

Wisconsin Crop Manager

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Wisconsin Fertilizer, Aglime & Pest Management Conference and Trade Show [Register Now!](#)

January 15-17, 2008
Alliant Energy Center, Madison, Wisconsin

Conference Highlights based on recent emails between Carrie Laboski and Chris Boerboom, conference coordinators.

Carrie,

You've done a fantastic job coordinating the Wisconsin Fertilizer, Aglime, and Pest Management Conference again this year. The program looks like a winner, especially the first day's focus on water. Great for CCAs looking for soil and

water credits. After all, you know what Ben Franklin said, "When the well's dry, we know the worth of water."

~ Boerboom

Chris,

You wouldn't have known that quote without an internet connection, but yes, Tuesday should be an interesting look at ag and water issues. Since you're into quotes, try this on for size, "All the water that will ever be, is right now." (*National Geographic*). Seriously, water is an important resource in Wisconsin. Even though Wisconsin averages 32 inches of precipitation, only 6 to 10 inches become groundwater, but we use millions of gallons. Actually, people use even more than cows – 56 gallons/day/person vs 45 gallons/day/cow.

~ Laboski

Carrie,

Yes, you're great with the facts and figures. You have me beat there. Do you think anyone has noticed that these emails are a shameless rip off of CropLife's Lucas and Schrimpf column? Since we're this far into this stunt, we might as well keep going. Are there any other conference highlights you want to promo?

~ Boerboom

Chris,

Really, there should be something at the conference for everyone: special speakers on starter fertilizer, insect resistance management, bioenergy/natural resources, crisis response, a new traits panel, etc., etc. CCA folks can earn 13.5 hours of credits and still have ample time to visit the trade show.

~ Laboski

Carrie,

One new wrinkle for the conference that might interest people is the review and exam session for recertifying applicators on Wednesday morning. Applicators could come to the conference early, recertify, and take the rest of the day to catch some sessions or buy a new spray rig. Maybe I should see about getting one to spray my test plots.

~ Boerboom

Chris,

Don't get excited, you can't afford any of those. Back to business, another couple special sessions are for new SNAP-Plus users or those looking for updates. Pre-registration is required for these sessions and the recertification session, but there's no extra fee.

~ Laboski

Carrie,

OK, I think we made all the main points. The opening session is a hot topic for Wisconsin, the next 2 days are packed with current issues, options for a couple special sessions, but yet plenty of time to visit the trade show. Only one question left, do you think they will print this?

~ Boerboom

Not likely.

~ Laboski

Download the entire conferece brochure and schedule >>> [AgLime2008AdvancedProgram.pdf](#)

CCA Pre-Test Training Session December 13-14, 2007

Bryan Jensen, IPM Program

The CCA Pre-Test Training Session, sponsored by UW-Extension, Wisconsin Fertilizer and Chemical Association and the IPM Program will be offered at the Crowne Plaza, Madison on December 13-14, 2007. This training session is designed to help participants understand the principles necessary to become a quality crop advisor and to assist in preparation for the state CCA exam. It is not a crash course designed to cover specific information necessary to pass the state CCA exam. However, it will cover some of the state performance objectives and will assist students by giving better direction for independent study.

Registration is on a first-come, first-served basis. The fee is \$150/person and which covers the cost of instruction, lunches, handouts and other costs associated with the course. Because handouts must be ordered and/or printed in sufficient quantities, registration by November 30 will be appreciated. Registrations after the November 30 deadline will be subject to materials on hand and we cannot guarantee handout availability. To register, make checks payable to WFCA (sorry credit cards cannot be accepted). Include your name, company affiliation, address, daytime phone number and email address. Send registration information and check to Bryan Jensen, Dept. of Entomology, 1630 Linden Dr., Madison, WI 53706. For more information please contact Bryan Jensen at 608-263-4073, bmjense1@facstaff.wisc.edu

Download the brochure here >>> [cca-2008a.pdf](#)

IPM Field Scout Training Class January 7-11, 2008

Bryan Jensen, IPM Program

The Madison Field Scout Training Classes will be held January 7-11, 2008. This course is designed to provide the skills necessary for proper pest identification, crop scouting techniques and can help people prepare for the CCA exam. In addition, basic information such as crop growth and development, pest life cycle, damage symptoms and economic thresholds will be covered.

