University
- Ed Stover (ed.stover@ars.usda.gov) – USDA/ARS - NCGR
- Nancy Sweet (nlsweet@ucdavis.edu) - University of California/FPS, Davis
- Daniel Ward (dward@aesop.rutgers.edu) – Rutgers University - NJAES
- Fritz Westover (fawestover@ag.tamu.edu) – Texas Cooperative Extension
- Tony Wolf (vitis@vt.edu) - Virginia Polytechnic Institute and State University

Welcome and Introductions – Ed Helman

Ed gave an overview of the program for the next two days. There was a round table introduction of participants.

Ed delivered 3 handouts: agenda, 2006 minutes, and 2005 protocol draft.

Ed introduced the current officers of the NE1020 Executive Committee: Ed Helman - Chair, Horst Caspari - Chair Elect, and Imed Dami - Secretary.

Administrative Advisor Report – Dr. Bruce McPherson

Bruce was impressed with large participation (representatives from 18 states) and encouraged to inform non-participating states to be included in the future.

He reminded the duration of NE1020 project which will run until 2017. He also reminded group about VC cancellation in FY2007 and funds were recycled back to state experiment stations.

No federal budget yet this year. Not likely to have Ag appropriation bill until mid-winter. Earmarks are back in this year's fed budget. New regulations for openness. VC is in both House Ag Appropriation Bill (AAB) and senate AAB. House Bill \$2.079M. Senate \$1.2M. Senate wants to cut earmark by half. There is a need for resolving between the two in conference. Bruce encouraged participants to inform state legislators of the importance of VC and its benefit to local grape and wine industries.

Farm Bill - on hold at White House due to food stamps and commodities. Senate bill will take \$600M out of CSREES (IFAS budget) to support commodities. Organic initiative - reauthorized by farm bill at \$3M/year (mandatory funding). House wants \$25M with authorization of additional \$25M (not sure?), Senate \$16M/year. Specialty Crop Initiative is brand new - House authorized \$100M/yr for specialty crop research. Senate version has \$16M/year. Conference committee has to reconcile the bill proposals from Senate and House.

Old Farm Bill has ended on 30 Sept 2007. Next cycle starts in fiscal Oct 08. No specialty Crop in '08 budget. In FY08, VC will be restored if passed – the amount will depend on proposal by House or Senate.

Review of 2006 Minutes – Horst Caspari. He reminded the group that the minutes were posted on the NE1020 website since Jan 2007. Motion to approve by Paul Domoto and seconded by Tony Wolf.

Additional Items to Agenda:

- New members. To join, new participants need to contact their state agricultural experiment stations. Experiment stations authorize state representative to NE1020. Only authorized representatives are allowed to vote. New participating members include: Dan Ward, Rutgers

University (NJ); Patty Skinkis, Oregon State University (OR); and Bernd Maier, New Mexico State University (NM).

- Rob brought up the issue of standardizing data reports (such as use of same units) because of previous problems encountered with similar projects (e.g. NC 140, USDA 183?).
- There is a need for a statistician on the project to coordinate, compile and analyze the data.

2007 VC proposals –

VC West – Horst. 4 states involved: TX, CO, ID, CA.

VC East - Wolf: proposal funded to purchase vines (2/3 VCE, 1/3 state). Vines were grafted in 2007 by two nurseries, Nova Vines (certified vinifera) and Double A Vineyards (non-certified vinifera and hybrids). 50% deposit was paid for grafting. There is shortage of varieties and vines including MN and NY varieties. Grant extended until June 2008 to allow purchases. Since RFPs were sent by VC, 2007 proposals will be resubmitted in 2008 with updated varieties and cost of establishment.

Ed brought up concern on behalf of Keith Striegler (absent) that proposals for existing variety trials (predating NE-1020) should not be submitted to the Viticulture Consortium. Group agreed not to compromise NE1020 funding with existing trials, but investigators are encouraged to share results from those trials with the group.

Imed asked if it is possible to speed up virus cleaning of varieties that were requested from the East in the NE1020 project even though they are not priority by FPS and/or NGCR. Sue from FPS indicated that it is possible and she will bring the request to the attention of FPS Director, Deborah Golino.

Ed Stover for Jim Wolpert – can add other vines for other goals such as plant breeding to NE1020 as long as it doesn't compromise 1020. Must design the block so it doesn't affect 1020.

CSREES Representative Report – Dr. Tom Bewick

Tom gave an update on federal funding. There will be a Clean Plan Network (\$5M??), Specialty Crop Research Initiative (mandatory \$43M [\$100M authorized] by House and \$16M by Senate as competitive grants). If get budget, there will be special grant (e.g. VC in the amount of \$2.5M).

Tom reminded the group that they could use teleconferencing for sub-committee meetings provided by CSREES by contacting him.

2008 VC Proposals:

Tony and Horst will continue to be PIs of VCE and VCW, respectively, and will resubmit proposals in 2008. They will add new participants and will send new proposals to all cooperators for review and comments before final submission to VC.

Protocol Revisited:

Ed referred to the protocol draft handout to refine the existing protocol of vineyard establishment, wine making, and data collection.

Viticulture protocol:

- 2005 and 2006 drafts were used as a starting point of discussion.
- A "*Protocol Sub-Committee*" was formed: Steve Lerch (Chair), Anne Fennel, Tim Martinson, Imed Dami, Terry Bradshaw, and Bill Nail. This sub-committee will be in charge of developing the step-by-step procedures and data collection for the viticulture protocol.
- Anne Fennel recorded a tabulated summary of the new protocol.
- Procedures and data collection are divided into "optional", "required" and "observations"
- Long discussion about differentiating between vinifera and hybrid in the following: training system, yield, crop load range, experimental design.

