

# AG *newsletter*

April 2009

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## SPRING FIELD DAY & SPECIAL SESSION FOR CCAs SE IOWA RESEARCH FARM – JUNE 24

Certified Crop Advisors can obtain 5 hours of credit (including 3 hours of soil and water) by attending a special session in the morning followed by the afternoon tour at the ISU SE Iowa Research & Demonstration Farm near Crawfordsville on June 24. More details will be posted soon.

## DATES SET FOR SOYBEAN REQUEST FOR REFERENDUM



The U.S. Department of Agriculture has announced that it will offer soybean producers the opportunity to request a referendum on the Soybean Promotion and Research Order during the month of May at local Farm Service Agency offices.

To be eligible to participate, producers must certify and provide documentation that shows that they produced soybeans and paid an assessment on the soybeans during the period of Jan. 1, 2007, through Dec. 31, 2008. Beginning May 4, 2009, and continuing through May 29, 2009, producers may obtain a form by mail, fax, or in person from Farm Service Agency county offices.

During the same time period forms may also be obtained via the internet at [www.ams.usda.gov/lsmarketingprograms](http://www.ams.usda.gov/lsmarketingprograms). For additional information, contact your local Farm Service Agency office.

## CROP UPDATE LISTSERV

Iowa State University Extension provides timely electronic Crop Updates as conditions change and the season evolves. If you would like to be included in the listserv please send an email to [mohling@iastate.edu](mailto:mohling@iastate.edu) and in the subject line write “subscribe to crop updates”

# SOYBEAN SEED TREATMENT

X.B. Yang, Department of Plant Pathology

Seed treatment was not a major production issue ten years ago because less than 3 percent of soybean planted in Iowa used seed treatment. Now the number is more than 50 percent, according to a survey. Such changes are associated with changes in soybean production. Increased cost of seeds and early planting in spring may be driving forces for such changes.

It is no question that seed treatments can increase yield in fields where risk of seedling diseases are high, for example, growers in Ohio routinely use seed treatment to prevent *Phytophthora* damping off. Despite the greater demand for seed treatment today, it is unknown if the majority (50% or more) of Iowa soybean fields will see an economic return from treatments. This is because of lower seedling disease risk in Iowa compared to Ohio and because soybean plants have a greater ability to grow over a large gap. Assessing the risk of seedling diseases in particular fields before use of a seed treatment can provide the producer needed protection while reducing production cost.

## Why seed treatment

In Iowa, as well as elsewhere in the North Central Region, seed treatments are mainly to protect seedling from damping off by *Phytophthora* and *Pythium*. In some years *Rhizoctonia* and *Fusarium* can be production problems to a few growers, both neither create major problems.



## When to treat seeds or effectiveness of seed treatments

Because in most seasons seedling diseases are not a general problem and are unique problems to individual Iowa farmers, producers should selectively use seed treatments in order to reduce production cost. Below are specific cases where one should use treated seeds.

1. When seed quality is poor, such as last year. Seed treatment will not improve germination rate, but will protect further stand loss. Generally speaking, this year the seed quality has been good. Seed quality has not been an issue.
  2. Your fields have a history of severe damping off from *Phytophthora* or *Pythium* and the coming spring is wet. *Phytophthora* can cause damping off for some Iowa soybean producers, especially in southern Iowa. However, if spring is not wet, the disease will not be a problem. This also applies to *Pythium* when soybeans are planted early. *Pythium* is a cool temperature disease and is not a concern when soybean is planted later in May or after.
  3. Replanting. If replanting is needed, seed treatment is insurance for a good stand. The lack of stand establishment during germination is a sign of seedling disease in your field. Using seed treatment is a must. However, insects such as seed corn maggots sometimes cause seed rot. Make sure the lack of soybean stand is from disease, not insect when you replant.
  4. Early planting. Early planting, planting before May, is not a reason in itself for seed treatment. When soybean is planted earlier, the soil is cool and seedling diseases *Pythium* and *Fusarium* occur in cool soils. Past surveys of these diseases indicate *Fusarium* only accounts for about 10 percent of seedling disease problems in Iowa.
- Finally, many seed treatment has multiple packaging which includes insecticide such as Cruiser. Seed treatment with insecticide will not help aphid control, but it may reduce first generation of bean leaf beetles if the insect is a concern in your production.

# PRESSURE CANNER TESTING DATES

Pressure canners with a dial-type pressure gauge should be tested each year for accuracy. Washington Co. Extension will be offering testing of dial gauge pressure canners. Following are the dates and times this service will be offered during the summer of 2009.

