North Dakota State University

NDSU EXTENSION SERVICE

YARD & GARDEN REPORT

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The cherry for the prairie

How would you like to grow a shrub that is beautiful all year and produces lots of delicious fruit?

Get to know the prairie cherries of Canada. They are impressive!

In spring, you will be enchanted by their pure white flowers. In summer, you will admire their shiny green leaves almost as much as their lustrous red fruit. Even in winter, you will appreciate the glossiness of their bark.

These cherries from the University of Saskatchewan are slowly making their way into garden centers of the USA. The shrubs grow 6–8 feet tall, are extremely hardy (Zone 2), and show very few disease problems (including black knot).

Plants usually begin producing after two to three years. After five years, you can expect 20 pounds of cherries per shrub each year! The fruits are exceptional for pies, cooking, juice, wine, or for flavoring ice cream or yogurt.

The cherries are juicier than sweet cherries but more tart in flavor. They are much more flavorful than a typical pie cherry. When picked off the shrub, the cherries are absolutely delicious.

Gardeners find the cherries irresistible. Researchers find that most gardeners harvest the cherries before they develop their deep red color and fully ripen.

'Carmine Jewel' was the first variety to be released, and it is the #1 commercial cherry today on the Canadian Plains. It has been a reliable producer of quality fruit at our NDSU research plots in Carrington. 'Carmine Jewel' ripens in late July to early August.

Fig. 1. 'Carmine Jewel' dwarf cherry is the top cherry on the Canadian plains. These fruits will ripen in two weeks. Look at the glossy green foliage. The dwarf cherries from Saskatchewan are great for home orchards and landscapes.

We are also testing 'Crimson Passion'. It is sweeter, but has mysteriously failed to produce the last two years. We suspect site-specific, weather-related problems with pollination/fertilization of the fruits.

Next year, more varieties of the Romance series of Saskatchewan will be available in the USA. 'Romeo' has dark red fruits with extraordinary flavor. It is not quite as hardy as 'Carmine Jewel', but still is very hardy (Zone 2). 'Romeo' matures a month later than 'Carmine Jewel', which extends the harvest to early September. Several nurseries are offering 'Romeo' in 2015. Do an online search to find them.

Look for 'Juliet'. It may be the sweetest of all the Saskatchewan cherries and is highly recommended for fresh eating. Its cherries are large enough for an old-fashioned crank pitter. 'Juliet' shows exceptional hardiness, but blooms a few days earlier than others. This may pose a risk of crop loss if a late frost strikes.

For more information on these remarkable cherries, go to www.fruit.usask.ca/dwarfsourcherries.html.

INSIDE THIS ISSUE

Plant now for fall harvest

Summer is in full swing and we're starting to harvest from our gardens. It's wonderful to be enjoying fresh vegetables! Don't stop now. We still have time to sow seeds for this fall's harvest.

I love the cool weather of fall—and so do many vegetables. Beets, spinach and Swiss chard can all be sown now. Don't forget about herbs—you can sow basil and cilantro in fall and dry them to enjoy over winter.

Try kohlrabi—you will be delighted with its mild cabbage flavor. Its crazy looking bulbs remind me of the spaceships in old movies!

Most people hate turnips, but that's because we grow them at the wrong time of the year. Turnips, kale, Asian greens, and many other crops taste better when they ripen in fall. The cool nights of autumn increase the sweetness of the vegetables.

Radishes often taste bitter when sown in spring. This is because they develop bulbs under warming temperatures. Sow your radishes in August and they will develop bulbs during the cool nights of September. You will be amazed at the difference.

To plant a fall garden, begin by removing any debris from the vegetables that have stopped producing. Then replenish the soil with a light layer of compost or peat moss. A light application of fertilizer will also restore the soil's fertility.

Sow your seeds when the soil is moist. Use early maturing cultivars that will ripen before our first hard frost, which is typically September 25 to October 5.

