North Dakota State University

YARD & GARDEN REPORT

August 1, 2017 Vol. 5, No. 5

Special Salads

Salads today are much different than salads of the past. Take a stroll down the produce aisle in your grocery store and you'll likely find more than iceberg lettuce. You may find bunches of romaine and leafy lettuces as well as bags of colorful, pre-mixed greens.

Salad greens from the store are nice, but nothing can beat fresh greens from your own garden. Now is a great time to grow these greens!

I encourage you to explore the mild mustards from Asia. These greens come in fascinating colors and shapes. They are harvested young and are very popular in salad mixes today.

Start with mizuna. This classic Japanese green has deeply cut leaves (*top photo*) that will delight your eyes when sprinkled on a salad. Its mild flavor will delight your taste buds too. Mizuna is definitely worth a try!

Tatsoi (*left photo*) has been a favorite in our North Dakota trials for years. Its mild, crunchy leaves are great for salads and in stir fry dishes.

This is the best time of the year to grow spinach—it thrives under cool temps. Spinach adds rich flavor to salads and sandwiches. Try a red-vein type like 'Red Kitten' (*center photo*).

No salad would be complete without radishes, and fall is the best time to grow them. Radishes sown in spring get bitter as they mature under rising temps. Radishes sown in fall will mature under cooling temps, leading to milder, crisper roots. You can make your salad extra special by growing a purple radish (*right photo*).

Make your salads special by growing mizuna (shown with red mustard in top photo), tatsoi, red-veined spinach and purple radish (shown left to right).

NDSU is inviting families to try these and other vegetables in its home garden variety trials this fall. Seeds are available for testing for free. Supplies are limited. For more information, go to https://www.ag.ndsu.edu/homegardenvarietytrials/.

Inside This Issue

Handy Tech for Watering Trees

Many communities have started using watering bags to help their young trees cope with the drought. Perhaps you have seen the pouches on trees in parks or along streets.

These communities have turned to this technology to reduce their labor costs while at the same time effectively irrigating trees.

The typical watering bag is made of polyethylene and holds 15–20 gallons of water. The pouch is wrapped around the outside of the trunk and its sides are zipped together. The trunk does not get wet.

Once filled, water will ooze out of holes in the bottom of the bag for 5 to 9 hours. The trees are watered deeply, helping to develop deep root systems.

There is an old rule that a newly planted tree needs a weekly application of 10 gallons of water per inch of trunk *caliper* (its diameter measured 6 inches above the soil line). Thus, a tree with a caliper of 1–2 inches needs 10–20 gallons and will benefit from a once-a-week watering using the bag. Larger trees (2–3 inch caliper) can be irrigated twice a week. Trees up to 8 inches can be irrigated using a double bag setup.

Communities are using watering bags to save time and labor when irrigating trees.

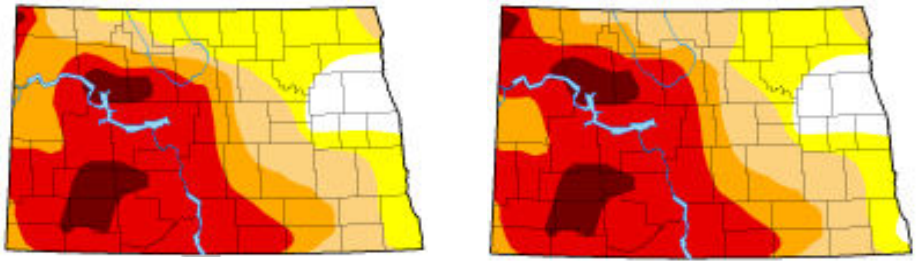
Bags can be easily unzipped so you can move them from tree to tree.

The bags are made by several manufacturers and cost about $25 each. They can be purchased online or through landscape supply stores.

Drought Watch

Rainfall was sparse and scattered throughout North Dakota last week. Approximately 93% of the state remains dry and 61% is suffering from severe drought. The state has not been this dry since 2006.

Temperatures remained hotter than normal, further increasing stress in landscapes. Rainfed lawns are dormant and many young trees are being scorched. Gardens are severely stressed. Details of our weather for the past week and the growing season are presented on page 5.



