North Dakota State University

NDSU EXTENSION SERVICE

YARD & GARDEN REPORT

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Tough tree gains popularity

One of the best selling trees in North Dakota is blooming right now.

The Japanese tree lilac (*Syringa reticulata*) is one of the toughest and most trouble-free trees for landscapes. It offers year-round beauty with its showy blooms, emerald leaves and glossy bark.

Japanese tree lilac is hardy throughout the state and adapts well to our soils. It is one of the finest trees to grow along boulevards. The rounded canopy grows 25 feet tall and fits neatly under power lines.

When the spring blooms of crabapples and lilacs have faded, the Japanese tree lilac takes center stage with its late display of cream-colored flowers. The fragrance of the flowers is not very pleasing; but not stinky either. Some gardeners feel the flowers smell like privet. Less critical gardeners say the blooms smell like vanilla.

The glossy copper bark is a great feature that provides winter interest.

'Ivory Silk' has been the top variety since its introduction from Ontario in 1973. It is a sturdy tree with deep green leaves. It blooms at a young age and is known for its heavy set of blooms. First Editions Snowdance™ has similar features (*Fig. 1*), and it has sterile flowers that won't create messy seedheads.

'Golden Eclipse' offers variegated foliage in spring, making this remarkable tree even more special. Its variegation fades over summer.

Photo courtesy of Bailey Nurseries, Inc.

Figs. 1–3. Japanese tree lilac is becoming one of the most popular trees in North Dakota. The trouble-free tree blooms in June and features glistening copper bark. 'Golden Eclipse' has variegated foliage in spring.

INSIDE THIS ISSUE

Rusty plants

Wet weather this spring is leading to an outbreak of rust on trees and shrubs in North Dakota. Orange, jelly-like galls on junipers are spewing rust all over apples, crabapples and hawthorns (*Figs. 4, 5*).

The rust spores penetrate into the foliage and cause orange spots (*Figs. 6, 7*). The disease will develop on the foliage and later spew rust spores back onto the junipers this summer for overwintering.

There is not much we can do about it once infection occurs; fortunately there is not much to worry about. Established plants can tolerate rust disease, but several consecutive years of infection can weaken trees and make them more susceptible to other stresses.

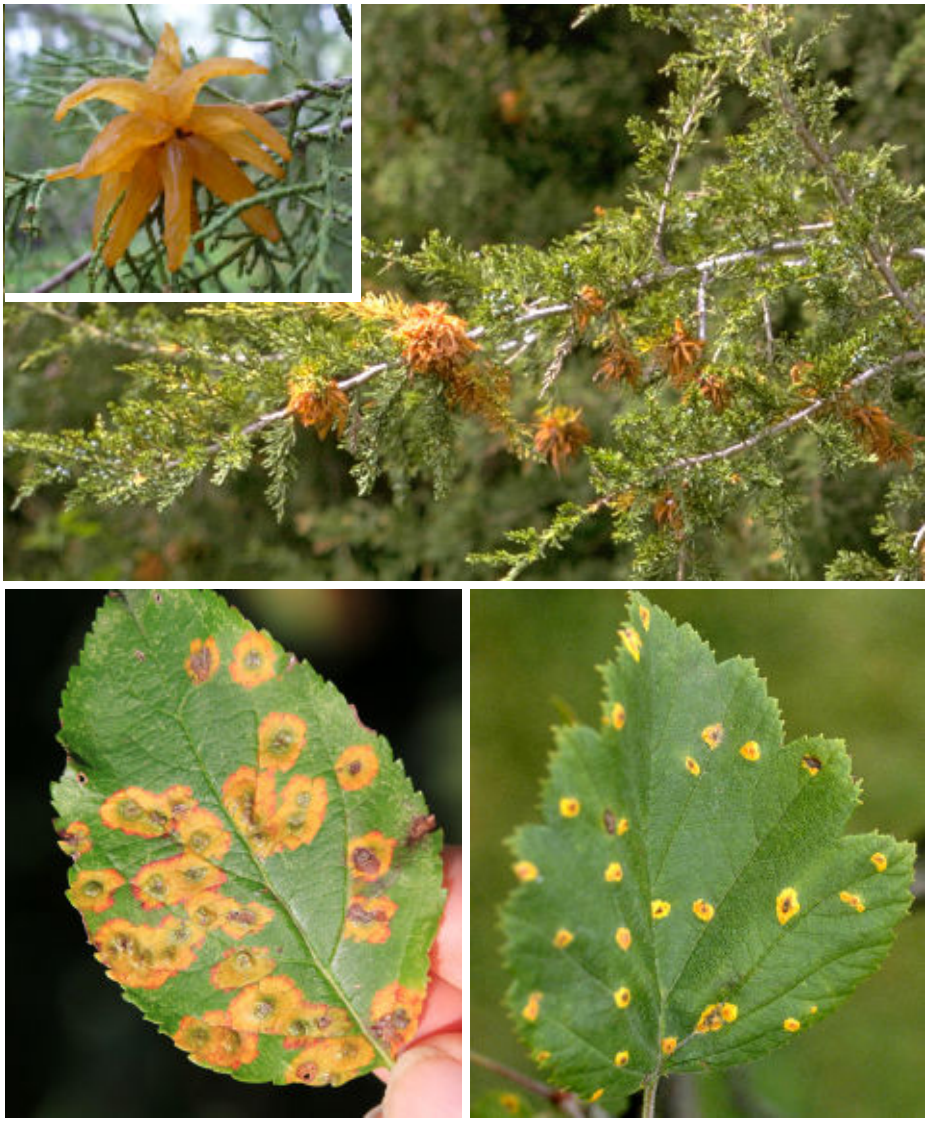
Rust fungi thrive under wet, humid conditions. We can reduce infections next spring by pruning plants to maximize sunlight and air movement within their canopies.

