



Agriculture

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FARMER- SAVED WHEAT SEED

QUESTIONS & ANSWERS

JEFF EDWARDS; SMALL GRAINS EXTENSION SPECIALIST-OKLAHOMA STATE UNIVERSITY

What is the difference between farmer saved seed and certified seed?

Certified wheat seed has gone through a certification process overseen by a state agency. The certification process is a system of checks that ensures seed sold as a certified class is of high quality and suitable for sowing by the purchaser. Farmer-saved seed can be divided into two classes: bin-run seed that has not been cleaned; and custom-cleaned seed that has been processed by a local seed cleaner (in some cases, the producer). Bin-run seed is frequently contaminated by weed seed and inert matter and often has low germinability and vigor. This can result in poor emergence, reduced forage production, and low grain yield. The quality of custom-cleaned seed in relation to certified seed depends on the quality of seed prior to cleaning and the efficiency of the cleaning process at removing small and/or light seeds. In summary, the quality of farmer-saved seed is only as good as the quality-control measure used in seed production and the cleaning process used post-production. It may be very high quality or very poor quality.

Am I allowed to save seed from PVPA protected varieties?

Yes. Wheat varieties protected under the 1994 Plant Variety Protection Act (PVPA) can only be sold as a class of certified seed. A grower may, however, save seed from these varieties to plant on his/her own holdings (land owned, leased, or rented). The exceptions to this rule are wheat varieties that have patented genetic material. Since these varieties contain a patented gene, they cannot be saved by the farmer, even for use on his/her farm.

What is Quality Seed?

Several factors influence the quality of wheat seed for planting, but paramount among these are:

Free of weed seed

- Purity
- High germination percentage
- High vigor
- Free of foreign material
- Free from small and/or shriveled kernels



HOW DO I MANAGE FOR QUALITY SEED?

The easiest way to ensure good seed quality for planting is to purchase certified seed from a supplier with a good reputation and history of quality seed. There are, however, some guidelines that can be followed to ensure that farmers wishing to save their own seed are successful in this endeavor. Among these are:

1. Sow enough certified seed each year to provide seed for sowing the following year. This ensures varietal purity and provides access to new varieties.
2. Only save seed from weed-free fields and clean all harvest equipment thoroughly before entering seed wheat fields.
3. Apply a fungicide and don't save seed from fields infested with loose smut or common bunt.
4. Store seed in a low-moisture environment and protect from insects.
5. Always perform a germination test and seed count (seeds per pound) prior to sowing and adjust seeding rates accordingly.
6. Apply a fungicide or insecticide seed treatment to aid with seedling establishment and survival.

What are the savings associated with farmer-saved seed?

Like most economic examples, the cost comparison of farmer-saved and certified seed sources will be farm-specific. The easiest way to compare the costs of the two, however, would be to create a partial budget that accurately accounts for the full cost of farmer-saved seed (Table 1). Naturally, costs vary from farm to farm and not all farmers will experience all of these expenses when saving their own seed, but it is also important to realize that the cost of farmer-saved wheat seed is not simply the production cost or the market price of wheat.

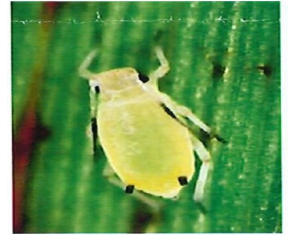
GRAIN SORGHUM UPDATES

Dr. Calvin Trostle-Texas A&M Agrilife Extension-Agronomist

Texas A&M Agrilife Extension thanks Dr. Brent Bean (brentb@sorghumcheckoff.com), national agronomist, United Sorghum Checkoff Program (USCP) for information in this Sorghum Tip. Dr. Bean presented this and other information, especially updates on grain sorghum herbicides, to the High Plains Association of Crop Consultants meeting in Lubbock, March 1, 2023.

Sugarcane Aphid Mystery Resolved

Since "sugarcane aphid" appeared on grain sorghum (late 2013) there has long been a question if this was a new biotype of the of the sugarcane aphid (*Melanaphis sacchari*). After close study of morphological features and genetic sequencing entomologists in France, USA, and UK have now concluded the aphid infesting sorghum is actually a biotype of the species *Melanaphis sorghi* or "sorghum aphid." Going forward when growers hear entomologists and others referring to the sorghum aphid this is nothing new but simply the same aphid that has been referred to as the sugarcane aphid for the last few years.



