2000

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Western bean cutworm moths earlier and sometimes more numerous than usual

Western bean cutworm moth flights have been running ten days to two weeks ahead of normal this year. The warmer spring in many areas has pushed the development of the overwintering larvae faster than usual. The damage potential from these early emerging cutworms from subsequent egg laying and feeding is not fully known. Because cutworm moth flight is early, farmers should begin checking their fields for moths and eggs now.

Western bean cutworm moths lay their eggs on the top surface of the upper most leaf of corn plants and on any bean leaf surface. These eggs, laid in clusters of five to 200, are white and dome shaped. Egg development takes five to seven days during which time the egg color changes to tan and then purple immediately before they hatch. After the small, dark brown

Field reports

Keith Jarvi, Extension Integrated Pest Management, Haskell Ag Lab, Concord: Western bean cutworm light trap counts reached record levels in northeast Nebraska last week. One light trap near Plainview caught 1000-3000 moths per night from July 5 to July 10. Some areas are at threshold levels. A lot of corn will be treated in the sandier areas of the northeast district (west of Hwy 81) over the next few weeks.

Ralph Anderson, Extension educator, Buffalo County: We’re finding high numbers of western bean cutworms in our light traps and are starting to find egg masses. Although spider mite populations are still low, we are well aware of the potential for a population flare following an insecticide treatment at this time of the season.

Andy Christiansen, Extension educator, Hamilton County: The flight of western bean cutworms started earlier and has been sustained over a longer period this year. Our first catch was June 19 and we’ve had a sustained flight this week of 300-800 moths per night. In 1998 the flight was July 9-25 with a peak flight of 20; and in 1999 the flight was July 1-27 with a peak flight of 112.

Ron Seymour, Extension educator in Adams County: Light trap catches of western bean cutworm are averaging 200-300 a night, slightly higher than normal.

Soybean inoculation failures: likely and unlikely causes

Field Observations

We’ve received many reports of inoculation problems this year. The June 30 issue of Crop Watch contained an article entitled “Check for nodules on ‘new’ soybean soils.” Many of you have subsequently checked fields and have reported similar findings: few or no nodules on soybeans grown on a field for the first time (new soils) even though inoculants were used. Some fields are already showing yellow strips related to residual nitrogen differences. These are probably from either previous nitrogen applications or differences in crop history.
Gary Hall, Extension educator in Phelps and Gosper counties: Many acres of cropland were destroyed by hail and wind in the western half of Gosper County. Farmers are planting feed if they have a means of using it. Flood damage in eastern Phelps County had damaged irrigation equipment but the crops seem to have weathered that storm fairly well with new growth on beans and corn tasseling. Dryland corn continues to decline as much of the heavy rains came too quickly to be soaked into the soil profile. Irrigated corn and beans are doing well. Western Bean Cutworm numbers are close to the threshold in some areas. We are expecting a huge adult rootworm flight in light of the poor soil insecticide control.

Paul C Hay, Extension educator in Gage County: Dryland corn has moved ahead with the rains and will most likely pollinate and produce some crop. More rain will be needed soon with the heat and growth using over .3 inch per day. Word on the oat crop is that yield and test weight are light. Milo looks great, but again we will need some rain to help bring in top yields.

Terry Gompert, Extension educator in Knox County: We missed the rains needed this week and the crops are showing it. There is no subsoil moisture. Dryland corn is starting to show stress and yields are going down daily without rain. Pasture growth has slowed to nearly nothing. Second cutting alfalfa was put up in good shape and quality; but yields were half of normal.

Dewey Teel, UNL Extension educator in Antelope County: Most of Antelope County received nice rains last week. Some places received up to four inches. Some of it came fast and hard but for the most part did a lot of good. Northwest part of the county is still waiting for a good rain. Hot humid weather has been great for the irrigated corn and beans and areas which received rain. Some corn is tasseling, especially dryland fields which were set back due to drought. Haying has been difficult as some of the hay was down prior to the rains and is not drying due to the humidity and wet soil underneath.

Gary Zoubek, Extension educator in York County: July 3-4 we received 1.75-6 or more inches of rain as well as some hail damage in some small areas. The moisture did more good than damage. This was the first good rain some areas had received in a long while. Other areas have been receiving timely rains. Insect activities include hatching of corn rootworm beetles and reports of Western bean cutworm. In general, dryland crops right around York are doing surprisingly well; however, I don’t know how long they can go with 90-100 degree temperatures.

