

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

NOTICE OF NAMING AND RELEASE OF 'MOUNTAIN BELLE' CHERRY TOMATO

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

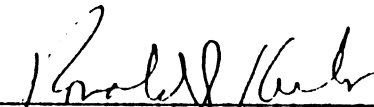
'Mountain Belle' is an F₁ hybrid resulting from the cross of NC 1C x NC 2C. Both parents were developed in the North Carolina fresh market tomato breeding program and are being released concurrently with 'Mountain Belle'. 'Mountain Belle' has been tested in North Carolina and several other states since 1986 as NC 8642D.

The plant habit of 'Mountain Belle' is determinate, slightly more vigorous than 'Cherry Grande'. 'Mountain Belle' has performed well when grown non-pruned on 4-ft. stakes. Foliage cover is similar to that of 'Cherry Grande'. Fruit are round to slightly ovate in shape and are smaller and more uniform in size than those of 'Cherry Grande'. Fruit size of 'Mountain Belle' ranges from 1-1½" in diameter and centers around 1¼" with good size maintained throughout the harvest season. Immature fruit have uniform green (y gene) color in contrast to the dark green shoulder color of 'Cherry Grande' and 'Castlette'. Fruit of 'Mountain Belle' have two locules and ripen to a uniform bright red color, free of the yellow shoulder defect which can occur on 'Cherry Grande' and 'Castlette'. Flavor is superior (subjective ratings) to that of 'Cherry Grande' and 'Castlette'. Fruit pedicels of 'Mountain Belle' are jointless (j2 gene) and fruit separate easily from the pedicels without tearing at the stem end. The jointless pedicel provides an advantage in harvest, since the pedicel stays on the plant and does not have to be removed from the fruit after picking.

In replicated yield trials conducted over five years at the Mountain Horticultural Crops Research Station, Fletcher, 'Mountain Belle' had total yields equivalent to 'Cherry Grande'. Yields of 'Mountain Belle' were equivalent to those of 'Castlette' in 1988 and 1989 but significantly lower than 'Castlette' in 1986 and 1987. 'Mountain Belle' is slightly later than 'Cherry Grande' in maturity and generally earlier than 'Castlette'. Harvest period is around six weeks, similar to 'Cherry Grande'. Yield during this period is distributed more uniformly than with 'Cherry Grande', which often has a heavy peak harvest over a 1-2 week period. 'Mountain Belle' has shown good acceptability in comparison with 'Cherry Grande' in grower trial plantings in North Carolina over the past three years. In trial comparisons with 'Castlette', 'Mountain Belle' has been more desirable because of its earlier maturity and less vigorous growth. It has performed well in observational trials in Florida and several other eastern states and in Ontario, Canada, indicating wide adaptability.

'Mountain Belle' is resistant to race 1 of Verticillium dahliae (Verticillium wilt) conferred by the single dominant gene Ve in NC 1C. It is resistant to race 1 of Fusarium oxysporum f. sp. lycopersici (Fusarium wilt) conferred by the single dominant gene I in NC 2C. Fruit are highly resistant to cracking and bursting and maintain good quality when left on the plant for an extended period after ripening.

Breeder seed of the parent lines will be maintained by the North Carolina Agricultural Research Service. Limited seed of 'Mountain Belle' 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 Belle' 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 1C and NC 2C.



Director, North Carolina Agricultural
Research Service, Raleigh, NC

11/14/90

Date