

FINGER LAKES VINEYARD NOTES

Newsletter 2

February 14, 2001

Cornell Cooperative Extension

Finger Lakes Grape Program

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CONVENTION REMINDER

Final arrangements for the 2001 Finger Lakes Grape Growers Convention and New Grower Workshop, March 2 and 3, are underway. In addition to the program, we have a full trade show, including 3 outdoor equipment displays, and participation by the Seneca County 4-H Teen council (baked goods for the trade show) and the New York State Women for Wine, who will be organizing the wine tasting during the March 2 New Grower Workshop and the March 3 Convention. **Pesticide recertification credits** will be offered for both programs. The New Grower workshop will have 1.25 credits, while 2.0 credits will be offered for the Saturday Convention. **To avoid a late registration fee, the deadline for pre-registering is Friday February 16.** The program is available at our web site www.cce.cornell.edu/programs/finger-lakes-grape, or by contacting our office at 315-536-5134.

REDUCING NITROGEN FERTILIZATION COSTS

Timothy E. Martinson

By now, it should be no secret that prices for nitrogen (N) fertilizer will jump sharply in the 2000 season. After several years of relatively inexpensive

natural gas prices (used in manufacture of nitrogen fertilizers), demand has increased, and prices are up. Some plants have been temporarily shut down, as natural gas is diverted to other higher-profit uses. Local suppliers in the Finger Lakes report ammonium nitrate prices rising from about \$180 to \$270 per ton.

Nitrogen use varies widely among growers and varieties. In the Finger Lakes, growers of bulk juice and wine grapes may apply up to 100 lb/acre of actual N (300 lb/acre ammonium nitrate), so material costs for this input could jump from \$25 to \$40 per acre or more. For grapes valued at \$250 to \$400 per ton, this is a significant cost. *Vinifera* growers typically apply less – from none up to 30 lb actual N per acre.

Given these prices, its a good time to take a long, hard look at your nitrogen program. Fortunately, there are many ways in which grape growers can modify their nitrogen programs to save money and increase application efficiency.

Reduce Rates. In central and western NY, growers have typically applied 100 lb/acre actual N to hybrid and native bulk juice and wine varieties. There is good evidence that on many (maybe most) sites, these rates could be reduced substantially without affecting yield or quality. A long-term experiment on heavily-cropped 'Concord' grapes in Western NY compared 0, 50, and 100 lb/acre nitrogen applications as one of the factors. The soil was a deep, well-drained gravelly loam. Over 40 years, vine size and yield increased with 50 lb/acre, but *no additional yield or vine size was obtained by increasing N rates from 50 to 100 lb actual N/acre.*

Remember what the soil supplies. Many soils supply significant quantities of N through breakdown of organic matter. If your soils have 3-4% organic matter, chances are that the soils can supply 40 -80 lb/acre of N. While its hard to directly correlate presence of organic matter and N availability, soils with higher organic matter content

should require less N than eroded or sandy soils with low organic matter content.

Remember nitrogen is mobil. Nitrogen can rapidly move through the soil, particularly during rainy periods. To gain maximum efficiency from the N you apply, it's best to time applications to coincide with periods of high demand by the grapevine.

Delay application until after bud break. Recent studies on both *vinifera* and native grapes are very clear about one thing: Between bud burst and bloom, vines relied on stored N and carbohydrates to support vine growth and development. *Before bloom very little nitrogen is taken up by grape roots.* Demand by the vine is greatest during the 4-6 weeks after bloom. For this reason, you can reduce losses and improve efficiency by avoiding early application of N.

Consider split applications. Because N is mobil and vine demand extends through mid-season, it may make sense to split the total amount, with 1/2 to 2/3 applied between bud break and bloom, and the remainder after bloom. This strategy should extend the period of N availability and result in more uptake of applied N. It is most useful on coarse soils with high leaching ability (sands & gravelly soils), or shallow soils.

What about foliar applications? The amount of N that can be applied with foliar applications (e.g. of feed-grade urea) is limited. However, there are some anecdotal indications that foliar applications may be useful at specific times, such as 1) a few weeks before veraison, when demand by fruit is high, 2) post-harvest, when significant N can be taken up through leaves and moved into storage in trunks and roots as the vine enters dormancy. These options are the subject of currently proposed research by Dr. Lailiang Cheng at Cornell.

