



High Ground Organics Community Supported Agriculture

October 26th and 27th 2011

The Great Carrot Trial, from Steve

The carrots in your box this week are the result of an experiment. No, they are not genetically modified or altered in any way—Mokum is a sweet, tender, relatively early variety in the Nantes class. They have, however, been grown in a field to which we added mustard seed meal (the solids that are left after mustard seeds have been pressed for oil).

When we first purchased our new farm in North Monterey County, one of the things I was most excited about was the possibility of being able to grow carrots other than Red Cored Chantenay, which is the only type that grows well in our heavy soils. It's not that I dislike Chantenay carrots—in fact, I love them—they are a great all-around carrot with good flavor and sweetness. It's just that there is a wide world of carrots out there (white, yellow, red, purple and all the varieties in the Nantes family) that wasn't really open to us.

So as soon as the ground became dry enough to work at our new site, one of the first things I planted was a large block of Mokum carrots. As a standard practice, I will pluck out a few carrots a various stages just to see how the tap roots are developing. And with this block it became evident at an early stage that something was wrong. Instead of developing a clean, straight tap root, about half of the carrots were forked out shallowly like the roots of a tree. The other half had tap roots that were pinched and forked about 3-4 inches down. All of the carrots had little white "galls" on them. When I looked it up in one of my pest management books, it was obviously a bad case of root-knot nematodes—something I had never had to deal with before.

Considering that the field had been fallow for over two decades, it was amazing to me that these pests had remained in the soil. The only explanation that I have come up with is that one of the weeds that predominated during the fallow period must have acted as a host. Because there are few viable organic management strategies, I became resigned to the depressing thought that we would just have to focus on less susceptible crops there.

Then one morning as I was leafing through the Ag-Alert, The Farm Bureau's weekly paper, I came across a picture of a nematode infested carrot that looked exactly like ours. The accompanying article was about an experiment, performed at UC Riverside, that looked into ways of controlling root-knot nematodes. In addition to trialing several conventional nematocides, the researchers decided to include a couple of organic treatments as well—a mustard cover crop, and the

application of mustard seed meal. They were surprised to find out that at the medium application rate, not only did the mustard meal work, it worked nearly as well as the chemical applications did—something that is nearly unheard of with organic treatments.

As it turns out, I am familiar with mustard seed cake through doing trials with the folks at UC Santa Cruz on our strawberries for soil borne disease control. It also turns out that a small company called Farm Fuel sprang up here in Watsonville a few years back and is pressing mustard seeds for both oil (to use as biodiesel) and seed cake as an organic fertilizer. Mustard grows easily in California's climate (you've probably seen fields of wild mustard plants with their pretty yellow flowers growing in orchards or on buffer strips around farms) and it can be grown in a resource-efficient way on fallow fields or in rotation with other crops, so it seems like a real winner all around. I hastily ordered enough mustard seed meal for a quarter acre and went about setting up a trial in the very same field that we had the earlier problems with. After the trial beds were listed up I spread the mustard meal on top, and then worked it in with a rototiller to a depth of about 8 inches. We soaked the field with sprinklers to activate the mustard and then waited for two weeks before planting. When it begins to break down, mustard seed cake also releases a natural compound that suppresses certain soil borne pests and diseases.

When I set up the trial I knew that to be meaningful, I would have to include an untreated control—which I did. I planted one row of carrots in ground that was not treated with the mustard seed meal. As I monitored the field's progress by periodically plucking out test carrots, I was cautiously optimistic. And by the time the carrots reached maturity I was ecstatic. The difference between the carrots grown with mustard seed meal and

those grown without is dramatic to say the least.

From cooperating with researchers on various projects over the years I know that results this clear cut are rare indeed. But as any good scientist will tell you, to be truly meaningful, repetition is key. And you can bet this is one experiment that we are going to repeat—every time we plant carrots.



The carrots at the left were grown in the field to which I applied mustard seed meal before planting. The carrots at the right were in the control field that did not have mustard seed meal added to the soil.

This Week

Green Butter or Green Oak Leaf
Lettuce

Carnival Winter Squash

Cauliflower or Romanesco

Mokum Carrots

Red Russian or Lacinato Kale

Tongue of Fire Shelling Beans
OR Romano beans

Mixed Summer Squash OR
Mixed Corno di Toro and
Hungarian Wax Peppers*

Flowers: Mixed Bouquet

Sign Up Now for the Winter CSA

The winter CSA will run every other week from November 30/December 1 to February 22/23. To sign up, please send a check for \$160 to High Ground Organics at the address along the bottom. Include your pick-up site. You must sign up for all 7 weeks--we will gladly donate your box if you know in advance that you will be unable to pick up on a certain date. Please sign up early so we can plan our crops accordingly. Thank you!