Ralph Anderson, Extension educator in Buffalo County: Some parts of Buffalo County have received timely rains while in other parts (north and east are the worst), pastures and hay fields are dry and brown. We are seeing a rapid emergence of corn rootworm beetles and populations have reached treatment levels if the producer is considering an adult beetle control program. Many producers are disappointed in the results of beetle knock down programs and are (Continued on page 137)
Western bean cutworm (Continued from page 135)

larvae hatch they move to the whorl or tassel of corn plants to feed on the tender yellow leaf tissue or on the tassel itself. Once the tassel emerges or if it has already emerged when the eggs hatch the larvae will move to the green silks. The developing larvae will feed on the green silks moving down the silk channel until they reach the ear tip. The larvae will feed in the ear tip until they are fully developed. If the infestation on one ear tip is so great that the larvae become crowded, a few individuals may move outside the ear and begin feeding on the side of the ear. Western bean cutworm larvae that hatch on bean plants begin to feed on blossoms and young, tender leaf material. The larvae will begin to attack bean pods as they develop, eventually feeding on developing seeds.

When scouting for western bean cutworm in corn, check 20 plants in at least five areas of each field. Look for eggs on the top surface of the upper most leaves or look for larvae in the tassel. If 8% of field corn plants or 5% of seed corn plants or popcorn have egg masses or larvae, consider an insecticide application. Western bean cutworm eggs that hatch when corn plants are in the whorl stage of growth have a high rate of survival. The larvae are well protected in the whorl or tassel. If a treatment is warranted in corn, it should be made when 95% of the plants in a field have tasseled or before the larvae have moved into the ears. Because of the prevalence of early season spider mite populations in some areas, chemical selection should consider the potential for flaring spider mites (see Spider Mite Management in Corn and Soybeans, NebGuide G1167).

Milk jug type pheromone or scent traps are recommended to monitor potential western bean cutworm infestations in dry edible beans. Traps should be mounted on a post, about 4 feet above the ground, on the north and south edges of each field. Place traps in areas with at least some vegetation around them. The pheromone source should be pinned to the under side of the milk jug lid. A mixture of four parts water and one part antifreeze with a few drops of liquid soap should be placed in each cut out milk jug. Instructions for constructing a milk jug trap and where to buy moth pheromone may be found in the University of Nebraska NebGuide: Western Bean Cutworm in Corn and Dry Beans (G98-1359-A) or from the UNL Department of Entomology internet site: http://www.ianr.unl.edu/ianr/entomol/entdept.htm.

The traps should be checked every few days until the peak of moth flight. When the traps are checked, the moths should be removed, counted, and liquid should be added. If the number of moths accumulated at the peak of the moth flight totals less than 700, the risk of significant damage is minimal. The risk of seed damage is moderate if 700-1000 moths are accumulated in each trap. The risk of damage is significant if more than 1000 moths are collected from the initiation to the peak of the moth flight. If the moth flight is moderate, infestations in nearby corn fields should be used as a decision making guide. If the adjacent corn needs an insecticide treatment for western bean cutworm, the beans should also be treated. Bean fields that require an insecticide application should be treated 10-20 days after the peak moth flight.

Briefs (Continued from page 136)

considering returning to spring treatments (or possibly soybean rotations).

Morale in rural communities is wavering as we see continued challenges for production and disastrous prices.

Jim Peterson, Extension educator in Washington County: Although the last few days have been extremely hot with a great deal of humidity in Washington County, the crops continue to look good.

Corn is tasselling and although it is hot, the high humidity should prevent problems with pollination. Soybeans continue to do well. The second cutting of alfalfa is short, but hopefully the third cutting will be better. In conversations with producers I am hearing very few reports of insect or disease problems at this time. Things look good now, but a rain in a few days would make it better.

Ronald Seymour
Extension Educator, Agriculture
Adams County

Gary Hein, Extension Entomologist
Panhandle REC
Soybean inoculation (Continued from page 135)

We would expect these symptoms on non-nodulated soybeans with low residual nitrogen or on soils with low nitrogen mineralization potential but not on well-nodulated soybeans. The problem is not confined to any specific inoculant company’s products, however, most of the reports we’ve had are from producers who have used seed-applied, liquid inoculants rather than either peat-based or soil-applied inoculants.

