

Scarlet Grape

new variety for fresh juice and jellies

H. P. Olmo

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A new juice grape—with a Concord-type flavor—adaptable to the climatic conditions of California, produces a juice that can be canned, or frozen, or used in pure, sparkling soft drinks.

Wine-growers may find the new grape useful in blending, because of its high color, flavor and acidity.

Named "Scarlet" because of its characteristics—the bright red of its extracted juice and the early fall coloring of its leaves—the new variety was developed at Davis.

Scarlet is a hybrid of Golden Muscat × Teinturier, station seedling 294E7, from a cross made in 1935. The seed was planted at Davis in the fall of that year and the vine first fruited in 1939.

The Golden Muscat parent is a hybrid of Muscat Hamburg and Diamond. The Teinturier is of the south of France.

Qualities of Scarlet

Of many new seedlings tested, Scarlet best meets the requirements for producing a juice grape, with a Concord-type flavor, that can be grown successfully in California.

Its color is bright, stable and attractive, and its chemical composition is so balanced that the pure juice can be used without correction.

The vine is well adapted for home gar-

dens as it is vigorous enough to grow on ferice, trellis or arbor.

Scarlet fruits regularly and well without great attention to detailed pruning methods, and is somewhat resistant to powdery mildew. The fruit will hang a long time on the vine without spoilage.

Productivity

Scarlet was selected from 60 plants and, as a seedling vine, it was the most productive of all. It averaged 11.5 pounds to the vine during the period 1940 to 1942 in plantings placed two feet apart in the row, when the vines were pruned to only three spurs of two buds each.

In 1945 the original vine was stubbed back to the main trunk, and all the canes were removed. Even with such severe pruning, over ten pounds of fruit were harvested. Many of the dormant buds proved fruitful.

Scattered trial plantings of Scarlet have been too small to furnish reliable data on yield in comparison with such varieties as Concord or Delaware. The more vigorous growth of the vine and the abundance of fruitful buds indicate that it will be more fruitful.

Utility

Because the berry is small, the variety cannot be used as a table grape.

Scarlet is introduced to give the commercial market, and the home grower a specific product—fresh or processed pure juice that can be produced in California with a minimum of effort.

High sugar content and acidity make a well-balanced juice. For example:

Date of test	Sugar content (Balling)	Acidity as tartaric Gms/100 cc.
August 19, 1940	20.0	1.00
August 31, 1941	20.8	1.30
October 4, 1942	28.2	0.80

Scarlet is very productive when spur-pruned, in contrast to Concord, but it also can be cane-pruned and then will carry much greater crops to maturity. The optimum stage of maturity at Davis is from 22 to 23 Balling for making the most palatable fresh juice.

Rapid sweetening of the fruit on the vine necessitates some care in harvesting at the proper period. The acidity can be increased by including the small cluster-lets—second crop—which ripen later and have very high acid content.

Scarlet has a thick skin that is very resistant to mechanical injury, is heavily pigmented and separates easily from the pulp.

The pulp is soft, very juicy and most of the berries have three seeds.

The fruit is very resistant to fruit rots and molds.

Ripening in early midseason, the berries hang on the vine and shrivel rapidly when overripe.

The juice is bright scarlet, more intense than Alicante Bouschet, and very stable, not oxidizing easily on exposure or when processed for jellies or beverage use. Sediment settles readily after extraction.

The flavor of Scarlet is similar to Concord and, though less pronounced, is highly palatable.

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Stubborn Disease

one cause of nonbearing in navels, Valencias, and grapefruit

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An increasing number of nonproductive trees sometimes noted in navel orange orchards as the trees advance in age may be due—in part—to the infectious disease known as stubborn disease.

Stubborn disease—also known as acorn disease, and as pink nose, in reference to

effects on some of the fruit—has been found in California in all sections where navels are grown.

The stubborn disease appears to affect Valencia trees less severely than navels and it is more difficult to diagnose in Valencias than in navels.

In Valencias, only occasionally are the fruits affected severely enough to produce the acorn shape.

What appears to be the same disease is found on grapefruit trees where it is more pronounced in the Coachella Valley than in other parts of California. It is severe on some grapefruit trees in Arizona.

The infectious nature of the disease was confirmed in experiments begun in 1939.

Young trees propagated by means of buds from diseased trees developed the same types of growth. In 1943, when the trees were four years old, they were top-worked with healthy buds. By 1946 these buds had formed a top which again showed the disease. Buds from the same

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