Recognizing this new understanding, Blayne Reed, 1PM Extension agent, Hale & Lamb Counties, Texas, notes this current aphid will now be more correctly known as the 'sorghum aphid'. This does not change Agrilife Extension's understanding of the insect, its management, or Extension's treatment suggestions in any way.

New Promising Herbicide Treatments for Pigweed/Palmer Amaranth in Grain Sorghum

As too many Texas sorghum growers know, pigweed/carelessweed/Palmer Amaranth is a huge concern in Texas grain sorghum. Furthermore, the further erosion of common atrazine use due to tightening use restrictions may requires alternate chemistries to fulfill the role atrazine has played in sorghum production for decades.

MAY 2023 A!.EXASA&M; f!GRILIFE; EXTENSION

USCP continues to fund research examining herbicide options that do not involve atrazine. Two treatments that stood out in 2022 trials were Verdict+ Outlook and Coyote, which is a combination of mesotrione + s-metolachlor. In addition to these treatments, herbicides labeled in other crops were examined, with several showing good pigweed control with minimal or no crop injury. It is hoped that in the future companies may consider modifying their labels to include sorghum.

Comparisons of New Grass Herbicide-Tolerant Sorghum Hybrid Families

More grass-herbicide tolerant grain sorghum hybrids will be on the market for 2023. These allow for grass control in grain sorghum, which is itself a grass.

Sorghum New Herbicide Tolerant Technologies

	Igrowth	Inzen™	Double Team™	
Seed Company/ Herbicide Company	Advanta/UPL	Pioneer/Corteva	S&W/ADAMA	<i>Remember, each of these grain sorghum hybrids must be paired only with the designated specific herbicide for each technology. Always follow label directions.</i>
Herbicide	ImFlex™	Zest™	FirstAct™	
Mode-of-Action	ALS (imi subclass)	ALS (SU subclass)	ACCase (Fop subclass)	
PRE Use	YES	NO	NO	
POST Use	YES	YES	YES	
Broadleaf Activity	Moderate	A Little	None	
Crop Rotation Concerns	Check label for wheat restrictions	Minimal	Minimal	<i>Summary courtesy of Dr. Brent Bean, United Sorghum Checkoff Program, March 2, 2023</i>
Seed Per Bag	600,000	50 lbs	600,000	

We are noticing a magnitude of grasshoppers already this year. For more information on management of them go to these sites:

Management in Rangeland, Pastures and Crops: <https://extension.okstate.edu/fact-sheets/grasshopper-management-in-rangeland-pastures-and-crops.html>

Control in Gardens and Landscapes: <https://extension.okstate.edu/fact-sheets/grasshopper-control-in-gardens-and-landscapes.html>

Loren has been searching for the Nolo Bait grasshopper bait; and wouldn't you know it is not available. Although he has found Grasshopper Bait through *Forestry Distributing*. <https://www.forestrydistributing.com/eco-bran-ecobran-grasshopper-bait-insecticide-peacock-industries>

Let us know if you find something that works well, we are concerned about the Grasshopper population this growing season. Call 580-625-3464 or email us at the Extension office, loren.sizelove@okstate.edu

Beginning June 11, livestock owners must obtain a veterinarian's prescription to purchase certain animal medications.

Beginning June 11, livestock owners must obtain a veterinarian's prescription to purchase certain animal medications.

The new rule is a continuation of the [Food and Drug Administration's](#) efforts to ensure the judicious use of medically important antimicrobials.

In 2017, the FDA implemented the original [Veterinary Feed Directive](#) rule, converting about 96% of the antibiotics used in animal medicine to veterinary feed direction drugs or prescription drugs. The FDA promotes judicious use of medically important antibiotics. Judicious use means the application of antibiotics only for the treatment, prevention and control of disease under the guidance of a veterinarian.

The latest guidelines enforce a prescription requirement for over-the-counter drugs such as injectable penicillin, tetracycline, sulfur drugs, oral medications like neomycin, and intramammary tubes like those used to treat mastitis.

