Palo Pinto County Agriculture and Natural Resources Newsletter

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Palo Pinto County Extension Office

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Fall lawncare can improve spring, summer turfgrass

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Homeowners can prepare their lawns for winter dormancy and set turfgrasses up for a good spring and summer now, according to a Texas A&M AgriLife Extension Service expert.

Becky Grubbs, Ph.D., AgriLife Extension turfgrass specialist, College Station, said lawns are about to enter dormancy throughout much of the state, and a few fall maintenance measures will set grass up for a strong spring reemergence next year.

"It's typically best to perform some of these practices a little earlier, but it's not too late for some regions of the state because we're still experiencing warmer temperatures than usual," she said. "But the window is closing, so now is the time to take action on your lawns."

Fertilizer

Grubbs said this time of year, many homeowners have questions about winterizing their lawns, and there can be a lot of confusing or conflicting information on the topic.

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UPCOMING PROGRAMS

- **December 2 - Multi-County Pecan Show - Palo Pinto**
- **January 21 - Pesticide Workshop 5 CEU Program - Palo Pinto**
  Space is limited due to COVID-19
  Call 940-659-1228 to pre-register

"The purpose of late summer and early fall fertilizer applications is to provide your turf with sufficient nutrients and resources to prepare for dormancy and reemergence next spring," she said. "There is research to indicate turfgrass utilizes nutrient reserves from the previous year for early season growth, but that does not mean homeowners should be putting heavy nitrogen applications on their lawns throughout the fall."

Grubbs said both nitrogen and potassium can be beneficial when applied in the late-summer and early fall. "Potassium has been identified as an important nutrient in turfgrass stress tolerance," Grubbs explained. "These benefits can vary some depending on the unique situation, but for late-season fertilizer applications we often recommend a product that has both potassium and nitrogen in it. But timing is very important, and Texas is a big state, so the timing will vary depending on where you are."

Generally, AgriLife Extension recommends the absolute latest fall fertilizer application should be made six weeks before the location's historic first-frost date, she said.

"What this means is that much of the state does not need to apply any nitrogen-based fertilizers past September, but there can be some exceptions for more southern regions of the state," she said.

Grubbs said there can be several consequences of applying too much nitrogen too late in the fall, including extended vegetative growth and ultimately winter kill.

"Too much nitrogen will encourage succulent, leafy green growth that is more vulnerable when we get a frost," she said. "In the late summer and early fall, our goal is just to provide that last bit of sustenance for the grass to store through winter so it can be ready in spring."

Too much late-fall nitrogen can also promote weeds and disease, Grubbs said.

Large patch disease, a fungus, becomes active as soil temperatures drop, and the disease proliferates when moisture and heavy nitrogen levels are present. Heavy amounts of nitrogen also provide energy to winter annual and perennial weeds.

For homeowners who may have already missed their window this year, Grubbs says there are some other steps they can take to be proactive with their nutrient management.

"This can be a good time of year to test your soil," Grubbs said. "Collecting soil samples and having them analyzed now will help you design an appropriate nutrient management plan for next year."

Irrigation

Fall is a time when homeowners should put an end to automated irrigation, Grubbs said. Grass needs far less water as it nears dormancy. "If you water at all, just do so based on visible wilt until growth is suspended," she said. "Then, if there is no active growth or grasses go dormant, you should stop watering completely. This season has been warmer and drier than usual, so it all depends on the location and conditions."

Suspension of watering is typical between October and April for much of the state, Grubbs said.

Irrigation at this point is not necessary for most parts of the state. Providing water should resume around April, when spring temperatures have grasses breaking dormancy and actively growing. (Texas A&M AgriLife Communications photo by Kay Ledbetter)

Weeds

Fall is when many of our winter weeds such as lawn burweed or annual bluegrass will start to emerge, and it is not too late to take preventative action by making a fall preemergence herbicide application. Preemergence herbicides to combat winter annuals like lawn burweed can be applied now, she said.

"We typically want to apply when soil temperatures reach approximately 70 degrees," she said. "That's often around the time when you have four to five consecutive days of 60-65-degree nighttime temperatures consistently. If you haven't gotten your preemergent out yet this year, there may still be time as we had one of the hottest and driest Septembers on record."

Grubbs recommends homeowners select products that are exclusively herbicides for this purpose. Products may not be clearly marked as "preemergents" but may instead have language on them such as "weed preventer." So, being familiar with some of the active ingredients can be helpful, she said.

