



# Seed Regulatory and Testing Division Spring 2023



## ITEMS OF INTEREST IN SEED

### TABLE OF CONTENTS

- Recent and Upcoming Activities .....1
- State Seed Regulators Quarterly Meeting .....1
- Mega Cool Season Grass Seed Workshop.....2
- Federal Noxious-Weed Seeds.....2
- Trueness-To-Variety Overview.....4
- The Federal Seed Act and Seed Libraries.....4
- Calendar of Events .....5

### RECENT AND UPCOMING ACTIVITIES

#### USDA AMS CLARIFIES VARIETAL LABELING REQUIREMENTS

On March 6, 2023, USDA AMS released a statement that reiterated its standing policy related to varietal labeling requirements for agricultural and vegetable seed shipped in interstate commerce. This policy statement makes clear that AMS views false advertising and mislabeling of seed varietal names as serious violations of the Federal Seed Act. For a complete description of varietal labeling, please visit the link: [USDA AMS Clarifies Varietal Labeling Requirements of the Federal Seed Act to Enhance Transparency for Growers | Agricultural Marketing Service](#)

#### SRTD HIRES A NEW AGRONOMIST

SRTD hired Dr. Keir Hamilton to manage the Division’s Trueness-to-Variety Program. Keir graduated from the University of Florida in 2021 as a Doctor of Plant Medicine with a master’s degree in Horticulture. In addition to his background with plant variety identification, Keir has experience in entomology, agronomy, and plant pathology.

#### CHARLENE BURTON RETIRES FROM SRTD

Charlene Burton has been in seed testing for 37 years. She graduated from Towson University in 1980 with a Bachelor of Science in Biology. From 1986 to 2004, she worked as a Seed Analyst with the Maryland Department of Agriculture. She received her

Certified Seed Analyst Certificates in Purity (1990) and Germination (1994). Charlene started as a Botanist with SRTD in 2004. She held many roles in seed testing such as AOSA Chair for the Teaching and Training Committee and member of the AOSA/SCST Exam Committee. She was also the SRTD Master Calibration Sample Program Administrator for the Uniform Blower Procedure. We thank you Charlene for your dedicated service at SRTD!



Charlene teaching during a seed workshop.

### STATE SEED REGULATORS QUARTERLY MEETING

SRTD conducts quarterly virtual meetings with State Seed Control Officials (SCO). The goal of the meetings is to promote better communication and working relationships with State seed regulators and discuss current industry issues. Each of the quarterly meetings cover: 1) Federal Seed Act questions or concerns, 2) industry awareness, 3) SRTD updates, 4) upcoming trainings, and 5) Trueness-to-Variety updates. In addition, SCOs are offered an opportunity to bring up agenda topics prior to the meetings. Topics in previous meetings included: 1) pre-dated test dates (usually from vegetable seed packets), 2)

the use of brands on certification tags, 3) labeling variety and brand names, 4) trademarked varieties, 5) certified seed, and 6) how to submit FSA complaint samples.

Members from all sections of SRTD are in attendance to provide their expertise on questions from SCOs. These members include the SRTD Director, Laboratory Supervisor, OECD Seed Schemes Program Manager, and the Agronomist. Each member of the Regulatory team is in attendance for every meeting.

For more information regarding this article, contact Seed Marketing Specialist Rodney McNeace (704) 810-8879; [rodney.mcneace@usda.gov](mailto:rodney.mcneace@usda.gov)

## MEGA COOL SEASON GRASS SEED WORKSHOP

Sharon Davidson, from Agri Seed Testing, hosted a cool season grass seed workshop in collaboration with the Pacific Northwest Seed Technologists and the Oregon Seed Association. The workshop was held at the new Agriculture Complex at Chemeketa Community College campus on April 24-28. The class consisted of seed analysts from various backgrounds who were eager to learn about the characteristics, identification, and testing of grass seeds.

