



Farm Views

Pesticide Applicators Training

Private Applicators Certification Options

University of Nebraska Cooperative Extension conducts educational programs designed to provide the private pesticide applicator with the necessary knowledge and skills to safely and responsibly apply pesticides. A grower must be a certified private applicator to apply restricted use pesticide (RUP) products to their land.

There are three methods available to anyone wishing to become a certified private applicator:

- 1) Attend a Nebraska Department of Agriculture (NDA) approved training program. (\$10)
- 2) Complete an NDA approved self-study course. (\$20)
- 3) Complete a graded examination administered by NDA. (No Cost)

Producers of Agricultural Products needing initial certification or recertification of their Private Applicators Certificate may complete this requirement by attending a 3 hour classroom training session conducted by UNL Extension Educators in any county across the state. The following is the schedule of training session to be conducted in 2000 at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. The cost of the training is \$10 for each person completing the training. Participants may attend anyone of the below scheduled sessions:

- . 9 - 12 a.m. on Thursday, January 27
- . 1 - 4 p.m. on Thursday, January 27
- . 9 - 12 a.m. on Friday, February 18
- . 9 - 12 a.m. on Saturday, February 19
- . 1 - 4 p.m. on Friday, March 3

Commercial Applicator Certification for Agricultural Pest Control Options

Initial commercial/noncommercial certification is based on satisfactory test scores on a general standards exam plus one or more category exams. The Nebraska Department of Agriculture will provide testing at all locations. Preregistration is required and study materials must be obtained for all initial commercial/noncommercial pesticide training programs. Call (402) 472-1632 or contact the nearest Extension Office for registration forms and complete schedules. To obtain study materials, mail request at least 10 working days before the training date.

Initial commercial certification in Agricultural Pest Control - Plant Category (01) training sessions will be held from 9a.m. to 4 p.m., at these Southeast Nebraska locations:

- . February 10 - Gage County Extension Office, Beatrice
Douglas County Extension Office, Omaha
- . February 22 - Saunders County Extension Office, Mead
Douglas County Extension Office, Omaha
- . March 7 - Lancaster County Extension Office, Lincoln
Saunders County Extension Office, Mead
Dodge County Extension Office, Fremont
Gage County Extension Office, Beatrice

Recertification in Agricultural Pest Control - Plant Category (01) may be completed by an examination administered by the Nebraska Department of Agriculture, 471-2394 or by attending one of the following Crop Protection Clinics in Southeast Nebraska:

- . January 4 - Lancaster County Extension Office, Lincoln
- . January 5 - Arbor Manor Restaurant, Auburn
- . January 6 - Holiday Lodge, Fremont
- . January 11 - Chances R Restaurant, York

Initial commercial/noncommercial applicators certification in Agricultural Pest Control - Animal Category (02) will be held at the following location:

- . February 22 - Saunders County Extension Office, Mead

Recertification of commercial/noncommercial applicators in Agricultural Pest Control - Animal Category (02) will be held at the following location:

- . February 24 - Saunders County Extension Office, Mead

Farmers Tax Guides available

The extension office has received a supply of the 1999 Farmers Tax Guides. Interested persons can pick these up at the extension office. These guides, along with many other tax publications and notices can also be found on the IRS website. To access the IRS website, point your web browser to: http://www.irs.gov/forms_pubs/pubs.html. (TD)

Area producers planning to shift production to value-added grains

Low commodity prices in recent years have prompted a group of producers in Lancaster County to explore production options other than the production of "bulk commodities." This group has formed a steering committee made up of members of the Lancaster County chapter of Farm Bureau, plus several agency personnel, including extension staff. The group calls themselves the Southeast Nebraska Area Producers (SNAP). They have been meeting monthly to explore options, with the main goal to improve profitability in grain production.

An option that shows promise is to convert a portion of the grain production in the area to "specialty" or "value-added" grains. A number of specialty grains have come on the market in recent years. These crops have properties that give them greater value when they are processed into certain animal feeds and into food products for human consumption as compared to traditional varieties.

Why aren't more farmers growing value-added grains?

