



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.



St. John's Wort (*Hypericum perforatum*) is a perennial herb in the Hypericaceae family and grows in zones 5 to 10 (from 42nd to 47th Parallel). South Dakota has SJW listed as a noxious weed and SJW can be toxic to animals. This herb has a shrub-like appearance has reddish, erect stems that are woody at the base and can grow to three feet.



The leaves have branches and branchlets with scattered translucent dots of glandular tissue that gives the leaves a perforated appearance. The yellow flowers have five petals and sepals with black dots that can have 10 or more stamens. The flowers blossom from late spring to midsummer. SJW grows well in sunny, dry places with substandard soil such as sand, clay, rocky or loam soil with a slightly alkaline pH. St. John's Wort is most commonly propagated by seeds or stem cuttings, but it can also be done by root divisions.

St. John's Wort is known for its anti-depressant activity. Harvesting the leaves and flowers and steep in a tea can lift your spirits. If you infuse the leaves and flowers in oil, you can topically use the infused oil for anti-inflammatory

issues such as cuts, burns or pain. SJW can decrease levels of estrogens by accelerating its metabolism so it should not be taken by women on contraceptive pills. Can interact with prescribed medicines, so check with you provider if you want to use SJW medically.



Hyacinth

By Roine Klassen, Master Gardener

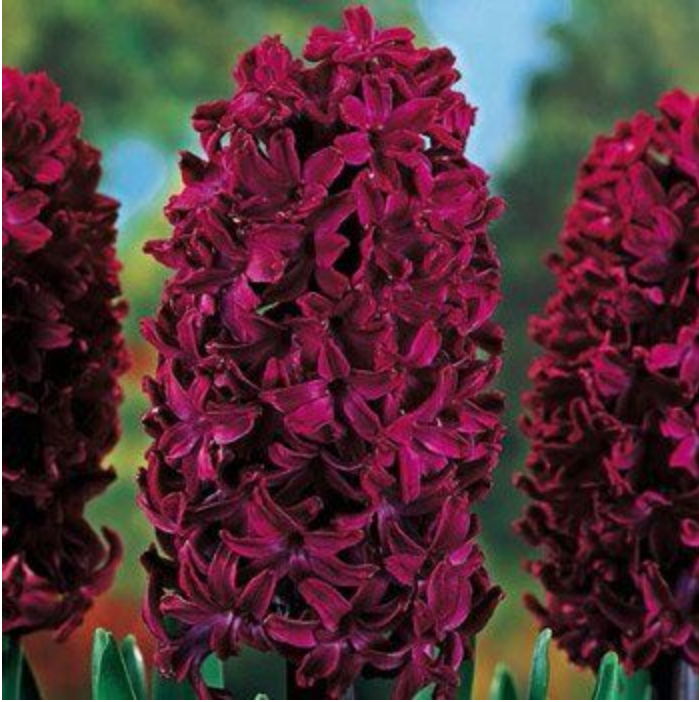


Time to be planning for your garden next spring or are you thinking about forcing some bulbs during the winter? When looking at garden catalogs the traditional colors for hyacinths have been expanded from the traditional pink, white and blue to maroon and yellow to name a couple of colors. Time for getting new bulbs in the ground is slipping by.

The common garden variety, Hyacinth *Orientalis* (family: Asparagaceae) was brought to Europe in the 16th century. The bulbs should be planted 6-8 weeks before a hard frost. Space the bulbs 4-6 inches apart with the pointy ends up. Water in well after

planting. The bulbs like full sun and good drainage. After blooming, the flower stalk can be cut back but the 7-8 strap shaped dark green leaves should be allowed time to produce and store energy for the next season. This would be the time to fertilize if needed. Because they don't need a lot of room for expansion, they will do well in containers. The plants are considered deer resistant.

The fragrance from just one bulb can perfume the room; people with sensitivity to smells need to take note. If you do plan to force some bulbs indoors, remember that they need to be conditioned for 6 or more weeks in a cold place. Information about forcing bulbs indoors are readily available on-line.



Discoveries Made During the 2019 Season



I sowed a wild flower bed this year. I watched unusually large white wild flowers grow that turned into large bushes.

Looking Forward to Spring 2020

STARTING SEEDS INDOORS

By Cindy Jungman, Minnehaha Master Gardener

A. PLANNING:

1. Go through last year's leftover seeds and determine which seeds are still viable.
2. Purchase new seeds/place seed orders.
3. Read instructions on seed packets. How many weeks before last frost date should seeds be started? Do seeds need special preparation, i.e. freezing?
4. Determine seed starting date. Using your area's last frost date (I use May 20), count backwards to the seed starting date. For instance, if the seed packet says to start 8 weeks before last frost date, then the seeds should be planted around March 25.
5. Sort seed packets by seed starting date.

