

UMass Amherst & Wilson Farm Explore

Ethnic Crops

By Elena Murphy

Scott Wilson has overseen marketing at Wilson Farms for a long time, so not much can

blanketed the local Brazilian media promoting the availability of taioba and maxixe, a kind of prickly cucumber. Mangan says, "It was phenomenal. All I did that day was bring up boxes of taioba."



surprise him. However, when Wilson Farms hosted an international food festival in 2008 at the farm stand in Lexington, featuring Brazilian vegetables, such as taioba, that had been raised at Wilson's, he says, "It was an eye-opener. Taioba is the only thing where people went crazy." It marked the first time Wilson Farms had to limit the amount of produce that each customer could buy.

Taioba may not be a household word yet, but this broad-leafed green, which can grow as long as an adult's arm and is a staple in southeastern Brazilian cooking, may become a lot more familiar in coming years. Wilson Farms has been one of the test grounds for raising and selling this green, which can be used in recipes that call for spinach, working with the University of Massachusetts Extension program, to gauge local demand for this vegetable.

For the huge response to the food festival, Scott tips his hat to Frank Mangan, associate professor at UMass Extension's department of plant, soil and insect sciences. Mangan

"You're always Krsytian from UMass Amherst's Ethnic Crops program inspects chipilin, a popular herb Chipilin is used in soups and in making the corn dough for pupusas, a type of tortilla popular in Central America. (Photo courtesy of www.worldcrops.org)"

looking for different products to introduce," says Jim Wilson, who heads up the farming side of operations at Wilson Farms. He says customers like to

"see items you don't usually have."

And new produce also draws new customers. When Wilson's hosted its food festival, people came from 30-40 miles away, he adds.

UMass's Frank Mangan says the event was a way to "check the waters before you put in a lot of time and energy. It's one thing for people to say they'll buy something, another to actually buy it, and still another to buy it again."

Mangan knows in addition to tuning into the existing market for a crop, gaining new customers is key. His work with UMass Extension includes looking at immigration patterns and what people eat. Then he and his students adapt the process of growing the vegetables in a local farm to meet market demand. His partnership with Wilson Farms goes back to when he had a graduate student who was also working at Wilson's and the potential for joint effort in growing crops was realized.



Students from UMass Amherst's Ethnic Crops program introduce customers at Wilson Farm to the delights of Brazilian vegetables and herbs. Photo by Laurie Atwater



Jim Wilson (left) and Scott Wilson (right). Wilson Farm has been one of the test sites for growing and marketing of ethnic crops. Photos by Elena Murphy.

To inform his work at UMass Extension's Ethnic Crops program, which is located at UMass Amherst, Mangan also spends time in Central and South America (he just returned from El Salvador last month)

researching agricultural practices to help him grow similar produce in the United States.

So, if taioba and other vegetables and herbs from Brazil aren't filling store shelves

Brazilian Cassava (yuca) at the international food festival at Wilson Farm. People in Hispanic countries use cassavas much like Americans use potatoes. There's both a sweet and a bitter variety of cassava. The sweet one can be eaten raw, but the bitter one requires cooking to destroy the harmful prussic acid it contains. Photo by Laurie Atwater.





UMass student Celina with a tray of maxixe. Maxixe similar to cucumber (*Cucumis sativus*), is thought to have originated in Africa. It was at one time thought to be from the West Indies, which is why it is also known as West Indian gherkin. But cucumber is another name for this crop.

And Wilson Farms is ready to invest in what customers want. “Twenty to thirty years ago,” says Jim Wilson, “We only sold

fresh parsley. Now, we have cilantro and basil – they’ve become mainstream.” The same goes for tomatoes, he says. Customers used to expect one kind, and now there are many varieties.

To learn more about how Wilson Farms matches produce selection with customer preferences, Mangan likes to get his students off the farm and into the marketplace. Scott Wilson gives Mangan’s students a tour of the New England produce terminals in Chelsea, where food comes in from everywhere from Chile to South Africa. Scott then has the students come to Lexington to see the retailing side of produce at Wilson Farms.

With plenty of produce available, the next step is getting it to the people who want it. Jim Wilson

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yet, there’s a reason. We’re still “getting the kinks out of growing taioba, which is truly tropical,” says Mangan. And UMass Extension undergraduates and grad students under his guidance are doing just that. At the university’s research farm in Deerfield, MA, students often grow these plants in greenhouses before transplanting them into the farm’s fields or other commercial grower’s fields. So far, the biggest challenge is susceptibility to pests.

The research farm, created in 1995, is designed to study “sustainable crops for a growing immigrant population,” says Mangan. Once the best conditions for the vegetable’s growth cycle have been determined, commercial farmers can use that as a model for their own fields.

Wilson Farms dedicated some land to growing taioba and a Central American herb chipilin back in 2008. Jim Wilson says, “Chipilin did a great job of attracting all the bugs to itself...not bad as a buffer plant.” But it was not so promising as a crop that the farm could plant an acre of it and expect it to be marketable, and smaller amounts don’t necessarily yield a profit.