Pest control recommendations, although may be discussed, will not be highlighted during this course. Crops covered will include, corn, alfalfa, soybean and wheat. CCA credits will be applied for.

Non-student registration fee is \$200/person. To register for the IPM Scout School, make checks payable to University of Wisconsin-Madison and send to CALS Conference Services, 620 Babcock Dr., Madison, WI 53706.

For more information on this course please contact Bryan Jensen at: Dept. of Entomology, 1630 Linden Dr., Madison, WI 53706. (608) 263-4073, bmjense1@facstaff.wisc.edu

Download the schedule >>> [mad-FST-schedule.pdf](#)

Revised Soil Testing Basics Publication Now Available

Scott Sturgul – Nutrient & Pest Management Program

The popular publication *Soil Testing Basics* has recently been revised by the Nutrient and Pest Management (NPM) Program. *Soil Testing Basics* is a useful one-page reference resource for individuals involved in nutrient management planning.

This publication includes information on why, when, and how to collect soil samples, as well as information on how to complete the soil information sheet that should accompany any samples sent to a lab. An example of a soil test report, along with guidance on how to read it, is also contained in the publication. This revision explains all changes that have been made to the soil information sheet and soil test report formats over the past years.

Thank you to the Wisconsin CCA Board for their financial support in the reprinting of this publication. Look for the revised *Soil Testing Basics* in the upcoming Soil, Water, and Nutrient Management Meetings packet. Additional copies are available by contacting the NPM Program at 608-265-2660 or npm@hort.wisc.edu.

The publication is also available for viewing and downloading at <http://ipcm.wisc.edu/Publications/> Then click on "New Publications" in the left column box.

Manage traffic on wet soils to limit soil compaction

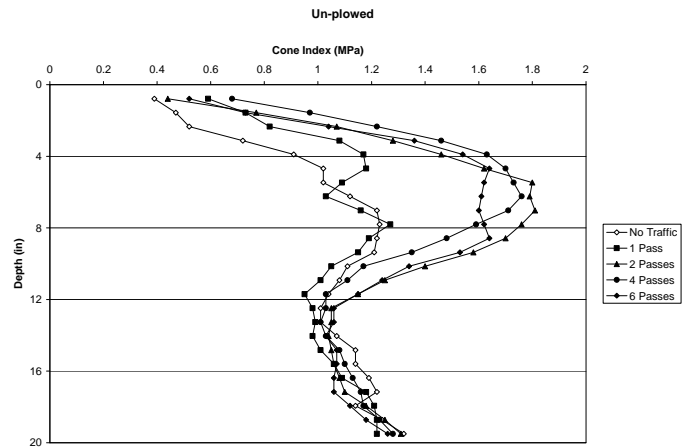
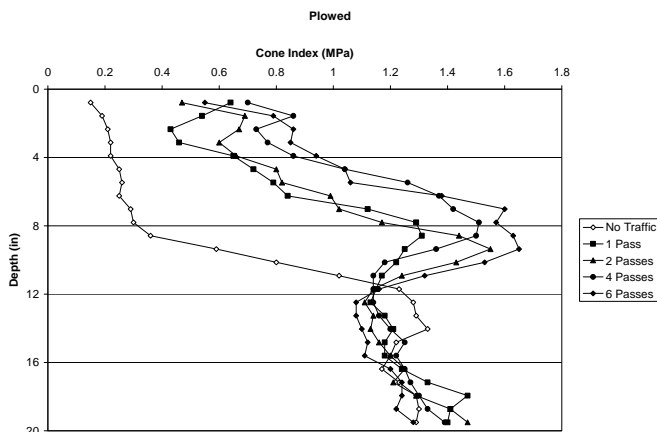
Dick Wolkowski, Extension Soil Scientist