B. PREPARING:

1. Make sure all fluorescent lights are in working order. Replace old bulbs (see "Note on Lights" below).
2. Make sure timers work.
3. Scarify seed if necessary, by freezing, soaking, scraping, etc.
4. Gather supplies.
 - a. Seeds
 - b. Potting soil (see "Note on Soil" below)
 - c. Seed starting mix (see "Note on Soil" below)
 - d. Clean containers
 - e. Clear plastic covering or domes
 - f. Popsicle sticks or the like to elevate plastic covering
 - g. Plant label stakes (I use mini blinds cut to 4")
 - h. Permanent marker
 - i. Squirt bottle

- j. Heat mats
 - k. Seed starting log
5. Prepare label stakes by writing seed variety and date planted (if desired) on sticks.
 6. Set up planting area - well-lit planting surface, container for moistening soil, bucket of warm water for rinsing hands and moistening soil, towel.

C. PLANTING:

1. Pour potting soil and seed starting mix into separate tubs and moisten each with warm water. Soil should be evenly moist but not soaked.
2. Fill planting containers with moistened potting soil topped with about 1/4 inch of seed starting mix.
3. Mark each container with a label stake.
4. Plant seeds according to instructions, paying close attention to planting depth, requirement for dark or light, requirement for heat or cold.
5. If seeds need to be covered, sprinkle with fine dry seed starting mix to the recommended depth.
6. Wet the top of the planting surface by spraying with a fine mist of warm water. Do not soak the trays – this causes the soil to be too wet and contributes to seedlings damping off.
7. Put containers in a flat and cover with plastic or domes. If covering with plastic, use popsicle sticks to raise the plastic above the soil surface.

Planting (continued):

8. Place flats on heat and/or in darkness, if required. Most flats are placed under lights (several inches from bulbs).
9. Keep a seed starting log that records seed variety, date seeds were planted, quantity planted, quantity germinated, date transplanted, and other comments. This is invaluable for future reference.
10. Run lights for 18 hours per day, i.e. 7:00 AM to 11:00 PM.
11. When seedlings emerge, remove plastic covering, and keep plants 3-4 inches from lights.
12. Keep seedlings out of cool drafts.
13. Allow the soil to dry somewhat before watering.
14. If the seeds were mass planted, transplant seedlings to individual cells or containers after true leaves appear.

D. MOVING OUTDOORS:

1. Begin to move seedlings to the greenhouse when nighttime temps are above freezing. You may want to move them back inside at night to begin with.

2. Move cool loving plants first – onions, lettuce, snapdragons, violas.
3. Carefully watch daytime temperatures in the greenhouse. Temps can easily reach over 100 degrees. Open vents by as needed to lower temps.
4. Fertilize lightly.
5. As seedlings grow, frequent watering is required.
6. If you are not using a greenhouse, keep seedlings under lights until two weeks before your outdoor planting date. Introduce seedlings to the outdoors by first moving them to a shaded/protected area for short periods and gradually increasing the time outdoors.
7. Harden off. Gradually acclimatize seedlings to the sun and wind. This requires patience and diligence! You don't want your tender seedlings to perish after all the care you have given them to this point!
8. Be patient! Don't plant outside too early.

NOTE ON SOIL:

I have tried many different seed starting mediums over the years. My preferred method for seed starting is to fill the container nearly full with good quality moistened potting soil (I use Ferti-Lome), then cover with ¼" of moistened seed starting mix (I use Gardener's Supply Seed Starting Mix). This prepares a nice planting surface for the seeds while giving the roots more nutrition as the seedlings grow. Once I plant my seeds, I cover the seeds with dry seed starting mix to the recommended depth, and then moisten well with a spray bottle of warm water.

NOTE ON LIGHTS:

Using fluorescent lights for your seedlings will give you stronger, stockier and healthier plants. Unless you have a sun room, it is nearly impossible to get enough sunlight through a window for the seedlings. They will become spindly as they lean towards the available light.

You do not need expensive grow lights. A standard shop fixture with 32 watt or 40 watt bulbs is sufficient. I generally buy Cool White bulbs. (I have very little experience using LED shop lights so I do not comment on those.) One four-foot shop light accommodates two flats of seedlings.

The light set-up can be very temporary in nature. This can be as simple as using two saw horses and a 2X4 board. Hang the light from the board, and place seedling flats under the light.

I recommend using a timer set to run 11 hours a day, and hanging lights only inches above the seedlings.