July 18, 2017 **July 25, 2017**

Moderately dry *(crop growth slowed); 93% of state.*
Moderate drought *(crop damage, voluntary water use restrictions); 79% of state.*
Severe drought *(crop losses likely, water use restrictions); 61% of state.*
Extreme drought *(major crop losses, widespread water use restrictions); 46% of state.*
Exceptional drought *(widespread crop losses, water emergencies); 8% of state.*

Chores & Challenges

Fruits

Plum Curculio

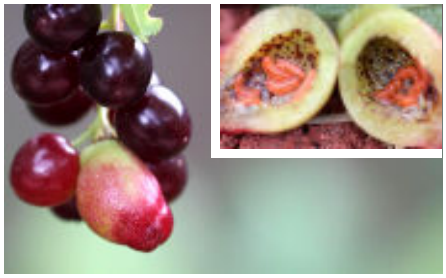
Weevils laid eggs inside plums earlier this spring. Larvae developed inside, causing fruit to rot and drop. Remove infested fruit ASAP. Next spring, spray insecticide after flower petals fall.

Spindle Gall on Plum

Eriophyid mites fed on the leaves in spring causing a reaction that led to unusual columns forming. Damage is cosmetic and no pesticides are needed.

Spotted Wing Drosophila

White maggots may be seen in fruits. Set out traps with apple vinegar to monitor the tiny, egg-laying "fruit" flies. Spray if needed. Harvest regularly. Keep orchard clean of weeds and overripe fruit.



Chokecherry Gall Midge

A tiny fly laid eggs in flowers, which hatched into larvae feeding inside fruit. Infested fruits are swollen and hollow. Pick off damaged fruit in early summer. No pesticides are recommended.

X-Disease on Chokecherry

Infected leaves gradually turn yellow to dark bronze. Fruits develop a yellow tinge and are pointed. The tree declines. No cure is available. Remove infected trees to prevent spread (by leafhoppers).

Pesticide Burn

Coppery lesions appear on foliage, particularly on south and west sides. Pesticides, especially sulfur and copper, can burn when applied under high temps. Minor defoliation occurs.

Trees and Shrubs

Scale

Shell-covered pests suck sap out of branches, causing dieback. The next generation of "crawlers" is hatching now. Spray with acephate, carbaryl, pyrethroids or summer oils.

Cottony Ash Psyllid

Black and Manchurian ash leaves curl. Branches die back and trees may die. Keep trees watered and healthy. Spray with acephate now and spray dormant oil before bud break next spring.

Petiole Gall 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 are needed.

Chores & Challenges

Vegetables and Herbs

Early Blight on Tomato

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

Herbicide Injury

Herbicide in manure or grass clippings may cause extreme curling of foliage. Plants will be stunted and vegetables may be contaminated.

Colorado Potato Beetle

Active now on potato and eggplant. Pick larvae (*top photo*) or adults and throw in pail of soapy water. Spinosad is recommended; other insecticides may work especially if pests are young.

Hollow Cucumber

Drought and poor pollination (related to heat) is causing fruits to be hollow. May be associated with too much nitrogen or a lack of calcium or boron. Maintain uniform moisture in the soil.

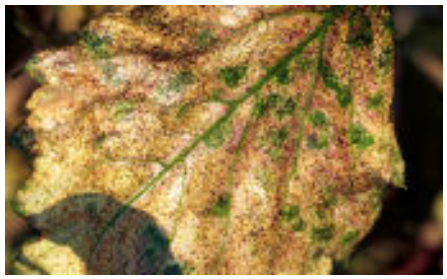
Ladybug Larva

Many insects in a garden are beneficial. Ladybug larvae are often mistaken for pests. Only spray an insecticide if you know the identity of the insect and if its level of damage warrants treatment.

Harvesting Herbs

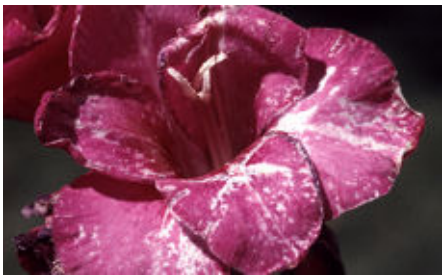
Oils are highest in the mid-morning after dew has dried. Harvest basil a few inches down the stem and above a new set of leaves. Snip stalks of parsley, dill and cilantro at the base of the plant. Pinch flower buds before they open.

