

Texas A&M AgriLife “Texas Row Crops Newsletter”

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Certified Seed Only (CSO) and Plant Variety Protection Act: Wheat Varieties

What farmers can and cannot do regarding saving grain for planting seed

In the past few years, many if not most wheat seed companies have implemented additional protections on many if not most of their wheat varieties. This includes limiting planting to Certified Seed Only (CSO). This means a CSO variety can only be planted in certified seed form, which must be purchased from the developer or their licensees and designated seed dealers. This is an effort to better recapture the cost of developing and releasing a new wheat variety with the most recent breeding improvements. The development cost can be several million dollars per released variety. Wheat breeding programs potentially make tens of thousands of observations and thousands of crosses through many generations over multiple locations to find one cultivar that will be released (Fig. 1). This is an expensive, time-consuming process.



Fig. 1. An advanced replicated Texas A&M AgriLife Research wheat breeding nursery at Bushland, TX, June 2023. This field is an intermediate step between initial single plant breeding crosses/single row plots vs. broad regional testing at many sites leading to final selection of a cultivar for release as a new variety. (Photo courtesy Shannon Baker.)

As a condition of the farmer's purchase of a CSO variety farmers must sign a Stewardship Agreement with the variety developer. The key agreement condition is the farmer may NOT save any grain as seed for planting a future crop. This is a contractual matter, not a regulatory or legal matter (unless the variety also has a utility patent, see below). The developer of a CSO variety who finds a farmer in violation of a CSO agreement has the right to seek civil recourse through the court system. If a farmer is unwilling to agree to CSO terms, then they simply should not purchase a CSO variety. Fortunately, there are other good non-CSO variety choices.

Some university breeding programs including Colorado State (via their PlainsGold brand) also have adopted CSO on some varieties. Currently no AgriLife TAM varieties are CSO but there is no assurance this provision may remain in the future.

The Historical Plant Variety Protection Act (PVPA)

Texas farmers are likely somewhat familiar with seed law in the form of PVPA. In wheat, PVPA allows a farmer to save grain from a variety they have purchased. They may condition/treat the amount of seed he/she can reasonably expect to plant the next cropping season from their saved grain. It is illegal to sell this saved grain to anyone else as planting seed without permission of the developer. Relabeling a PVPA variety as 'VNS, variety not stated' and selling it to another party is also prohibited. For a 2005 AgriLife Extension review of PVPA see <https://varietytesting.tamu.edu/wp-content/uploads/sites/17/legacy-files/wheat/docs/plantvarietyprotectionact.pdf>

Texas A&M AgriLife will be updating the above previous guide on wheat and PVPA for the 2023 wheat planting season.

Utility patent

Texas A&M AgriLife agricultural law Extension specialist Tiffany Dowell-Lashmet has blogged about PVPA vs. another form of seed protection, the utility patent. You can read the blog at <https://agrilife.org/texasaglaw/files/2022/01/Overview-of-Seed-Saving-Laws.pdf> (Nov 2021). A utility patent, though more expensive than PVPA, is a stronger protection of 20 years on the developer's intellectual property. Dr. Bryan Gensch, executive director, Texas Seed Trade Association, notes that utility patents are more comprehensive and expensive to implement than standard PVPA. The main advantage is the U.S. court system more widely and readily recognizes—"understands"—the long history of patent protection in contrast to the few recent decades of PVPA.

Most wheat variety developers may also use utility patents as a means to govern the use and reuse of their varieties. A utility patent is not a requirement to designate a variety as CSO, which could simply be the developer's conditions for purchase and enforcement of a contractual agreement for no saved seed. A utility patent, however, would provide a stronger legal basis for requiring and enforcing a CSO grower agreement. Utility patents, PVPA, and

contractual developer/grower agreements rely on the seed developer (intellectual property owner) to enforce infringements through civil courts.

One recent example of an apparent violation of CSO in Texas was revealed in an AgriLife grower variety survey estimated that there were >20,000 acres of a specific wheat variety planted. Yet a company representative share they sold only 8,000 to 9,000 units (about one unit per acre for seeding). This suggests that farmers were saving seed in violation of their Stewardship Agreement. If caught, a farmer can face major civil penalties well beyond the actual value of the seed.

