



Harmony Valley Farm

An update for our Community Supported Agriculture Members - Since 1993

September 25-26, 2015

Cover Crops...Our Allies in Nutrient Management

by Richard de Wilde

Every year we are intrigued by cover crops and find ourselves wondering why more farmers don't utilize them. Late summer and fall is an important time of year when we start to wrap things up for the growing season, making our final passes through the fields and putting them to bed for the winter. We remove the mulch and irrigation lines, take down tomato stakes and chop any remaining plant material (such as broccoli stalks) in the field. Starting in mid-late summer, as soon as a crop is finished, we start this process with the goal of getting a cover crop planted as soon as possible. We've been planting cover crops since August, so many fields are already covered with a lush blanket of green growth. Cover crops are a very important part of our production system and are important for maintaining the health of our soil as well as investing in future crops we'll take off the land.

Cover crops are an excellent example of how it pays to work in alignment with nature. While we plant most of our cover crops in the fall, they could be planted at other times of the year in certain scenarios. We choose cereal grains, grasses and legumes as our plants. It's important to understand why we plant them and what purpose they serve. First, cover crops will out-compete any fall weeds that might germinate in a field...and we hate weeds! There are actually some weeds that germinate and start their growth cycle in the fall. Once they are established, we have to deal with them in the spring when they start to bloom. The more weeds we can prevent from getting established in the fall, the better it will be in the spring. Cover crops also help hold soil in place. Winter winds and moisture can carry precious topsoil away if there isn't something to hold onto it. We try to get cover crops established as soon as possible so we can maximize their growth potential and form a strong root structure to hold the soil in place and prevent erosion.

Another important reason for planting cover crops is to build soil health and nutrition while building a system for holding nutrients. Cover crop plants can both synthesize and extract nutrients from their environment and then act like a sponge to take these nutrients up and hold onto them. Through photosynthesis they are able to take carbon from the air and use it to build nutrients in the plant and soil system. Some scientists studying climate change have theorized that if all farmers used

cover crop systems, we could mitigate the problem of excess carbon and the effects of climate change. Many nutrients in the soil are water-soluble and can be lost when they wash away with melting snow and moisture over the winter and in the spring. If you have a plant in the soil, it will take up the nutrients and utilize or hold onto them.

This year we've chosen to diversify our cover crop plant mixes. We have two different mixes. The first mix is a combination of four different plants that have the ability to overwinter. This means they will start to grow again in the spring time. We plant this mix in fields that we do not plan to plant early crops in. This mix includes hairy vetch and mammoth red clover which are both legumes. The other two components are annual rye grass and cereal rye. Each component of the mix has a specific purpose. The legumes are important because they have the ability to take nitrogen from the air and fix it in the soil. Annual rye grass is a fast-growing, aggressive plant that can

out-compete weeds. While it's part of the overwinter mix for this purpose, it's actually one component that will not come back in the spring. Cereal rye is important because it takes up the nutrients, including the nitrogen synthesized by the legumes, and acts like the sponge to hold onto them. They release them into the soil as needed, or at the end of their life cycle when we cut the cover crop and work it back into the soil.

Our second mix contains five components that will winter-kill. While this means that the plants will die when we get temperatures of 10°F or less, these amazing plants can and will continue to grow (slowly) up until this point. This is yet another reason that cover crops are so amazing! We use this mix on fields that we know we'll need to get into early in the spring to plant some of our early crops such as parsnips, salad greens, early cabbage, kohlrabi, peas, etc. This mix also contains the annual rye grass for its fast-growing abilities. The nitrogen-fixing legumes in this mix include winter peas

This Week's Box

RUSSET POTATOES: This is a starchy potato, perfect for baking or mashing. They are delicious if you rub them with olive oil and put a hefty sprinkling of salt on the skin. Bake until tender and load it up with your favorite toppings.

BROCCOLI: Don't forget to eat the stems too! Peel away the tough outer layer and you'll find a tender, sweet stem inside. Lightly steam or shred it to add to a slaw.

BROCCOLI ROMANESCO OR CAULIFLOWER: Toss with oil, roast until golden, then top with Parmesan for a quick dinner side dish.

RED OR YELLOW ONIONS: Make a quick pickled red onion and use it as a topping for tacos or salads.

ORANGE CARROTS: Cut into evenly-sized pieces and toss with olive oil, salt and pepper. Roast at 350°F until golden brown and sweet smelling. They'll be so sweet it will seem like you're eating candy!

SUGAR DUMPLING SQUASH: This is not a squash that typically stores well, so eat it soon! Cut in half and scoop out the seeds. Slice and pan-fry along with onions, apples and a touch of sage.

MINI-SWEET PEPPERS: Don't forget these are one of the easiest vegetables to preserve. Toss them in a freezer bag and pop them in the freezer. You can freeze them whole & raw and you'll be glad you did when winter rolls around!

ICEBERG LETTUCE OR SPINACH: Enjoy this crispy, refreshing lettuce topped with your favorite creamy dressing or use the leaves to make a wrap. Dress spinach with a simple vinaigrette and enjoy the first spinach of fall!

LEEKs: Saute gently in butter along with fresh mushrooms until both are soft and tender. Add a touch of cream, salt, pepper and top it off with a layer of cooked spaghetti squash. Simmer, uncovered until the squash is warm and the cream has thickened a bit.

LEMONGRASS: See this week's vegetable feature for more information.

FENNEL: One of the easiest ways to prepare fennel is to slice the bulb paper thin and toss it with a light vinaigrette of honey, lemon and olive oil—simple and refreshing.

