



Worldwide Crops Sprout From Arizona-Grown Seed

Arizonans produce planting seed for pasta wheat grown in Italy, bermuda-grass grown in the Caribbean, okra grown in Georgia and much of the cotton grown nationwide.

Saudi Arabia, aiming for quick self-sufficiency in wheat production, bought 40 metric tons of Arizona-grown wheat seed last year and will probably want even more in 1984, said Robert G. Sackett, executive director of the Arizona Crop Improvement Association (ACIA).

This year, Arizona farmers will harvest more acres of certified planting seed than ever before, predicted Sackett. Cotton and wheat predominate, but nine other types of certified seed also grew in the state last year. Most seed production is in Yuma, Maricopa and Pinal counties, with small amounts in Graham and Cochise counties in 1983.

Arizona's edge in seed production includes a climate that usually lets farmers control the field environment, said Robert Huntington of Valley Seed Company in Phoenix and Ron Harp of Pacific Southwest Seed and Grain in Yuma. "The grower controls the water and controls the fertilizer,"

Photograph: This field of Yecoro Rojo variety wheat was grown for sale as seed wheat this year by the Barkley Company at Yuma. (Photo by Allan Fertig.)

Robert Sackett demonstrates equipment at the University of Arizona seed laboratory that eases the job of checking seed samples for stems, off-type seeds and other impurities.



said Huntington. "Sometimes there's an advantage in not having much rain. Rain at harvest time can hurt the germination rate for certain seeds."

Harp noted, "Yuma County has a reputation as the seed increase capital of the world."

Standards for Quality

ACIA certifies planting seed that meets standards for genetic purity, freedom from disease and debris, and germination rate. About 85 members, mostly seed company representatives and farmers, attended the association's annual meeting in January at the new ACIA office and laboratory on the University of Arizona Campus Agricultural Center farm in Tucson.

Sackett has been a member of the UA agriculture faculty as well as the ACIA's officer since 1969. Certified seed production in the state has quadrupled since he started. He has also been president of the International Crop Improvement Association.

Sackett visited 21 agricultural companies in Saudi Arabia during a recent three-week trip sponsored by Arizona seed companies. He predicted that wheat seed sales to the Saudis this year could bring a bonus of \$3 million or more to Arizona growers and sellers, compared with selling the same wheat as grain.

"We've got about 36,000 acres of certified wheat growing in Arizona this year for this market," said Sackett. "That's about doubled from last year."

The Saudi government has subsidized land, credit, fertilizer and irrigation pumps in that country. "On top of that, the government buys the wheat crop for \$27.25 per bushel, about four times what it costs them to import feed wheat from the United States," said Sackett. He predicted that one year soon, the price subsidy will end, and the country will begin using its own wheat for seed. However, he said, some Saudi farmers will probably keep using Arizona seed, grown with flood irrigation, because it is higher quality than can be grown with sprinklers, which wet developing seed heads.

Wheat is just one type of seed for which Arizona has established widespread markets, Sackett said.

Last year, 64,566 acres of Arizona farmland were certified for seed production, though some of that land did not produce acceptable seed because

of autumn rains. Cotton — 14 varieties of it — grew on half the acreage. Wheat and millet seed each grew on more than 10,000 acres. Smaller acreages produced seed for bermudagrass, barley, alfalfa, safflower, watermelon, lovegrass, okra and oats.

Certified Seed for Cotton

Delta & Pine Land and Stoneville seed companies, the two biggest sellers of cotton seed nationally, are both headquartered in Mississippi but both sell primarily Arizona-grown seed, said Sackett. "Every few years, we pick up another major seed company to produce its cotton seed in Arizona," he said. Coker Varieties, based in South Carolina, joined the list last year. Arizona-grown, certified seed has been used to plant cotton fields in Central America, China, Egypt, Australia and many other lands.

For farmers, growing a crop for certified planting seed gives a premium price compared with the same crop for its normal use. Certified wheat seed, for example, brings the farmer about \$10 to \$20 per ton more than the going price for wheat as grain. Similarly, a grower can sell certified cotton planting seed for about \$30 to \$50 more per ton than cottonseed used for vegetable oil and livestock feed. However, even at the premium price, the seed is worth only a fraction of the value of the fiber from the same cotton field.

To be certified, Arizona-grown seed must pass ACIA standards. The Arizona Commission of Agriculture and Horticulture has designated the 51-year old association as the state's official certifying agency. Field inspections check for clean and weed-free growing conditions. Laboratory tests assess the germination rate of samples taken from harvested, prepared seed.

Seed companies or growers pay for the field inspections and pay about a nickel for a certification tag for each 50-pound sack of certified seed. The fees for all seed crops added up to \$134,861 last year.

Growing certified seed takes special care in weed and fertilizer management, and other variables, compared with growing crops for other uses. Gabe Piceno, manager for Barkley Company farms at Yuma, has grown wheat seed since 1966. He said, "If you're going to grow for seed, you should be sure at the outset of the season that that's what you're going to do. ...It's going to take a little more money."

For national and international marketing of Arizona-produced seed, Sackett stressed the importance of the state's reputation for high-quality certified seed.

Piceno agreed: "The better your track record is, the more people are going to want to do business with you."



Gabe Piceno, farm manager for the Barkley Company, grew seed wheat this year marketed to Saudi Arabia by Pacific Southwest Seed and Grain Company.