Viticulture Protocol

Vineyard Establishment:

- Site preparation: standard practices by location
- Rootstock for vinifera: East = 101-14; West = varies
- Row spacing = 8-10', vine spacing = 4-8'
- Training: VSP for vinifera, High Cordon for hybrids; both cordon training
- Drip Irrigation – optional
- Grow tubes optional
- 6 reps of 4 vines or 6 reps of 3 vines for widely spaced vines
- Randomized Complete Block (RCB) based on location
- Missing/dead/rogue vines must be replaced no later than year 2. After year 2, replaced vines are no longer part of the NE1020 experiment and will be reported as "missing" data. Empty holes must be replanted with vines; any variety is acceptable even if not part of the experiment.
- Guard rows/vine required – no exterior rows/vines

Viticultural Practices:

- Shoot density: after shoot thinning, retain 4-5 fruitful shoots/linear ft of canopy
- Dormant pruning: spur pruning – determine nodes/spur = 2 (minimum) to 6 (maximum?)

- Keep record of frequency of canopy trimming/hedging
- Keep record of cluster thinning if conducted
- Standard practices for pest, disease, and weed control.

Data Collection:

- Crop estimate not required however it is recommended so that you can achieve target Ravaz index (crop load = crop weight/pruning weight per vine).
- Target yield: use of Ravaz Index (crop load) = 5-10 for vinifera and 10-15 for hybrids.

Data collected	Required 1	Required 2	Optional 1	Optional 2	Observation that can be recorded
Vine Size	Pruning wt/vine	cm of cordon			
Bud survival	Live buds per total buds per vine after pruning			shoots/node	
Fruitfulness	Crop weight/node (calculation)		Clusters/node	crop/linear length	
Yield Components	berry wt (50 berries per panel) for monitoring fruit chemistry	100 Berry weight at harvest			
	Crop weight/vine	fruiting node/vine (calculation)			
	clusters/shoot?? Or		clusters/shoot??		
	Clusters/vine				
	cluster weight (calculation)				
	berries/cluster (calculation)				
Ravaz Index	Crop size/vine size				
Phenology	date of 50% bud break stage five - BBCH09				
	date of 50% bloom				
	date of 50% veraison				
Acclimation and cold hardiness	bud damage, canes, cordons and trunk kill in event of damaging cold	Crown gall??	% periderm formation after first killing frost	Bud hardiness using thermal analysis	
Pest tolerance	record disease incidence	Bunch rot??	Optional records that there will be a consistent protocol for		

Abiotic Stresses					oxidant stipple, phytotoxicity, nutrient, fruit set etc.
Meteorological	Air temperature hourly		Relative humidity	Type of freeze event (radiative vs. advection)	
	Rainfall daily		PAR		
			Potential ET		
			Wind Speed		
			Wind Direction		
Fruit Quality pre-harvest	no required sampling		Weekly brix, pH, TA		
Timing of Harvest	Timing of harvest is optimized for location and season		Fruit rots noted at harvest		
Fruit quality at harvest 100 berries minimum per panel	Brix		Color density		
	pH				
	TA				

Enology Protocol:

It was noted that there was no Enologists in the group to discuss enology protocol in details. The group delegated this task to the vinification committee: Anna Katherine Mansfield (Chair), Bruce Zoecklein, and Sara Spayd. The developed procedures will follow similar format to the viticulture protocol with “optional” and “required” procedure. Group recommended inviting enologists to the CO meeting to help complete wine making protocol

Elections and future date and location

Paul Nominated Joe Fiola as Secretary, who respectfully declined. Ed Stover nominated Paulo Sabbatini as a new Secretary and seconded by Horst Caspari.

Next NE1020 meeting will be in Grand Junction (?), Colorado hosted by future Chair, Horst Caspari. Suggested dates: November 6-7 or November 12-13.

Committee Reports – None

No other protocols were discussed either (e.g. Nutrition protocol).

Adjourn 5pm.

Day 2, Thursday 8, 2007, La Quinta Inn Hotel

Start 8:40 am

Announcement

- Ed Helman: bus leaving to tour vineyards in the area
- Mark Chien: new book released in Sept 2007 “Winter Injury to Grapevines and Methods of Protection” by Michigan State University Extension.
- Imed and Joe: suggested to formalize the request for plant materials clean up of varieties in the NE1020, but are not in FPS priority list, by sending a letter on behalf of NE1020 participants to Directors of centers for grape clean up and grape genetic resources. Directors of grape clean up centers include: Deborah Golino, FPS; Mark Fuke ?, NYSAES; Wen Ping and Ken Eastwell, NWGFS. Letter will be sent to Directors of the NGCR in California and New York. Letter will be copied to Thomas Burr, Director of NYSAES. Who else?
- A subcommittee was formed to be in charge: Joe Fiola (chair), Ed Stover, Imed Dami, and Tony Wolf. Ed Stover suggested adding new introduction of varieties then include in the protocol. But not wine making in 2-3 locations.
- Ed Stover suggested to officially recognize multiple tiers of data collection as being part of the NE-1020 process, suitable for funding, joint data collection, and joint evaluation. For example, California plans to implement the following three-tier system:

- 1) 12-15 varieties with full replication and data specified as core for NE-1020.
- 2) ~25 varieties with fewer vines, but full viticultural data
- 3) Guard rows of even more speculative material.

Coordination of Data and Statistics:

- A subcommittee for data collection and handling was formed: Dan Ward (chair), Anne Fennel, Rob Craswell, Horst Caspari, and Bill Neal.
- Dan is a statistician and will help define accurately the objectives of this project in order to utilize proper experimental designs, data collection, and statistical analyses.

Final Comments

Dan recommended that current Secretary write a thank you letter to Ed for his services as 2007 NE1020 Chair.

Meeting adjourned 9:45am