We need these crops to be “economically viable,” agrees Mangan. He and his students try out different conditions for growing crops from other countries that have potential markets in the Northeast. Chipilin is a popular herb in Mexico and El Salvador for cooking and appears in herb gardens in places such as East Boston, where there is a population that grew up with it. Mangan says that so far he has two commercial growers so it may become available year-round.

agrees that those who grow produce need to know their market. “There are good farmers that are poor businessmen.”

To do outreach before the international food festival in ’08, Mangan says he promoted the event in Brazilian publications and radio stations, translating the information into Portuguese to reach the Brazilian population spread throughout eastern Massachusetts.

However, for a population that may know little about regional Brazilian cooking, the challenge, then, is familiarizing customers with these new vegetables and herbs. Doing demonstrations is time-consuming and costly, says Mangan, but it helps potential customers to know how to cook new foods.


What also helps is that there is a lot of overlap among continents when it comes to using ingredients that are similar even if they’re grown in different parts of the world. For instance, spinach and taioba can be used interchangeably; and different varieties of spinach and cucumbers appear in Asian

Fresh Maxixe combined with white vinegar, salsa, and green onions, for a refreshing summer time salad!

Serves 4

Maxixe Salad

8 Maxixes, washed, peeled, and sliced thin
 1 tablespoon green onions, washed, chopped
 1/2 cup white vinegar
 1 tablespoon sugar
 2 tablespoons salsa
 Dash of salt and pepper



1. Wash and prepare vegetables.
2. In a medium bowl, mix all ingredients, except maxixes.
3. Add maxixes and mix well.
4. Refrigerate for at least 10 minutes and serve.

Tips:

- Add cooked whole-wheat pasta or cooked brown rice for another great-tasting salad.
- Place maxixe salad on top of fresh baked salmon or whitefish for a refreshing meal.
- Spread a small amount of low-fat vegetable cream cheese on a slice of whole-wheat toast and top with maxixe salad.
- Serve maxixe salad mixed with cold taioba sauté.

Nutrition Facts: Serving size: 1/2 cup. Calories: 40. Fruits and Vegetables: 2. Fat: 0 g. Fiber: 1 g

Maxixe
 This vegetable is similar to the cucumber and is popular in Northern Brazil and the West Indies where it is called West Indian gherkin. It can be eaten raw and has a slight lemony taste. In Brazil, the variety of seed is called “Maxixe do norte” (“Maxixe of the north” in Portuguese). In this part of Brazil, it is used in salads and soups, and cooked with beef dishes.

For more information on Brazilian crops, visit: www.worldcrops.org

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A variety of peppers which are a staple of South American cuisine. Photo by Laurie Atwater.

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and Indian cooking as well.

One success story is the prickly cucumber maxixe, which is being grown commercially, and is available through Whole Foods, according to Mangan. It can be cooked or eaten fresh. Mangan's website www.worldcrops.org traces maxixe's origins to Africa, then to Brazil, when it appeared during the slave trade. It almost seems like maxixe is simply being reintroduced to Massachusetts after a relatively short absence as Mangan says

it was commonly grown here during colonial times.

UMass Extension and other sources are also making recipes available. A quick Google search shows a number of websites that have recipes for taioba, for instance. Mangan's website www.worldcrops.org, features a number of recipes (see accompanying boxes). He says that UMass Extension's nutritionists develop healthy versions of recipes and there is input from the federal food stamp program

before the recipes are distributed.

Getting customers to try new vegetables has been working. Scott Wilson says, "We've seen customers palates expand." He notes Wilson Farms now sells several types of eggplant: Chinese, Japanese, white, and graffiti version of the vegetable as well as assorted wild mushrooms. "All that extends beyond our normal clientele," says Scott

Mangan says by looking at immigration patterns since 1960, most migration has come from warmer climates, and immigrants look for the heat tolerant vegetables they know. As a result, food from those regions now appears regularly on American plates. Peppers, tomatoes, corn, says Mangan, all have become basics in the United States, and even "lettuce is from the Mediterranean."

Wilson Farms also tracks how people want to buy their food. Scott Wilson says there has been a change in "customer shopping habits." People come in more often than in the past,

and not only buy produce but also pre-cooked vegetables and other foods, he says. If customers are newer to the United States, Scott says, they usually want produce fresh and they'll cook it themselves. The longer people have been here, he says, the more they want vegetables not only cut up as butternut squash started to be packaged ten years ago, but actually ready to eat, as Wilson Farms sells it now.

Increasing vegetable offerings to include new crops such as taioba will probably grow gradually. Mangan says, "You go where customers do their shopping." For his part, Jim Wilson says Wilson Farms is growing a few taioba plants, with more space planned once the pest management issues are solved. "It's fun," says Scott Wilson, of expanding vegetable selection, and "a benefit to everybody when it's more diverse."

Why Brazilian cuisine?

Brazil has a population second only to the United States (180 million compared to 280 million). It covers more than half of the continent of South America. Frank Mangan says that as UMass Extension does outreach, it identifies where the vegetable demand within an immigrant populations in Massachusetts is not being met, and the University focuses on cultivating crops to meet the need. (Numbers sourced from www.worldcrops.org)

**Find more information
about UMass Amherst's
Program at:**

**[http://www.
umassvegetable.
org/ethnic-crops](http://www.umassvegetable.org/ethnic-crops)**