

YARD & GARDEN REPORT

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Fireworks in autumn

Fireworks started this week. I'm not talking about the firecrackers we see on the Fourth of July. I'm talking about the mountainash berries turning orange. Magnificent!

Mountainash is famous for its radiant fruits, but this tree is a four-season wonder (Figs. 1–5).

In spring, frilly white flowers adorn the tree. In summer, the tree shows off its lustrous coat of green leaves. This foliage turns golden in fall, but you probably won't notice it because of the eye-catching fruits.

The berry clusters may last through winter, adding a welcome splash of color to the dreary winter landscape. As an added bonus, the fruits attract lively birds to our yards in winter and early spring. Even the tree's bark is attractive!

Mountainash is a beautiful tree, but it is temperamental. It demands a cool, moist and well-drained soil. It will not tolerate the heat of the urban concrete jungle and it struggles in saline soil. An east-facing location that gets the morning sun is ideal.

You can show your love to this tree by mulching it with shredded bark to keep its roots cool. Keep the mower away from its delicate bark. Wrap the bark during the first few winters to protect it from sunscald.

The rosy red fruits of Korean mountainash (*Sorbus alnifolia*) persist through the winter. Hardy to Zone 4, it is considered superior to the far more common European mountainash (*S. aucuparia*). 'Black



Figs. 1–5. Its rich orange clusters are striking, but mountainash adds color to the landscape all year. Its creamy white blossoms, lustrous green foliage, golden fall color, and silvery bark are magnificent. The colorful fruits may persist all winter and attract birds in early spring.

Hawk' and 'Cardinal Royal' are recommended European types; both are hardy in Zone 3. Showy mountainash (*S. decora*) is native to the Midwest. This scarlet-fruited species may be the hardiest and most adaptable of the group.

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Finest daylilies

Our last winter was cold and unusually long. Perennial flowers were slow to emerge out of the ground—many never did. Perhaps this is why daylilies are having such a strong presence in landscapes this year.

Daylilies are among the toughest of all plants. We as North Dakotans show a special appreciation of this flower and boast the nation's largest collection, located at North Dakota State University.

When talking daylilies, the conversation begins with the introduction of 'Stella De Oro' in 1975. Daylilies had previously been respected for their toughness, but their bloom time was only about a month. 'Stella De Oro' changed everything—it bloomed all summer! The plant was embraced by all and appeared everywhere—from the International Peace Garden to gas stations.

Today there are THOUSANDS of daylilies to choose from. Which one is best for you? Ask the experts. Go



Fig. 6. North Dakota State University has the largest collection of daylilies in the USA. Over 1,200 varieties are on display.

to the leaders of the American Hemerocallis Society (AHS). Every year they provide awards to top performers. The Stout Silver Medal is the highest honor, given to only ONE variety per year.

I respect the AHS official judges, but also enjoy learning which varieties are preferred by gardeners. Members of AHS vote on their fa-

vorite varieties annually. Go to www.daylilies.org and see the results by region. Several of the most popular selections in the north are shown below (Figs. 7–14).

You can judge for yourself by going to the NDSU gardens in Fargo. The gardens are open to the public and located at 12th Avenue North and 18th Street North.



F7. Stella De Oro*

Revolutionized landscaping. Blooms all summer.



F8. Primal Scream*

Bright tangerine orange. Much in demand.



F9. Ruby Spider

Huge red blooms with golden throats. Extremely popular.



F10. Webster's Pink Wonder

Soft pink, twisted petals. One of today's most popular varieties.



F11. Moonlit Masquerade*

Cream-colored petals with a bright purple band.



F12. All American Chief*

Tall plants filled with big red blooms. Prolific bloomer.



F13. Fooled Me*

Radiant, long lasting blooms with red picotee edge.



F14. Siloam Double Classic*

Ruffled blooms with sweet scent. Extended blooms.

Figs. 7–14. Popular daylilies in the Midwest. The asterisk after variety names indicates it is a winner of the Stout Silver Medal. This is the highest award of the American Hemerocallis Society and awarded to only one proven variety per year.

The Great Watermelon Challenge

One of the joys of summer is biting into a cold, crisp slice of watermelon. Juices drip down your cheeks and then you get to spit the seeds out. Delicious!

The watermelons we enjoy here in North Dakota were likely grown hundreds of miles south of here. Our growing season is too short and too cold.