"Common active ingredients used for preemergence control include prodiamine, dithiopyr, pendimethalin, isoxaben and others," she said. "You can find these by themselves or in combination with postemergence herbicides for weeds that have already germinated."

Finally, Grubbs said homeowners should always take time to read and follow product labels. "These products will have specifications on appropriate application rates and timings in order to be more effective," she said. "It's very important homeowners take time to do their research and follow all label instructions in order to both get the most out of their product and reduce any potential risk to their lawn and other landscape plants."

Fall armyworms

Fall armyworms are typically an insect pest forage producers monitor to reduce grazing or hay production losses, but Grubbs said the pest can also negatively impact turfgrass this time of year. Homeowners should monitor their yards for armyworms up to the first frost, she said. They can be voracious consumers and should be treated quickly.

"Homeowners should keep an eye out for them, especially on newly planted areas," she said. "They can feed on vegetation down to the soil. While they generally do not kill our warm-season grasses, they can create exposed areas, which allow weeds and other problems to move in."

Disease

As temperatures begin to drop in the fall, select turfgrass diseases will become more active. Grubbs said many practices already discussed here, including reduced irrigation and nitrogen-based fertilization in the fall will help prevent disease problems.

But other important cultural practices, including improving drainage as-needed, annual tree pruning to increase filtered light and mowing at an appropriate height, can reduce disease risks.

Shade, poor drainage, cutting grass too short can add stress to turfgrasses and encourages diseases. Lawns with a history of disease issues should be treated with fungicides, and potential summer stresses should be addressed. (Texas A&M AgriLife Extension Service photo by Adam Russell)

"Diseases will often proliferate in areas where some sort of stress is already occurring either from shade, poor drainage or scalping from mowing too low," Grubbs emphasized. "When homeowners take steps to reduce these stresses, they are less likely to have issues with many of these diseases."

Grubbs said chemical prevention is also an option where homeowners have had historic issues with diseases such as large patch and take-all root rot.

"In lawns with a known history of disease, we sometimes recommend a preventative fungicide application in the fall around the same time we apply our preemergence herbicides." Grubbs said. "Fungicides can be expensive, so it can be helpful to note where disease issues tend to recur so you can be more precise with your applications."

Grubbs stressed that proper diagnosis is key when designing any chemical management plan.

Texas A&M AgriLife Extension

Agriculture and Natural Resources

2020-Progress Report

Broadcast Herbicide Applications on Cedar Elm

Site Locations: Palo Pinto County

Cooperators: Johnson League Ranch

Authors: James Jackson, Extension Program Specialist, Stephenville

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Summary

A site was established in 2019 and 2020 to evaluate the efficacy of various herbicides for cedar elm control. Evaluations will be conducted at 3 months after treatment for percent defoliation and mortality evaluation will be done at 1 and 2 years after treatment for percent defoliation.

Objective

Cedar elm (*Ulmus crassifolia)* is one of four native elm species in Texas. Depending on age and other conditions, cedar elms can be small, shrubby trees or large trees reaching up to 70 feet tall. The shrubby growth form of this plant can be a nuisance for land managers wishing to maintain brush-free pastures. Currently, recommended chemical control measures for elm species include triclopyr applied as a stem spray, and soil applied hexazinone liquid or tebuthiuron pellets. The objective of this project is to evaluate the efficacy of various herbicides for cedar elm control.

Materials and Methods

Cedar elm treatments were applied on June 6, 2019 and May 28, 2020 in Palo Pinto County. Ground broadcast application was used on all treatments at a rate of 10 GPA with a boom equipped with 6 teejet XR 8002VS broadcast nozzles. Plant sizes ranged from 1-4 feet tall with a broadcast application being applied over an area with a high brush density. Dyneamic was used as the surfactant in all treatments in 2019 and 2020. Environmental conditions on the days of application are detailed in Table 1 and herbicides, rates, and application data are presented in Table 2.

Table 1. Environmental conditions on the day of application for cedar elm ground broadcast trials established in Palo Pinto County in 2019 and 2020.

Spray Time	Date	Wind Speed/Direction	Soil Temp.	Air Temp.	Soil Type/Moisture	RH
11:00-12:00	6/18/19	9 mph/WSW	77°F	83°F	Clay Loam/Low	22%
11:00-12:00	5/28/20	5 mph/NNE	78°F	83°F	Clay Loam/Mod	58%

Table 2. Treatments, rates, and material per plot on the 2019 and 2020 Palo Pinto County Cedar elm trials.