"For a veterinarian to write a prescription, they have to have a proper veterinary client patient relationship, as defined by the Oklahoma State Board of Veterinary Medical Examiners," said Barry Whitworth, Oklahoma State University Extension southeast area food and animal quality health specialist.

A veterinarian must have sufficient knowledge of an animal by examining it or knowing information about how the animal is cared for in a livestock operation.

"For livestock producers, now is the time — if you don't have a relationship with a veterinarian — you need to get one," Whitworth said.

He is advising animal owners to take inventory of the medications they currently administer and consult with their veterinarians on what is needed for continued use after June 11.

Whitworth discusses the upcoming changes to [veterinary drug guidelines](#) in a recent segment of SUNUP, OSU Agriculture's production agriculture television show. Livestock owners can learn more about the list of medications that will soon require a prescription by contacting their local veterinarian's office.

Frequently Asked Questions:

Q: What kinds of drugs are included?

- Injectable penicillin
- Tetracycline
- Sulfur drugs
- Oral medications (like neomycin)
- Intramammary tubes (like those used to treat mastitis)

Click here to see all 90+ medications impacted by GFI #263 okla.st/3Wfbh10

Q: How can I obtain medications impacted by the new rule after June 11?

A veterinarian must have sufficient knowledge of an animal by examining it or knowing information about how the animal is cared for in a livestock operation.

Q: What if I don't currently have a veterinarian?

Now is the time for livestock owners and producers to find a veterinarian, according to Barry Whitworth, OSU Extension southeast area food and animal quality specialist.

Q: What steps should I take to prepare for the new rule?

1. Establish a relationship with a veterinarian
2. Take inventory of the medications you currently administer
3. Consult with your veterinarian on what is needed for continued use after June 11

Choosing a Pest Control Method

David Hillock

Earth-Kind gardeners learn to live with some insect pests in their gardens but must also determine when to treat them with insecticides and which insecticides to use. They must become familiar with insect friends and foes to know which ones to fight and which to encourage.

Correct identification of an insect or other pest is the first step in selecting a control method. This means frequent inspections and monitoring of garden crops. Complete elimination of pests is nearly impossible. The goal of pest control is to lower the number of pests to a manageable level.

If you cannot diagnose the problem yourself, you can get help from your county Extension Educator, who has publications with pictures of the pests and the damage they cause. If necessary, the educator can also provide information on how to select, prepare and send specimens to OSU entomologists or pathologists for identification of insects or diseases.

Once you have identified the pest, use all available cultural and mechanical pest control measures first, which may include hand-picking and destroying insects.

Avoid using any insecticide when only minor damage is evident, and an action threshold has not been reached. An action threshold is the point when it is less expensive to use an insect control method than to endure damage to your plants—a smattering of grass-hopper nibbles in a tomato planting or discovery of a few white grubs in the soil beneath your lawn normally are not serious enough problems to justify the use of insecticides.

If insecticide application is required, choose the material proven by research to be the safest and most effective. Consider spot treating areas rather than giving blanket treatments. Avoid improper use of pesticides—make sure you are not trying to use an insecticide on a problem caused by a fungus or bacterium.

For more information on Earth Kind Gardening and Integrated Pest Management (IPM) techniques, see OSU Extension Fact Sheets - [HLA-6431 Earth-Kind Gardening Series: Cultural Control Practices](#), [HLA-6432 Earth-Kind Gardening Series: Mechanical Pest Controls](#), [HLA-6433 Earth-Kind Gardening Series: Botanical Pest Controls](#), [HLA-6434 Earth-Kind Gardening Series: Biological Pest Controls](#).



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EXTENSION

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BEAVER COUNTY FAIR

AUGUST 22-26, 2023

Schedule and Fair-Books are now
available

Come join us for Exhibits, Livestock,
Chili Cook Off, Car Show, Rodeo with
Mutton Bustin', Wild Cow Milking &
Mini Bull Riding, Antique Tractor Pull,
and so much more.



Josiah Neville showing his
grandfather how to work the
drone.

Balko Wheat Field taken with a
drone.



The Extension Office has a team of youth that have been
showing local farmers and ranchers about Drones.

If you are interested in a Commercial Drone License
please contact our office@ 580-625-3464.



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