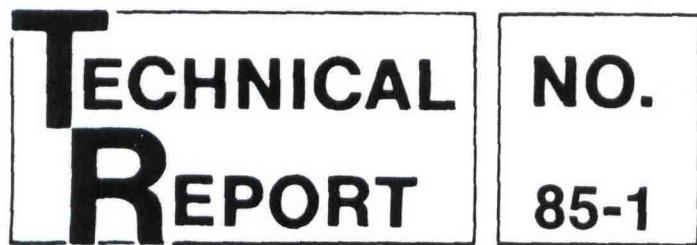


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Research Center



SWEET POTATO VARIETIES

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The sweet potato varieties 'Jewel' and 'Centennial' account for most of the current sweet potato acreage in Texas. 'Jewel' accounts for the majority of this production. The major markets in the United States prefer sweet potatoes with a copper skin, and deep orange, moist flesh.

Each sweet potato variety has its strong points and weaknesses. For example, 'Jewel' will yield more than 'Centennial' under good growing conditions. 'Jewel' has a greater tendency to mutate to a light flesh color than 'Centennial', but 'Centennial' has a tendency to produce elongated roots.

To prevent chilling injury to sweet potato roots in the field, all varieties should be harvested before the soil temperature falls below 55°F. After harvest, the roots should be cured in a well ventilated storage at a high (85%-90%) relative humidity for 4-7 days and then stored so the temperature does not fall below 55°F.

Research results and grower experience indicate that we are now growing the best varieties available for Texas. As new varieties are developed and tested, sweet potato producers will be made aware of these. They should be tried on a small basis at first to evaluate their performance and to determine if they can fit into the production and marketing scheme. Incorporation of disease and insect resistance, extending storage life while maintaining acceptable eating quality and other horticultural characteristics, are goals in the National Sweet Potato Collaborators Group breeding program.

In addition to the Texas testing and breeding program, new varieties and promising seedlings from other states are evaluated under our soil types and growing conditions.

This publication is intended to provide information on the current status of the variety situation in Texas. The following table briefly describes the newest and most important sweet potato varieties. As new information becomes available, appropriate revisions will be made.

SWEET POTATO VARIETY DESCRIPTIONS

Variety Origin, Date	Foliage	Roots Skin	Flesh	Yield	Disease & Insect Resistance	Flood Damage	Other Weaknesses	Other Strengths
Carolina Nugget (NC 1984)	Green leaf, purple stem, deeply cut leaf	Rosy	Light orange with purple	Average	Root-knot Fusarium wilt	Moderate resistance	Shape of root pigment in flesh Yields	
Cordner (TX 1983)	Green stems and leaves	Copper	Medium orange	Very good	Root-knot Fusarium wilt	Susceptible to pox	Susceptible to earliness, good plant production	
Centennial (IA 1960)	Green leaves and petioles, purple stems large leaves	Light copper	Deep orange	Average	Root-knot Fusarium wilt Wireworms	Moderate resistance	Shape of roots yield	Low mutation rate
Jewel 95 (NC 1970)	Green leaves and stems, bushy	Copper	Deep orange	Very good	Root-knot Fusarium wilt Internal cork	Susceptible	Root-knot Soil pox Skinning	
NC Porto Rico 198 (NC 1966)	Deep purple stems & veins	Rose- pink	Orange mottled	Average	Root-knot Fusarium wilt Internal cork	Moderate resistance	Internal cork Root-knot Wireworms	
Pope (NC 1981)	Green leaves with slightly purple stems	Light copper	Medium orange	Very good	Root-knot Fusarium wilt Internal cork	Some resistance	Root-knot Soil insects	Long vines
Regal (USDA, SC, TX, 1984)	Green leaves with purple veins	Bright purple	Deep orange	Excellent	Fusarium wilt Root-knot	Good resistance	Root-knot Soil insects Weevil (moderate)	

Variety Descriptions continued -

Variety Origin, Date	Foliage	Roots		Yield	Disease & Insect Resistance	Flood Damage	Other Weaknesses	Other Strengths
		Skin	Flesh					
Resisto (USDA, SC, TX, 1982)	Moderate sized, green	Reddish copper	Deep orange	Very good	Root-knot Fusarium wilt soil insects	Some resistance	Skin texture in some soils Susceptible to pox	Soil insect resistance
Scarlet (NC 1982)	Green leaves and stems	Deep red	Deep orange	Very good	Fusarium wilt Root-knot	Susceptible	Skinning, mutation rate, soil pox	Chilling
Topaz (TX, USDA (1986))	Green leaves and stems	Light copper	Medium orange	Very good	Fusarium wilt Root-knot	No information	No - burning burning	Hard - core
Travis (LA 1980)	Green leaves Purple stems and petioles	Rosy	Deep orange	Excellent	Soil pox Fusarium wilt Root-knot	No information	Storage life Baking and processing quality	Earliness

Based on N.C. Agr. Ext. Ser. Leaflet No. 23-D by L. G. Wilson and W. W. Collins.