Planting Choice of CSO Seed vs. Saving PVPA Seed

Varieties with CSO designation may cost a little more to plant than other purchased varieties (certified or not). But they likely represent the best genetics a company or university seed program has to offer and may have utility patent traits such as CoAXiom® herbicide tolerance. It is possible farmers will likely not choose CSO varieties for drought-prone dryland regions. Saving seed under PVPA for on-farm use is one way to reduce economic risk for drier, low-yielding environments.

Texas A&M AgriLife does not endorse or discourage saving of seed under PVPA for your own use. We do encourage farmers to ensure good quality seed if saving grain for planting. This includes high germination (>95%) and a test weight or >58 lbs./bu (60 lbs./bu is standard). As a general rule of thumb, we suggest farmers using legal seed saving, consider switching out to certified seed after saving seed twice (purchase certified seed every third year). In general Texas A&M AgriLife agrees with the adage “Certified seed doesn’t cost, it pays.” Certified seed more likely ensures genetic purity, strong germination and seedling vigor, and minimal risk of seed-borne disease, or contaminant weed seed.

As of this writing companies we are aware of marketing some or most of their seed under CSO conditions include:

- WestBred (Bayer)
- SY and AgriPro brands (Syngenta)
- Dyna-Gro
- Croplan
- PlainsGold (Colorado State Univ.)
- LCS (LimaGrain)
- Agri-South Genetics

This list may not be complete. Check with your seed supplier. If you choose a CSO please read fully the Stewardship Agreement. Again, currently no Texas A&M AgriLife “TAM” varieties are CSO.

Elevator-Run Seed Legality (Not!)

Can a farmer purchase bulk wheat grain from an elevator and use it as planting seed? Legally, the answer is 'No.' There will likely be many PVPA varieties (including all TAM lines) and some CSO varieties commingled together and from many different fields. It is possible the farmer knows that much of that grain is TAM varieties like 113, 114, 115, etc. That intent is a violation of federal seed law. This has been established in landmark court cases including a Corn Belt example where a farmer bought elevator-run soybeans knowing the soybean grain would be Roundup Ready. Monsanto took the farmer to court and won their case. The farmer's attempt to circumvent seed law and save some money ultimately cost him many fold more than he would have saved.

You don't have to guess. Texas A&M AgriLife would never recommend this practice, even if all you wanted was wheat seed to plant for basic ground cover. Elevator-run seed is not genetically pure, has no assurance of seed quality, and could contain seed-borne diseases that could derive from just one variety in any of 20 or more fields in that elevator bin. These are not problems you want to bring home to your farm.

Final Consideration for CSO Wheat Varieties

Our intent is for Texas farmers to become more aware of the impetus for CSO wheat varieties. The decision is yours if you want to plant one on your farm. CSO varieties from most of the companies listed above are among Texas A&M AgriLife Picks for the planting season (see <http://lubbock.tamu.edu/wheat>) Ask your preferred seed dealer if the variety you are interested in is CSO. Review the Stewardship Agreement. Then make your decision. If you routinely do not save grain to plant as seed in the next wheat crop, then CSO may be a moot point.

Does "Certified Seed Only" Apply to Other Small Grains?

I am not aware of CSO in other small grains with one exception (triticale). All are grown in Texas as seed blocks under developer/company supervision. Wheat and rye are the two small grains that are routinely used in cover crops.

- Oats. Significant Texas acres are harvested for grain and also hay. Oats are not grazed much.
- Barley. There are a few hundred acres grown in the Texas High Plains for grain for malting. Another High Plains elevator contracts a few thousand acres for grain for dairies. Barley is otherwise sometimes planted due to its tolerance to salty soils and salty irrigation water.
- Rye. Grown a little for hay but mostly as a cover crop.

- Triticale. This small grain is a cross between rye and wheat. It is grown mostly for silage. Some nearly beardless triticale varieties (including the TriCal brand) have a company stewardship agreement with growers does not permit saving seed.

For Further Information

- Certified Seed and the Laws on “Brown Bagging.” (~2021) Texas Foundation Seed Service (a unit of Texas A&M AgriLife Research), https://foundationseed.tamu.edu/?page_id=114.
- Edwards, J. (2017). Farmer-Saved Wheat Seed in Oklahoma: Questions and Answers. (2017). PSS-2139. Oklahoma State Univ. Extension.