The forecast shows another week of rainy weather and farmers are probably getting nervous about finishing up harvesting and conducting other fall field operations such as manure application. Soils are at or near their field capacity water content, which is the point where maximum compaction is possible. The easy, armchair quarterback advice is to stay off these wet soils, but in reality that may not happen. So how much compaction really may occur when heavy equipment is driven on wet soils? Does it make sense to confine needed traffic to the same tracks? A recent evaluation was conducted at the Arlington Agricultural Research Station on a Plano silt loam soil to examine these questions.

The figures below show the results of a study last month where penetration resistance was measured after driving a large combine in multiple passes on a wet soil that was unplowed or recently chisel plowed. The field was in winter wheat stubble that had been no-till planted in the fall of 2006 into corn silage residue. Each point represents the average of six measurements that were taken in the center of the combine wheeltrack. The results are predictable. The soil that was plowed showed increased penetration resistance with succeeding passes. The soil that was unplowed appeared to handle one pass, but multiple passes increased resistance. These data show that up to 70 – 80% of the compaction occurred in the first pass over the field. Clearly important decisions need to be made where and when to drive on a field if compaction is to be avoided.

The best advice continues to be the admonition to stay off wet soils. Even a few hours of sun and wind will cause some drying that can substantially increase the bearing strength of the soil. Since the majority of the compaction occurs in the first pass attempt to maintain traffic in established tracks whenever possible.

Effect of the number of passes on the penetration resistance of a 14.5 ton combine, Arlington, Wis.



Other important factors are to use the recommended tire size and type for the implement, being sure to inflate them to the proper pressure. Tires with larger tire prints, such as radials or larger diameter tires, will cause less topsoil compaction, however deep soil compaction will not change because it is affected by total load not soil area contact. Tandem axles will also reduce surface soil compaction, compared to a single axle and compact less area than dual or triple systems. Tracks have larger soil-to-machine contact area than tires and cause less compaction.

Giant Ragweed Competition for Nitrogen in Corn

Chris Boerboom, Extension Weed Scientist

A recent research article by Purdue weed scientists highlights the damage that giant ragweed can cause in corn. Obviously, these tall weeds are going to be highly competitive for light and they are also



going to compete for water. However, this new study also documents their competition for nitrogen. In the study, 180 lb/a of nitrogen was applied before corn planting. Giant ragweed emerged at 1 to 3 days after corn planting and were thinned to a low density that was equal to 2,020 plants/a (0.5 plants/m²). Giant ragweed emerging along with the corn would be highly competitive. On the date when giant ragweed reached 16 inches tall and the corn was at the V8 growth stage, samples of both plants were harvested and nitrogen accumulation was determined. Plants were also sampled at the end of the season at a couple weeks before corn harvest.

Giant ragweed was effective at taking up a significant amount of nitrogen despite its low density (Figure 1). Giant ragweed had removed 10 lb/a N by the time it was 16 inches tall at a time when corn had taken up 24 lb/a N. By the end of the season without any control, giant ragweed had

removed 58 lb/a N while corn had accumulated 97 lb/a N. Perhaps this is not a surprise that this low density of giant ragweed could accumulate this much nitrogen when the size of individual giant ragweed plants is considered. Still, when nitrogen prices are considered, it doesn't seem to be wise to be "fertilizing" giant ragweed.