That being said, it's fun to grow watermelons. It may be a challenge, but it certainly is not impossible.

Start with an early ripening variety. North Dakota State University and its team of 250+ gardeners evaluate vegetable varieties every year. One of the best performers is 'Sweet Dakota Rose', which was developed here in our state. Some of our evaluators say it is the best watermelon they have ever eaten. The melons have attractive green stripes and grow up to 20 pounds. The flesh is very flavorful. Yields are good but not reliable, especially in the far north (this unreliability holds true for all melon varieties).

Start your seeds indoors. Melon transplants are usually grown in peat pots to reduce transplanting shock (Fig. 16). Place three seeds in each pot and give them temps in the 80s to get them germinated. Heating mats help. Temps in the 70s are fine after germination. Move the transplants to the garden after the soil is warm (first week of June) and while the transplants are only 3–4 weeks old.

Melons need heat and plastic mulch can make a big difference. Black plastic mulch is most widely available and will raise soil temperatures 5°F versus bare ground. You can generate even more heat by using clear plastic mulch (8–14°F). Clear plastic is not widely used in



Fig. 15. Growing watermelon is a challenge, but the rewards are satisfying.



Fig. 16. Start watermelon seeds indoors. Heating mats will stimulate germination. Peat pots are often used because cucurbits are very sensitive to transplanting shock.

the USA because weeds grow under it. But we need as much heat as possible and weeds in well-managed gardens are usually a minor problem (Fig. 17). Herbicides can be used to prevent weeds, too.

The latest mulch technology is green infrared-transmitting (IRT) "solar" mulch. It blocks out visible light, thereby suppressing weeds, AND it allows infrared light to pass through, generating more heat than



Fig. 17. The cucumber vine grown with clear plastic mulch is weeks ahead of the bare ground plant. The mulched vines are blooming and will produce earlier and higher yields. Weeds are growing under the mulch, but in this case are not causing problems.

black plastic mulch. Increases of 8–10°F over bare soil are reported.

Melons have been shown to respond to blue plastic mulch as well. Studies in Pennsylvania show yield increases of 20–35% using blue plastic over black plastic. Blue plastic suppresses weeds and produces slightly higher soil temperatures than black plastic. The reflected blue light seems to enhance vine development, too.

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

TREES AND SHRUBS



F18. Leaf scorch

Leaf margins turn brown, especially on the south and west sides of canopy. Most common in urban sites, sandy soils, and with young trees. Irrigate deeply. Avoid fertilizing in dry soil.



F19. Powdery mildew

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.



F20, 21. 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.

LAWNS



F22. Yellowing

Non-irrigated lawns go dormant due to summer heat. Avoid fertilizing and using herbicides. Mow tall. Lawns will awaken when temps cool in fall.



F23. Grubs

Grubs eat roots, creating dead spots. Peel back damaged turf to reveal pests. If more than 3 grubs per square foot, treat with carbaryl or trichlorfon. Irrigate deeply to get chemical in soil.



F24. Rust

Orange powder on blades. Fertilize and irrigate (irrigate mornings only). Collect clippings. Fungicides rarely needed. Goes away in 2–3 weeks.

FRUITS



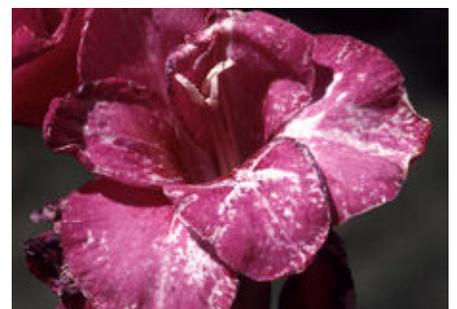
F25. Sap beetles on raspberry

These beetles attack overripe fruits. Harvest regularly. Do not discard fruits on orchard floor. Spray only at last resort; use malathion, spinosad or other insecticide with short residual.



F26, 27. Leafhoppers on grape

Small (1/8-inch) wedge-shaped pests pierce and suck juices, creating yellow spots. Leaves may turn brown; in such cases, control pests with carbaryl or pyrethrin. Keep vineyard floor clean.



F28. Thrips on gladiolus

White streaks appear on flowers and leaves. Flowers may become distorted and turn brown. Tiny (1/16-inch) brown pests may be found in folds of leaves. Spinosad or acephate recommended.