The soil is warm this time of year. You may wish to lightly mulch the soil with some straw or dried grass clippings. Weeds are less of a problem in fall plantings.

Fig. 2. Kohlrabi is a fascinating plant with delicate cabbage flavor.

Fig. 3. The mildest radishes are grown in fall.

Fig. 4. Red mustard and other Asian greens are wonderful in stir fries.

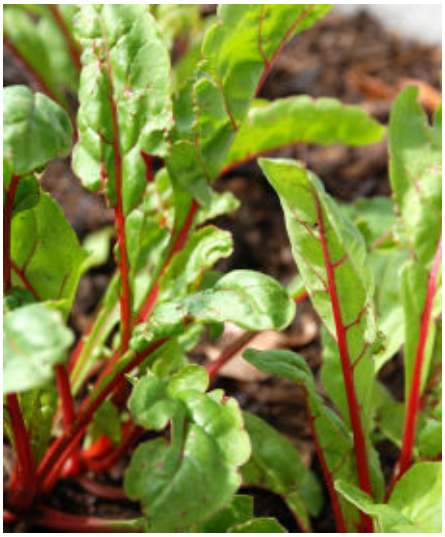


Fig. 5. Baby chard adds color to salads.

Fig. 6. Basil can be grown in fall.

Tomato blights appear

Tomato vines are starting to suffer from disease. The most active fungus on tomato vines is early blight (*Alternaria solani*). This fungus comes from the soil and starts on the lower leaves. Brown spots with dark borders grow to over ½ inch in diameter. You will notice a pattern of brown concentric rings in the lesions (*Fig. 7*). Surrounding tissue turns yellow.

Monitor the fertility of your soil. Early blight is especially aggressive on pale, hungry vines. Most tomato plants, infected or not, benefit from a light fertilization after first fruit set.

Keep your eyes open for early blight as well as Septoria leaf spot disease through the late summer. Septoria appears as tiny 1/8-inch brown spots with dark borders (*Fig. 8*). It also starts from the soil and works its way up the plant. Numerous lesions can appear on each leaf.

Management strategies of both diseases are similar. Remove infected foliage. Protect the healthy foliage by applying a fungicide. Chlorothalonil (Daconil, Bravo) and mancozeb (Dithane) are most often used. Copper sulfate (Bordeaux mix) is an organic option. Sprays can continue every 10–14 days if needed.

Fig. 7, 8. Early blight lesions (left) may be over 1/2 inches in diameter with concentric rings. Septoria lesions are only 1/8 inch in diameter and numerous.

Keep the foliage dry when watering to prevent the splashing and spread of fungal spores. Irrigate in the morning so any water that gets on the foliage can dry before nightfall.

Mulch your plants; this can serve as a barrier between your vines and the disease-infected soil.

Staking can help to maximize air flow and sunlight in the planting.

After frost, remove all infected vines to prevent fungal problems next year. Next year, don't crowd your plants in the garden. Varieties resistant to early blight are available.

Renovate the strawberry patch

There is an old saying in the Midwest that goes: Here we have only two seasons: *Winter* and *Construction Season*. If's not winter—yet. That means it must be Construction Season.

The last harvest of Junebearing strawberries is over. It is time to put on your construction outfit (perhaps an orange highway vest and hardhat will get you in the mood) and *detour* your attention away from the veggies and toward the strawberry patch.

Let's renovate the patch. We need to keep the rows intact and promote the establishment of healthy plants for next year's crop.

Bring your hoe and let's start by removing weeds. If leaf diseases are present, mow over the plants. Set the mower at its highest height making sure you do not damage the crowns of the plants.

Next, use a tiller to narrow each row to a width of 12–15 inches.

Fertilize plants with six pounds of 10–10–10 or a similar fertilizer per 100 feet of row. These nutrients will be used in forming runners and flower buds for next year's crop.

The attention we give the patch now will lead to lots of berries next spring!

Fig. 9. Renovate the patch today and enjoy lots of berries next spring.

