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A word about Minnehaha Master Gardeners: We are volunteers trained through the South Dakota State University Extension Master Gardener Program. The Minnehaha Master Gardeners mission is to provide current, research-based, consumer horticulture information and education to South Dakotans through Master Gardener projects and services. For more information on becoming a master gardener, visit SDSU Extension Master gardener volunteer program

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What's inside

In the Herb Garden

By Priscilla Jurkovich, Master Gardener

The herb section will highlight an herb that can be grown in the South Dakota region.

Aloe (Aloe vera) is an herb with succulent leaves in the shrubby succulent Asphodelaceae family grown outdoors in zones 10 through 12. In zone 4, aloe has many cultivars with aloe vera the most common as a houseplant. The leaves have jagged edges that grow from a basal rosette and are mostly green with white spots on the surfaces. The leaves have sharp, pinkish spines along the edges with a colorless gel found inside the succulent leaves. As a houseplant, it may take years to produce a flower stalk. However, propagation is easy as the plant produces “pups” that can easily be repotted. The plant prefers full sun or partial shade or bright, natural light indoors. As a succulent, water when the soil dries out.
The soothing gel from the leaves has commonly been used for skin care, burns or the juice as a tonic to help with digestion.

Landscaping-Before You Dig!

By JoAnn Christensen, Master Gardener

Begin the process by listing what you like in terms of plants and flowers. Do you like a formal, manicured look or more casual look? I like evergreen type materials because I like some color in the winter and these plants can slow down the wind around my home in the winter. Adding evergreens doesn’t mean a 60-foot Black Hills Spruce in the backyard. There are numerous miniature versions of many evergreens. I love arborvitae but they tend to dry out in the winter winds unless they are in a protected

area. I lost all of my arborvitae the first year even though they were covered with burlap, sprayed with anti-desiccant, and watered over the winter.

Once you have your list of desired plantings, determine which are sun loving, shade loving or a combination of both. Next look at your light flow.


10:00 a.m. Available Light 1:00 p.m. Available Light
BoBo Hydrangeas/Mini mugo pines and Spilled Wine Weigela above.

I have some coneflowers, a perennial, in my yard. Even though they are the same plant, the pink ones need full sun and the white ones need part sun-part shade. Be sure to read the plant tags and save the tags for future reference. I keep a binder of appliance manuals for my home and include a plastic sleeve of garden tags for future reference. Over time, light may change if a neighbor's tree grows larger and creates shade for your sun loving plants. Plants may need a refresh over time.

Oftentimes, homeowners want to plant once and ignore their yard. All plants require some level of attention. Plants may need to be trimmed, flowers dead-headed, or even prepared for winter. Be sure to balance your availability with maintenance requirements, or budget for someone to care for your yard periodically during the year.

If you have mulch instead of rock, be sure to replenish it periodically. If you have a hill, mulch may run down it with the rain or it may blow into your lawn in a windy area. Rock may be a better alternative.

If a plant struggles in its environment, check the light, soil and wind in that area. Sometimes, plants do better simply by moving them to a new area. It may take a year to settle into the new environment.

Have fun and you can always change it if you don't like it! We had a lot of rain this year and many plants are stressed. Give them time to recover and you can always try something new if they don't recover.

DID YOU KNOW…that you can grow tomatoes on a string? Part 2

By Debi Ulrey-Crosby, Master Gardener

The tomato season is in full swing and so far, the tomatoes are growing and climbing up the strings. I have to check them every few days to add a few more clips to the stems and string for support. As the tomatoes get heavier, the clips seem to give the plants some extra support. I have pinched out some of the suckers that grow between the main stem and the side branches. As I've done more research on pinching out the suckers, I'm not sure that's a true way to go. More research needs to be done on my part to see if that's truly beneficial or just one of those garden myths that seem to live on. I continue to add grass clippings as needed and this has worked great to keep weeds from encroaching on the plants.

As you can see, the clover is really growing and is also a great weed suppressor. If you read Part 1 in last month's newsletter, I didn't intentionally plant the clover. It is a wild clover that has seen an opportunity to grow in the garden area, as well as much of our yard and since we live in the country, this works for us. When it seems a little too tall or thick, I just mow or weed wack and leave it in place.

Today, my grandson Carter picked three red San Marzano Roma tomatoes. They were easy to pick without having to dig through massive clusters of leaves. I think I like the

string method thus far but stay tuned for more information as the season progresses.

Blister Beetles Are Here

By Kat Murphy, Master Gardener

Have you ever seen any of these critters in your yard or garden?

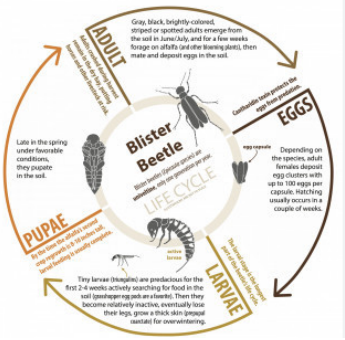
Beware, they are the dreaded Blister Beetle. They can cause a seriously painful welt, if you touch them or are squirted by them.

They can destroy garden crops seemingly overnight. For example, my Yukon Gold potatoes were growing great guns, about two more weeks and I would have had a full crop to harvest. Tuesday morning, I saw a few what appeared to be tiny black bb's on some of the leaves.

I washed them off with soapy water and thought, problem solved. But no. By Wednesday afternoon these terrifying creatures had stripped all the leaves from my

crop of a dozen plants. I found the critters under the leaves, in the soil and munching themselves into a stupor!