Survey of problems in North Dakota yards and gardens (continued)

VEGETABLES



F29. Poor pollination

Dry weather or silk-destroying insects can reduce pollination and fertilization of kernels. Plant corn in groups of short rows instead of long individual rows to concentrate pollen in planting.



F30. Powdery mildew

Lesions with gray powder appear on leaves. Avoid getting foliage wet. Protect with fungicides chlorothalonil (Daconil, Bravo), mancozeb (Dithane), or copper. Use resistant cultivars.



F31. Angular leaf spot

Bacterial pathogen. Angular lesions turn brown and drop out. Avoid getting foliage wet. Stay out of garden when vines wet. Protect with copper sprays. Use resistant cultivars.



F32, 33. Cabbageworms

Moths lay eggs on cabbage and broccoli. Eggs hatch into larvae that create tunnels. Spray with *Bacillus thuringiensis* while caterpillars are small. Carbaryl used on mature pests.



F34, 35. Blossom end rot

Caused by calcium deficiency. Keep soil evenly moist and do not damage roots when cultivating. Mulch vines. As root system develops it finds calcium ions. Future fruits are usually fine.



F36, 37. Leafhoppers on potato

Small (1/8" long), slender, pale green insects pierce and suck sap. Leaf tips turn purple, then dark brown. Carbaryl or pyrethrin used for control but only in severe cases.

WEEDS



F38. Dodder

Yellow to orange, thread-like plant is a parasite. It winds around and feeds upon flowers, vegetables, shrubs and vines. Pull and remove before it sets seeds.



F39. Lambsquarters

Annual. Silver-green foliage with white or pink speckling; stems have purple or red grooves. Individual plants produce thousands of seeds. Cultivate or pull before seeds set. Edible.



F40. Purslane

Low-growing, drought-tolerant annual. Thrives in heat. Pull out, being careful not to drop any foliage or stems from which it can re-establish. Mulch to cool soil and smother seedlings. Edible.

Weather Almanac for August 10–16, 2014

Site	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS ^{1,2}			
	Week				Week		2014		Week		2014	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	69	68	87	45	0.00	0.53	12.26	12.84	120	108	1414	1540
Bowman	69	70	90	49	0.68	0.28	11.60	11.46	116	120	1391	1573
Carrington	67	69	84	45	0.34	0.59	9.73	14.07	108	114	1440	1668
Crosby	70	67	88	49	0.13	0.39	10.52	11.06	131	104	1416	1419
Dickinson	71	69	90	51	3.02	0.40	12.28	12.27	130	116	1456	1560
Fargo	72	70	87	47	0.27	0.60	12.31	14.64	131	121	1760	1791
Grafton	70	71	87	50	0.00	0.70	14.94	14.01	117	123	1550	1801
Grand Forks	69	68	86	49	0.00	0.76	12.56	13.82	117	109	1637	1597
Hazen	69	71	89	45	2.03	0.46	14.01	12.30	120	124	1469	1719
Hillsboro	70	70	86	47	0.13	0.62	12.59	14.50	124	117	1614	1691
Jamestown	69	69	84	51	0.59	0.50	11.45	13.37	116	115	1525	1662
Langdon	67	66	84	49	0.00	0.67	8.03	13.68	104	93	1325	1326
Mandan	70	70	85	51	0.68	0.59	9.95	13.04	121	119	1535	1653
Minot	69	68	85	50	0.30	0.53	12.96	13.06	122	109	1464	1512
Mott	71	70	90	48	0.39	0.42	11.66	12.15	127	119	1446	1629
Rugby	69	68	85	48	0.04	0.57	10.35	14.18	118	106	1486	1540
Wahpeton	69	71	86	46	1.88	0.60	14.45	14.50	118	126	1680	1862
Watford City	73	69	93	50	0.93	0.39	8.29	10.96	140	114	1568	1586
Williston	74	72	93	51	0.00	0.43	7.49	10.45	145	128	1622	1776
Wishek	69	68	85	51	1.89	0.61	11.22	14.95	117	107	1442	1500

DAYLENGTH (August 16, McClusky)³

Sunrise: 6:39 AM | Daylength: 14h 15m
 Sunset: 8:54 PM | Change since August 9: -21m

LONG-TERM OUTLOOKS⁴

6–10 Day: Temp: Below Normal; Precipitation: Above Normal
 8–14 Day: Temp: Below Normal; Precipitation: Above 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:

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