Survey of problems found in North Dakota yards and gardens this week:

TREES AND SHRUBS

F10, 11. Dutch elm disease

Major branch shows yellowing and wilting. Look for brown streaking in sapwood and beneath bark. Removal of tree is most effective strategy.

F12. Galls on leafy trees

Leaves develop bumps. Ash, linden, hackberry and silver maple among trees affected. Damage is mostly aesthetic. Pesticides not needed.

F13, 14. Petiole galls on poplar

Bumps appear on petioles; leaves may drop. Aphids develop inside galls and later feed on mustards. Defoliation is minor. Rake leaves. No pesticides.

F15. Powdery mildew on lilac

Gray blotches appear on leaves. Lilac, rose, honeysuckle are often affected, especially in shady spots with poor air circulation. Rake fallen leaves. Prune to increase sunlight and air movement.

F16. Chlorosis on silver maple

Leaves yellow, often with green veins. Associated with high pH and the unavailability of iron. Foliar feed with soluble fertilizer containing iron. Root feeding is good option. Get soil tested to assess pH and long-term strategy.

F17, 18. Needlecast on spruce

Needles turn yellow and drop. Youngest needles (at branch tips) may be healthy. Infected needles show black spores in stomata. Spray with chlorothalonil or copper sulfate in June and early July. Space trees to allow air circulation.

FLOWERS

F19. Black spot on rose

Round dark spots with fringed margins; surrounding tissues turn yellow. Remove infected foliage. Avoid overhead watering. Apply fungicides. Grow disease-resistant varieties.

F20. Aster yellows

Leaves become yellow, small and narrow. Flowers become distorted. Transmitted by leafhoppers. Affects marigold, zinnia, petunia, and many more flowers. Pull out plants. Reduce leafhoppers by controlling weeds.

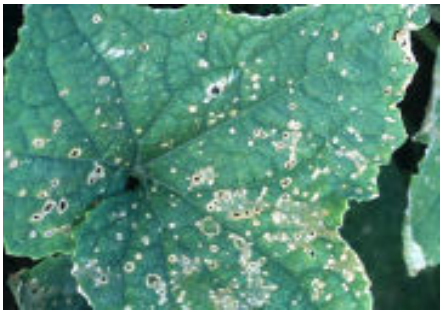
F21. Downy mildew on sunflower

Plants are stunted with yellowing along leaf veins. Fungus is inside plant and no sprays are useful. Pull out plants. Remove wild sunflowers in vicinity. Use resistant varieties.

VEGETABLES AND FRUITS

F22. Herbicide injury

Pesticide drift or contaminated manure may cause extreme curling of foliage. Vegetables are contaminated. Avoid spraying herbicides in summer.



F23. Anthracnose on cucumber

Tan lesions appear; leaves get ragged. Keep foliage dry when watering. Protect with fungicides chlorothalonil, mancozeb or copper.

F24. Early blight on tomato

Brown lesions with concentric rings. Pick off infected foliage, protect with fungicides chlorothalonil, mancozeb, or copper. Avoid overhead irrigation.

F25, 26. Pear, cherry slugs

Slimy larvae skeletonize leaves of rose, chokeberry, pear and cherry. Jet spray of water usually adequate; or control with Sevin or insecticidal soap.

F27. Rust on Juneberry

Berries develop “spikes” that emit orange spores. Disease comes from juniper. Prune to reduce shade and humidity in canopy. Avoid planting near junipers.

F28. Shotholes in chokecherry

Bacterial or fungal lesions drop out of leaves, creating holes. Rake leaf litter. Avoid irrigating foliage. Inspect branches for cankers; remove if found.

WEEDS

F29. Perennial sowthistle

Perennial may grow 4 or more feet tall. Cut to prevent seed dispersal. Its deep roots make pulling difficult. Spot spray with dicamba or glyphosate. Fall applications are most effective.