June 2 (Tuesday) or June 16 (Tuesday) - Washington County Extension Office, 2223 250th St., Washington, 8:00 am to 4:30 p.m. Phone 319-653-4811 Lids will be left at the office for testing later that week. Testing is free of charge during these two weeks.

To have a dial-gauge canner tested, **bring the canner lid only**--the entire canner is not needed. The pressure gauge and all vents and openings in the lid will be checked for proper functioning. It is not necessary to test weighted or rocker-type pressure regulators because they cannot be adjusted and will usually remain accurate. If you are unavailable at the scheduled time but would like a canner lid tested, you may bring the lid to the office for testing however there will be a charge of \$5. **For additional information about canning, call Washington Co. Extension at 319-653-4811**

## CONSULTANTS NOW REQUIRED FOR AERIAL PESTICIDE APPLICATORS

Kristine J. P. Schaefer, Pest Management/ Environment

There continues to be changes regarding pesticide application in Iowa. The April 5 ICM News article discussed changes in pesticide record-keeping requirements and the Iowa Bee Rule. Today's article addresses an additional requirement concerning aerial application of pesticides. All of these changes were initiated by the Iowa Department of Agriculture and Land Stewardship (IDALS) and went through a public comment period before becoming part of the Iowa Administrative Code. IDALS is responsible for writing and enforcing all amendments to the Iowa Administrative Code. The role of the Pest Management and the Environment program at Iowa State University is to communicate changes and updates to pesticide applicators throughout the state. The new aerial applicator changes are described below.

An aerial applicator, applying pesticides to agricultural land, can now only operate in Iowa in cooperation with an "aerial applicator consultant." An aerial applicator consultant coordinates the commercial application of pesticides by aerial applicators. The consultant must be a resident of Iowa; hold a certification in Category 11, Aerial Application; and either a valid commercial applicator license or pesticide dealer license.

An aerial applicator consultant has a variety of responsibilities and requirements they must comply with. A partial list of the responsibilities includes:

- Meet with aerial applicators prior to pesticide applications to verify compliance with Iowa's pesticide rules, the requirements of the Federal Aviation Administration, and the Iowa department of transportation
- Provide detailed aerial maps of application location
- Maintain daily communication with aerial applicator during pesticide applications and daily oversight of pesticide handlers' activities
- Provide information regarding sensitive areas and apiaries
- Provide instructions for proper emergency response procedures in the case of a pesticide spill or accident

This change is part of amendments to Chapter 45, "Pesticides," of the Iowa Administrative Code. The amendments, effective Feb. 1, 2009, outline the requirements, qualifications and duties of the aerial applicator consultant; the procedures for aerial application; and the license, certification, and continuing instruction requirements for aerial applicators operating in Iowa.

A full description of the amendments can be found in [Chapter 45, pages 13-15, of the Iowa Administrative Code](#). IDALS has prepared checklists for aerial applicator consultants and for aerial application jobs. Copies of the [checklists are available at the IDALS website](#). Please contact IDALS, Pesticide Bureau, at 515 281-8591 for additional information.

## 2009 MEAT & BOAR GOAT EXTRAVAGANZA

**2009 Meat and Boer Goat Extravaganza** will be held **June 6<sup>th</sup>** at the **Kalona Sales Barn, Inc.**, Kalona, Iowa. Registration and check-in begin at 8:30 AM and the program at 9:00 AM. Registration deadline is May 29. Cost per adult is \$20 and per 4H, FFA and Youth is \$10. The cost includes lunch. Walk-ins are welcome.

The Goat Extravaganza will host nationally known Beth Mason, ABGA Judge. Dr. Janet Sears, Farm and Family Veterinary Clinics, Brooklyn, Iowa, will join Beth on the program to cover goat health and husbandry techniques. Janet is an Iowa native and 1995 graduate of Iowa State University College of Veterinary Medicine. From 1995 to 2000 Dr. Sears served as a relief veterinarian for the eastern half of Iowa's mixed animal practices. In 2000 she joined Brooklyn Monte Vet Clinic as an owner-partner. She is currently an owner-partner in Farm and Family Veterinary Clinics located in Montezuma, Brooklyn and Victor. For more information contact Susan Thorp, Secretary, Tall Corn Meat Goat Wether Association, Inc. at 641-660-1388 or e-mail [NeverThorp@aol.com](mailto:NeverThorp@aol.com).



