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

NOTICE OF NAMING AND RELEASE OF 'PIEDMONT' TOMATO

The North Carolina Agricultural Research Service announces the release of a new fresh market tomato cultivar, 'Piedmont'.

'Piedmont' is an inbred line in the F_7 generation. It resulted from the cross of the North Carolina inbred lines, NC50-7 and NC BC3-28-1-1. NC50-7 was released in 1981 as the male parent of the F_1 hybrid 'Mountain Pride'. NCBC3-28-1-1, a 'Walter' backcross line, is closely related to 'Cherokee', the female parent of 'Mountain Pride'. 'Piedmont' has been tested in North Carolina since 1981 in research and commercial plantings as NC7990. It was tested in the 1982 and 1983 replicated trials of the Southern Tomato Exchange Program as STEP 670.

Fruit of 'Piedmont' are similar to 'Mountain Pride' in size, shape, firmness, exterior and interior color, and flavor. Fruit have the uniform green (u gene) shoulder character and have a very glossy finish. Pedicels are jointed. Season of maturity is slightly later than 'Mountain Pride'. Vine type is strong determinate, slightly shorter than 'Mountain Pride' when staked and pruned. Foliage is heavy with broad, dark green leaflets which provide good fruit coverage. 'Piedmont' is adapted to stake and ground culture for mature green and vine ripe harvest.

'Piedmont' is resistant to races 1 and 2 (I-2 gene) 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 highly resistant to all types of fruit cracking and resistant to gray wall, blossom-end rot, puffiness, and angularity.

'Piedmont' produced yields of U.S. Combination Grade fruit similar to 'Mountain Pride' and consistently greater than 'Flora-Dade' in replicated ground and stake culture trials in North Carolina in 1981, 1982, and 1983. Fruit size of 'Piedmont' averaged 8.3 oz. per fruit compared to 7.8 oz. for 'Mountain Pride' and 6.6 oz. for 'Flora-Dade'. 'Piedmont' was grown commercially on several acres in North Carolina in 1982 and 1983 and showed good market acceptability.

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., P.O. Box 33245, Method Station, Raleigh, N.C. 27607-0245, for distribution. Seed will be available from commercial seed companies in 1985. Proposed release date is June 29, 1984. Application is being made for a Plant Variety Protection Certificate.

Director, North Carolina Agricultural Research Service, Raleigh, N.C.