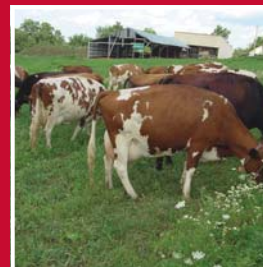


# FIELD & FEEDLOT



ISU EXTENSION—NORTHWEST REGIONS

MARCH 2010 ISSUE

## Extension Web Sites

### Ag Decision Maker

<http://www.extension.iastate.edu/agdm/>

### Beef Center

<http://www.iowabeefcenter.org/>

### Manure Management

<http://www.agronext.iastate.edu/immag/>

### Pork Center

<http://www.ipic.iastate.edu/>

### ISU Extension Dairy Team

<http://www.extension.iastate.edu/DairyTeam/>

## Asian Soybean Rust Update

*By Paul Kassel, ISU Extension Field Agronomist*

Asian soybean rust (ASR) was first discovered in the United States in November of 2004. Nearly every aspect of crop production reacted to this discovery – with some positive benefits as well as some negative benefits.

Some positive benefits of the ASR discovery:

- Farmers and ag professionals learned about foliar fungicides.
- Soybean disease identification skills were increased.
- Several fungicides were granted emergency exemption status for the management of ASR.
- Farmers and dealers upgraded spray application equipment.
- Knowledge of fungicide use was increased.
- Education and knowledge of leaf diseases were increased.

Some negative effects of ASR discovery:

- Some farmers and dealers overreacted to the ASR discovery – and stockpiled fungicides that were not used for several years.
- Information on ASR was often inaccurate and contributed to some overreaction to the problem.

University, commodity groups, government and industry cooperated to develop a system of spore traps and sentinel plots. This system of spore traps and sentinel plots has created an information system that can inform farmers and agribusiness of ASR movement.

So what has happened recently in the area of ASR? Daren Mueller – who is an ISU Extension Plant Pathologist, has some thoughts on ASR in 2009.

Soybean rust did not make it to Iowa in 2009, but as Mueller says, it was not for a lack of trying. Asian rust was found early in Louisiana and there were high levels of ASR spores in the South. Both of these factors are necessary for ASR to develop in Iowa.

So, why didn't it get to Iowa in 2009? There was nearly a seven month time lag between when the ASR was initially found in Louisiana and it was found in soybean fields during the growing season. Logically the early detection in Louisiana should have been a concern to Iowa growers. However, as Mueller noted, it likely has to do with the low levels of inoculum (amounts of ASR spores) during the early summer. Therefore the disease took a long time to get established.

However, Mueller notes that the disease really expanded in the South in early August. A total of 575 counties had ASR in 2009. That included most of the counties in Arkansas, Louisiana, Mississippi, Alabama and Georgia. A total of 16 states had ASR in 2009 and included southern Illinois.

The recent cool weather (and snow) in the Deep South will likely limit the ability of ASR overwinter on a widespread basis. Therefore, Asian soybean rust may suffer a setback in 2010 in the United States. See <http://sbr.ipmpipe.org/cgi-bin/sbr/public.cgi> for more information.

## Check Your Corn Now!

*By Kris Kohl, ISU Extension Ag Engineer Program Specialist*

This winter has been one of the worst on record. My phone calls indicate that corn may be going out of condition at a rate of ten times above normal. Stories include:

- Two feet of snow blowing into the bins
- Fines creating hot spots
- Frost cutting off the airflow at night
- Snow plugging the plenums
- Mold growth in the fines in fairly dry corn

When corn starts to spoil, a spot the size of a basketball can spoil an entire bin regardless of the size of the bin. The spoiling process will produce two and a half pounds of water for each pound of corn that spoils, turning a problem spot into a chain reaction that explodes like an atomic bomb. The problem spots are often filled with fines that prevent the air flow. So getting them cooled down is very difficult once the problem starts.