Blister beetles have a complete life cycle with egg, larval, pupal and adult stages. They overwinter as mature larvae in the soil and pupate in the spring. Adults emerge in early summer and can be seen feeding on plant foliage or flowers. They are often highly colored and gregarious, and can sometimes be nocturnal. Adult blister beetles can live for over three months, and populations can grow quickly in warm areas.



At the very first sign of their presence consider getting out your heavy offensive weapons. Be sure to wear protective gloves, long ones, and pants. The least offensive method to rid the garden of these pests is to shake them into a jar of soapy water. But, Be Careful! Do Not Touch them. While these pests do not bite or sting, they squirt their poison onto unsuspecting, or unprotected skin, raising welts and blisters.

Welts and blisters will disappear in about a week. To treat symptoms of a local reaction, wash the blister with warm, soapy water each day, and then apply a topical steroid or antibiotic. This can prevent a secondary infection and ease redness, swelling, and pain.

Applying a cold compress to the lesion several times a day can also ease swelling and pain. You don't need to see a doctor, but you should seek medical attention if cantharidin gets in your eyes.

If a blister beetle lands on your skin, DO NOT crush it. Gently remove the beetle by blowing it off your skin and/or clothing. After skin contact with the beetle, wash the

exposed area with soap and water. Also be sure to wash your clothes where the beetles may have landed.

The most effective way is to prevent them by treating your plants with Pyrethrin, a concentrated chrysanthemum poison.

“Pyrethrins and pyrethroids are insecticides that are often used in household products. Pyrethrins are naturally occurring chemicals found in chrysanthemum flowers, while pyrethroids are synthetic chemicals that are similar to pyrethrins but are often more toxic. Both work by altering nerve function, which causes paralysis in target insect pests, eventually resulting in death.

Pyrethroid insecticides, such as bifenthrin, esfenvalerate, lambda-cyhalothrin, and alpha- and zeta-cypermethrin registered for use on alfalfa, canola, dry edible beans, soybeans, potatoes and sugar beets provide good control of blister beetles. Carbaryl also provides blister beetle control.”

Pyrethroids can be harmful to bees so use a sprayer and localize the insecticide to those plants you wish to protect. You will likely have to reapply every 7-10 days to be sure you have eliminated any offspring from subsequent hatches.

When disposing of affected leaves and soil Do Not put them into your compost piles. Completely remove them from your yard. Do not let animals (horses, cows, goats) eat the affected leaves.

My advice, see them, eliminate them, remove all traces from your yard and garden areas.

Virginia Cooperative Extension, Virginia Tech, Virginia University
NDSU Extension, North Dakota State University

Vermiculture, Parts 3 and 4

By Jason Cruse, Master Gardener

It has been an exciting time with my worms for the past 2 months! Many new things have been learned and a whole new batch of castings have been harvested.

When last we met, my worms were trucking along. Worms are, however, very susceptible to environmental change, including temperature. I keep mine in my basement, where the temp is fairly constant, but there is a difference, of course, for when the a/c is on and off, as well as humidity in the basement. A rainy cool spring meant the worms were active and really tried hard to get out of their bins. Now that we

are in a hot summer, the basement is a little warmer and the worms move around a lot less.

I also purchased a new sieve for clearing out the castings. My first removal of castings was done by hand, with my red wigglers. In June, it was time to re-house my European night crawlers. My red wigglers were not happy with their home after the first casting harvest. I couldn't get them to stay in their box no matter what I did. So, I decided to create a new environment for both boxes (I'll talk about the new environment in a minute).

My new setup is with a sieve on a 5 gallon bucket. As I said in the first article, castings will last up to 9 months if kept in a ventilated plastic container (like a 5 gallon bucket). The sieve fits exactly over the top of the bucket.

The castings get worked around the sieve, letting the smaller particles through (as well as some worms) but keeping the larger pieces of uncomposted material remain to go back in the container. I ran mine through the sieve twice; the second time was to remove as many worms as possible from the sifted mix. The final result is a fine grain of composted worm castings ready to use in a planter box. In sufficient quantity, worm castings can also be tilled in the ground.

Sifting castings

Sifted castings

Once my castings were sifted, I transferred them to a Rubbermaid container with holes in it, so the castings can get air. Castings have living organisms in them; they require air—but not water—to remain alive until used.

Next, it's time to rebuild your nest. I used new materials this time: cardboard boxes for a liner (instead of newspaper) and shredded paper mixed with mushroom compost for the bedding. In addition, I have changed the feeding times for my worms. Previously, I attempted to feed them daily; that was too much and too wet for the worms. As we know from rain, worms try to get out of their homes when there's too much water (think about all the worms you see on sidewalks after a heavy rain).

Having worms hasn't been without difficulty. Their constant desire to escape has caused some issues at home, as you might expect. Both sets appear to prefer this new medium over what I had previously; escapes are down. That may also be affected by a warmer temperature in my basement during the summer. Finally, for a time I was mixing my vegetable scraps into the medium. I have stopped doing that, as that increases the temperature of the base and also makes the worms sluggish.

Anecdotally, the planter boxes where I incorporated castings from my first harvest in May show slightly better growth than the planter boxes without castings. I *think* I have my wife convinced to let the worms stay in the house for a bit longer, as long as I have their escapism under control. After now having gone through 2 harvestings, I'm in a better position with the worms.

The next steps for the worms include continued harvest every 3 months and keeping the castings to use in the spring. I would like to have my planter boxes in a 50/50 mix of castings and potting soil, and would also like to use castings as an experiment on things planted in the ground, perhaps at the teaching garden in 2025.

Do you have comments, questions, or topic ideas that you would like us to explore? Email us at MinnehahaMGnews@gmail.com. We would love to hear from you!

All articles are researched and written by Minnehaha County Master Gardeners and Interns. Thank you to all, for sharing your knowledge!