Preventative fungicides can be sprayed on susceptible trees next spring. Spray when flower buds first show color. A few more applications at 7 to 10 day intervals will protect the plants. Chlorothalonil (Daconil, Bravo), mancozeb (Dithane), copper and sulfur are used.

You could remove the orange galls on nearby junipers in early spring. Unfortunately rust spores can fly for miles, making it impossible to prevent exposure to this rust.

Look for varieties that resist the disease. Popular crabapple varieties that resist rust include 'Adams', 'Adirondack', 'Dolgo', 'Donald Wyman', 'Red Jewel', 'Snowdrift' and 'Tina'. None of our most popular apple or hawthorn varieties show strong resistance to rust.

The wet weather is favoring the development of rust and black spot diseases on roses, too (*Fig. 8*). Avoid overhead sprinkling of plants. Prune to maximize ventilation and apply preventative sprays of fungicides. Triforine and tebuconazole are popular fungicides used by rose gardeners. Remove infected foliage.



Figs. 4–7. Slimy orange galls are spewing rust spores all over apple (bottom left), crabapple and hawthorn (bottom right).

Other types of rust are active on other plants. Grasses are spewing rust on buckthorn shrubs and ash trees. Stress to these plants is usually minimal but pruning in winter can help reduce future infections.

Rust is expected on smooth hydrangea and Juneberry. Preventative fungicides can help.

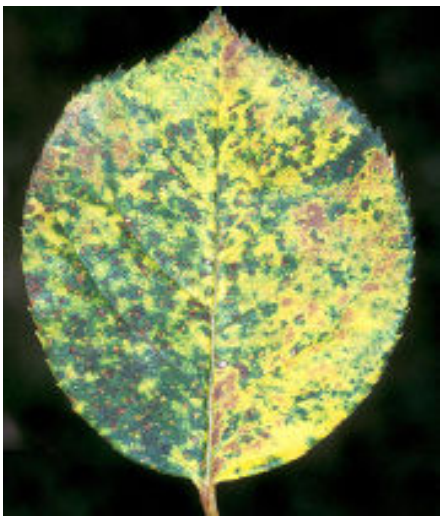


Fig. 8. Wet weather is conducive to rust on roses.

Survey of problems found in North Dakota yards and gardens:

TREES AND SHRUBS

Fig. 9. Galls on silver maple

Red bumps are caused by mites feeding on leaves earlier this spring. The mites are gone; thus pesticides are not useful now. These galls cause very little stress to the tree.

Fig. 10. Winter kill on evergreens

Focus on branch tips. If new shoots are emerging (as shown), the plant can outgrow the problem. If not, the branch may be dead and require removal.

Fig. 11. Frost injury

Needles/leaves become shriveled w/ browned tissue. Branch tips are most sensitive (as shown). Established plants usually survive and may send out new sprouts later this year.

Fig. 12. Chlorosis on maple

Leaves yellow, often with green veins. Associated with high pH. Fertilize foliage or use a root feeder to provide a soluble fertilizer containing iron.

Fig. 13. Herbicide injury

Leaves become elongated, curled or cupped. Most woody plants survive. In the future, use herbicides only when needed. Spray when wind is minimal; use heavy droplets; avoid hot days.

Fig. 14. Cytospora canker

Fungus chokes off flow of water and branch tips die back. Entire branches die. Often found on lower branches of mature trees. Prune off dead or dying branches. Sterilize saw between cuts.

LAWNS

Fig. 15. Brown tips

Dull mower blades tear the tips of leaf blades. Frayed blades lose water more quickly and are susceptible to disease. Use a sharp blade and mow when grass is dry.

