

# Tom's Garden

## Blog July 2021

### Mulching

Mulch is a layer of either organic or inorganic material put down to cover the ground. This layer can be used to affect the soil or to protect seeds, bulbs roots of plants. This layer should be permeable to let air and water get through.

I don't like to use plastic, cardboard or newspaper because these items block air movement in the soil.

Mulches will moderate soil temperature extremes. In the summer, they will stop solar radiation from overheating the top layer of soil. In the winter, a mulch layer acts like an insulating blanket.

#### **Moisture retention-weed prevention**

Soil type has an important relationship with the availability of water for plants. Sandy soil drains quickly, leaving less moisture for plants. Clay soil holds water and can be too wet, not allowing roots to "breathe."

Loam is a good balance of sand and clay and its moisture retention is good for most garden plants. Whatever soil type you have, a good layer of mulch or ground cover will slow evaporation in the heat of summer.

Fast forward to winter. The insulating effect is important in winter. The roots and crown of perennial plants can be protected from extreme cold with mulch. It will stop the

cycle of freezing and thawing which can happen every day in winter. Frost heaving can occur, pushing the plant out of the ground enough to expose the roots and crown to cold temperatures. This can kill the plant.

Seeds of many weeds need sunlight for germination. Mulch blocks sunlight from reaching the soil and therefore prevents weeds.

Another benefit of mulching is to reduce soil-borne plant diseases. These diseases spread from the soil to the plant when the bottom leaves or stem is splashed by rain or by watering.

#### **Mulch Choices**

Organic mulches will decompose over time and can add some nutrients back into the soil. Inorganic mulches come from man-made materials and will not break down. You want a mulch that doesn't mat down or compact, blocking moisture and air flow. Straw is excellent since it is hollow with trapped air inside. Pine needles interlock so they don't wash or blow away. Shredded hardwood mulch stays in place, also. Arborist chips (from a tree service) are excellent, too.

Grass clippings should be left to dry first or they will mat down. Grass clippings should **not** have been treated with any kind of weed prevention chemicals!

Leaves should be shredded to prevent them from matting down or blowing away.

Black plastic and landscape fabric do not allow the transfer of air and water. They can, however be used to warm the soil in early spring and then removed.

Newspaper and cardboard, as in the “lasagna Style” of gardening also block air and water movement. If you think about what cardboard is meant for ; to protect packages from rain and moisture, you can see that it would take a very long time for it to break down.

Mulch or ground cover can also be used to prevent soil erosion on steep areas that are otherwise difficult to mow or otherwise maintain.

Mulching is an important step to be used by every home gardener.

## Datura: Devil or Angel

### Solanaceae Datura

Datura has many common names:

Trumpet flower, jimsonweed, angel’s trumpet, thorn apple, devil’s trumpet, devil’s weed, loco weed, devil’s breath, and hell’s bells.

Sources don’t agree on the exact origin, but it grew on our shores as early as the 1500s. it grew near Jamestown Virginia in such numbers it became known as Jamestown weed. As the plant spread across the country, it became known as jimsonweed. It was used as a hallucinogen Throughout history by various groups and also used as a poison. The hallucinogenic properties of this plant were well known to the natives of the

area and to the colonists as well. Ingesting any part of the plant, but especially the seeds results in major behavioral changes!



Jimsonweed was traditionally used to treat epilepsy and is closely related to witchcraft. It is well known as an essential ingredient of magic potions, ointments and witches brews. All parts of the plant are toxic. Datura flowers from the end of summer until autumn with trumpet-shaped flowers that are about 6 to 8 inches long. The foliage is bluish, this makes Datura a very attractive garden specimen. The flowers are also very fragrant.



Native to tropic and temperate regions, they like full sun and rich soil. Space plants about 12 inches apart. Height is 36 to 72 inches. They can be propagated from side shoots in summer. They can spread aggressively, so remove seed pods before they open. (don't eat them!).

Datura flowers differ from brugmansia (angel trumpet) in that the flowers are erect, brugmansia is pendulous.

Again, as a precaution, all parts of the plant are toxic, (but beautiful). I started my Datura from purchased seed-“ Select Seed Company.” [www.selectseeds.com](http://www.selectseeds.com)

## July

Named to honor Julius Caesar (100BC-44 BC). In 46 BC, Julius Caesar made one of his greatest contributions to history: he developed the Julian calendar which became the Gregorian calendar that we use today.

Water lily is the birth month flower of July. Water lilies are ornamental plants that live in water. Named for the Greek goddess of water- Nymphaeaceae.

They have evolved over time to have large leaves for photosynthesis and weak stems to easily float on water.

They can be annual or perennial. Annual or tropical water lilies come from Asia. They bloom in the evening and at night.

Perennial water lilies are from Europe and North America. They bloom from morning until about 4:00 p.m. The symbolism of the

water lily includes happiness, purity and divine birth.

## Striped Cucumber Beetle

**HOSTS:** A wide variety of vegetables, but cucumber, melon, squash and other cucurbits are damaged the most.

Adult beetles feed on seedlings and can retard or even kill young plants. Later they may be found in large numbers in flowers of squash or melon and may chew pits in fruit. Larvae feed on the roots. Adult beetles can transmit a bacterium that causes bacterial wilt.



Adult beetles spend the winter under debris in the garden. When squash-family host plants emerge, the beetles chew the seedlings and spread the disease among the plants.

Unfortunately, effective control methods beyond pesticides are few and far between.