Treatment No.		Herbicide	Rate product/acre	Material/plot	TSV
2019 Treatments					
1		GrazonNext HL Remedy Dyne-amic	24 32 4	70 mL 93 mL 12 mL	10 GPA
2		Tordon 22K Remedy Dyneamic	32 32 4	93 mL 93 mL 12 mL	10 GPA
3		Tordon 22K Remedy Sharpen Dyneamic	32 32 4 4	93 mL 93 mL 12 mL 12 mL	10 GPA
4		MezaVue Dynamic	32 4	93 mL 12 mL	10 GPA
5		MezaVue Remedy Dynamic	32 32 4	93 mL 93 mL 4 mL	10 GPA
6		MezaVue Sharpen Dyneamic	32 4 4	93 mL 12 mL 12 mL	10 GPA
7		Surmount Sharpen Dyneamic	64 4 4	187 mL 12 mL 12 mL	10 GPA
8		PastureGard HL Sharpen Dyneamic	32 4 4	93 mL 12 mL 12 mL	10 GPA
2020 Treatments					
1		Tordon 22K Dyne-amic	64 4	187.7 11.7	10 GPA
2		Tordon 22K Remedy Dyne-amic	64 32 4	35.2 93.8 11.7	10 GPA
3		Tordon 22K Duracor Dyne-amic	64 20 4	187.7 58.7 11.7	10 GPA
4		Duracor Remedy Dyne-amic	20 32 4	58.7 93.8 11.7	10 GPA
5		MezaVue Remedy Dyne-amic	32 32 4	93.8 93.8 11.7	10 GPA
6		Surmount Dyne-amic	64 4	187.7 11.7	10 GPA
7		PastureGard Dyne-amic	32 4	93.8 11.7	10 GPA
8		PastureGard Sharpen Dyne-amic	32 4 4	93.8 11.7 11.7	10 GPA

Results and Discussion

Evaluations were made at 3 months after treatment for percent defoliation and will be made at 1 and 2 years after treatment as the date arrives. At the one year after treatment evaluation treatments 5, 7 and 8 all have greater than 70 percent mortality at 12 months after treatment. All these treatments contain the active ingredient fluroxypyr which appears to have significant activity on Cedar elm. These trials will continue to be evaluated until all treatments are evaluated at 2 years post application date.

Treatment No.		Herbicide	Rate product/acre	% Defoliation	% Mortality 1 YAT	% Mortality 2 YAT
2019 Treatments						
1		GrazonNext HL Remedy Dyne-amic	24 32 4	75%	30%	
2		Tordon 22K Remedy Dyneamic	32 32 4	75%	40%	
3		Tordon 22K Remedy Sharpen Dyneamic	32 32 4 4	75%	15%	
4		MezaVue Dynamic	32 4	95%	50%	
5		MezaVue Remedy Dynamic	32 32 4	98%	70%	
6		MezaVue Sharpen Dyneamic	32 4 4	70%	35%	
7		Surmount Sharpen Dyneamic	64 4 4	98%	75%	
8		PastureGard HL Sharpen Dyneamic	32 4 4	98%	80%	
2020 Treatments						
1		Tordon 22K Dyne-amic	64 4	25%		
2		Tordon 22K Remedy Dyne-amic	64 32 4	65%		
3		Tordon 22K Duracor Dyne-amic	64 20 4	50%		
4		Duracor Remedy Dyne-amic	20 32 4	40%		
5		MezaVue Remedy Dyne-amic	32 32 4	85%		
6		Surmount Dyne-amic	64 4	95%		
7		PastureGard Dyne-amic	32 4	95%		
8		PastureGard Sharpen Dyne-amic	32 4 4	50%		

Acknowledgements

This project was supported by Corteva AgroSciences, Palo Pinto County and the cooperating landowner.

December 2, 2020

Multi-County Pecan Show

The Texas A&M Agrilife Extension Services of Palo Pinto, Parker, Young & Jack, counties will host their Pecan Show on Wednesday, December 2, 2020 at the Palo Pinto County Extension Office, 221 South 5th Ave., in Palo Pinto. If you would like to enter your pecans, you should have them at the office by 9:00 am on

December 2nd

Rules:

- Exhibitors are limited to one entry of each named variety they grow. The grower may enter as many seedlings, known hybrids, or natives as he or she wishes.
- Pecans need to be entered in the name of the county that they were grown, which must be from one of the counties hosting the show.
- An entry consists of a minimum, 40 pecans...but an entry of 42 is preferred.
- Nuts that are cut, sanded, polished, or otherwise altered will be disqualified.
- Winners from each division will advance to the Central Regional Show

TEXAS A&M AGRILIFE EXTENSION