The classroom setting included both visual and hands-on training. The instructors reviewed Pure Seed Unit definitions, how to conduct purities, how to use the uniform classification section of the AOSA rules, and how to calibrate equipment such as balances and the uniform blower. The class observed some of the differences between annual and perennial ryegrass when grown out. This type of information helps analysts who are not experienced or familiar with sources other than laboratory practices. Analysts performed ryegrass fluorescence, an ammonia test, tetrazolium test, and discussed sources of variability. Participants had the opportunity to visit seed cleaning companies and research farms in the surrounding area.

For more information regarding this article, contact Botanist Anitra Walker (704) 810-7269; [anitra.walker@usda.gov](mailto:anitra.walker@usda.gov).

## FEDERAL NOXIOUS-WEED SEEDS

SRTD compiles the State Noxious-Weed Seed Requirements which lists the seeds that are considered noxious in each State and those considered noxious according to the Federal Seed Act. Below is a selection of seeds from the Federal list and descriptions of why these species are considered noxious. For the complete listing, visit the SRTD website: [All State Noxious Weed Seed List \(usda.gov\)](https://www.usda.gov/pestmanagement/seed/seed-requirements).

**Scientific Name:** *Emex australis*

**Common Name:** Southern Three Corner Jack, Doublegee

**Family:** Polygonaceae

*Emex australis* is an annual plant that is reproduced by seed. The seeds can remain viable for up to 10 years in soil. These thorny seeds can also stick to animals, humans, or even car tires to travel long distances. The seed can also float on water, which provides another means of dispersal. It is a weed found in annual crop fields, particularly grains, where it could compete for resources in the field.



*Emex australis* (Steve Hurst, USDA ARS)

**Scientific Name:** *Galega officinalis*

**Common Name:** Professor Weed, Goatsrue

**Family:** Fabaceae

*Galega officinalis* is a perennial herb that invades wet areas such as streambanks and low pastures. The plant forms dense shrubs and can be toxic to livestock. It grows very quickly, and a single plant can produce up to 15,000 seed pods in one year, with each pod containing approximately 9 seeds. The seed pods are often transported through waterways, allowing the species to spread.

*Galega officinalis* also has medicinal properties. Metformin, a drug for hypoglycemia, was derived from this species.



*Galega officinalis* (Steve Hurst, USDA ARS)

**Scientific Name:** *Heracleum mantegazzianum*  
**Common Name:** Giant Hogweed, Cartwheel-flower  
**Family:** Apiaceae

*Heracleum mantegazzianum* is a large perennial plant reaching up to 20 feet tall. The plant can take several years to flower, but once it does it will produce thousands of seeds. The sap of the plant is poisonous and when it touches a person's skin or eyes can cause large blisters or blindness. *Heracleum mantegazzianum* is also a threat to natural habitats due to its rapid growth and size.



*Heracleum mantegazzianum* (Steve Hurst, USDA ARS)

For more information regarding this article, contact Botanist Elizabeth Stewart (704) 810-8873; [elizabeth.stewart1@usda.gov](mailto:elizabeth.stewart1@usda.gov).

## References:

- Abbas, G., Al-Harrasi, A. S., & Hussain, H. (2017). Chapter 9 -  $\alpha$ -Glucosidase Enzyme Inhibitors From Natural Products. In G. Brahmachari (Ed.), *Discovery and Development of Antidiabetic Agents from Natural Products* (pp. 251–269). Elsevier.
- CABI (2022) 'Emex australis (Doublegee)', CABI Compendium. CABI International. Doi: 10.1079/cabicompendium.20826
- *Giant Hogweed*. (n.d.). NCDA&CS Plant Industry Division Plant Protection Services. <https://caldwell.ces.ncsu.edu/wp-content/uploads/2018/06/Giant-Hogweed-Pest-Alert.pdf?fwd=no>
- Hadfield, J., Ransom, C., & Zesiger, C. (2021, March 1). *Goatsrue (Galega officinalis) Identification and Management in Pastures and Croplands*. Utah State University Crops Resources Extension Crops. <https://extension.usu.edu/crops/research/goatsrue-identification-and-management-in-pastures-and-croplands>
- USDA, NRCS. 2023. PLANTS Database (<https://plants.sc.egov.usda.gov/>, 05/11/2023). National Plant Data Team, Greensboro, NC 27401-4901 USA.

