DISPATCHES

Cultivating Fields of Fire in New Mexico

By Brennen Jensen

LAS CRUCES, N.M.

THIS SOUTHWESTERN STATE is called the Land of Enchantment, but it could well carry another name: the Land of Chile Peppers.

Folks here are fanatics for the fiery fruits (and keen on using the Spanish spelling for the potent peppers while looking askance at those who write "chili"). New Mexico is home to more than half of the nation's chile crop, and the bulk of the pepper-processing plants that produce spicy powders and sauces.

Take a drive on a fall day along the rural back roads trailing alongside the Rio Grande and you'll see it all firsthand: field after field of pepper plants laden with scarlet pods ripening and drying in the autumn sun. Pull into a New Mexican eatery and your server may hit you with a colorful question: "Red or green?" This query is how restaurants determine which type of down-home chile sauce you want ladled over your burrito or enchilada. Lawmakers in Santa Fe have even made "red or green?" the official state question.

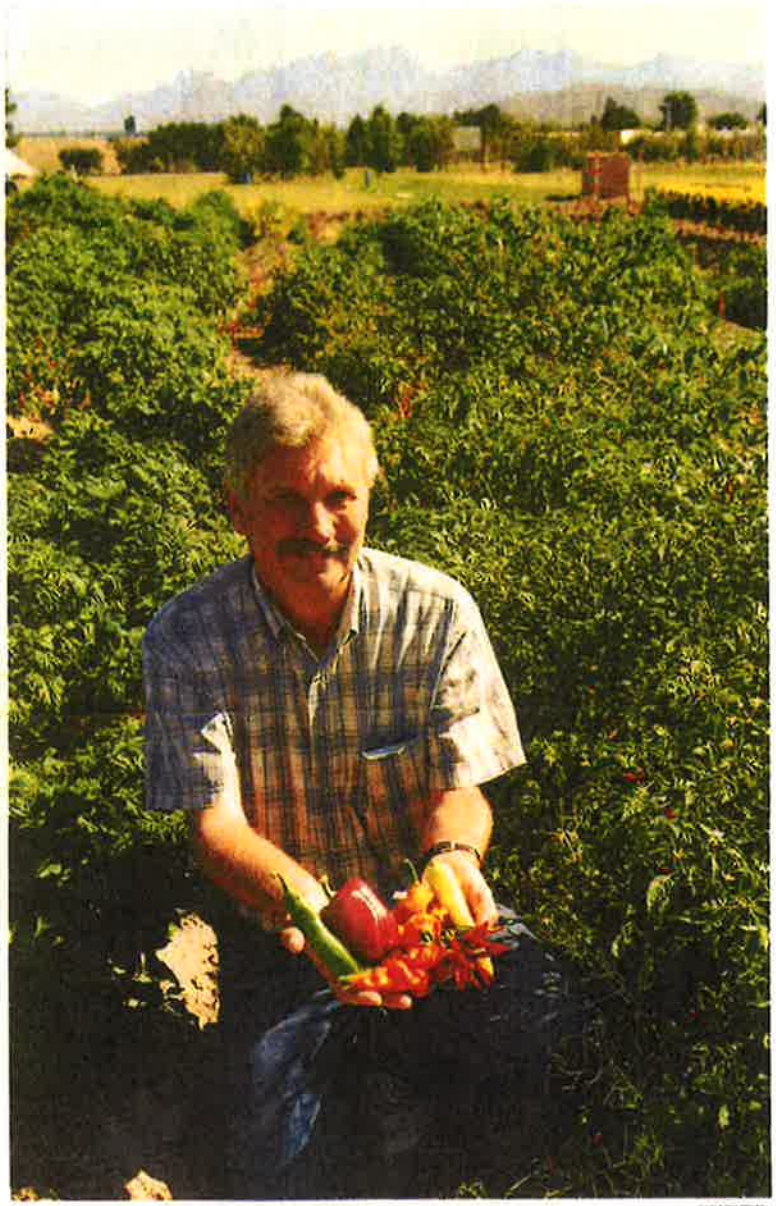
And so it makes perfect sense that the leading, if not only, institution dedicated to hot-pepper propagation, culture, and lore should be located here. The 15-year-old Chile Pepper Institute resides in an agricultural-science building at New Mexico State University at Las Cruces. Though closely associated with the university, the institute is organized as a separate nonprofit organization.

"We love chiles, but we are impartial and unbiased in our approach to them," says Paul Bosland, the jovial professor of horticulture who co-founded and directs the institute. From the get-go, he doesn't want his charity confused with some of the other agriculture institutes, such as the now-defunct Tobacco Institute, in Washington, which he calls "PR arms for an industry."

"Any time someone says they found something out about chiles, we look at the science and make sure it's sound," he adds. "As a nonprofit, we are able to do that. We are a research-based resource center with nothing to do with marketing."

Mr. Bosland, widely known around campus simply as "chileman," says the institute was born when more and more people began calling the university—home to one of the country's oldest chile-breeding programs—with questions about peppers and requests for plants.

