

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

NOTICE OF NAMING AND RELEASE OF 'MOUNTAIN SPRING' TOMATO

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

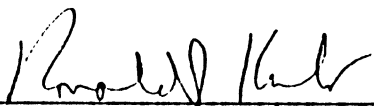
'Mountain Spring' is an F<sub>1</sub> hybrid resulting from the cross of NC 8276 x NC 84173. Both parents were developed in the North Carolina fresh-market tomato breeding program and are being released concurrently with 'Mountain Spring'. 'Mountain Spring' has been tested extensively in North Carolina and in several other states as NC 87127 and in the Southern Tomato Exchange Program as STEP 710.

The plant type of 'Mountain Spring' is determinate (sp gene). Foliage exhibits slight to moderate adaxial leaf curl but provides good coverage for fruit protection. Fruit of 'Mountain Spring' are deep oblate in shape. Blossom scars are typically pinpoint as a result of the n gene (nipped blossom scar) present in both parent lines. 'Mountain Spring' has the u gene for uniform light green color of immature fruit and has a glossy fruit finish. Fruit pedicels are jointed. Fruit ripen to a uniform bright red external and internal color. Fruit are very firm and soften slowly after ripening. Flavor has been rated similar to 'Pikred' and other early season cultivars.

'Mountain Spring' has produced high total and marketable fruit yields in trials in North Carolina and several other eastern states. Fruit size is very large with a high percentage of fruit exceeding 3½" diameter. 'Mountain Spring' is classified as early mid-season in maturity. In comparison with 'Pikred', it has generally produced lower early season yields. However, because of its much better fruit quality, 'Mountain Spring' has greatly exceeded 'Pikred' in early and total season yields of U.S. Combination Grade fruit.

'Mountain Spring' is resistant to races 1 and 2 (I and I-2 genes) of Fusarium oxysporum f. sp. lycopersici (Fusarium wilt) and to race 1 (Ve gene) of Verticillium dahliae (Verticillium wilt). Fruit are highly resistant to all types of fruit cracking and are resistant to blossom-end rot, puffiness, and angularity. Some susceptibility to graywall has been observed under conditions highly conducive to development of the disorder.

Breeder seed of the parent lines will be maintained by the North Carolina Agricultural Research Service. Limited seed of 'Mountain Spring' is being produced by the North Carolina Foundation Seed Producers, Inc., P. O. Box 33245, Method Station, Raleigh, NC 27607-0245 to be made available for sale in 1991. 'Mountain Spring' will be released on a restricted basis to one or more seed companies and should be available through commercial seed channels in 1992. Application is being made for Plant Variety Protection Certificates for the parent lines NC 8276 and NC 84173.

  
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Director, North Carolina Agricultural

11/14/90  
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Date