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UNIVERSITY OF MISSOURI-COLUMBIA  
COLLEGE OF AGRICULTURE  
AGRICULTURAL EXPERIMENT STATION  
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# Release of Greenhouse Tomato Line 417

VICTOR N. LAMBETH



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COLUMBIA, MISSOURI

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# Release of Greenhouse Tomato Line 417

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The Missouri Agricultural Experiment Station announces the release of greenhouse tomato breeding line 417 as a source of germplasm, not as a finished variety. Promising hybrid combinations for forcing in greenhouses and plastic structures are resulting from hybridization of this line with other inbred lines and varieties from the Missouri, Purdue, and Ohio Agriculture Experiment Stations.

## Description

*Line 417* is pink-fruited and of good horticultural type. The fruits average 6-7 oz. and are smooth, flattened globe in shape. They have five or more locules and good internal structure.

Line 417 carries the Bay State Forcing resistance to common races of *Cladosporium fulvum* and field immunity to *Fusarium oxysporium* f. *Lycopersici* (Sacc.) Snyder and Hansen.

Fruit of line 417 have shown the following fruit quality attributes: Brix 4.49 percent; pH 4.32; titratable acidity 0.3875 percent citric acid equivalent.

## Pedigree

Line 417 originated from a cross of Missouri line 211 and Ohio WR3. Following the original cross, individual plant selections were made of plants having resistance to both diseases and good horticultural type. Breeding line 417 is the F<sub>9</sub> generation of a selection made from the original cross. Line 211 originated from crossing lines that preceded Tucker's Forcing with Long Calyx.

Most hybrid combinations of line 417 demonstrate significant heterosis as shown by higher yields and earlier maturity. To date, of several hybrid combinations involving line 417, hybrid 533 has been particularly promising. This hybrid is being released concurrently with line 417, as Tuckcross 533.

## Availability of Seed

A limited amount of seed is available upon written request to the Department of Horticulture, University of Missouri, Columbia, Mo. 65201.