Today the institute serves as a clearinghouse for all manner of chile information, as a source for rare chile seeds (which it sells to raise money), and as a sort of go-between, channeling the concerns and needs of commercial chile growers to the researchers working on the next generation of peppers. (Chile farmers are currently looking for a pepper plant resistant to a debilitating fungus.)



PAUL BOSLAND CO-FOUNDED NEW MEXICO'S CHILE PEPPER INSTITUTE. BRENNEN JENSEN

The institute has paying members from all 50 states and more than a dozen foreign countries. (Annual memberships start at $25 for individuals, while corporate memberships cost $5,000.) Also contributing to the charity's $50,000 annual budget are the registration fees to the annual New Mexico Chile Conference staged here each winter. A final fund-raising component is the "Wall of Flame," where donors can have their names placed on a decorative ceramic tile displayed outside the institute's offices.

While big growers raising hundreds of acres of chiles are part of the charity's constituency, so too are the so-called chileheads—dichard chile devotees who may have only a couple of pepper pots out on the patio. Mr. Bosland has even heard of one such enthusiast raising chiles above the Arctic Circle in Canada's Yukon Territory. This intrepid chilehead uses a castoff helicopter windshield as an impromptu greenhouse. ("I guess chiles go good with walrus," the professor says.)

Mr. Bosland learned early on that some folks get "very attached" to their chile plants. "People send us pictures of their chiles all the time," he says. "They are almost pets. They

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The Chile Pepper Institute's Wall of Flame (left) commemorates donors. Above, the Bhut Jolokia pepper, from India, holds the title of world's hottest pepper.

Chile Pepper Institute Takes an Unbiased Approach to a Fiery Topic

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give names to them. Rutabagas don't have this kind of following."

While the devotion is sometimes hard to fathom, Mr. Bosland likens eager chile growers (and cooks) to people who are into grape varietals and wine.

A particularly rough encounter with pepper passion happened a few years back, he says, when the institute worked with plant breeders to successfully develop a jalapeño pepper lacking a hot taste. Commercial growers, it seems, sought a not-hot jalapeño for use in mild salsa blends.

"When we did that, the chileheads got really upset," Mr. Bosland recalls. "I actually got hate e-mail saying I was selling my soul to the devil and that this was terrible and wrong."

No part of chile lore is as alluring as the pepper's fiery effect on tongues and taste buds. A substance called capsaicin gives chiles their heat, and the institute recently got a little splash of publicity after its analysis led the *Guinness Book of World Records* to issue a new "hottest of all spices" proclamation in February. An Indian chile called Bhut Jolokia snatched the hottest-of-the-hot crown from a California-grown pepper called Red Savina.

The institute first got wind of a mysterious super-hot Indian pepper back in 2000, when a tiny Associated Press article quoted Indian scientists announcing that the world's hottest pepper had emerged from the rural Indian hinterlands. It took several years for Mr. Bosland to get his hands on some Bhut Jolokia seeds and grow enough plants for testing.

So how blistering is this Indian upstart?

Chile heat is measured in what are called "Scoville heat units." A garden-variety jalapeño, of the sort packing more than enough punch to turn a plate of nachos into a tongue-burning snack, might check in at around 4,000 to 5,000 Scoville heat units. The Bhut Jolokia, meanwhile, clocked in at more than 1 million such units when the institute took its pods into the lab.

"There are people that can actually consume it as if it were a bell pepper," Mr. Bosland says of the Indian scorcher. (He is not among them, saying only that it was a "big mistake" when he took a bite out of a Bhut.) Some people, it turns out, are genetically less receptive to chile heat, and people who eat peppers in abundance can build up some resistance to their fire.

But while chile-pepper heat makes the headlines, there really is a lot more to the plants than fire. There's also color. Mr. Bosland explains how it is increasingly popular to make a natural food coloring out of bright red-pepper pods, and this chile-born color now shows up in products as diverse as lipstick and mayonnaise. More and more types of purely ornamental chiles are now bred—diminutive plants that boast "bouquets" of yellow, orange, and red fruits above their foliage.

The best way to see the breadth of the chile-pepper world is to visit the institute's Teaching and Demonstration Garden, a half-acre patch a short drive from campus where more than 150 chile varieties are grown.

Showing a reporter around on a recent visit, Mr. Bosland apologizes for the garden's scruffy appearance. The season is winding down, and the pepper-killing first frosts of fall could happen any evening. Still, pods of all shapes, sizes, and hues can be seen amid the tilled rows and bushy plants. The fiery Bhut Jolokia is here—its atypically hot fruits, a little longer than your average jalapeño, are born on an otherwise typical-looking pepper plant.

When Mr. Bosland first came to New Mexico State 21 years ago as a professor and researcher, he dabbled a bit with broccoli. He spent some time working with onions. But it was the chile that soon captured his academic curiosity.

"The science of chiles still has a lot of unanswered questions," he says, scanning his rambling pepper patch. "The spring may come when I don't want to plant chiles, but that hasn't happened yet."