## PLANTING RESTRICTIONS FOLLOWING 2,4-D APPLICATIONS

By Bob Hartzler, Department of Agronomy

Weeds present at planting time in no-till fields are commonly controlled by adding 2,4-D to glyphosate. Its use broadens the spectrum of weeds controlled, provides more consistent control during cool weather, and reduces selection pressure for glyphosate resistance compared to glyphosate only. The primary disadvantages of including 2,4-D are the added cost and the potential for crop injury.

Crop injury risk is minimized by following the planting delays stated on product labels. Ester formulations are recommended over amine formulations for pre-plant applications, due to a slightly shorter half-life and less mobility in the soil profile. Planting seed at the proper depth and ensuring closure of the seed furrow also is important in managing risks.

The restrictions regarding corn planting are based solely on injury risk and vary among manufacturers. For soybean, the restriction is based on both injury risk and residue tolerance, therefore they are uniform on all products.

**Planting restrictions following pre-plant applications of 2,4-D.** (Rates are based on products containing 4 lb a.i. per gallon.)

**Soybean:** 2,4-D ester—7 days following 1 pt; 30 days following 1-2 pt; 2,4-D amine—15 days following 1pt; 30 days following 1-2 pt

**Corn:** 2,4-D ester or amine: 7 days following 1 pt 4 lb/gal; 14 days following 1-2 .

## MANAGING POISON HEMLOCK IN NO-TILL

By Bob

Hartzler & Mike Owen, Department of Agronomy

Poison hemlock, a biennial in the carrot family (Apiaceae), is becoming more common in crop fields as no-till acres increase. Infestations typically start in fencerows or other less-intensively managed areas and creep into production fields. Like other biennial weeds, its tolerance to control tactics increase rapidly as the plant moves from a vegetative rosette to reproductive stages in early spring.

The simplest method of controlling poison hemlock is to eliminate seed sources in areas adjacent to the field. Fall applications of 2,4-D + dicamba are highly effective against the plant. Applications to these areas can be made following corn or soybean harvest, and infested areas of crop fields should be treated at the same time.



Poison hemlock will not be controlled consistently by the standard burn down program of glyphosate + 0.5 lb/A 2,4-D LVE (1 pt 4 lb a.e./gal). Increasing the rate of 2,4-D LVE to 1 lb will improve control, but this requires a 15 day planting interval for soybean and 7 to 14 day interval for corn.

Alternatives to the standard glyphosate +2,4-D burn down treatment include dicamba (14 day planting interval is required before planting soybean following an 8 oz application of Clarity) or Basis (corn only). Field observations suggest that mesotrione (Callisto, Lumax, etc.) has activity on poison hemlock, but we are unaware of any research documenting this product's effectiveness on poison hemlock.

In summary, poison hemlock in no-till fields may have reached a stage where consistent control will not be achieved by any registered treatment. However, the competitiveness of the weed should be greatly reduced with a traditional burn down herbicide followed by an early post emergence application of glyphosate, dicamba, Ignite or Callisto. In future years, targeting seed sources of poison hemlock in areas adjacent to the field and making applications in the fall or early spring will minimize problems with this weed.

# EARLY PLANTING AND SOYBEAN DISEASE CONSIDERATIONS

by XB Yang, Department of Plant Pathology

Blessed by good weather, crop planting in Iowa has begun smoothly. During the April 20 crop teleconference, Extension field agronomists reported good progress of corn planting and some soybean plantings before April 20 around Iowa. With the current weather outlook favorable for spring planting, many soybean fields are likely to be planted early (before the end of the first week of May).

While early planting increases our chance for maximum yield, we should also keep in mind that the risk of some soybean diseases is associated with early planting. Sudden death syndrome is one of them.

## Sudden Death Syndrome

In 2007, sudden death syndrome was wide spread in Iowa. Many of those infested fields will return to soybean after being rotated with corn last year. Early planting in these fields will likely have a higher risk of SDS.

New research data suggests that the critical stage for the SDS pathogen to infect soybean plants is before emergence of the germinated seed. Infections occurring at early growth stages are more likely to produce foliar symptoms late in the summer. Soybeans planted early in cool soil have slow germination and emergence, which prolongs the contact period between pathogen and soybean, promoting infection. Plant pathology literature and our experience suggest that in a growing season with regular levels of soil moisture, the earlier the planting the higher the disease risk. Research in Missouri proved that the disease is more severe in fields planted in early spring.

My experience in Iowa is that soybean fields showing severe defoliation in summer and early fall were likely planted before the end of the first week of May. Rarely, there are cases of severe SDS in fields planted after May 15. If you have fields with a high SDS risk, consider making a planting route in which fields that had SDS in 2007 would be planted last. Such a plan will avoid very early planting and reduce the risk of disease re-occurrence.

