

## 2007 ARS/NGWI Field Tour



University of Idaho



### Viticulture

The viticulture research programs at WSU and ARS (Prosser, WA, and Parma, ID) focus on developmental and environmental factors and vineyard management practices as they influence the physiology, productivity and quality of wine and juice grapes. Projects address yield formation and estimation, grape ripening and fruit quality, variety and rootstock evaluation, deficit irrigation and water relations, cover crop management, pruning strategies, and cold hardiness. The WSU program also provides clean grapevine selections to industry and research through the Northwest Grape Foundation Service. While each scientist obviously manages his or her own program, most research projects are collaborative in nature, often across institutional and state boundaries.

- Grape berry water relations and implications for deficit irrigation strategies
- Cold hardiness evaluation (<http://winegrapes.wsu.edu/frigid.html>)
- Northwest Grape Foundation Service (<http://nwgfs.wsu.edu>)
- NE 1020 multistate project (regional wine grape variety testing)
- Scion-rootstock interactions and rootstock effects on wine quality and juice grape chlorosis
- Optimal plant spacing for mechanized juice grape production
- Trellis Tension Monitor & Automated yield estimation
- Light and temperature effects on fruit exposure and quality
- Kaolinite application to prevent sunscald in wine grapes
- Trellis modification for mechanical and minimal pruning and canopy management
- Cover crop evaluation for arid climates and organic production

### Team Members:

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