Nitrogen applications have been driven by the idea that it's 'cheap insurance', and that it therefore makes sense to make sure there is an ample supply for vine growth. With rising prices, considering application efficiency is becoming more important. Evidence suggests that many growers could reduce outlays by 1/3 without risking reduced yield or quality.

Note: For more detail on nitrogen use and application strategies, consult the 3 part series on nitrogen fertilization that appeared in the February 12, April 6 and June 10, 1999 issues of Finger Lakes Vineyard Notes.

2000 NEW YORK GRAPE STATISTICS RELEASED

Timothy E. Martinson

The New York Agricultural Statistics Service has released 2000 crop statistics for grapes. Statewide, tonnage declined from last year's near-record 202,000 tons to 152,000 tons, a drop of 25%. The drop in tonnage was led by Natives, down 26% from last year. Statewide hybrid tonnage was down 13%, and *V. vinifera* tonnage increased by 16% in 2000. The 2000 crop is about 18% below the long-term average of 186,000 tons.

The Finger Lake's share of the statewide crop was 24.6%, up from 22.8% of the state's crop in 1999. Overall, the 2000 crop in the Finger Lakes was down 19% from 1999, with Natives down 23%; Hybrids down 12% and *vinifera* tonnage up 10%. Among native varieties, the change in tonnage varied. Concord tonnage dropped only 13% (compared to 28% in Western NY). Catawba tonnage was down 37% from last year's heavy crop, while Niagaras were down 25% and Elviras were down 22%. Among the hybrids, deChaunac and Seyval blanc posted the biggest declines, dropping 27% and 25% respectively. **(Table on page 4)**

MARCH 26 PROGRAM TO NETWORK FINGER LAKES FARM, FOOD & TOURISM INDUSTRIES

Tim Pezzolesi
Cornell Cooperative Extension
Ontario County

The theme of the March 26th Finger Lakes Culinary Bounty Trade Show is "Building Business among Food, Farming and Tourism Industries". Organizers are inviting businesses in the 14-county Finger Lakes region to network with others who share an interest in promoting local food, farm and tourism products and services.

"The networking opportunities at this event will result in the development of partnerships benefiting farmers, food processors, regional promoters, residents, tourists and local economies," says Tim Pezzolesi of Cornell Cooperative Extension of Ontario County.

The Waterloo Holiday Inn will host a day-long program including panels of speakers, a buffet lunch made with Finger Lakes ingredients, and an

afternoon Finger Lakes wine and cheese tasting. Organizers have allowed ample networking time for the food processors, farmers, restaurant owners, tourism promoters, farm and farmers' markets managers, hospitality industry representatives, caterers, winery operators, food distributors, and chefs expected to attend the event from across the Finger Lakes region. Exhibit spaces are available to those who wish to showcase their goods and services.

"This is the most exciting thing to happen in the Finger Lakes in a long time. The partnerships which will grow from this event are essential and overdue," says Dave Connelly, publisher of the Finger Lakes Business Almanac, a show sponsor. "Agriculture is the bedrock industry of this region, but in terms of doing business it has been isolated from the rest of the economy. The Finger Lakes Culinary Bounty effort and this networking event will allow agriculture to work in combination with the region's second-largest industry, tourism, and will show how the two can connect through the imaginative restaurants throughout the region looking to offer a unique Finger Lakes flavor to visitors."

Panels of farmers, chefs, and tourism and business representatives will offer tips on how-to create successful partnerships. Keynote speaker Amy Cotler is executive director of Berkshire Grown, a successful farmer-chef program in western Massachusetts with pledges from more than 65 restaurants, stores, and inns to purchase products from 85 farm and food producers.

For registration and exhibit information, contact Tim Pezzolesi, Cornell Cooperative Extension of Ontario County, by phone at 716-394-3977 x30, or email: tp4@cornell.edu

UPCOMING EVENTS

Ohio Grape/Wine Shortcourse "The Path to Gold." February 18 - 20, 2001. Wyndham Dublin Hotel, Dublin, OH. For more information contact Ohio Wines from the Heartland at 440.466.4417 or 800.227.6972.

Niagara Peninsula Fruit and Veg Growers' Association Convention. February 21 - 22, 2001. Brock University, St. Catharines. Contact Ken Slingerland, Ontario Ministry of Agriculture, Food and Rural Affairs at 905-562-4147

52nd Annual Finger Lakes Grape Growers Convention. March 2 - 3, 2001. Waterloo Holiday

Inn, Waterloo, NY. The convention returns to Waterloo. This year it will feature a half-day session on Friday afternoon, March 2, aimed at "New Growers. Call 315.536.5134 for more information.