Because of the problems we are already experiencing, I am recommending that producers check their bins once a week until the 2009 crop is sold or fed. Check the bins by walking inside them and reaching into the grain, especially on the northeast side of the bin. Smell the first stale air when the fan is turned on, especially near the center of the bin. Musty odors indicate a problem that needs to be dealt with, while a sour smell indicates a big problem.

Be sure that the bins have been cored to remove the fines and that the cone it produces is round. Off center cones indicate a lump of fines that need to be removed.

If there is corn that is still above 18%, start the natural drying fans by about March 15<sup>th</sup> when the high temperatures are getting up to 40 degrees. All corn over fifteen percent should be dried below fifteen percent by starting the drying fans by April 1st. Leave them running until the top is testing below fifteen percent. Then run aeration fans at night, cooling the corn below 40 degrees, to maintain storage until sold or fed.

## Sow Tracker—Swine Reproductive Data Management Software

*Article written by Iowa Pork Industry Center, Iowa State University Extension*

*Submitted by Dave Stender, ISU Extension Swine Program Specialist*

This entry level software is designed to assist the swine producer in managing the breeding, farrowing and weaning aspects of their swine production program. It has the capability of converting data from some popular reproductive data management software applications. There are more than fourteen reproductive data management reports that can be used by the producer to assist them in management of their swine farrowing operation, such as a farrowing report, sow management lists, boar use and more. Pricing is a onetime fee.

Data entry is done through a drop down menu system. Adding new sows is easy and adding or editing reproductive events is done in full view of the sows' full reproductive history. All basic events, such as entry, mating, pregnancy check, group ID, location ID, farrow, foster, pig death, wean, part wean, nurse on, nurse off and sow removal are included. Also, a dictionary with user defined categories for genetics, abortion reasons, death reasons, treatments, mating types and origins is included. Users are able to print off sow cards for use in farrowing barn and breeding.

The software has been developed by Dr. John Mabry for the Iowa Pork Industry Center. For more information contact Dave Stender, ISU Extension Swine Field Specialist at (712) 261-0225.

You can find more information regarding this software on the web at: [www.ipic.iastate.edu](http://www.ipic.iastate.edu).

## Producers Should Consider Frost Seeding or Interseeding Pastures in the Spring

*By Stephen K. Barnhart, ISU Extension Forage Agronomist*

Producers wanting to add to or improve the forage species in their existing pastures should consider using either the frost-seeding method in February and early March, or interseeding later in the spring months.

Frost seeding involves spreading forage seed on existing pastures during the late winter or very early spring while the ground is still frozen. Freeze-thaw cycles then provide shallow coverage of the seed, with help from early spring rains.

Frost seeding is the easiest method producers have to add new forage legumes or grasses to their pasture, and is likely the least expensive method as well.

To increase this method's success, one should spread seed on the thinnest pasture sod areas first and on areas where bare soil has been exposed due to heavy grazing or disturbance.

One common misconception about frost seeding is that spreading the seed on top of snow works best. The goal of frost seeding is to get seed on bare soil. This is more effectively and more safely done without snow cover.

Red clover has been the forage species of choice in Iowa for frost seeding. Other legumes, such as white clover and birds-foot trefoil, also can be frost seeded but with less success than red clover. In general, frost seeding does not work as well with grasses.

Research has found that following a few steps will improve the success of frost seeding. See Iowa State University Extension bulletin *Improving Pasture by Frost Seeding* for more suggested seeding rates and guidelines - <http://www.extension.iastate.edu/Publications/PM856.pdf>.

Interseeding offers an opportunity for improving pasture productivity too. Interseeding involves using a no-till drill to aid in the incorporation of a legume or a more productive grass into an existing pasture sod. Interseeding is normally done from mid-March through early May, when soil moisture and temperature are more suitable for rapid seedling establishment.

Interseeding can be accomplished with relatively few field operations. Opening of the grass sod, shallow seed placement, and seed coverage are required. A number of drills are available that can be used in sod-seeding efforts. Some of these drills may have improved features related to sod penetration, depth control, seed metering, or coverage that improves their effectiveness in sod seeding situations. Equipment limitations for sod seeding implements sometimes are overcome by operator experience and home shop modifications.

