



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.



Red Clover (*Trifolium pratense*) is a short-lived perennial herb in the Fabaceae (legume) family and grows in zones 3 to 8. It's often used as a cover crop or grazing crop and helps to improve the soil. The plant is adaptable to many kinds of soils but thrives on well-drained loamy soils with a pH of 6 or higher. The plants grow from crowns and have hollow, hairy stems and branches that average 18 inches or longer. The flowers are small, oval clusters and pinkish-purple in color. The flowers and leaves are edible and rich in phytosterols, antioxidants and anti-inflammatory compounds. Each leaf consists of a slender stalk bearing 3 leaflets.

Propagates by seed pods that are small, short and contain kidney-shaped seeds.



Some interesting health benefits of red clover include its ability to treat estrogen imbalances, lower cholesterol levels, stimulate urination, boost circulation, strengthen bones, protect the immune system, reduce hypertension, and protect the cardiovascular system. Harvest the flower buds just above the first set of leaves and dry them to make tea. Use 2 of the flower buds in 1 cup of boiling water and steep for 10 minutes.

Starflower

By Roine Klassen, Master Gardener

(Egyptian star cluster, *Pentas lanceolata*)

To attract butterflies and hummingbirds to your garden you might plant some long blooming annuals called starflowers. Plant a drift of one color to keep a lot of butterflies happy. The flowers come in shades of red, white, pink and lavender with 4-inch wide flower clusters. The plants are suitable in the garden border or in containers since they grow to about 14 inches tall and about 18 inches wide. They prefer full sun to part shade. Soil should be moist but well drained, and organically rich. Water regularly and feed monthly to encourage the long blooming plant.

While they are considered deer and rabbit resistant, they may have issues with aphids or spider mites. Since it is a perennial in zones 8-11, it could be brought indoors for the winter.

From the picture, the petals explain where the name penta originates



Protecting and Enhancing Pollinators in Your Gardens

By: Debi Ulrey-Crosby, Minnehaha Extension Master Gardener

Every garden, large or small, needs pollinators for the health of your flowers and vegetables. By providing a good habitat with **food, shelter and water**, you can help to ensure that your garden stays healthy. Pollinators needs can vary from such things as shade, shelter from wind and inclement weather, water, nectar from various plant and even other bugs and insects for their survival. They also need protection from unnecessary sprays such as insecticides and pesticides.

Your gardens are alive, and nature can provide what the pollinators need when given a little boost from you. We all need to consider the plants we use and how other insects and pollinators will benefit from them.

Food - provide plants that bloom throughout the growing seasons. These plants can be flowers from garden plants or blooming trees.

Examples of early season flowers:

Alder
Heather
Willow
Witch-hazel
Forsythia

Examples of late season flowers:

Asters
Cosmos
Purple coneflower
Hyssop
Sedum



Are you trying to attract certain pollinators or insects? Butterflies, Bees, natural enemies? Each has its own needs, but many plants can be crossover plants, providing something for more than one type of insect.

Bees - need pollen and nectar (protein and carbohydrates). Some plants provide one or both and different bees prefer different flowers depending on their anatomy, so be sure to provide a variety of plants- you never know what type of insect might show up in your garden

Examples of flowering trees:

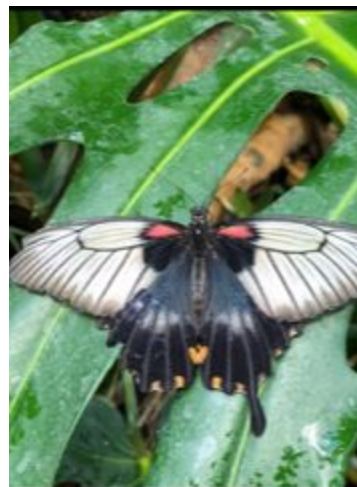
Black locust
Catalpa
Linden
Willow
Eastern Redbud
Fruit trees (apple, cherry, plum etc.)

Examples of wildflowers:

Purple coneflower
Goldenrod
Bee balm
Butterfly weed
Milkweed
Blazing star
Sunflower

Examples of Flowering Shrubs:

Native roses
Serviceberry
Wild plum



Butterflies/Moths - Butterflies and Moths go through complete metamorphosis (transforms from immature to adult phases) and the larvae and adults have different food needs. Some of these food sources can be very specific for that particular insect. These are general plant lists. Be sure to research the specific butterfly/moth you're trying to attract so you can provide their particular habitat.

These insects have complete metamorphosis, many adults and larvae have different food sources. Some of these food sources, especially for larvae are very specific for the particular insect, the plant lists are general, and you may want to do further research if you would like to provide habitat for particular butterflies/moths.

Examples of caterpillar plants:

Birch
Cherry
Crab apple
Oak
Willow
Goldenrod
Lupine
Maple

Examples of adult butterfly plants:

Aster
Bee balm
Purple coneflower
Goldenrod
Honeysuckle
Lavender
Phlox
Zinnia

Natural enemies - can also have life stages that need to feed on pollen and nectar. Insectary plants (those grown to attract, feed, and shelter insect parasites and predators to enhance biological pest control) can provide this food source in your garden. Since most of these natural enemy insects are small, small flowers are often needed to provide them with better accessibility.

Examples of good insectary plants:

Parsley family - cilantro, dill, fennel, coriander
Mustard family - sweet alyssum, radish, cress
Mint family - thyme, catnip, many herbs
Aster family - yarrow, dandelion, daisy, dahlia

Shelter - Mixed plantings of a variety of flowers, trees, shrubs and insectary plants can provide food as well as shelter.

Examples of shelters:

Clumping grasses provide summer shelter and a place for overwintering ladybugs, ground beetles and more

Evergreen and deciduous shrubs provide undisturbed habitat and windbreak for butterflies/moths and other insects

Mulch and discarded plant materials left undisturbed can provide year-round shelter, especially for various larvae

Water - SURPRISE - insects need water too!



Shallow trays or birdbaths with stones or rocks to land on
Mud puddles or even plants that collect small amounts of water within leaves or other parts

Pollinators, natural enemies and even your plants themselves need protection from pesticides, herbicides and other ‘disturbances’. Tilling soil not only disturbs the microorganisms that live in the soil (a topic for another time), but also disturbs the “hiding spots” for ground nesting bees, and natural enemies.

Knowing that you are providing a healthy habitat for beneficial AND natural enemies can help you learn to tolerate a little pest damage in your garden. Plan for it...plant (extra) for it. Often a light spray of water, or a soapy water mixture can be all you need. However...if you

find you must use pesticides or herbicides follow these simple guidelines:

- be sure that you identify the pests correctly before applying for control
- spot spray on area needed, as little as possible
- use the “least toxic pesticide”
- don’t spray plants in bloom
- and ALWAYS use pesticides and herbicides AS DIRECTED



Sources of information:

Stoven, Heather, Oregon State University Extension. Encouraging Beneficial Insects in the Garden, International Master Gardener Conference July 12, 2017.

Insectary Plants. University of California Agriculture & Natural Resources Statewide Integrated Pest Management Program.

http://ipm.ucanr.edu/mitigation/insectary_plants.html

Garden “Mini” Insectary.

<https://learn.eartheasy.com/guides/garden-mini-insectary/>

Gardening for Pollinators.

<https://www.fs.fed.us/wildflowers/pollinators/gardening.shtml>

