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

NOTICE OF RELEASE OF NC 2C CHERRY TOMATO BREEDING LINE

The North Carolina Agricultural Research Service announces the release of a new fresh-market cherry tomato breeding line, NC 2C.

NC 2C is an inbred line in the F_7 generation. It resulted from a cross of the F_1 hybrid 'Castlette' and the cultivar 'Mini Rose' (Fig. 1).

NC 2C has a determinate plant habit (<u>sp</u> gene). The plant is vigorous in growth providing excellent foliage cover to the fruit. Plant height has been acceptable, and it has not shown excessive growth when grown non-pruned on a 4-ft. stake. Fruit are deep round to slightly ovate in shape and have two locules. Fruit pedicels are jointless, and the fruit separate easily from the pedicels. Non-ripe fruit have the <u>u</u> gene for uniform light green color and have a glossy finish. Color develops to a bright, glossy uniform red. Fruit size of NC 2C has been very uniform and desirable with few fruit exceeding 1½" in diameter and maintenance of good fruit size throughout the plant.

In replicated trials conducted over a 4-year period, NC 2C produced yields equivalent to the F, hybrids 'Cherry Grande' and 'Castlette'. Season of maturity is later than that of 'Cherry Grande' and similar to 'Castlette'.

NC 2C has the <u>I</u> gene which confers a high level of resistance to race 1 of Fusarium oxysporum f. sp. <u>lycopersici</u> (Fusarium wilt).

NC 2C is being released primarily for its use as a parent of the F₁ hybrid 'Mountain Belle', which is being released concurrently with NC 2C. Breeder seed will be maintained by the North Carolina Agricultural Research Service. Small samples for trial and breeding purposes are available from R. G. Gardner, Mountain Horticultural Crops Research and Extension Center, Fletcher, NC 28732-9216. Application is being made for a Plant Variety Protection Certificate.

Fig. 1. Pedigree of NC 2C cherry tomato breeding line.

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| Director, North Carolina Agricultural | Date |
| Research Service, Raleigh, NC | |