Legumes interseeded into grass sod should increase pasture yield, improve forage quality, and eliminate or minimize need for nitrogen fertilizer. Clovers, alfalfa, and birdsfoot trefoil have been successfully interseeded. The more efficient seed placement provided by a no-till drill allows many of our more productive perennial forage grasses to also be successfully established by interseeding. Thin, low-producing, grass sod might best be improved by interseeding a grass-legume mixture.

A seeding delay into late spring to improve growing conditions often also leads to a greater competition from the existing grass sod. Close grazing in the fall or spring, ahead of interseeding, will help to reduce sod competition. Contact herbicides are sometimes also used to temporarily further reduce competition from plants present in the stand.

Interseeding success depends a lot on paying attention to details, timeliness, careful management of sod competition, controlling seeding depth to no deeper than ¼ to ½ inch, and a little bit of luck with weather.

Interseeding research has been conducted in many parts of the U.S. and around the world. It shouldn't come as a surprise that the conclusions from these efforts all point to several very important issues that must be met for successful interseedings. See Iowa State University Extension bulletin *Interseeding and No-Till Pasture Renovation* for more suggested seeding rates and guidelines - <http://www.extension.iastate.edu/Publications/PM1097.pdf>.

For more information, contact Stephen K. Barnhart, ISU Extension Forage Agronomist, phone 515-294-7835 or [sbarnhar@iastate.edu](mailto:sbarnhar@iastate.edu).

## 2010 Iowa Farm Custom Rate Survey Released

By Tom Olsen, ISU Extension Farm Management Program Specialist

The annually updated custom rate survey is now available. It can be found at ISU Extension's, *Ag Decision Maker* - <http://www.extension.iastate.edu/agdm/crops/html/a3-10.html>. A printed copy will also be available at any ISU County Extension Office.

### Steady to Higher

In general, the custom rates are slightly higher for individual tillage practices showing 1-2% increases over 2009. Combining

charges are nearly steady with corn combining up slightly with an average of \$29.70/acre, and soybean combining the same at \$28.70/acre for the average response. These rates include fuel and operator labor. The fuel was calculated at \$2.25 per gallon. In past years, fuel surcharges have been used when diesel fuel prices have risen extraordinarily.

Custom farming rates are up a bit with custom corn averaging \$102.40 per acre and soybeans at \$91.05 per acre. This includes tillage, planting, pest control, and harvesting.

Tractor rental is still averaging \$.20/horsepower/hour. In general, machinery rentals are steady. These do not include the tractor, labor, or fuel.

### Notable Changes

Scanning the Miscellaneous Services section yielded some interesting changes. It appears the higher labor, perhaps more detestable, jobs have jumped quite a bit. For example, power-washing is up \$6.50/per hour to \$39.80 and chain-sawing is up \$6.60 per hour to \$37.70 on the average. Even post-hole digging is up \$.70 per hole to \$4.30.

Maybe as a result of the last three months of winter, removing snow with a loader is now surveyed at an average of \$74.50/hour, up \$2.90.

Farm labor wages are down a fraction averaging from \$11.70 to \$12.80 per hour.

The Custom Rate Survey is not perfect, but it is a good starting point to negotiate a local, individual custom rate.

“The values reported on the survey are simply the average of all the responses received for each category. The range of the highest and lowest responses received is also reported. These values are intended only as a guide. There are many reasons why the rate charged in a particular situation should be above or below the average. These include the timeliness with which operations are performed, quality and special features of the machine, operator skill, size and shape of fields, number of acres contracted, and the condition of the crop for harvesting. The availability of custom operators in a given area will also affect rates. “ ....*William Edwards ISUE*

Included in the survey is a small worksheet for calculating a machinery rental rate when the tractor and labor are not included.

When determining a custom rate that is not captured by the survey, or as a means to analyze whether rates cover all costs, further help can be found at *Estimating Machinery Costs*, a bulletin and spreadsheet at the *Ag Decision Maker*, <http://www.extension.iastate.edu/agdm/crops/html/a3-29.html>.

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