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THE WSU ORGANIC STANDARD

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A Microclimate for Maximum Effect

I figured it wouldn't take long for the farm to experience a frost after I sent out last week's newsletter declaring "too much of a good thing!" Sure enough, last Monday night we had a mild frost at the farm, and more extensive frost in more sensitive areas of the Palouse. Most of the crops survived that first chill with grace, but the writing is on the wall as the days shorten and the sun drops lower in the sky. I'm always amazed at the farm's ability to resist these light frosts and continue to produce such consistent crops. Microclimate is everything in vegetable production on the Palouse and the farm couldn't be in a better spot. Three factors contribute to the farm's success: south facing slope, wind breaks on the east and west edges, and location on a hill.

The southern orientation allows all crops on the farm to receive equal amounts of sunlight through the entire growing season without any shading from the natural landscape. In fact, the fields tilt to the south and act as a solar collector, warming rapidly in the sun and retaining much of the heat through our cool summer nights. While some crops can still produce well with less than full sun, most of the garden vegetables that we choose thrive under ideal, full sun conditions.

The wind breaks on either side of the farm also contribute to the soil's ability to hold heat. On the west edge of the farm, a 5-row wind break was planted when the Tukey Orchard was established back in the 70's. It does an excellent job of slowing the strong west and southwest winds that dominate the Palouse in the spring and summer. Smaller willows and bushes were planted on the outside of the break, moving towards taller cottonwoods and evergreens on the inside. This tapered effect allows the prevailing winds to lift over the break and be dispersed over the farm

before continuing on. We've seen improved production in the crops closest to this windbreak where the effects are greatest. On the east edge is a single row of Ponderosa Pines which have grown considerably over the last 7 year. They help slow the cold east winds of fall and winter.

Finally, the farm's proximity to the top of the hill at Tukey is the key factor in keeping those light frosts off the site. Cold air sinks to lower depressions in the landscape. The farm is part of this natural drainage—when the air cools it flows through the farm to the southwest corner where it then travels down the small valley towards Airport Road and the creek bottom connecting with Paradise Creek. Cold air follows the landscape unless it is blocked by an obstacle such as a structure or natural feature. We haven't planted large trees on the southern or lower edge of the farm to allow for the air to drain easily off the hill and into the valley below us.

You can put these guidelines to use when locating a garden site or improving on your home garden. Sometimes you're stuck with what you have, but a little planning can go a long way in helping your gardens be more productive.

--Brad

The annual **CSA Survey** is available and we appreciate your feedback! The survey's included as a PDF—you can either print and fill out, or complete on the computer and return to us via email. We'll also have copies at the pickup sites. If completing by hand, make sure to return it to your pickup site or send in to our campus address.

Thank you!

With the autumn nip in the air, it's time to break out the soup pot. This recipe for white bean soup is one of my favorites. Warm and satisfying. The garlic, rosemary and red pepper turn white beans into something special, while the addition of kale not only adds a splash of color to the soup, but a lot of vitamins and minerals as well. Kale is high in iron and folic acid, and is very high in vitamins K and C.

--Jamaica

Tuscan White Bean Soup with Kale

From Rebar Modern Food Cookbook, by Audrey Alsterberg & Wanda Urbanowicz (Big Ideas Publishing, 2001)

Serves 8

2 cups cannellini beans, soaked overnight	4 ripe tomatoes, diced
10 cups water	½ teaspoon cracked pepper
4 bay leaves	2 tablespoons balsamic vinegar
1 tablespoon salt	1 bunch of kale
1 tablespoon minced fresh rosemary	Parmesan cheese (optional)
2 tablespoons olive oil	
1 yellow onion, diced	
8 cloves garlic, minced	
¼ teaspoon red pepper flakes	

Drain and rinse the soaked beans and place them in a pot with bay leaves, 2 teaspoons rosemary and cold water. Bring to a boil, reduce heat and simmer until the beans are tender. In the last 15 minutes of cooking, add 2 teaspoons of salt to the beans.

When the beans are tender, heat olive oil in a soup pot and add the onion, remaining 1 teaspoon salt, and the red pepper flakes. Sauté until the onions are lightly golden, then add the garlic and the rest of the rosemary. Cook several minutes, then add the cooked beans and their cooking liquid. Bring to a simmer, add the tomatoes and simmer gently for 20 minutes.

Meanwhile, remove the stems from the kale, and cut the leaves into ribbons. Add the leaves to the soup and cook until wilted. Season the soup to taste with balsamic vinegar, cracked pepper and more salt. Garnish with freshly grated Parmesan cheese.

