



J. Victor Espinoza/NMSU

**Danise Coon, assistant director of New Mexico State University's Chile Pepper Institute, shows a red jalapeno, one of 150 chile varieties on display in one of the world's largest public chile demonstration gardens. It is located at the Fabian Garcia Research Center in Las Cruces.**

## **NMSU's Chile Garden: Hot beds attract growing crowds**

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**LAS CRUCES** A stroll in New Mexico State University's chile demonstration garden makes good scents these days. Researchers here have planted more than 150 varieties of spicy-sweet smelling peppers in one of the largest public chile gardens in the world.

Visitors walk through a sea of colorful lush plants, drooping under the weight of fresh summer fruit in a blazing mix of red, green, yellow, purple, brown, ivory and orange peppers.

Beyond a select group of growers, research specialists and fanatical chileheads, it's rare to see so many varieties of chile growing in one place.

"Many times we think of the chile industry in New Mexico as a single entity, but there are really five different segments: red, green, paprika, cayenne and jalapeno," said Paul Bosland, a professor and director of the Chile Pepper Institute at NMSU.

"They're very different plants, and they're grown and harvested differently. This is one of few places you can see how diverse our chile industry is in New Mexico."

The half-acre demonstration garden, which has been in operation for the past seven years, is located 1.5 miles west of the campus at the Fabian Garcia Research Center in Las Cruces.

The garden, underwritten by NMSU's Chile Pepper Institute, is supported by a grant from Frieda's, a Los Alamos, Calif.-based marketer and distributor of specialty produce. In addition, the garden receives technical assistance from Master Gardener volunteers with NMSU's Cooperative Extension Service.

Bosland explained that the demonstration garden is part of NMSU's land-grant mission of teaching, service and research.

While the garden's main function is to serve as a real world teaching laboratory for students and interested visitors, it frequently has a research component, too, as a largely organic operation subject to the travails of weather, disease and pests.

"We let nature take its course here," he said.

For instance, two years ago the garden was hit with a devastating outbreak of curly top virus that wiped out half the plants. The virus, which is spread by a tiny insect called the beet leafhopper, produces yellow, curled leaves and stiff, thickened stems that break with a snap. Infected plants produce a few dull, wrinkled peppers that ripen prematurely.

"Most of the varieties were susceptible, but we found a few that had some resistance, which was useful for our breeding research," Bosland said.

In 1999, the problem was soil salinity. An early spring downpour caused salt to leach onto just-transplanted chile seedlings, setting many back significantly. Again, NMSU chile researchers discovered several unexpected varieties that were salt tolerant.

Other times, like last year, the research centers on the annual theme of the garden, which was habaneros, the world's hottest peppers. At the end of the growing season, research teams carefully bundled up the blistering hot peppers and ranked them using pungency tests, which determine the pod's heat level, measured in Scoville Heat Units.

A garden with so many chile varieties is bound to draw the curious, Bosland said. Visitors range from new residents who don't know



AP photo

**The Suave Orange Habanero chile, normally the world's hottest pepper, has been toned down enough to actually taste.**

that red chile comes from mature green chile to third-generation chile growers who haven't seen some of the school's chile stock from Peru and Bolivia, he said.

"Most aren't acquainted with these South American chiles, which have a unique taste and aroma," he said.

The garden features colorful ornamentals, bell peppers, New

Mexican pod types and the world's hottest peppers, the habaneros.

Plantings also include Tabasco peppers used in hot sauces and cayennes that are a big part of New Mexico's chile industry, Bosland said. Several of the varieties were developed and released by NMSU scientists.

For most of those coming to the garden, it is primarily a visual treat. But for a few adventurous souls, there are always pepper tastings. "If people want to taste them, we'll let them taste most of them," said Danise Coon, assistant director of NMSU's Chile Pepper Institute. "We just don't let them do a lot of picking."

Among the most eye-catching are strange little hat-shaped peppers called Christmas bells, she said. Another must-see is the

Big Jim variety, boasting pods up to 13 inches long. Top attraction: the Red Savina habanero, the hottest scientifically tested pepper in the world at a sizzling 577,000 heat units. A normal tongue-burning jalapeno ranks about 25,000 teary-eyed units.

"People are always surprised that there are so many different shapes, colors and sizes of chile," Coon said. "Most tell me, 'I never knew there were this many.'" While large, she admitted that NMSU's chile roster contains a fraction of the more than 1,000 chile varieties worldwide.

NMSU agricultural experts say New Mexico is well on the way to a repeat of 2000's banner crop, when 19,000 acres produced about 99,000 tons of chile. Once picked and processed, chile is the state's most valuable vegetable, worth more than \$200 million annually.