Fig. 16. Foxtail barley

Short-lived, shallow-rooted perennial grass found in recently disturbed sites such as new residential areas. Cultivate or pull out. Spot spray with glyphosate.

Fig. 17. Mushrooms

Mushrooms are decomposing organic matter (typically tree roots, stump or lumber). It's natural and may continue for years. Leave mushrooms alone or rake. Do not eat. No spray is useful.

More problems found in North Dakota yards and gardens:

FLOWERS, FRUITS AND VEGETABLES

Fig. 18. Ants on peony

Ants are attracted to the nectar of peony blooms. The ants do not affect the opening of the blooms. No treatment is recommended.

Fig. 19. Leaf scorch

Young leaves turn white, especially along margins. Burning was caused by intense sun when leaves emerged. Future leaves will be healthy. No treatment is needed.

Fig. 20. Thinning apples, crabs

Maximize fruit size by thinning apples to 6 inches apart. Thin when fruits are size of dime. For messy crabs, you can encourage fruit drop with half-strength spray of carbaryl (Sevin).

Fig. 21. Flea beetle

Tiny (1/8-inch) pests create shotholes in radish and leafy greens. Young seedlings are very sensitive. Consider spraying carbaryl, neem or pyrethrin if 10–30% defoliation.

Fig. 22. Cankers

Fungi disrupt flow of water and cause dieback. No sprays are useful since the disease is inside the wood. Prune infected branches/trunk going at least 6 inches into healthy tissue.

Fig. 23. Herbicide injury

Pesticide drift or contaminated manure may cause extreme curling of foliage. Plants will be stunted and vegetables may be contaminated. If caused by drift, replanting is recommended.

MISCELLANEOUS

Fig. 24. Rabbits

Fencing is recommended. Make it 3 feet tall (4 feet for jackrabbits) and bury 6 inches deep. Mesh should be 1.5 inches or less. Repellents, guard dog, and live trapping may help.

Fig. 25. Ground squirrels

Pests damage garden plants and dig holes in lawns. In gardens, use rat traps baited with peanut butter. Zinc phosphide baits are used in noncrop areas. Flood burrows. Use live traps.

Fig. 26. Mosquitoes

Avoid going outdoors from dusk to dawn. Wear long-sleeved shirts, long pants and socks. Use repellents (DEET, picaridin, IR3535, oil of lemon eucalyptus) on exposed skin and clothing.

Weather Almanac for June 5–June 11, 2015

	TEMPERATURE (Week)				RAINFALL (Week)		RAINFALL (2015)		GROWING DEGREE DAYS[1,2] (Week)		GROWING DEGREE DAYS[1,2] (2015)	
Site	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	66	61	84	48	0.93	0.85	4.98	6.51	97	73	382	394
Bowman	65	60	85	50	1.66	0.78	5.35	6.77	92	67	337	354
Carrington	66	62	84	51	0.06	0.87	5.06	7.09	100	79	393	420
Crosby	66	60	87	48	1.01	0.65	5.18	5.43	94	67	375	357
Dickinson	67	60	87	53	0.27	0.85	3.56	6.52	100	71	357	381
Fargo	69	64	90	55	0.49	0.91	9.01	8.16	114	88	450	455
Grafton	66	65	82	51	1.63	0.81	8.88	7.08	99	93	397	457
Grand Forks	67	62	84	49	0.87	0.76	5.64	6.89	102	75	431	415
Hazen	65	62	86	48	0.26	0.80	6.55	6.65	93	80	382	454
Hillsboro	69	63	91	54	0.93	0.80	5.76	7.57	114	81	432	423
Jamestown	69	63	89	54	0.44	0.78	6.56	6.82	115	77	427	405
Langdon	66	59	80	50	2.11	0.87	6.89	6.54	97	63	357	328
Mandan	67	62	87	52	0.27	0.75	6.20	6.38	101	74	411	388
Minot	67	61	86	53	1.39	0.82	5.47	7.24	105	69	379	359
Mott	66	61	87	51	1.32	0.61	6.59	7.24	94	73	369	388
Rugby	66	61	83	50	1.55	0.79	4.83	7.30	97	75	376	409
Wahpeton	69	66	93	55	0.86	0.70	7.44	8.00	114	94	450	488
Watford City	68	61	88	54	0.79	0.66	3.77	5.61	108	72	393	390
Williston	67	63	84	53	0.41	0.60	4.47	5.34	105	81	399	450
Wishek	67	60	86	51	0.23	0.79	7.38	8.23	107	65	374	355

DAYLENGTH (June 11, McClusky, center of ND)[3]

Sunrise: 5:45 AM | *Daylength:* 15h 53m

Sunset: 9:38 PM | *Change since June 4:* +8m

LONG-TERM OUTLOOKS[4]

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

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