

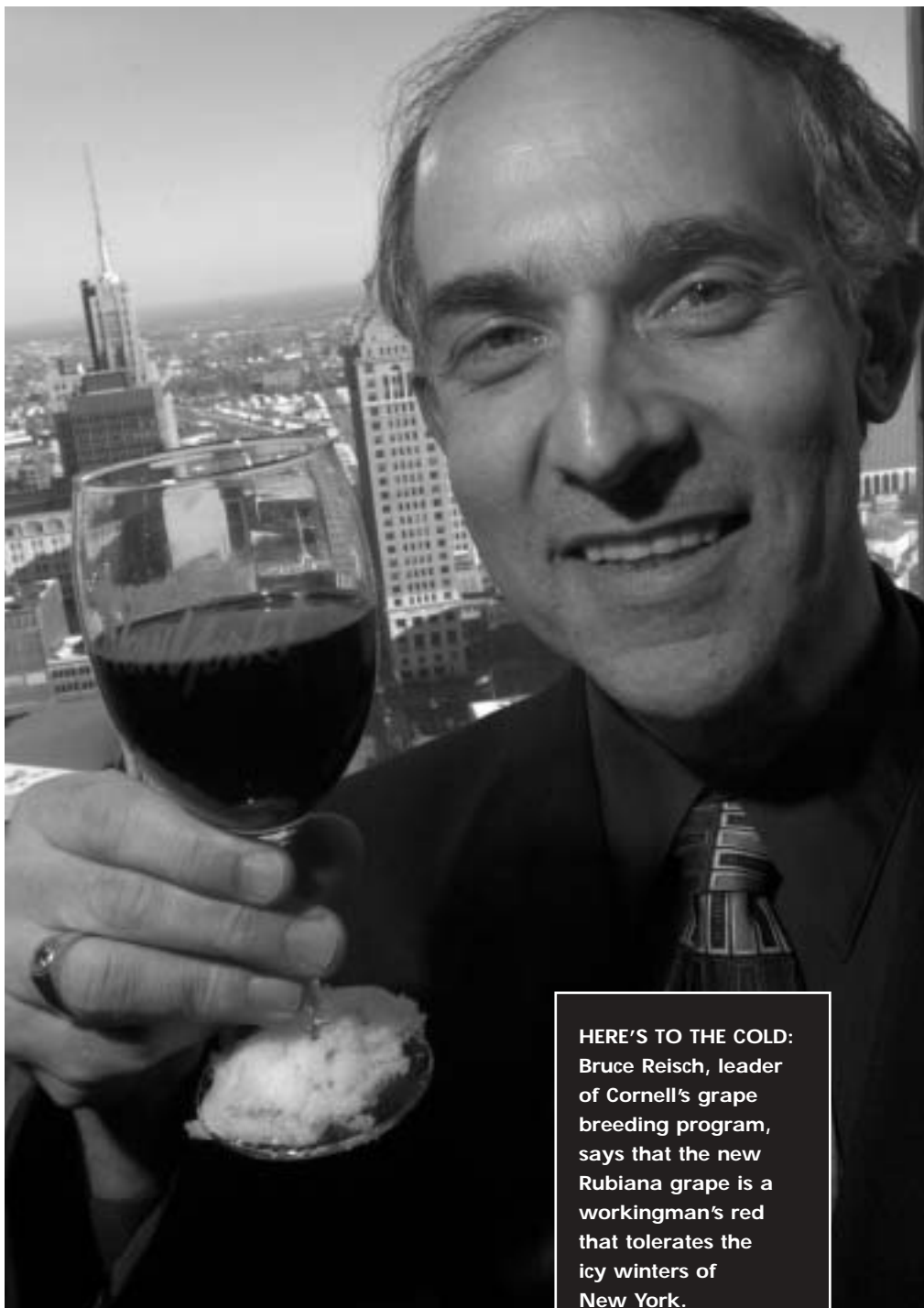
Cornell Brings Its Sixth Wine Grape to the Glass

The newest release from the New York State Agricultural Experiment Station at Geneva is Rubiana a red grape that is disease resistant and winter hardy year after year.

by Linda McCandless

If you planted a vineyard of grapes that had been bred and released by Cornell University, you would have 53 vines, trained on the world-famous double-curtain trellis system developed by Cornell viticulturist Nelson Shaulis. Among them would be juice, table, and wine grapes bred for hardiness, flavor, and pest resistance. The earliest, a table grape called Goff, dates back to 1906. The latest, a wine grape that breeder and geneticist Bruce Reisch calls “a working man’s red,” was released last February, and takes its place next to five other Cornell wine grapes: Cayuga White, Chardonel, Traminette, Melody, and Horizon.

