# CERTIFIED SEED GLEANINGS

Utah Crop Improvement Association Room 344C, Agric Sciences Bldg., Utah State University (435) 797-2082
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**2015**
**ANNUAL SEED SCHOOL AND UCIA MEMBERSHIP MEETING**

The Utah Crop Improvement Association will host the Utah Seed Industry on Wednesday, March 11, 2015 in Ephraim, UT. We will meet at Founder's Hall (4th Floor) in the Noyes Building, 150 E College Ave (100 N), starting at 9:00 a.m. with light refreshments. See back of page for complete program. **PLEASE RSVP USING THE COUPON ON THE REVERSE SIDE**.

## THE VALUE OF CERTIFIED SEED

**By Clark Israelsen**
**USU Extension Agent, Cache County**

It appears we'll be in the fields planting crops earlier than normal this year. It's not too early for growers to select and purchase seed for all crops that will be planted. Genetically pure certified seed of known identity and superior quality is the preferred source. Sometimes however, growers are tempted to use seed from their own bins or from a neighbor. The thinking is they can save a few dollars on seed costs and still get a good crop. Results from the most recent "Drill Box Survey" should convince everyone that certified seed is a great bargain, even if it does cost more per bag at planting time.

Once each decade, since 1958, USU Extension, Utah Crop Improvement Association (UCIA), Utah Agricultural Experiment Station (UAES), and the Utah Department of Agriculture and Food (UDAF) have conducted drill box surveys. Our purpose is to document the kind and quality of seed that is actually being planted in Utah fields. The most recent survey for small grains included 42 spring samples and 46 fall planted samples from Cache County. Our sincere thanks to the growers who kindly stopped planting so we could obtain small grain samples and get the necessary information to complete the survey.

In most cases the samples were taken from the box of a grain drill actually planting in the field. In some cases we collected samples from bags in pickups or truck boxes that were parked in the field waiting to be dumped into the drill boxes. In all cases we actually visited the farm and in some cases we collected more than one sample from a given farm if they were planting multiple acres from different seed lots in different fields. Our protocol was to include grain from the top, middle and bottom portions of each drill box. Otherwise, small weed seeds (like field bindweed, kochia, and pigweed) would likely settle to the bottom, or large seeds (like wild oats) would float to the top. Without proper sampling protocol a valid purity analysis could not be assessed. All samples were methodically assessed at the UDAF Seed Laboratory.

For each sample collected we conducted a germination test, assessed seed purity, identified percent and identity of weed seeds, inert matter and other crop seeds (such as wheat seeds mixed with barley seed). The typical analysis on certified seed was 99.09% purity, 98% germination, 0% weeds, 0% other crops and 0.01% inert matter. By comparison, farmer saved seed was 98.34% pure (not bad) but only an average of 87% of the seed germinated. A germination test 12% lower than certified seed is reason enough to only plant certified. Even more alarming was the fact that germination from some of the farmer saved seed was as low as 48%. Another real concern from non-certified seed came from the detection of 0.32% weeds, 0.26% other crop seed and 1.13% inert matter. Much of the weed seed was barnyard grass, green foxtail, goosefoot, wild mustard, pigweed, witchgrass, wild buckwheat, quack grass, lambs quarter, and field bindweed. Most of these seeds are tiny, so on a percentage basis, a multitude of weeds were being planted for each cultivated crop such as wheat or barley. Anything saved on the initial cost of the seed was soon lost to reduced yield or additional herbicide costs from attempting to control weeds that the grower actually planted. A purity of about 98% doesn't look like a bad number but when you look at what makes up the remaining 2% it is amazing that someone would consider planting such seed.

Certified seed is typically grown by local farmers in cooperation with local seed companies. It is also inspected several times throughout the growing and conditioning process before it qualifies as Certified Seed and is sold to the farmer. UCIA personnel work closely with the farmer and seed companies to ensure that the farmer receives a quality product.

I will confess that over the years we have planted seed on our farm that came from our own bin or was purchased from trusted neighbors. At the time we thought it was a great bargain because it cost less than certified seed. In most cases we took it to a seed conditioning mill and had it cleaned before planting, but not all growers even do that. Years of data from our regular "Drill Box Surveys" demonstrate that certified seed is actually a savings instead of an expense. We heartily encourage all growers to purchase proven seed of known purity and verified germination. Any perceived savings on the front end of a crop is soon lost on the back end with increased weed pressure, lower yields, and reduced quality.

--Clark Israelsen

**RSVP PLEASE**
Please complete this coupon and send in an envelope or call (435) 797-2233, or fax (435) 797-3376, or email (keren.williams@usu.edu) if you plan to attend the Seed School so we can make arrangements for the luncheon.

I (we) will be attending the UCIA Seed School and Annual Meeting at Ephraim, UT on Wednesday, March 11, 2015.
Number of people attending luncheon: _____
Name(s): _____
Company/Farm/Agency: _____

## SEED SCHOOL AND ANNUAL MEETING
## Sponsored by Utah Crop Improvement Association

### Snow College, Noyes Building, Founder's Hall (4th Floor)
### 150 East College Ave (100 N), Ephraim, UT
### Wednesday, March 11, 2015, 9:00 am – 1:00 pm

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| 9:00 a.m. | Pre-Meeting Social – Light Refreshments |
| 9:30 a.m. | Welcome – Ron Stevenson, President, UCIA<br>Meeting Chairman: Mark Plummer, Director, UCIA |
| 9:35 a.m. | Proactive Projects: A Proposal for Real Revegetation of Western U.S. Rangelands – Stanford Young, UCIA, USU |
| 10:00 a.m. | Drought and Fire: Impacts on the Native Seed Industry – Stanley Kitchen, USFS, Provo Shrub Lab |
| 10:25 a.m. | Seed Zones and Subspecies ID for Big Sagebrush – Bryce Richardson, USFS, Provo Shrub Lab |
| 10:50 a.m. | Break – Light Refreshments |
| 11:10 a.m. | Source Identified Seed Collection Protocols; Glitches and Stitches – Wayne Andersen and Stan Young, UCIA, USU |
| 11:35 a.m. | General Reports and Updates<br>1) UCIA and the Seed Industry – Ron Stevenson, Ephraim, UT<br>2) UDAF Seed Program – Ron Larsen, SLC, UT<br>3) BLM, Utah State Office, SLC –<br>4) State Trust Lands – Scott Chamberlain, Richfield, UT<br>5) US Forest Service – Karlton Moss, Ephraim, UT<br>6) UDWR, GBES – Danny Summers, Ephraim, UT |
| 12:30 p.m. | UCIA Business Meeting |
| 1:00 p.m. | Luncheon – Hosted by UCIA, Founders Hall, Snow College Catering |

**UCIA OFFICERS AND DIRECTORS**
Directors elected by mail ballot in 2013 were: District 1: Chris Allen, Cove, and Chris Reeder, Corinne
District 2: Eric Christensen, Ephraim, and Mark Plummer, Ephraim.
UCIA members have received election ballots (2015) for two vacancies in District 1 (Utah north of I-80) and one vacancy in District 2 (Utah south of I-80).
Officers elected at the Board of Directors Meeting Dec. 9, 2014 in SLC were: President: Ron Stevenson, Ephraim; Vice President: Chris Reeder, Corinne; Executive Committee Member: Chris Allen, Cove.