

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

NOTICE OF NAMING AND RELEASE OF 'CAROLINA GOLD' TOMATO

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

'Carolina Gold', the F₁ hybrid of NC 1Y x NC 2Y (Fig. 1), was developed to overcome the problem of graywall sometimes encountered in production of the yellow-fruited tomato 'Mountain Gold'. 'Mountain Gold' has shown severe graywall symptoms in some seasons in various production areas. Graywall has not been observed on 'Carolina Gold' or its parental lines over five years of testing in different areas of North Carolina.

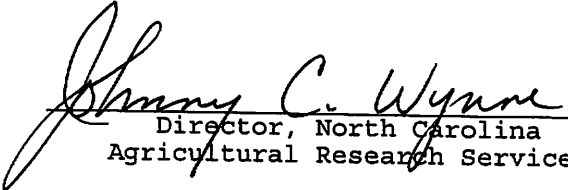
Vine type of 'Carolina Gold' is similar to that of 'Mountain Gold'. The plant is determinate (sp gene) with good foliage cover for fruit protection and is well adapted to the short stake, string weave system of culture.

Fruit of 'Carolina Gold' are deep oblate to flattened globe in shape and are well-filled and symmetrical. The blossom scar is generally smooth and well healed. Immature fruit are uniform, glossy green (u gene). Fruit ripen to a uniform bright yellowish orange exterior and interior color. Ripe fruit are firm with good shelf-life and are comparable in flavor to those of 'Mountain Gold'. Fruit pedicels are jointed. 'Carolina Gold' averaged higher than 'Mountain Gold' in early, total, and U.S. Combination grade (U.S. No. 1 + U.S. No. 2) yields in nine replicated trials conducted over a five-year period at the Mountain Horticultural Crops Research Station, Fletcher, NC. Average fruit weight was equal to or greater than that of 'Mountain Gold' in all trials.

'Carolina Gold' has the I and I-2 genes for resistance to races 1 and 2 of fusarium wilt and the Ve gene for resistance to verticillium wilt. It is resistant to fruit cracking and weather check (fine cuticle crack on the shoulder of the fruit).

'Carolina Gold' will provide growers with improvements in earliness, fruit quality, and yield over the currently used variety 'Mountain Gold'. Although yellow tomatoes are produced on a limited basis as a specialty item, their market share is increasing, and growers are usually paid a premium for yellow tomatoes.

'Carolina Gold' will be released on an exclusive basis for commercial seed production and sales to a selected seed company. Breeder seed of the parent lines will be maintained by the North Carolina Agricultural Research Service. Small samples of 'Carolina Gold' and its parental lines for trial and breeding purposes are available from R. G. Gardner, Mountain Horticultural Crops Research and Extension Center, Fletcher, NC 28732-9244.



Director, North Carolina
Agricultural Research Service

7/29/97

Date

Carolina Gold
F₁ hybrid

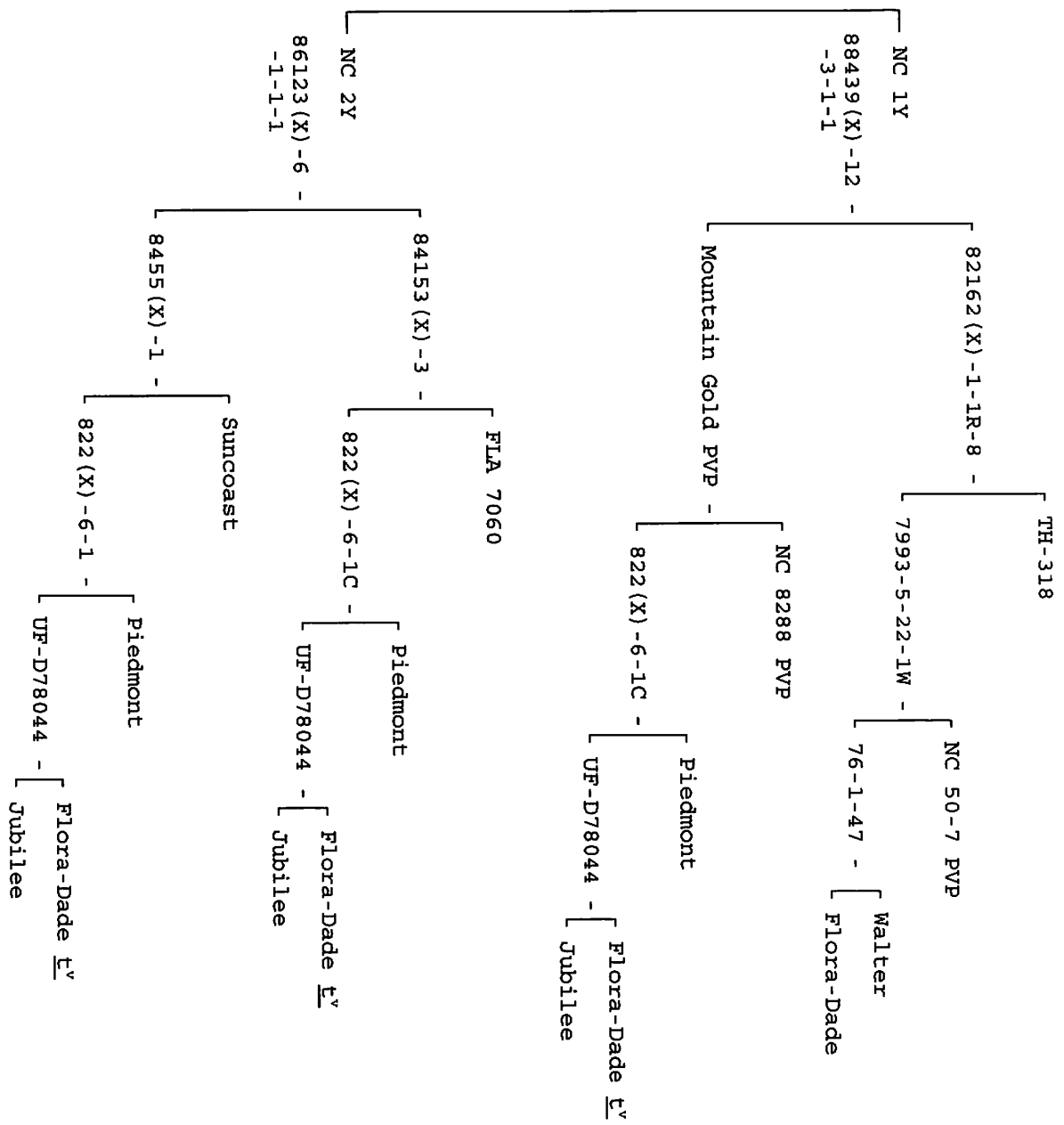


Fig. 1. Pedigree of 'Carolina Gold' F₁ hybrid tomato.