

# Heirloom Native American Crops Finding A Market

Pima corn, roasted wheat, blue corn flour, and tepary beans are just a few of the more than 20 Native American products marketed by Ramona Button. When she was young she helped her dad raise the Native American crops she and her husband Terry now raise, package and sell.

"When I moved back to this area, I saw the decline in the health of the people and realized the old crops were no longer being grown," says Ramona, a member of the Akimel O'Odham (Gila River Pima) community, Sacaton, Arizona.

She and Terry decided to do something about it. Their Arizona farm makes its money raising thousands of acres of cotton, alfalfa and other cash crops, but their passion is for crops that go back thousands of years.

They specialize in traditional native crops as well as some brought from Spain in 1685. They include black-eyed peas, wheat, melons and more.

"Our commercial farming operation has subsidized the research into these alternative crops and the equipment needed to produce them," notes Terry.

The equipment is pretty simple, as much of the work is done by hand. Ears of 60-day Pima and blue corn are picked by hand at the milk stage, shucked and roasted over mesquite fires. The corn is cooled and spread

out to dry in the sun before it is shelled. Some is shelled and finely stone-ground and sold as pinole. Pima Club wheat is roasted in large pans over open flames and then fine ground.

Three different varieties of wheat berries that are not roasted are also available for sale, as is corn in 6 different processed products. In addition to the multitude of other fruits and vegetables sold locally, it is the tepary bean that stands out.

Ramona describes it as "the most drought adapted species of bean in the world. It is high in soluble fiber and protein and is a low glycemic index food."

Native to the area, the tepary beans are a good example of why producing them is not a moneymaking enterprise. The beans grow as viny, bushy forms that are difficult to harvest mechanically. They are cut and brought to a thresher and then cleaned. Over the years, Terry has cobbled together what he calls his Rube Goldberg bean cleaner. Streams of air clean the beans, but separating them by their 3 colors is done by hand.

Corn is shelled with a 1925 John Deere corn sheller originally used by Terry's grandfather on his Maryland farm. Aside from these 2 machines, most of the work is done by hand.

"If anyone cares to volunteer to help, let us know," says Ramona.



Ears of rare corn varieties are picked by hand at the milk stage and roasted over mesquite fires, then dried in the sun before being prepared for market.



In addition to growing the crops, Ramona and daughter Velvet demonstrate how to use the crops and provide recipes. They present both locally and at trade shows and conferences throughout the Southwest, as well as at the Museum of the American Indian in Washington, D.C. As a result, demand is building.

"We have 35 restaurants and a number of stores ordering corn, wheat and beans weekly, from Washington State to Philadelphia and Boston," says Ramona. "We've had orders on our website store from all 50 states."

The Buttons hope the market continues to expand to the point that growing the crops

can be profitable and more of the work can be automated. Currently, a 1-lb. package of tepary beans sells for \$5.40. Finely stoneground, parched Pima corn pinole and Pima Club Wheat pinole are priced at \$4.65 for 8 oz. Whole kernel cob roasted Pima corn sells for \$10 per lb., while the same stoneground corn sells for \$11.25 per lb.

Check out Ramona Farms at FARMSHOW.com.

Contact: FARM SHOW Followup, Ramona Farms, P.O. Box 2195, Sacaton, Arizona 85147 (ph 520 418-0900 or 520 418-3642; www.ramonafarms.com).

## "Promiscuous Pollination" Produces Amazing New Garden Varieties

Joseph Lofthouse practices "promiscuous pollination" to develop new varieties of vegetables and fruit.

"I send seed all over the country and have even shipped to friends and family overseas," says Lofthouse of Paradise, Utah. "The popularity of some of my seeds in the southern U.S. really surprised me. But these varieties grow fast and furious so they have already produced a crop before it gets hot. I get good reviews from northern areas as well."

While others keep heritage plant varieties separated to produce genetically "pure" seed, Lofthouse does the opposite. He may plant 100 varieties together so they will pollinate each other, merging genetics.