## TRUENESS-TO-VARIETY OVERVIEW

SRTD is responsible for enforcing the Federal Seed Act (FSA), a truth-in-labeling law that regulates the labeling of agricultural and vegetable seed shipped in interstate commerce. Companies who mislabel seed are subject to civil penalties. The FSA requires that seed shipped in interstate commerce is labeled with the correct variety name. Seed samples for variety testing are received from State Departments of Agriculture under cooperative agreements with AMS or purchased from seed companies. The samples are grown in field plots and compared to control samples and/or official descriptions of the labeled variety.

SRTD will conduct Trueness-to-Variety field trials on tomatoes in the spring/summer of 2023 at the Piedmont Research Station in Salisbury, North Carolina, and carrots at Sandhills Research Station, Jackson Springs, North Carolina during the fall of 2023. Tomatoes will be grown in the SRTD greenhouse and later transplanted into the fields at the Piedmont Research Station for further testing and evaluation.

Additionally, SRTD will plant samples of tall fescue, perennial ryegrass, and annual ryegrass. SRTD will grow the grasses in the greenhouse during September and October 2023. The seedlings will then be transplanted in the fields during November 2023, for further evaluation in the spring of 2024. SRTD Plant Physiologist Yujia Wu has concurrently been conducting electrophoresis tests on Kentucky 31 tall fescue. The samples provided by the State have helped him create an electrophoresis test which verifies Kentucky 31 tall fescue. A research note about his procedure was published in the International Seed Testing Association's Journal 'Seed Science and Technology' in April 2023.

SRTD would like to thank the States that participated in the TTV program. Once results and information have been compiled, participating States will be notified of any mislabeling.

For more information regarding this article, contact Seed Marketing Specialist Alvin Allen (704) 810-8878; [alvin.allen@usda.gov](mailto:alvin.allen@usda.gov).

## THE FEDERAL SEED ACT AND SEED LIBRARIES

Seed libraries are commonly found in local county or city libraries. They are intended to be a way to trade seed within the community and encourage home gardening. While most seed from these libraries will be planted for flowers or food, some will be traded or donated. There are concerns that noxious-weed seeds could be unintentionally traded in seed libraires.

The Federal Seed Act (FSA) is directed towards seed that will be used to produce food, feed, fiber, or turf. The FSA also enforces State noxious-weed seed laws. Unfortunately, seed trade is one of the primary avenues for noxious-weed seed distribution around the world. Inadvertent noxious-weed seed contaminants in agricultural and vegetable seed lots are often planted with the target seed kind. Weed removal and crop yield loss cost American farmers hundreds of millions of dollars each year. This is a major concern at both the Federal and State level.

The Federal Seed Act does not have jurisdiction for seed traded within a State's border. Individuals looking to participate in seed trade through the use of seed libraries are urged

to contact their [state's seed control official](#) for specifics on how the State seed law will apply to their situation. In those rare instances where seed library samples are traded between states, seed library owners must ensure [Federal Seed Act regulations](#) are followed.

For more information regarding this article, contact SRTD Division Director Ernest Allen (704) 810-8884; [ernest.allen@usda.gov](mailto:ernest.allen@usda.gov).

## CALENDAR OF EVENTS

- Association of Official Seed Analyst/ Society of Commercial Seed Technologist Annual Meeting  
Saskatoon, Canada; *June 9-15, 2023*
- Organization for Economic Cooperation and Development Seed Schemes Annual Meeting  
Antalya, Turkey; *June 19-23, 2023*
- Association of American Seed Control Officials  
Lafayette, Indiana; *July 11-14, 2023*
- Seed Regulatory and Testing Division Seed School  
Gastonia, NC; *August 14-16, 2023*

---

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).

USDA is an equal opportunity provider, employer, and lender.