“Rubiana, or Abundance, as it was briefly called, is a product of opportunity and circumstance,” says Reisch,



AP/WIDE WORLD PHOTOS

HERE'S TO THE COLD: Bruce Reisch, leader of Cornell's grape breeding program, says that the new Rubiana grape is a workingman's red that tolerates the icy winters of New York.



NYS AGRICULTURAL EXPERIMENT STATION

CELLAR SUCCESS: Steve DiFrancesco, winemaker at Glenora Wine Cellars, has been using Rubiana for eight years and finds that it has good color and moderate acidity.

become more sophisticated over time as universities here and abroad have developed formal breeding programs. “The Geneva grape breeding program began in 1888. Until the early 1800s, grapes were not scientifically bred, but were insteaders, and shared by growers,” Reisch says. “Modern breeding programs release new varieties when the decision is made to name them and make them available for commercial use or use in backyard gardens.”

who leads Cornell’s grape breeding program at the New York State Agricultural Experiment Station in Geneva, N.Y.

Release strategies for fruit have

The release date for a grape is the time when the grape is released for public use. Prior to that date, the grape is available as a selection that growers and wineries can test. As part of the testing process for new wine grape selections, the wine sometimes finds its way into commercial products. Such was the case with Rubiana.

“Normally, it takes 20 to 25 years to test and release a new grape,” notes Reisch. “With Rubiana, it took longer than that for growers and researchers to discover that it remained productive in older vineyards while other red wine varieties were succumbing to disease.”

In the intervening years, winemakers also discovered how to better use the grape in wine. Sales of red wine have soared in recent years because of reputed health benefits, so the market was ripe for a red wine grape that would help winemakers meet increased demand. “Rubiana is helping fill that void,” Reisch says.

Rubiana, is already under cultivation in Finger Lakes vineyards and used commercially by Finger Lakes winemakers to

make red wine blends. One of these, Steve DiFrancesco, the winemaker at Glenora Wine Cellars, in Dundee, N.Y., has been using the Rubiana grape in Glenora's Classic Red and Bobsled Red for over eight years. "We find Rubiana has good color and moderate acidity," DiFrancesco says. "It is generally the first wine to complete malolactic fermentation, which we then use to inoculate our other red hybrids."

"Rubiana makes dark, soft wines with a classical hybrid aroma," says Cornell enologist Thomas

Grape growers and winemakers pushed Cornell to officially name and release GR7 because it had proven to be so vigorous, productive, disease resistant, and winter hardy.

Henick-Kling, who together with Bruce Reisch sets the goals for the wine grape breeding program. "Rubiana has much better viticulture and winemaking char-

acteristics than older red hybrid varieties. It makes a good-quality wine with attractive cherry flavors."

Grape growers and winemakers helped select a name for the new grape and pushed Cornell to officially name and release the variety because it had proven to be so vigorous, productive, disease resistant, and winter hardy.

The newest grape from Geneva's internationally acclaimed fruit breeding program ran into a roadblock on its way home from last February's name-and-release party, however. After receiving lots of national press as Abundance, breeder Reisch was forced to reconvene the naming committee when Abundance Vineyards in Sonoma County, Calif., claimed ownership to the name. An initial search in the U.S. Patents and Trademark Office database did not uncover the name. Reisch named GR7 Rubiana in September.

Rubiana was selected from a cross of Buffalo x Baco noir, made in 1947, and tested in the experiment station's grape breeding program under Richard Wellington, John Einset, Willard Robinson, and Robert Pool. Grower-adviser Seaton "Zeke" Mendall helped popularize the grape among growers.

Cornell's Other Wine Grapes

In this vineyard you are cultivating, you might want to pay particular attention to Cornell's other wine grape cultivars. Noticeable improvements in the quality of New York's products are capturing the attention of wine drinkers and judges far beyond its borders. Part of that success can be attributed to Cornell's success in creating several hybridized grape varieties that ripen in a relatively short growing season and survive the cold winters. All except Horizon have earned a reputation for solid performance among grape growers, wine makers, and consumers in the Finger Lakes.

Cornell grapes are bred to perform in the eastern United States and have helped provide muscle to a New York wine industry that has expanded from nine to over 190 wineries in the last 25 years. The genetic foundation of the breeding program involves the genus *Vitis* in all its diversity, according to breeder Reisch. Cornell uses native species, which are particularly disease resistant and winter hardy, and crosses them with European *Vitis vinifera*, which are good for wine, and also uses Asian species found throughout China, the northern part of Russia, Japan, and Korea.

Cornell's first wine grape, Cayuga White, a cross of Seyval x Schuyler, was released for commercial use in 1972. It is productive, easy to grow, and very versatile in winemaking.

"Cayuga White probably enjoys the strongest following of them all," says Dave Pohl, wine buyer and consultant at Northside

Wine and Spirits in Ithaca, the largest retailer of New York State wines in the country. "It has a certain amount of character and not too much acidity, so you can pair it with a wide range of foods, including spicier ones."

