NORTH CAROLINA AGRICULTURAL RESEARCH SERVICE NORTH CAROLINA STATE UNIVERSITY RALEIGH, NORTH CAROLINA

NOTICE OF NAMING AND RELEASE OF 'CHEROKEE' TOMATO

The North Carolina Agricultural Research Service announces the development and naming of a new fresh market tomato cultivar 'Cherokee'.

'Cherokee' resulted from a breeding effort to develop a 'Walter' type tomato with Verticillium wilt resistance. It is an inbred line in the F₇ generation derived from the cross of an F₂ selection of ('Walter' x 'Ace 55VF') x 'Walter'. 'Cherokee' has been tested in North Carolina since 1978 as NC BC₁-32.

'Cherokee' is similar in firmness, flavor, and other fruit characteristics to 'Walter'. Fruit are larger than those of 'Walter', approximately one week later in maturity, and have the uniform green (u gene) shoulder character. Fruit pedicels are jointed. Vine type is strong determinate (sp gene), taller growing than 'Walter' when staked and pruned. Foliage is moderately heavy with broad leaflets of medium green color.

'Cherokee' is resistant to races 1 and 2 (<u>I</u>, <u>I-2</u> genes) of <u>Fusarium oxysporum</u> f. sp. <u>lycopersici</u> (Fusarium wilt) and to race 1 (<u>Ve</u> gene) of <u>Verticillium dahliae</u> (Verticillium wilt). Fruit are resistant to gray wall and moderately resistant to cracking.

'Cherokee' has produced yields almost double those of 'Walter' on <u>Verticillium</u>-infested soils in western North Carolina. Total yields and yields of U.S. Combination Grade have equalled or exceeded the standard <u>Verticillium</u>-resistant cultivar 'Flora-Dade' in replicated and grower trials in North Carolina. Fruit of 'Cherokee' averaged 60% extra-large (>3 in. diameter) compared to 25% extra-large for 'Flora-Dade' in grower trials in 1979 and 1980.

Breeder seed will be maintained by the North Carolina Agricultural Research Service and will be made available to the North Carolina Foundation Seed Producers, Inc., for distribution. Seed will be available from commercial seed companies in 1982. Proposed release date is August 28, 1981. Application is being made for a Plant Variety Protection Certificate.

Director, North Carolina Agricultural

Research Service, Raleigh, N.C.

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