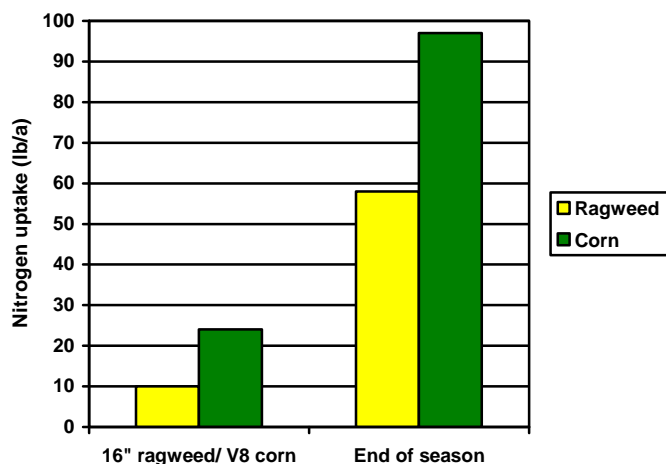


Figure 1. Nitrogen uptake by a low density of giant ragweed and corn plants when sampled early and at the end of the season.

The effect of giant ragweed competition, including competition for nitrogen, on corn yield was also predictable. When this low density of giant ragweed was removed early enough in the season, the corn yield was not statistically reduced compared with the weedfree corn (Figure 2). However, season-long giant ragweed competition reduced corn yield by 19%. If the giant ragweed density was greater, yield loss would likely occur before giant ragweed reached 16-inches tall and yield loss would be greater than 19% if not controlled at all.

Giant ragweed is a highly competitive plant and is generally difficult to control with a single herbicide application. Consequently, we encourage two-pass herbicide programs to control giant ragweed in corn. The first pass should be a preemergence residual herbicide to control the early emerging giant ragweed. Preemergence herbicide options include atrazine or premixtures with atrazine, Hornet, Lumax, and Princep. The residual control from such herbicides often will not provide adequate full season control and a second postemergence herbicide application is usually required. Hence, this becomes a two-pass program. The advantage with the postemergence application after the preemergence herbicide is that the "window" to make the application is longer and the ragweed is smaller and easier to control. The temptation to control giant ragweed with a single postemergence herbicide application is risky because 1) the giant ragweed may be too large to get complete control; 2) the ragweed may have already competed too long (i.e. removed nitrogen, etc.) and reduced corn yield; and 3) more ragweed may still emerge after this postemergence application, which would still require a second application.

I will be discussing the research that Carrie Laboski and I have conducted on nitrogen accumulation by weeds and the effect on corn yield at the Fertilizer, Aglime, and Pest Management Conference in January. The results are more dramatic than the effects of this ragweed study because of the higher density and multiple weeds involved in our study. If you are interested, we hope you attend the session.

Source: Johnson and others. 2007. Influence of nitrogen application timing on low density giant ragweed (*Ambrosia trifida*) interference in corn. *Weed Technology* 21:763-767.

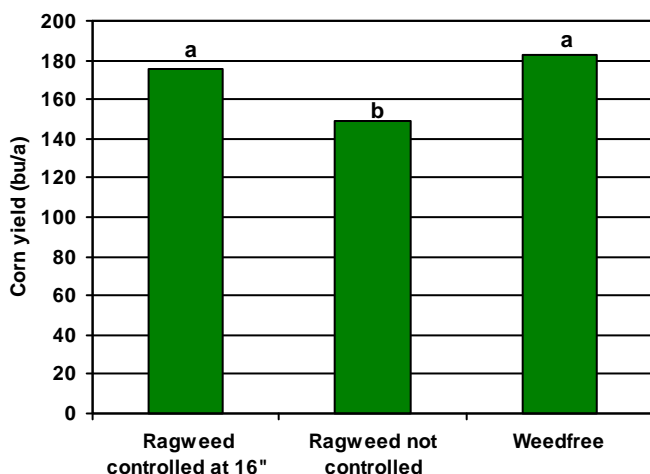


Figure 2. Corn yield when a low density of giant ragweed was controlled early in the season or allowed to compete all season compared to weedfree corn. Bars with the same letter are not statistically different.

Next issue Dec 14.

Check the web site for articles posted between now and then!

<http://ipcm.wisc.edu>