

‘Good Growing with the Garden Gal’ Program #5 August 2017
Cover Crops and Double Cropping/Water Cycle/Tomatoes
TO DO THIS MONTH – PLANT COVER CROPS / DOUBLE CROPPING

PLANT COVER CROPS

- Cover crops on a field or garden over the winter help reduce soil erosion, keep nitrogen in the root zone, and keep soils healthy by providing food (root exudates) to the beneficial bacteria and fungi that live in the soil.
- Winter-killed crops such as oats and field peas can be under-sown now and achieve enough growth before being killed by winter temperatures. (they can withstand a light frost)
- Rye can be planted as late as the first fall frost and still grow enough to provide benefits. Rye does not winter-kill, and you need a plan to kill it the next spring (3 weeks before crop is planted)
- Many feed and grain stores carry a wide variety of cover crop seed. Also commonly available by mail order
- Planting mixture of seed types, such as a small grain and a legume, increases the benefits.

DOUBLE CROPPING

- You can plant short season crops such as lettuce, spinach, radishes, and green onions six to eight weeks before the first frost in the fall and still get a crop.
- Consider planting them in areas that have already been harvested, or soon will be. Crops that pair well with this (in addition to those listed above) are carrots, early types of bush beans, bulb onions, garlic, summer squash, potatoes, early corn, and edges of tomato beds

IN THE KNOW – WHERE DOES THE WATER GO?

Runoff from rain or irrigation can cause soil erosion, and move certain types of fertilizers and pesticides into our lakes and streams (those that attach themselves to soil particles). Phosphorus and malathion are examples of compounds that ADSORB to soil particles.

Other types of fertilizers and pesticides go into water solution, and these can move into our groundwater. Nitrogen and atrazine are two to watch out for.

The key is to get the right amount of water in the right place at the right time.

Keeping soil covered with plants or mulch can greatly reduce soil erosion

Buffer strips on the edges of crop fields can help with reducing the amount of soil, pesticides, and fertilizers that leave a crop field.

CROP OF THE MONTH - TOMATOES

TYPES OF TOMATOES

Growth habit of the vines

- Determinate – will stop growing after reaching about 4-5'
- Indeterminate – keep on growing until something kills

Color

- Every color of the rainbow (except blue). Even brown and white. Also striped

Shape

- Cherry
- Grape
- Oval
- Round

Use

- Canning tomatoes generally have more meat and less juice

Genetics

- Open Pollinated
- Heirloom
- Hybrid
- Genetically modified (Flavr Savr) – 1st commercially sold GE crop. Allowed tomatoes to stay on the vine until ripe and still be able to with stand shipping. Not accepted by the public, and was only sold from 1994-1997.
- Grafted – by grafting desirable tomatoes onto a disease resistant / more vigorous tomato rootstock you can achieve better production. Both organic and non-organic are available.

HOW TO GROW TOMATOES

- Remember that they are a vine. They can't support an upright stem longer than 2' at most. You can let them sprawl on the ground if the ground is covered with straw, but that does invite disease.
- STURDY trellis is needed. Options include:
 - Tying to a stake
 - Florida weave
 - Hearty cages
 - Livestock panels
 - Tied up to trellis twine in a greenhouse/high tunnel
- Prone to fungal diseases so good air circulation is very important.
 - Space plants minimum of 3' apart if planted outside
 - Mulching with grass or straw prevents infection from "splash-up" when it rains.
 - Irrigating the soil rather than the plant also helps.

- Blossom end rot due to a lack of phosphorus, which can be due to uneven watering as well as low P levels
- Main insect pest is tomato hornworm. Providing a bird perch on your trellising will get the birds to manage this insect for you.
- Easy to start your own. Aim for transplants that are six weeks old.
- Pruning
 - Removing suckers below first fruit cluster can help speed ripening and increase airflow. Don't remove too much foliage so that you don't get sunscald. You can pinch off the end of the suckers, leaving just two leaflets, to help with this.
 - Be careful about pruning determinate varieties.
 - Consider removing all flowers six weeks before expected first frost – they will likely never produce ripe fruit
- Consider protection so that you can set them out earlier:
 - Wall o' waters (green or red, but avoid clear)
 - Tunnels
 - I've even seen black pipe and large olive jars filled with water to provide a little bit of warmth during the night.