

# 'Florida Fry': A Bronze Muscadine Grape

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'Florida Fry' (*Vitis rotundifolia* Michx.) is being released by the Univ. of Florida. It is similar to 'Fry' (Mortensen and Andrews, 1981), but it is hermaphroditic, which will increase productivity, and has a higher level of resistance to fungal diseases. The release also ripens over a long period.

## Origin

'Florida Fry' was one of 136 segregants from a 1983 cross between 'Triumph' and Fla. AD3-42 (Fig. 1). 'Triumph' is hermaphroditic and produces large, bronze fruit with good texture and flavor. Fla. AD3-42 is hermaphroditic and produces medium-sized, bronze fruit with uniform ripening and resistance to ripe rot [*Glomerella cingulata* (Stonem.) Spaulding & VonSchrenk] and bitter rot [*Melanconium fuligineum* (Scrib. & Viala) Cav.]. The original seedling of 'Florida Fry' was planted in the experimental vineyard in 1985 and first fruited in 1987. This selection, Fla. AA7-44, was chosen in 1987 because of the firm texture, delicious flavor, and good appearance of its fruit, as judged by us.

## Description

The bronze, spherical fruit normally are borne on the third and fourth nodes of the shoot, while occasional fruit may be found on the fifth node (Fig. 2). Clusters are moderately loose, averaging 6.3 berries per cluster. Berry weight is 2.0 g less than for 'Fry' (Table 1). With an average of 3.5 seeds per berry weighing 8.1 g per 100 seeds, there is an average flesh : seed ratio of 28:1. Although the flesh : seed ratios of 'Fry' (37:1), 'Summit' (36:1), and 'Triumph' (37:1) are higher than those of 'Florida Fry', the skin is included with the flesh in determining these ratios, and the skin is much thicker on 'Fry' (2.20 mm), 'Summit' (1.95 mm), and 'Triumph' (1.10 mm) than on 'Florida Fry' (0.87 mm). Pulp of 'Florida Fry'

'Fry' is hermaphroditic and, therefore, may be planted in commercial block plantings or in dooryard plantings, without the need of another cultivar as a pollinizer.

Symptoms of Pierce's disease (*Xylella fastidiosa* Wells et al.) (Mortensen et al., 1977) have never been observed in 'Florida Fry' plants at Leesburg. Evaluations of harvested fruit have shown it to be more resistant to ripe rot, bitter rot, and black rot [*Guignardia bidwellii* (Ellis) Viala & Ravaz f. *muscadinii*] than 'Fry', 'Triumph', and 'Summit'. Late-season diseases such as angular leaf spot (*Mycosphaerella angulata* Jenkins) may occur on 'Florida Fry' but can be controlled by fungicides.

'Florida Fry' is well suited for fresh fruit. Replicated trials evaluating yield of 'Florida Fry' have not been conducted, but individual vines of 'Florida Fry' have outyielded 'Fry', which averaged 8.7 t·ha<sup>-1</sup> in a 5-year replicated

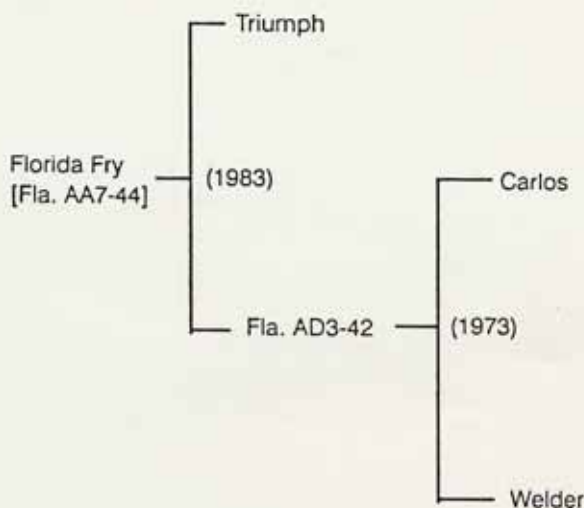


Fig. 1. Pedigree of 'Florida Fry' with year of pollination in parentheses.



Fig. 2. Fruiting vine of 'Florida Fry'.

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Table 1. Flower type and fruit attributes of 'Florida Fry' compared with three bronze muscadine cultivars grown for fresh-fruit consumption.<sup>a</sup>

Cultivar	Flower type <sup>b</sup>	Fruit with dry scar (%)	Berry wt (g)	Soluble solids concn (%)	Type of ripening
Florida Fry	P	76.7 b	9.9 b	19.1 ab	Uneven
Fry	F	23.4 c	11.9 a	18.2 b	Uneven
Triumph	P	95.0 a	9.2 b	18.5 b	Uneven
Summit	F	86.7 ab	9.7 b	19.8 a	Even

<sup>a</sup>Data are the means for 2 years and represent 30 samples per year for dry scar and berry size and five samples per year for soluble solids. Mean separation within columns by Duncan's multiple range test,  $P \leq 0.05$ .

<sup>b</sup>P = perfect; F = female (pistillate), requiring pollinizer.

test. 'Florida Fry' grows less vigorously than 'Fry' and can be spaced closer together in the row to increase yields per acre (e.g., 3.7 m apart instead of 4.9 or 5.5 m). The cold hardiness of 'Florida Fry' has not been determined, but satisfactory budbreak has occurred with the limited chilling at Leesburg, and young vines are doing well in other southern states.

'Florida Fry' propagates readily from herbaceous cuttings under mist and does not require grafting.

#### Summary

The principal advantages of 'Florida Fry' are perfect flowers, improved resistance to

fruit rots, fresh-fruit quality, extended ripening, and relatively dry picking scar (Table 1). The firmer-than-usual muscadine texture with an edible skin likely will make it useful as a commercial fresh-fruit cultivar, especially in the pick-your-own market.

#### Availability

Inquiries regarding the availability of 'Florida Fry' should be directed to Florida Foundation Seed Producers, P.O. Box 309, Greenwood, FL 32443.

#### Literature Cited

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