Fourth Annual Cornell Vinification & Brewing Technology Laboratory Gala Dinner and Wine Auction. March 9, 2001. Casa Larga Vineyards, Fairport NY contact: Nancy Long (npl1@cornell.edu, ph: 315-787-2288, fax: 315-787-2284) <http://www.nysaes.cornell.edu/fst/vb/>

Grape Expectations - A Viticultural and Enological Symposium. March 10, 2001. Forsgate Country Club, Jamesburg, NJ. For more information contact Dr. Joseph Fiola, Rutgers Fruit R & E Center, 283 Route 539, Cream Ridge, NJ 08514, call 609.758.7311 or email creamridge@aesop.rutgers.edu

Wineries Unlimited. March 20-23. Lancaster, PA. This will be the 25th annual trade show and seminar, organized by Vineyard and Winery Management. Call 800.535.5670 for more information. <http://www.vwm-online.com>

New York Wine Industry Workshop. April 4 - 6, 2001. Lake Front Ramada Inn, Geneva NY. Contact Nancy Long for more information at npl1@cornell.edu or phone 315-787-2288 or fax 315-787-2284.

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New York Agricultural Statistics Service
NEW YORK GROWN GRAPES PROCESSED

*Tonnage by Variety and Production Area Received by Wineries and Processing Plants,
 1999 and 2000; Prices Paid to Growers, 1998-2000 1/*

[Note: I have modified the NASS table by adding subtotals for native and hybrid varieties. I included the 'Other varieties' category with the hybrids, because most of the varieties listed as 'other varieties' by NASS are hybrids. - TEM)]

	New York Production Areas										
	Chautauqua-Erie		Niagara County		Finger Lakes		State Total <u>2/</u>		Average Prices Paid by Variety (\$ per ton)		
	1999	2000	1999	2000	1999	2000	1999	2000	1998	1999	2000
American Varieties:											
Catawba	2,379	1,820	<u>3/</u>	<u>3/</u>	7,166	4,503	9,600	6,400	245	243	246
Concord <u>4/</u>	136,078	97,929	2,198	1,720	15,813	13,542	154,500	113,300	276	261	263
Delaware	183	<u>3/</u>	-	-	994	592	1,180	630	270	279	272
Ives	<u>3/</u>	<u>3/</u>	-	-	176	126	210	140	370	384	385
Elvira	870	816	-	-	3,668	2,839	4,540	3,660	240	238	244
Niagara <u>4/</u>	9,685	8,182	1,625	1,298	5,828	4,394	17,200	13,900	265	271	248
All Natives	149,195	108,747	3,823	3,018	33,645	25,996	187,230	138,030			
French Hybrids:											
Aurora	<u>3/</u>	<u>3/</u>	-	-	4,215	4,040	4,240	4,060	245	248	240
Baco Noir	<u>3/</u>	<u>3/</u>	-	-	716	704	730	720	395	409	405
Cayuga White	-	<u>3/</u>	-	-	783	692	860	740	390	401	412
deChaunac	-	-	<u>3/</u>	-	902	659	940	670	375	285	391
Rougeon	-	-	-	-	652	529	660	540	380	404	384
Seyval Blanc	<u>3/</u>	<u>3/</u>	-	-	658	490	850	550	360	346	392
Other Var.	281	<u>3/</u>	<u>3/</u>	-	2,225	1,780	2,460	2,020	325	322	324
All Hybrids					10,151	8,894	10,740	9,300			
Vitis Vinifera:											
All	<u>3/</u>	<u>3/</u>	-	<u>3/</u>	2,340	2,592	4,030	4,670	1,230	1,290	1,310
TOTAL <u>4/</u>	149,476	108,932	3,922	3,146	46,166	37,482	202,000	152,000	308	283	295

- 1/ Includes New York grown grapes received at out of state plants.
- 2/ Includes Hudson Valley, Long Island, and other areas not listed.
- 3/ Quantities less than 100 tons not published. Amounts are included in other varieties by area and variety totals at state level.
- 4/ 1999 and 2000 prices are preliminary. Estimates of future payments by cooperatives have been included based upon historical data.

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