## White Mold

White mold is another disease that should be kept in mind when moving soybean fields for an early planting – although white mold is more prevalent in even years. Early planted soybean fields tend to have a denser canopy, which encourages white mold occurrence, especially in fields that have had white mold in the past.

White mold management to a large degree is canopy management. Besides managing canopy density, one could also use varieties resistant to white mold. Over the years there have been many varieties developed with good resistance to white mold. If you plan to plant early in a field that has had white mold within the last four years (even if it hasn't been in soybeans every year) use a seed variety that is resistant to this disease.



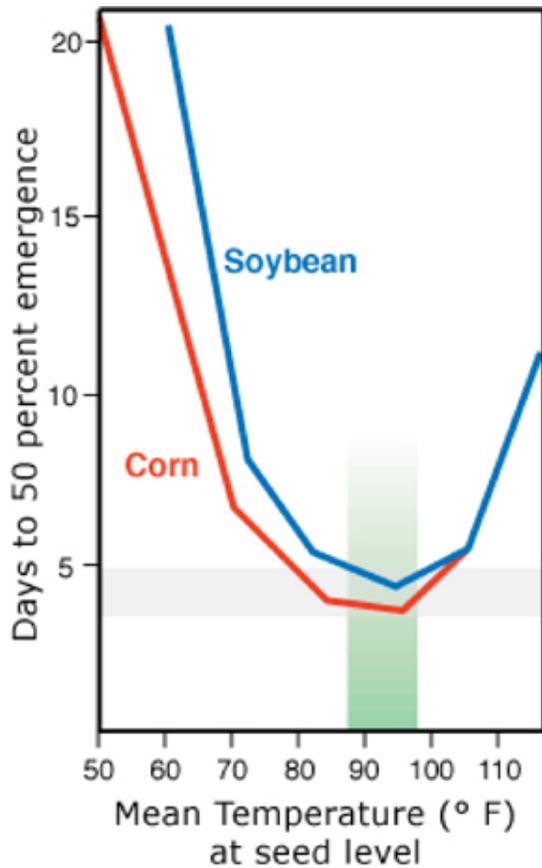
# FORAGE/BEDDING PRICES

Recent auctions in east central and southeast Iowa have resulted in the following forage/bedding prices:

**Walcott** (EC IA) 2nd Sat Dec-Mar; Noon Feb 14 09 Sale Alfalfa: (SmSq \$165-185/T; (LgSq \$120/T Jan); LgRd \$125-160/T Feb) Mixed: (SmSq \$180-200/T; LgSq \$205/T; LgRd \$95-145/T Feb) Grass: (SmSq \$105-125/T; LgSq \$80/T; (LgRd \$100-120/T Jan) Feb\_ Straw: (SmSq \$-3.00/bale Feb) Cornstalks: (LgRd \$40/T Jan) **Keosauqua** (SE IA) Sat 11:30A Alfalfa: SmSq \$2.25-3.25/bale Grass : SmSq \$1.75-2.50/bale Straw: SmSq \$2.00-2.50/bale **Kalona** (SE IA) 1st Thurs, Year-round 11:30AM (& 3rd Thurs Oct-winter) Alfalfa" SmSq \$4.10-5.20/bale; LgSq \$32-54/b, \$97.50-155/T; LgRd \$38-54/b Mixed Leg/Gr: (LgRd \$49-72.50/bale Feb) Grass: SmSq \$4.10/bale; LgRd \$26-34/bale Cornstalks (LgRd \$35-39/bale Feb)

# TAKE NOTE OF SOIL TEMPERATURE by Elwynn Taylor, Department of Agronomy

Taylor, Department of Agronomy



Soil temperature is important in all seasons, but especially so in the spring as crop emergence takes center stage. Corn seed planted in soil at 50 degrees F requires about 21 days to emerge. Only seven days elapse from planting to emergence when the soil temperature is 70 degrees.

Insects, earthworms, weeds and the micro-organisms that influence the fate of nitrogen in our fields are directly impacted by soil temperature. Central Iowa soil temperature in late April is normally 47 to 62 degrees; the long term average is 57 degrees F. The cooling of soils in the third week of April this year appears to be of brief duration and will not likely result in serious setbacks or direct damage to seed already in the soil. [Current soil temperatures](http://extension.agron.iastate.edu/NPKnowledge/) for the past three days, is available by county at <http://extension.agron.iastate.edu/NPKnowledge/>

Risk oriented?

