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'CORDNER' SWEET POTATO¹

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INTRODUCTION

The 'Cordner' sweet potato [*Ipomoea batatas* (L.) Lam.], developed jointly by the Texas Agricultural Experiment Station and Oklahoma State University, combines high yield, good sprout production and excellent baking and canning quality.

ORIGIN

The Okla 6-100 breeding line that originated from the H. B. Cordner collection in Oklahoma has been tested since 1967 in Texas and in the National Sweet Potato Collaborators Group from 1979-1981 as TX-4. The pedigree of 'Cordner' is not known.

DESCRIPTION

The vines of this entry are trailing with medium internodes. The stems and leaves are green. The leaves are medium sized and heart shaped. The roots are chunky and slightly tapered at each end. They have an orange flesh color and a smooth bronze skin color. Of 12 entries tested by the National Sweet Potato Collaborators Group at 17 locations in 1980, the 'Cordner' entry was second in US No. 1, first in marketable, and seventh in canning grade yield of roots (Table 1). 'Cordner' was found to be resistant to both fusarium wilt or stem rot caused by the soilborne fungus *Fusarium oxysporum* f. sp. *batatas* (Wr.) Synd. & Hans. and to southern root-knot nematode (*Meloidogyne incognita*). 'Cordner' was more susceptible to the sweet potato flea beetle (*Chaetocnema confinis* Crotch.) injury and more resistant to white grub (*Plectris aliena* Chapin). damage when compared to Jewel. 'Cordner' was susceptible to soil rot (Pox) caused by *Streptomyces ipomoea* (Person & W. J. Martin) Waks. & Henrici. This breeding line was better than the checks, Centennial and Jewel, in both canning and baking trials (Table 1). In sprouting trials, 'Cordner' was early,

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uniform in emergence and had good plant production. In 1981, out of 7 entries in the replicated trials at 20 locations, 'Cordner' was second in US No. 1 and marketable grades and fourth in canning grade of roots (Table 1). 'Cordner' is similar in dry matter and yield to Jewel. 'Cordner' has about 15% more carotene than Jewel.

AVAILABILITY

Foundation seed in limited quantities is commercially available. Requests for roots should be made to the Foundation Seed Service, Texas A&M University, College Station, Texas 77843.

Table 1. A 2-year comparison of yields and quality of 'Cordner', 'Jewel' and 'Centennial' sweet potato cultivars from 1980 and 1981 National Sweet Potato Collaborators regional trials in 14 states.^z

Year	Cultivar	Grade of Roots			Total marketable	Canning score ^y	Baking score ^y
		US #1	Canning	Jumbo			
Yield (MT/ha)							
1980	Cordner	19.7	6.1	6.8	32.6	76.3	79.6
1980	Jewel	15.5	4.7	6.0	26.2	76.1	74.4
1980	Centennial	12.6	5.0	4.4	22.0	75.2	67.0
1981	Cordner	15.9	7.4	2.8	26.1	75.7	73.3
1981	Jewel	13.5	5.5	2.7	21.7	73.8	71.9
1981	Centennial	11.3	6.6	2.7	20.6	74.4	76.3

^z States include Alabama, Arkansas, Georgia, Kansas, Louisiana, Maryland, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.

^y Rated on a scale of 0-100 for each of 10 characters; the higher the score, the better the quality; average of 5 baking trials each year, 8 canning trials in 1980 and 6 canning trials in 1981. MT/ha X 0.446 = tons per acre.