

PUBLICATIONS

1987

Horticulture Research, 1987 – Overton

Research Center Technical Report 87-1

Texas A&M University Agriculture Research &
Extension Center at Overton

Texas Agricultural Experiment Station
Texas Agricultural Extension Service

Overton, Texas

1987

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 and 86° F 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		Yield	Disease & Insect Resistance	Flood Damage	Other Weaknesses	Other Strengths
		Skin	Flesh					
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	Susceptible to pox	Earliness, good plant production
Centennial (LA 1960)	Green leaves and petioles, purple stems large leaves	Light copper	Deep orange	Average	Root-knot Fusarium wilt Wireworms Internal cork	Moderate resistance	Shape of roots Yield	Low mutation rate
Jewel (NC 1970)	Green leaves and stems, bushy	Copper	Deep orange	Very good	Root-knot Fusarium wilt Internal cork	Susceptible	Mutations Soil pox Skinning	Storage life Shapes
NC Porto Rico 198 (NC 1966)	Deep purple stems & veins	Rose- pink	Orange mottled	Average	-	Moderate resistance	Internal cork Root-knot Wireworms Fusarium wilt	Baking quality
Pope (NC 1981)	Green leaves with slightly purple stems	Light copper	Medium orange	Very good	Root-knot Fusarium wilt Internal cork	Some resistance	Long vines	Baking quality
Regal (USDA, SC, TX, 1984)	Green leaves with purple veins	Bright purple	Deep orange	Excellent	Fusarium wilt Root-knot Soil insects Weevil (moderate)	Good resistance		

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
Southern Delite (USDA, SC, 1986)	Green leaves with purple veins	Rose dark copper	Deep orange	Very good	Internal cork Stem rot Root-knot Sclerotial blight Soil rot Soil insects	No information	-	Baking quality Flowering
Topaz (TX, USDA (1986)	Green leaves and stems	Light copper	Medium orange	Very good	Fusarium wilt Root-knot	No information	-	-
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.