F30. Yellow sweetclover

Cut down or spray before seeds disperse. Use 2,4-D amine, dicamba or glyphosate. Biennial (blooms and sets seeds its second year, then dies). Seeds stay viable for 30 years.

F31. Field bindweed

Aggressive, persistent perennial with spade-shaped leaves and white or pink blooms. Its deep roots make pulling difficult. Spray with glyphosate or dicamba. Fall applications best.

Weather Almanac for July 13–19, 2014

	TEMPERATURE (Week)				RAINFALL (Week)		RAINFALL (2014)		GROWING DEGREE DAYS[1,2] (Week)		GROWING DEGREE DAYS[1,2] (2014)	
Site	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	63	68	81	46	0.00	0.58	11.37	10.90	86	110	917	1014
Bowman	63	70	89	42	0.00	0.50	7.17	10.06	88	124	889	991
Carrington	63	70	84	45	0.00	0.77	7.66	11.76	87	123	970	1103
Crosby	63	67	87	47	0.00	0.67	9.04	9.35	84	103	893	919
Dickinson	64	69	83	44	0.00	0.60	6.88	10.58	91	118	921	998
Fargo	67	71	85	47	0.00	0.63	11.29	12.57	103	132	1186	1196
Grafton	64	71	85	46	0.35	0.66	13.48	11.52	96	127	1028	1199
Grand Forks	66	69	86	48	0.01	0.71	11.18	11.29	100	114	1109	1065
Hazen	63	71	84	42	0.00	0.57	10.45	10.57	89	126	955	1133
Hillsboro	65	70	85	46	0.05	0.79	11.53	12.14	94	122	1091	1117
Jamestown	65	71	84	50	0.13	0.78	10.29	11.31	91	125	1016	1092
Langdon	63	66	82	47	0.09	0.74	6.54	11.22	86	96	868	867
Mandan	65	71	85	47	0.00	0.74	6.74	10.61	94	126	1014	1071
Minot	64	69	82	50	0.00	0.56	11.17	11.18	91	114	957	985
Mott	63	71	85	39	0.00	0.48	8.73	10.71	89	125	925	1050
Rugby	65	68	84	48	0.00	0.79	8.99	11.78	97	108	973	1024
Wahpeton	65	72	84	47	0.12	0.74	12.27	12.36	98	132	1161	1250
Watford City	66	70	91	44	0.00	0.60	6.42	9.41	100	119	984	1017
Williston	67	72	90	48	0.00	0.57	5.69	8.86	101	132	1024	1164
Wishek	63	69	83	47	0.00	0.69	8.30	12.59	86	114	927	977

DAYLENGTH (July 19, McClusky)[3]

Sunrise: 6:04 AM | *Daylength:* 15h 29m

Sunset: 9:32 PM | *Change since July 12:* –12m

LONG-TERM OUTLOOKS[4]

6–10 Day: Temp: Below Normal; *Preciptation:* Below Normal

8–14 Day: Temp: Below Normal; *Precipitation:* Below Normal

[1] GDDs for garden vegetables are not available. GDD data in this table are for corn, which responds to temperature as most vegetables grown in gardens. Data begin May 1 with base minimum and maximum temperatures of 50 and 86°F., respectively.

[2,3,4] Sources: North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.

Credits

Sources:

Bors, B. 2014. *U of S Fruit Program: Dwarf sour cherries*. www.fruit.usask.ca/dwarfsourcherries. html. Univ. of Saskatchewan: Saskatoon.

Smith, B.R., D.L. Mahr, P.S.McManus, and T.R. Roper. 1999. *Growing strawberries in Wisconsin*. Univ. of Wisconsin: Madison.

Written by Tom Kalb, who expresses gratitude to the NDSU educators who contributed to this report: Becky Buchmann; Sarah Crimmins, Kelsie Egeland, Scott Knoke, Esther McGinnis, Jared Nelson, Julianne Racine, Steve Sagaser, Kelsey Sheldon, Todd Weinmann, Kathy Wiederholt and Joe Zeleznik.