"Cayuga plays a very important role in the wine industry," Henick-Kling says. "It makes a great white wine on its own and is a fantastic blender, with good body and a range of flavors that lets you make several styles of wine." He puts Cayuga White in the Riesling and Chardonnay category even though it is a hybrid and not a pure *vinifera*.

Part of the success of New York's wine products can be attributed to Cornell's success in creating several hybridized grape varieties that ripen in a relatively short growing season and survive the cold winters.



SENSORY TEST: Thomas Henick-Kling (right), director of Cornell's enology program, and Ben Gavitt, extension support specialist, conduct sensory analysis of wine submitted to the Wine Analysis Laboratory at Geneva.

Dave Peterson, whose family owns Swedish Hill and Goosewatch wineries on Cayuga Lake in the Finger Lakes region of New York, processed 80 tons of Cayuga White last year and has been using it since the late 1980s. "We use Cayuga on its own, and it serves as the primary baseline in a couple of blended

products at Swedish Hill and Goosewatch," he says, including a Blanc de Blanc sparkling wine, which won two gold medals in California competitions this spring.

"The whites we are using have a credibility with the consumer because of their relationship with Cornell," Peterson says. "People identify with regional wines and particularly identify with Cayuga because it is locally grown as well as locally developed."

Melody, a Seyval x Pinot blanc x Ontario cross, released in 1985, is an alternative to Seyval, without the potential to overcrop, which limits Seyval. It is productive, resistant to Botrytis bunch rot, and food friendly as a wine. At Goosewatch, Peterson reports a little over three acres planted, with more vines going in. "We made 800 cases of Melody last year," he says.

Chardonel, a Seyval x Chardonnay, released in 1990, makes a Chardonnay-style wine and exhibits good winter hardiness and disease resistance. It does especially well in Missouri, Arkansas, and Michigan, where cold and disease pressure take their toll on Chardonnay. Chaumette Vineyard owner Hank Johnson, in Missouri, has at least 15 acres of Chardonel planted and has been using the grape primarily as a varietal for the last eight years.

"It is dry and kind of fruity," he says. "Like Chardonnay, it goes well with fish and cream dishes." Johnson thinks the Chardonels from Missouri are very competitive with the Chardonnays from California.

Chardonel is the most widely planted white grape in Missouri.

Traminette, a Joannes-Seyve 23-416 x Gewürztraminer cross, released in 1996, is catching on extremely fast in the Finger Lakes. It is a Gewürztraminer-style white wine grape that is more productive, winter hardy, and disease resistant than its Gewürztraminer parent.

One of Traminette's biggest champions is John Brahm, of Arbor Hill Winery, in Naples, N.Y., who has pioneered its use since 1994, and currently has 2.5 acres in production. Arbor Hill makes three styles of Traminette—dry, signature semi-dry, and an ambrosia dessert wine. All three recently received awards in the 2003 International Eastern Wine Competition: the signature received a gold; the dry, a silver; and the ambrosia, a bronze. This follows a tradition of success with the variety at Arbor Hill, whose 1996 Traminette took the prize for best white wine in New York at the 1997 International Eastern Wine Competition. Brahm reports yields of 3 to 3.5 tons/acre for Traminette and characterizes it as an "easy keeper."

With the reputation of the other four to recommend it, Rubiana, the newest release, is already enjoying solid demand. Dennis Rak, owner of Double A Vineyard in Fredonia, N.Y., has sold 5,000 vines so far and says demand by customers in cooler states, like Nebraska, Wisconsin, and Minnesota is particularly strong.

What the Future Brings

With a horizon that is 20 years out, grape breeders are always looking at a fairly long pipeline. Three Cornell grapes are slated to be named and released in 2006: NY62-0122.01, a Muscat-style white wine grape that produces an intensely flavored high-quality dessert wine or can be used in blending; NY70.0809.10, a red wine grape that produces a deep-red, medium-bodied wine, with cherry and blackberry flavors; and NY73-0136.17, which produces a full-bodied, well-structured red wine with pepper and red fruit aromas. These grapes are currently in production in test plots with grower cooperators throughout New York, including Glenora, Swedish Hill, Goosewatch, and Arbor Hill.

Further out in the future, Reisch and Henick-Kling are working on the generation of Cornell releases that will be disease tolerant, cold hardy, and require no disease control measures at all. "We are looking for varieties that require no sprays and have flavor profiles that are as good as the best hybrids we have and hopefully more of the vinifera type," says Henick-Kling, who has been involved with the breeding and wine analysis programs at the Geneva experiment station for 16 years.

So, make sure there is room for expansion in your Cornell vineyard: it is not going to stay at 53 vines for long.

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