MIBUNA: This green is in the "mustard" family. It is delicious lightly sautéed, added to a stir-fry, or tear the raw greens into bite-sized pieces and mix with Iceberg lettuce for a nice salad combo.

and crimson clover. The sponges in this mix include two cereal grains, oats & Japanese millet. While creating these mixes has added a level of complexity to the process, it also has added a higher level of diversity to our cover crop system which in turn will create a wider diversity of microbes in the soil.

Our standard operating procedure when we finish harvesting a crop is to immediately follow with the chopper to break down any remaining plant material, then do a light disking. Next, we spread compost and then the cover crop seeds are planted. This happens fast and the whole process can be completed in 24-36 hours! This is very time-sensitive and every day matters because

you really want to maximize the growth of the cover crop while the fall days are still warm. Of course we need moisture in the soil to germinate the seeds, so sometimes we dance with the weather and try to time the seeding right before or after a rain.

Using cover crops is a very efficient way to hold and add nutrients to the soil. Once the crop is planted, everything happens in place. There is no additional need to haul or spread additional fertilizer...the plant does all the work for us! Management, teamwork and timeliness are key components to making this all come together.

Vegetable Feature: Lemongrass

by Andrea Yoder

Lemongrass is considered an herb, and is very fragrant and aromatic. There are three parts to lemongrass and all the parts of the lemongrass can be used; the leaves, the middle stalk and the bulb. The bulb contains the most refreshing lemon essence and only needs to be used in small amounts. The stalk has good flavor but is not as intense as the bulb's and the leaves have a good lemon flavor followed by more of a "greens" taste. When using the leaves, it takes about three times more product to achieve the flavor intensity of a bulb. You can make a bundle with the leaves and use it to flavor pasta or rice while it is cooking. Remove and discard the bundle when finished cooking. You can also steep the leaves in hot water to make tea. The middle section can be cut into sections a few inches in length. You'll find this section to be tough but flavorful. Add them to sautéed dishes, to marinades and to flavor soups; discard before eating. You can also use the stalk as a skewer for cooking kabobs or chicken satay or as a stirring stick for refreshing beverages. The bulb is the most tender portion and can be sliced into thin pieces and added to soups, salads and other entrees where it can be eaten instead of discarded. The secret to cooking with the bulb or the stem is to pound it with the back of a knife to release the oils before using.

Lemongrass combines well with ginger, garlic, basil, chilies, coconut milk, cilantro, cinnamon and clove. It is frequently used in Thai, Vietnamese, African, Indian and even Mexican cuisine. Soups, curries, marinades and teas are more common uses, but don't limit the use of lemongrass to just these. You can use lemongrass anywhere a refreshing, crisp lemon taste is desired. It is often a key to making some of your own homemade curries combined with fresh chiles, ginger, etc. Lemongrass can be stored wrapped in plastic and put in the refrigerator for up to two weeks. You can also freeze it whole or cut into smaller pieces and it can be dried for later use by hanging to air-dry or by using a food dehydrator.

While lemongrass provides great flavor, this grass also happens to be good for you! Lemongrass is rich in a substance called citral, traditionally distilled from the leaves and stalks. Citral has shown to be helpful in aiding in the decrease of such ailments as muscle cramps and headaches, and well as aiding in digestion. Studies have also shown that the components of the grass when boiled (in a tea for example) create multiple anti-oxidants that are believed to help prevent cancer.

Lemongrass Mojito

Serves 2

2 lemongrass stalks
6 large fresh mint leaves
3 Tbsp sugar
6 Tbsp white rum
3 Tbsp fresh lime juice
Ice cubes
1 cup chilled club soda

1. Cut the bottom 7 inches from each stalk of lemongrass. Save the tops for garnish and thinly slice the stalks. Combine sliced lemongrass, mint and sugar in a shaker; mash well with muddler or wooden spoon.
2. Add rum and lime juice to the lemongrass mixture; mash until all sugar dissolves. Strain into 2 highball glasses. Fill with ice; top with club soda. Garnish with lemongrass tops.

Recipe originally published in *Bon Appetit*, November 18, 2009

Thai Larb (Thai Lettuce Wraps with Chicken)

Servings: 4

Chicken

1 ½ pounds skinless, boneless chicken breasts, cut into 1-inch pieces
½ cup coarsely chopped shallots
2 Tbsp thinly sliced lemongrass
2 kaffir lime leaves, thinly sliced
1 small red Thai chile, thinly sliced
1 garlic clove, thinly sliced
2 tsp fish sauce
1 tsp kosher salt
3 Tbsp peanut oil or canola oil, divided
8 small iceberg lettuce leaves
Cilantro, tender leaves and stems for garnish

Dressing

½ cup fresh lime juice
2 Tbsp fish sauce
2 Tbsp (packed) light brown sugar
½ tsp Sriracha sauce

1. Stir all ingredients in a small bowl to blend; set dressing aside.

1. Combine first 8 ingredients in a food processor. Drizzle 1 Tbsp oil over and pulse until chicken is very finely chopped.
2. Heat remaining 2 Tbsp oil in a large heavy nonstick skillet over medium-high heat. Add chicken mixture and sauté, breaking up into small pieces with the back of a spoon, until chicken is starting to turn golden brown and is cooked through, about 6 minutes.
3. Place 2 lettuce leaves on each plate. Top leaves with chicken mixture, dividing evenly. Garnish with cilantro and spoon reserved dressing over.

Recipe originally published in *Bon Appetit*, July 24, 2012