Notes from Chef Andrew

This week brings a colorful box with many possibilities. Use the **carrots, summer squash, beans, and lacinato** for a soup a la minestrone. Cook up some onions, mushrooms, and garlic, sauté the carrots, and then add the sliced up summer squash. Add the lacinato kale in shreds along with the beans, and add some red wine. Cook until the wine is almost gone, then add some vegetable stock or water. Add plenty of herbs, and then add some pasta and let it simmer until everything is tender. If you have any rinds from Parmesan or Pecorino cheese, this is a perfect time to use them. Just toss some into the soup and let it do its magic. I can also see using the **summer squash** and the **carrots** diced up with mushrooms and onions and garlic for a stuffing for the **Carnival squashes** after roasting them. I would add some leftover grains to the mix and then top the lot with a little cheese and breadcrumbs. I either slow cook **Romano beans** (see recipe) for an hour, or cut them into small bits and sear them in a hot pan and finish them with vinegar or a juice like orange or lemon and a scattering of nuts.

For a simple but refreshing salad, dice the **peppers** ¼ inch and toss with shredded **lettuce** dressed with a lemon-lime vinaigrette seasoned with ground coriander seed, and a touch of dried oregano and cumin seed powder. Build on this salad by adding cold cooked shrimp and some avocado, and maybe some diced onion or onion quickles of you have them.

Braised Romano Beans, from Chef Andrew E Cohen

1 lb. Romano beans, stem end removed	2 TBS soffritto, see recipe on website-OR-¼ of a brown onion minced fine
2 TBS olive oil	1 large garlic clove, peeled & minced
1/3 C water or white wine	Salt and pepper to taste
-Optional- ½ TBS bacon fat, or 2 tsp. Pimenton de la Vera Dulce (Spanish sweet smoked paprika)	

In a pot just large enough to hold the beans that has a tight fitting lid, warm the oil over medium heat. When the oil is shimmering, add the soffritto and heat through. (If using just the onions, add the onions and sauté slowly until soft.) Add the garlic and gently cook until softened and aromatic. If using, add the bacon fat now. (For the vegetarian version that will maintain this flavor, add the smoked paprika now and cook for 2 minutes, stirring, to wake the flavors and infuse the oil.) Add the beans, and toss to spread the aromatics around. Add the liquid and put the top on the pot. As soon as the liquid starts to steam, lower the heat as low as it will go. Cook like this for 1 hour, occasionally rattling the pot to stir it around. Check after a ½ hour to ensure there is still liquid in the pan. If it seems very low, turn the heat down or use something to lower the heat, and add more liquid. Cook until the beans are meltingly soft, but still holding their shape, around 1 hour total. Season with a little salt and pepper and serve.

Upcoming Events

Joni Sare's Cooking Classes in Cupertino:

Preregistration at jonisare.com/cooking-outside-the-box/ is required. Last-minute sign-ups are okay.

Wednesday, *October 26th*, from 6:30 to 8pm; \$10

Sunday, *October 30th*, from 1:30 to 3:30pm; \$10

Wreathmaking at the Thomas Farm: Join Jean Thomas at her art studio at the Thomas Farm in Corralitos to make your own holiday wreaths. *November 19, November 20, December 3rd, and December 4th*. Price is \$30 for individuals or \$25 for groups of 6 or more. Call Jean at (831) 724-4013 to sign up.

Sicilian Inflected Caramelized Cauliflower

Slices, from Chef Andrew E Cohen

1 head cauliflower or romanesco - florets sliced into 3/16ths to ¼" thickness	2 cloves garlic, peeled and halved lengthwise
½ cup golden raisins, soaked in ½ cup aromatic sweet white wine such as viognier	¼ cup capers, drained
salt and pepper to taste	Olive oil as needed
½ cup roasted unsalted almonds, chopped finely -OR- ½ cup chopped almonds and 1 cup fresh bread crumbs, tossed and lightly oiled	

Fill your largest sauté pan (14 inch is best) with water, salt it generously and bring to a boil. (For a 10 inch pan use ¼ less cauliflower and pull a little of the other ingredients.)

When boiling, drop in the cauliflower and cook just until it loses its "raw" edge and is starting to get a little tender-4 to 6 minutes. Drain well and return the pan to the heat, lowering it to medium. Toss cauliflower into a large bowl and drizzle with a little oil, and toss to coat well. When the pan is hot, film with oil, around two tablespoons. When the oil is hot, add the garlic cloves and cook until the garlic is fragrant and golden.

Remove the garlic from the pan.

When the oil is quite hot, carefully add the cauliflower slices (residual water may cause spattering and popping of oil) and level out so the slices on the bottom are flat. Do not pile in too much cauliflower or it will steam and become mushy. Use less cauliflower if necessary. Cook cauliflower until pieces on bottom are caramelized. Turn and toss until all the slices are caramelized.

Drain the raisins, reserving the liquid. Squeeze the raisins to extract more liquid. Add raisins and capers, and cook to heat. Season with salt and pepper. Add reserved raisin soaking liquid, tossing to coat the vegetables with the liquid. Cook until almost reduced and a glaze forms. Scatter the almonds over all and toss to mix. Serve hot. -OR- If you are using the crumbs mixture, pour the cauliflower out into a serving dish, then add the crumbs and almonds to the hot pan and stir the crumbs while they turn golden. Once golden, pour over the cauliflower.

Everything in your box and the flowers are certified organic. The peppers are from Borba Farms. All other veggies and fruits were grown by High Ground Organics. Organic flowers are from the Thomas Farm.