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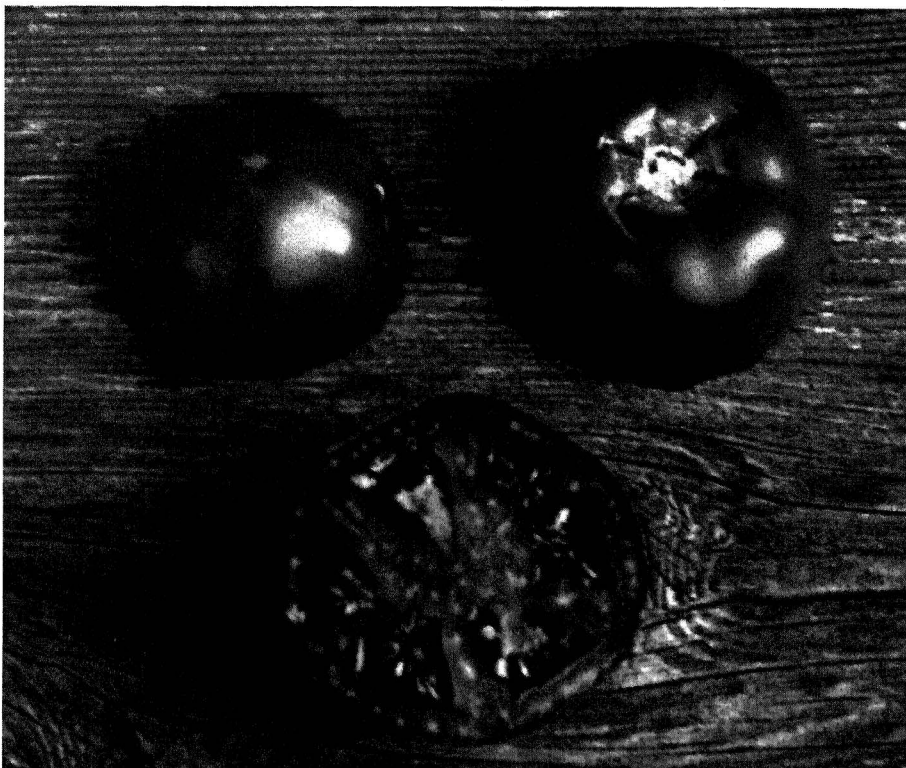
ROGER MITCHELL, DIRECTOR

# Origin and Release of Tomato Hybrid 'Gardener's Choice' and Breeding Line 41-St-31

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**Gardener's Choice**

## **Acknowledgement**

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# Origin and Release of Tomato Hybrid 'Gardener's Choice' and Breeding Line 41-St-31

## Release

The Missouri Agricultural Experiment Station announces the release of tomato breeding line 41-St-31 and hybrid 'Gardener's Choice', which utilizes 41-St-31 as a parent.

Hybrid 'Gardener's Choice' has wide utility for home use and wide geographical adaptation in the midwestern and southern regions.

