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# 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: Skin | Roots: 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<br>Fusarium wilt | Moderate resistance | Shape of root<br>Pigment in flesh<br>Yields | |
| Cordner (TX 1983) | Green stems and leaves | Copper | Medium orange | Very good | Root-knot<br>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<br>Fusarium wilt<br>Wireworms<br>Internal cork | Moderate resistance | Shape of roots<br>Yield | Low mutation rate |
| Jewel (NC 1970) | Green leaves and stems, bushy | Copper | Deep orange | Very good | Root-knot<br>Fusarium wilt<br>Internal cork | Susceptible | Mutations<br>Soil pox<br>Skinning | Storage life<br>Shapes |
| NC Porto Rico 198 (NC 1966) | Deep purple stems & veins | Rose-pink | Orange mottled | Average | - | Moderate resistance | Internal cork<br>Root-knot<br>Wireworms<br>Fusarium wilt | Baking quality |
| Pope (NC 1981) | Green leaves with slightly purple stems | Light copper | Medium orange | Very good | Root-knot<br>Fusarium wilt<br>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<br>Root-knot<br>Soil insects<br>Weevil (moderate) | Good resistance | | |

Variety Descriptions continued -

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

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