

A Hot Agricultural Item

CHILI IN COCHISE

By Norman F. Oebker

Strings of bright red chili peppers hanging along a white adobe wall create an impressive and unforgettable sight for those travelling through the Southwest for the first time. One area where chilies are displayed in this manner is Cochise County, Arizona.

This land, once the home base of Indian Chiefs Geronimo and Cochise, is now considered one of the best chili producing areas in the country. The high



Strings of red chilies, drying in the Cochise County sun.

quality of the green, as well as the red, pepper fruits is attributed to the climate, soil and know-how of the growers.

Present Acreage Is About 900

In the past, up to 1,500 acres a year have been grown commercially in this area. The present acreage is around 900 acres, mostly near the towns of Elfrida and McNeal. Although not a large acreage, it is an important crop to the growers and to all Mexican food lovers in many parts of the United States. Of course, chili plants are grown also in many backyard gardens in the Southwest.

The green peppers, picked from August until early October, are sold for fresh use in towns and cities of Arizona and neighboring states, and for canning at the plant in Douglas. Also, green chilies are sent to California for processing. The "reds" are sold mostly for dehydration. Products made from these chilies are distributed throughout the United States.

The chili strings are made up by local families and dried in the sun for later use. Many of these attractive arrays of scarlet peppers are sold for decorative use, too. The large, plump, smooth, bright colored chilies of Cochise County have won many awards at county and state fairs.

Dr. Oebker is Extension Specialist in Horticulture, in charge of vegetable production work.



Dr. Oebker examines plants of New Mexico No. 6-4 chili.

They Are Good For You

Because chili peppers are rich in vitamins A and C, and because of the volume consumed by Latin Americans, this vegetable has contributed much to the health of the people of the Southwestern United States and Mexico.

Plantings are made during April. The seed is sown directly into a ridge or bed of soil. Usually about two pounds of seed is sufficient for one acre. Rows are spaced 36 to 40 inches apart and are thinned to one plant every 6 to 12 inches. Usually nitrogen and phosphorus fertilizers are applied before planting, followed by a side-dressing of nitrogen about midseason. Water is applied by furrow irrigation.

Harvesting begins in August and continues until the first killing frost in October. The first picking or two in a field are green followed by a stripping of the red fruit. In the past, peppers have been picked into burlap bags, carried from the field and delivered to the processor in these containers. This year in larger fields chilies are being picked into pails, which when full are dumped on a conveyer belt extending crosswise of the rows behind the pickers.

The belt carries the peppers to bulk bins on trucks or trailers, resulting in more efficient handling in the field and at the processing plant. A good yield per acre is considered to be 10 to 12 tons of fresh green peppers or two tons of dried chili.

University Personnel Have Helped

Researchers and Extension personnel of The University of Arizona have followed this crop over the years and have helped in solving problems and developing

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Chili plant response to different nitrogen fertilizer treatments. Note the dark squares. Study arranged by UA researchers.



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growing techniques. County agent Carmy Page of Cochise County and his predecessors have worked closely with the chili growers. Horticulturist Harvey F. Tate and Plant Breeder W. E. Bryan spent many hours from 1946 to 1953 selecting improved types of chili in the fields of Cochise County. Dr. R. B. Streets and other UA plant pathologists diagnosed many disease problems and recommended controls. In recent years new varieties have been evaluated and fertilizer practices have been studied by The University of Arizona in this chili producing area.

For many years the "Anaheim" types and College No. 9, a variety developed by New Mexico State University, were the main chili varieties grown. Improvements in these were made by selecting desirable plants in the field for seed. In about 1950, New Mexico No. 6 was introduced. From this variety selections have been made leading to the development of Rio Grande 21 and



Green chili peppers of the No. 6-4 variety ready for delivery to the cannery or market.



Arrival of bagged green chilies at the canning plant at the Douglas-Bisbee airport.



Inspection and grading of peeled green chili peppers ready for canning.

New Mexico 6-4. Both are grown in Cochise County but No. 6-4 is the more popular.

Fresh, Canned, Dried or Frozen

New Mexico No. 6-4 is a mild or slightly pungent chili. It produces high yields of smooth, thick-fleshed pods. Rio Grande 21 is of medium pungency and yields large, thick-meated peppers. Both are good for fresh use and canning when green and for drying when red. Also they can be frozen.

Another variety, Sandia A, is very pungent and early maturing with medium sized pods, but it is recommended for high elevations where pungency is often difficult to obtain.

Fertilizer tests have been conducted by The University of Arizona on the Kenneth McDaniel farm near Elfrida the past two years. Dr. Jack Stroehlein, UA soils scientist, Cochise County Agent Carmy Page and this writer are cooperating on these studies. This project is now in its third year.

Use Both Nitrogen and Phosphorus

From preliminary results it looks like a fertilizer recommendation of 100 to 150 pounds of nitrogen and 60 to 100 pounds of P_2O_5 per acre would be satisfactory for good yields in the area. About half of the nitrogen and all of the phosphorus should be placed in the bed before planting. The remaining nitrogen should be sidedressed in one or two applications before plants exceed 12 to 15 inches in height.

Although Cochise County produces top quality chili, it is not without problems. Some of these are damping-off, curly top, bacterial leaf spot, wilt and nematodes.

Losses from these are reduced by good drainage, proper irrigation, rotation of crops, seed treatment, use of newer varieties and soil fumigation.

A Hot Item to Spell, Too

Chili or chile is often the question. The former spelling is preferred in the dictionary and the latter is the Spanish name for this vegetable. Chilli is still another spelling used. The scientific name for this pepper is *Capsicum annuum*. But regardless of how it is said or how it is spelled, the fact remains that Cochise County can grow them.