Ornamentals



Leafhopper on Vines

Small (1/8-inch) wedge-shaped pests pierce and suck juices, creating yellow spots. Leaves may turn brown. Control with carbaryl, malathion, pyrethroids or pyrethrins. Rake leaf litter.



Thrips on Gladiolus

White streaks appear on flowers and leaves. Tiny (1/16-inch) pests may be found in leaf folds. Spray with carbaryl, acephate, pyrethrins or spinosad. Dust corms with carbaryl before storing.

Powdery Mildew on Peony

Avoid getting foliage wet. Remove debris in fall. Scout for mildew on leaves early next spring. If found, apply fungicides. Consider dividing plants in fall to promote better air flow.

Weather Almanac for July 25–31, 2017

	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS[1,2]			
	July 25–31				July 25–31		2017		July 25–31		2017	
Site	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	71	69	91	51	0.01	0.47	4.48	11.76	121	114	1219	1242
Bowman	74	71	97	55	0.18	0.42	3.66	10.82	130	126	1431	1243
Carrington	72	70	93	53	0.00	0.61	7.13	12.88	130	125	1362	1354
Crosby	73	68	95	52	0.00	0.48	2.85	10.24	128	108	1366	1135
Dickinson	76	70	96	58	0.00	0.45	3.31	11.41	140	121	1506	1239
Fargo	75	71	90	55	0.20	0.51	5.19	13.47	148	132	1501	1460
Grafton	72	68	89	53	0.16	0.52	6.82	12.33	131	114	1304	1264
Grand Forks	74	69	89	56	0.00	0.61	9.50	12.35	138	114	1444	1298
Hazen	74	72	95	57	0.58	0.44	3.25	11.37	130	126	1459	1385
Hillsboro	71	71	88	52	0.23	0.61	6.19	13.23	127	126	1378	1369
Jamestown	72	71	92	53	0.00	0.58	5.73	12.37	124	126	1330	1344
Langdon	70	66	87	54	0.01	0.60	5.96	12.31	121	102	1097	1070
Mandan	75	71	93	60	0.17	0.66	5.18	11.79	142	128	1490	1325
Minot	75	69	91	55	0.00	0.46	3.16	12.01	142	114	1380	1213
Mott	75	71	96	56	0.03	0.34	3.65	11.34	137	126	1443	1302
Rugby	73	69	90	54	0.00	0.65	6.15	12.97	133	114	1334	1248
Wahpeton	72	72	86	54	0.00	0.57	9.66	13.38	131	133	1425	1516
Watford City	76	71	94	56	0.67	0.42	4.28	10.17	141	126	1468	1267
Williston	75	73	96	58	1.24	0.42	3.62	9.61	141	132	1515	1428
Wishek	73	69	87	59	0.00	0.60	4.18	13.68	137	114	1373	1205

DAYLENGTH (July 31, McClusky, center of ND)[3]

Sunrise: 6:18 AM

Sunset: 9:18 PM

Daylength: 15h 0m

Change since July 24: –17m

LONG-TERM OUTLOOKS[4]

August 6–10: Temp.: Below Normal; Precip.: Below Normal

August 8–14: Temp.: Below Normal; Precip.: 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

Source:

University of Nebraska. 2017. Drought Monitor, droughtmonitor.unl.edu/.Home.aspx

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Written by Tom Kalb, who expresses gratitude to the NDSU educators who contributed to this report: Craig Askim, Anitha Chirumamilla, Kelsey Deckert, Kelsie Egeland, Ken Eraas, Sheldon Gerhardt, Katelyn Hain, Bill Hodous, Angie Johnson, Breana Kiser, Scott Knoke, Julie Kramlich, Chandra Langseth, Esther McGinnis, Penny Nester, Steve Sagaser, Yolanda Schmidt, Megan Vig and Joe Zeleznik.