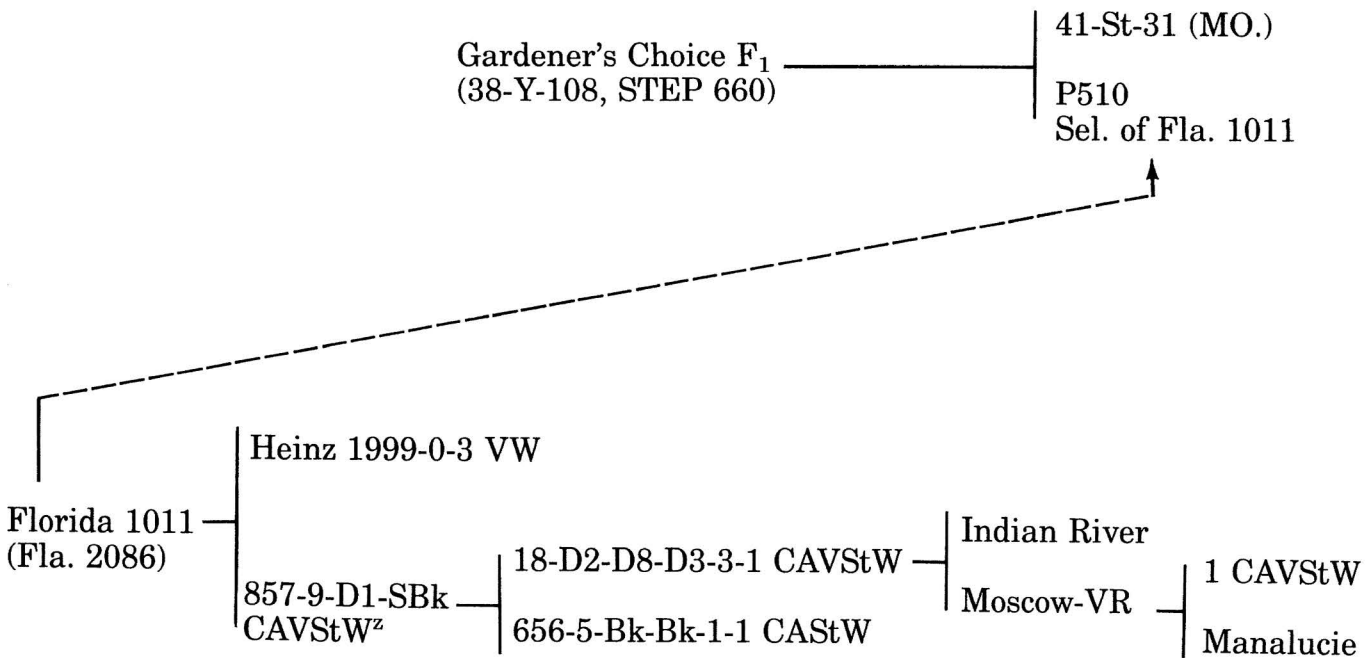
## Hybrid 'Gardener's Choice'

### Description

Plants of 'Gardener's Choice' are indeterminate with upright growth habit and foliage cover that persists until fall frosts in Missouri. Field tolerance to disease includes *Fusarium oxysporium* and leaf blights including *Alternaria solani*.

The fruits are red, globular, uniform ripening, somewhat elongated late in the season and range in size from 6.2 to 5.3 oz. during the growing season. The fruits remain sufficiently firm when vine-ripened for local marketing. Fruit quality attributes are: pH 4.4, Brix 1.339, titratable acidity 0.383 expressed as % citric acid equivalent.

Pedigree:



**Performance:**

'Gardener's Choice' was extensively tested and critically evaluated in the Southern Tomato Exchange Program (STEP) as STEP 660 and in growers trials throughout Missouri since 1970. Its performance as compared to control cultivar 'Floradel' during the 1980 and 1982 seasons is given in Table 1.

**TABLE 1**

**Comparison of Marketable Yields and Fruit Quality of Hybrid 'Gardener's Choice' and cultivar 'Floradel'.<sup>1</sup>**

Entry	Marketable Yield Tons/A. (MO. data)		Internal Fruit Quality <sup>2</sup>					
			Color		Firmness		Flavor	
	1980	1982	1980	1982	1980	1982	1980	1982
Gardener's Choice	12.7	33.1	3.6	3.5	4.0	3.6	3.2	3.3
Floradel	7.8	32.5	2.9	3.2	3.2	3.1	3.3	3.4

<sup>1</sup>Data taken from Missouri Agricultural Experiment Station STEP reports for 1980, 1982.

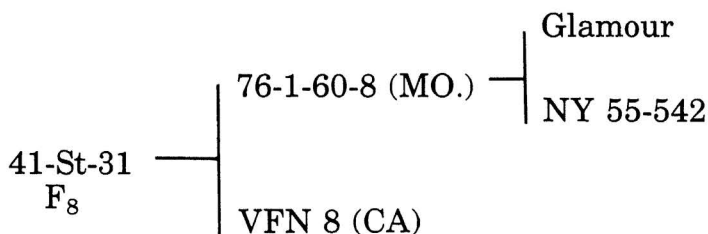
<sup>2</sup>Rating made on 1 to 5 scale where 1 = poor and 5 = excellent.

## Breeding Line 41-St-31

### Description

Breeding line MO. 41-St-31 has shown good utility for use in hybrid combination. The fruits are medium sized globe, apple green when immature and red with red gel when mature. Fruits are highly tolerant of radial and concentric cracking. Plants are indeterminate (sp+) with adequate foliage cover for fruit protection.

### Pedigree



### Availability of seed

Small samples of breeding seed of line 41-St-31 are available upon written request to the Department of Horticulture, University of Missouri, Columbia, MO 65211. Seed of hybrid 'Gardener's Choice' for gardening use should be available from commercial seed sources in 1987.



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