"They will create all kinds of new combinations that are selected for this environment," says Lofthouse. "I'm interested in the on-going web of life. People say that we may lose 1,000 varieties of sweet corn this year, but I create new varieties every year."

If you order seeds from a variety that he has selected, a lot of the genetic mix is still there. Plant them and save seed. In 2 to 3

years, they'll have adapted to your area.

Lofthouse has only a few guidelines for the varieties he develops. They have to be short season and grow fast. He also selects for plants that do well without fertilizer, mulch or even compost, as well as without much weeding.

"When they get to a garden with a lot of fertility and care, they can really thrive," says Lofthouse.

However, the key attribute Lofthouse selects for is taste. "That makes it a joyful process for me," he says.

Lofthouse has found a lot of varieties that meet his requirements. He currently offers seed for about 40 different varieties and is working on about 85 in total. A full list is available on his web page, with orders processed between January 1 and April 30.

Customers ordering seed are encouraged to send a pre-1964 silver dime or a \$5 bill for each seed packet ordered. Seeds per packet vary. He also requests \$4 per shipment to cover postage, and a bubble-padded envelope. In return, they will get a small packet of seed to plant, and hopefully they



Unusual muskmelons (left) were the result of pollination from 40 different varieties. Beans shown at right resulted from a mix of 100 varieties planted together.



will save seed for replanting in future years.

For Lofthouse, selling seed is less about business and more about interacting with other people. It is why you can't buy his seed on the internet or make a digital order.

In fact, Lofthouse has operated under a vow of poverty for the past 17 years. Seed sales, as well as sales of fruit and vegetables at a local farmers market, help support a food

pantry he operates for the local community.

While Lofthouse doesn't require it, he appreciates those customers who replant their own seed and then eventually send back samples.

Contact: FARM SHOW Followup, Joseph Lofthouse, P.O. Box 538, Paradise, Utah 84328 (ph 435 363-5119; garden@lofthouse.com; http://garden.lofthouse.com).

## Solar-Powered Insect Killer

"Our new solar-powered insect killer draws in night-flying insects with a solar-powered light that charges during the day and shines at night. It works great in a variety of agricultural settings including orchards, nurseries, vegetable crops, vineyards and livestock farms," says Richard Westphal, GreenFuture Equipment, Sacramento, Calif.

The bug-killer is equipped with a solar panel mounted on a metal pole, which can be adjusted from 6 to 9 ft. high depending on crop height. Insects are attracted to a dual color light bulb housed inside a ring of electric wires. Dead insects fall into a large removable container.

The machine is effective over a 230-ft. radius, or about a 3-acre area. You can mount it in a permanent location or move it around by bolting the base to a pallet, wheel rim, or other heavy object.

"It targets nighttime harmful insects including mosquitoes, moths, beetles, grasshoppers, and stink bugs, but not beneficial insects such as bees and butterflies which are mostly active during the day," says Westphal. "It also doesn't kill predatory insects such as dragonflies, lady bugs, and praying mantises, because they aren't naturally attracted toward light."

"The machine can be used with pheromones to help attract insects, and it can be customized with specialty light bulbs. For example, we offer a black light bulb that's perfect for rice fields and a dual color one for vineyards," says Westphal.

As soon as insects make contact with the electric wires, the heavier ones fall into the container while the lighter ones get stuck to the wires. "The electric wires are programmed to rotate periodically and clean

themselves by brushing against a rubber flap," says Westphal.

The machine is also programmed to turn itself on and off during periods of precipitation or low temperatures.

The GFS-8 Outdoor Insect Killer sells for \$899 plus S&H.

Contact: FARM SHOW Followup, GreenFuture Equipment, 9727 Business Park Dr., Suite B, Sacramento, Calif. 95827 (ph 916 307-7579; info@GreenFutureEquipment.com; www.GreenFutureEquipment.com).

Bug zapper attracts insects with light. Because it's solar-powered, it can be placed anywhere, drawing in pests from about a 3-acre area.