Want to know what the chance is that soil temperatures will be 50 degrees F or less on Oct. 24? (In Ames, it is 100 percent.) Wondering what's the chance of soil temperature falling below 50 degrees F on May 5? (In Ames, it is 29 percent or about one year in five.) Use the following site at <http://mesonet.agron.iastate.edu/agclimate/soilt-prob.php> to calculate soil temperature risks for your area.

Temperature and the days to crop emergence.

# ALFALFA WEEVIL HATCH IS UPON US

by Rich Pope, Corn and Soybean Initiative and Jon Tollefson, Department of Entomology

The map below indicates the accumulated degree days for each of the nine Iowa crop reporting districts. Degree-day information indicates that alfalfa weevil larvae should be hatching this week in southern Iowa. In central Iowa counties, weevils should be hatching by the third week of April; and in northern Iowa, weevils should hatch the last full week of April. That means that fields in southern Iowa should be scouted now.



Figure 1. Projected degree days (base 48 °F), Jan. 1 through April 15, 2009 and predicted hatch date.

Scouting should begin at approximately 200 degree days in fields south of I-80, and 250 degree days in fields to the north. Begin scouting in a respective district based on the projected hatching dates. Scouting should start on south-facing hillsides where larvae will hatch first. These areas warm up more quickly than north-facing hillsides.

Management of alfalfa weevil depends upon proper identification, timely scouting to determine populations, and if needed, early cutting or spraying with an insecticide. These larvae can cause significant damage to first-cutting alfalfa, so fields should be scouted.

Larvae remove leaf tissue, beginning with the new leaves at the top of the plant, then work down the stem to other leaves. This feeding reduces forage quality and quantity.

**Identification**



Alfalfa weevil larvae can be recognized by a very dark head, which is almost black, and a pale green body with a white stripe along the back. When the larvae hatch, they are approximately 1/16 inch in length and may be light yellow in color. After feeding for several days, they turn green. They are 5/16 inch in length when fully grown.

Alfalfa Weevil Larva (Image 1) Clover leaf weevil larva (Image 2)

**Table 2. Insecticides labeled for alfalfa weevil**

Insecticide	Rate per Acre (High and Low Rates)	Harvest Interval (Days)
Baythroid 2 E	1.6-2.8 ounces	7
Furadan 4 F	0.5-2 pints	7-28
Lannate LV	3 pints	0
Lorsban 4 E	1-2 pints	14-21
Mustang Max	2.24-4.0 ounces	3
Pounce 3.2 EC	4-8 ounces	0-14
Sevin XLR+	3 pints	7
Warrior	2.56-3.84 ounces	7

Alfalfa weevil larvae (Image 1) may be confused with larvae of the clover leaf weevil (Image 2). Clover leaf weevil are much larger, have a light brown head, and often have the white stripe edged with pink. Clover leaf weevil larvae usually hide around the base of the plant during the day, feed mostly in lower leaves at night, and rarely cause economic yield losses. Clover leaf weevil larvae should not be counted as part of the alfalfa weevil sample.

The economic threshold depends on crop height, estimated crop value, control costs and the growing conditions.

## HOW TO TAP PRODUCER GRANTS

If you’ve got a dynamite idea for new value-added farm products, your nearest USDA office may have money for you from a new round of Value-added Producer Grant (VAPG) funding. Even at a time of tight federal budgets, past VAPG successes make it likely that Congress will continue to add to more than \$137 million already passed out since the program was launched by the 2002 Farm Bill. In an *AgMRC Renewable Energy Newsletter* article, Kansas State’s Michael Boland, John Crespi and Dustin Oswald provide tips on getting VAPG funding which can be up to \$500,000 per project, with a \$153,576 average. They point out that the grants can be used to subsidize the development and marketing of value-added agricultural products, expand a value-added business, and provide working capital. Among other tips:

- “Grants that added value to fluid milk, cut flowers, tree fruit, tree nuts, specialty meats, wheat and wine were found to result in a greater likelihood of VAPG success.”
- “. . . inexpensive corn in Iowa and southern Minnesota is likely to lead to greater opportunities to add value to corn through corn sweetener plants or ethanol plants.”
- Larger, vertically integrated operations with greater access to market intelligence “are more likely to achieve business success.”

For the full article which includes a breakdown of VAPG grants by state, visit the [Agricultural Marketing Resource Center](http://www.agmrc.org/) (AgMRC), a virtual value-added agriculture center operated by Iowa State University and partially funded by the U.S. Department of Agriculture (USDA), at: <http://www.agmrc.org/>.

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# Extension Ag Newsletter May 2009

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