Specialty grains have met with limited acceptance as alternatives to bulk commodities by crop producers for several reasons. By their very nature, these grains must be produced in such a way that cross-contamination from off-type grains is held to very low levels or eliminated almost entirely. This requires extra time and labor to thoroughly clean planting, harvesting, grain hauling and

grain handling equipment in order to keep the grain pure (this concept is known as keeping the grain "identity preserved" or IP). Another factor is yield. In some cases, the energy a crop plant puts into producing the properties that make these grains more valuable, results in some degree of yield reduction as compared to traditional varieties. Before producers will be enticed to produce IP grains, the price received must be sufficiently higher than "bulk grain" price to compensate the producer for the extra labor and management, production risk and perhaps lower yield and result in greater profit per acre than is possible with traditional grains.

If these grains have properties that significantly add to their value, why aren't they bringing bigger premiums at the point of sale?

The answer requires an understanding of the present grain handling industry. Grain elevators have traditionally been designed to handle, store and ship bulk commodities. For example, until a few years ago, all corn produced in this area was yellow dent corn. End-users, whether they be feedyards, millers or exporters did not care about specific varieties. They merely wanted corn that met the USDA grading standards. Elevators were designed to receive corn from various sources, condition it as needed, store it in large common storage structures, blend the product to meet specs and ship it to the end user. All done in large volume and without regard for

segregation within a type of grain.

With IP grains, elevators must be concerned about contamination from off-type grains. This requires additional labor to clean the grain handling equipment each time a different IP grain is handled. Storage is also a problem. Elevators have been designed to handle large volumes of grain. When storage space is tight, as it has been the past couple of years, it may not be feasible to tie up a full bin or tube to store a relatively small quantity of IP grain until it can be shipped to a processor.

The chicken and egg

Most of the time elevators can handle IP grains, but the extra labor and other special handling and storage costs must be accounted for in the price bid to the producer. At present, it is a chicken and egg thing. If, for example, there is enough production of a given IP grain so a leg at the elevator can be reserved to receive only that grain and a bin or tube can be reserved to store it, efficiency is improved and handling costs go down. Higher efficiency translates into higher bid prices. Higher bid prices translates into more producers willing to produce the grain. As it stands now, producers don't produce IP grains because the price is low. The price is low because there isn't enough volume to create handling, storage and shipping efficiency. What is needed is a way to increase price to encourage increased production.

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Grain check can save crop



Stored grain should be checked every two to four weeks to ensure temperature and moisture levels will thwart molds and insects. Moisture measurement depends on the grain temperature, so it's best to collect a grain sample, let it warm to room temperature in a plastic bag or other sealed container, then check moisture content. Record date for future reference. Be sure to wear a safety harness when entering the bin and that someone is on the outside of the bin to help in an emergency. Grain should be at 30-40 degrees F for winter storage in Nebraska. Maintaining grain temperature below 70 degrees F reduces insect reproduction. Insects become dormant at temperatures below 50 degrees F and are killed below 32 degrees F. Mold growth is nearly zero at temperatures below 40 degrees F.

Aeration should have started

before the average outdoor temperature was 20 degrees cooler than the grain temperature. Typically, grain is aerated shortly after harvest, once in the fall and again in late fall as outdoor temperatures cool. When cooling grain, be certain that the cooling front is pushed all the way through the grain mass before discontinuing the aeration. A cooling front pushed partway through the grain can result in moisture condensation in the zone where the two temperatures meet. This is especially important if temperature is being lowered more than 20 degrees in one step.

The amount of time required for an aeration cooling cycle depends on the airflow rate. The cooling time can be estimated by dividing 15 by the airflow rate. For example, 75

hours is needed with an airflow rate of 0.2 cfm/bu. Check grain temperature at several locations to determine when aeration is complete. Grain temperature changes about 50 times faster than the moisture content, so the air's relative humidity is of little concern during grain cooling.

Once grain temperature is reduced to less than 50 degrees F, fans can be run intermittently to prevent re-wetting during periods of high humidity. Cover hatches, fans and ducts after grain is cooled for winter storage to prevent any snow from blowing into the bin. Cover the fan whenever it's not running to prevent re-wetting that can occur as a result of convection currents that can draw in moist air at the bottom of the bin during wet weather. (TD)

"cfm/bu = Cubic feet of air per minute per bushel of grain in the bin. The airflow rate produced by a fan is a function of the fan design and the back pressure the fan must overcome. The back pressure is a function of the air delivery system, the type of grain and depth of grain in the bin. Once the type and depth of grain is known, the air flow can be estimated from performance data for the fan. The cubic feet of air per minute produced by the fan, divided by the total bushels in the bin, results in cfm/bu."