Likely (and Unlikely) Causes

1. Most of the reports are from fields with Roundup Ready Soybeans. This is an unlikely cause for the nodulation failure. Researchers in several states have investigated the effects of the Roundup Ready system on soybean nodulation and nitrogen fixation. Roundup Ready varieties and their sister lines have nodulated similarly in all cases (personal communication, Tom Wacik, Urbana Laboratories, and Stewart Smith, Lipha Tech). Perhaps the reason that most reports of the current problem are from Roundup Ready soybeans is more from the fact that Roundup of the lack of comparable ‘sister’ lines.

2. Some seed fungicides are toxic to inoculant bacteria. Make sure that fungicides have dried before inoculants are applied. Even then, some combinations of fungicide and inoculant materials are not compatible. In-furrow inoculants were developed in part to keep inoculants away from chemically treated seed. Thus, in-furrow inoculant applications are recommended when seed treatments are used. When an inoculant and a seed treatment are combined on the seed, keep exposure time as short as possible. Less than four hours is best. Some seed treatments kill Rhizobia (inoculant bacteria) immediately. Be sure to check the compatibility charts of inoculant companies for details (http://urbana-labs.com/compat.htm and http://liphatech.com/inoc/soy/celtech_charts.html). Inoculant-seed treatment interaction problems are likely causes in some of the situations reported; however, the most likely cause of poor nodulation is the following...

3. High soil temperatures and/or dry soil conditions after planting are known to decrease nodule formation and/or growth; reducing nitrogen fixation. This is the most likely cause of the widespread problems this year. Any plant stress will affect the symbiotic relationship between the soybean plant and Rhizobia bacteria that ‘fix’ nitrogen. May soil temperatures in south central Nebraska were 5° to 10° above normal for all but the week beginning May 15 (see figure 1 for data from SCREC, Clay Center). This coupled with low soil moisture could negatively impact nodule formation especially on new soils. If seed were planted into dry soils and the plants immediately ‘watered

Fig. 1 Above average soil temperatures have been typical this year. These soil temperatures were taken at 4 inches below bare soil at the South Central Research and Extension Center near Clay Center.

(Continued on page 139)
Soybean inoculation  (Continued from page 135)

up’, the impact of hot-dry soils would be less. However, one study has shown that just seven days of dry soils following planting can seriously impact nodulation and nitrogen fixation (personal communication, Stewart Smith, LiphaTech).

Many soybeans are planted on ‘new’ soils in Nebraska each year. If high temperatures and dry soils are present at planting on ‘new’ soils, in-furrow peat-based inoculants are probably the best choice, soil-applied liquid inoculants and seed-applied peat-based materials are second best, and seed-applied liquid materials are the last choice. Considering this, it is not surprising that most of the observations this year have been on fields with liquid, seed-applied materials.

Plant and Pest Diagnostic Update

Corn diseases diagnosed June 28-July 10 in the UNL Plant and Pest Diagnostic Clinic were eyespot (York County), Greensnap (Nemaha County), holcus spot (Hamilton and Holt counties), and Stewart’s wilt - leaf blight symptoms (Holt and Phelps counties).

Soybean diseases present were bacterial blight (Boone County), bacterial pustule (Adams, Kearney, and Seward counties and in many phone inquires from various soybean production areas of the state), Fusarium root and stem rot (Nemaha County), Phytophthora rot (Saline and Thayer counties) and Rhizoctonia stem and root rot from Adams and Stanton counties.

Note to our clients regarding soybeans:

I’ve received some phone calls about yellow soybeans that look as though they have a nutritional problem. No other symptoms are present. If you would like to submit a sample with these symptoms for diagnosis, please dig rather than pull the plants when you are collecting the sample and include the entire plant in the sample. We need to check the roots for nodulation and any sign of root rot. Nodules and decayed roots are easily dislodged if the plants are pulled.

Jane Christensen, Plant and Pest Diagnostic Clinic

Possible Action

The total amount of nitrogen taken up by a 50 bu/acre soybean crop will exceed 300 lb N/acre - more than a 150 bu/acre corn crop. Normally, this nitrogen will come from residual nitrate-nitrogen in the soil, nitrogen mineralized from organic matter during the growing season, and from symbiotic fixation in nodules. If active nodules are not present, the amount of supplemental fertilizer nitrogen necessary to optimize yield will depend on the amount of nitrogen available from either of these sources, making it difficult to predict the optimum rate of supplemental fertilizer nitrogen.

In Nebraska, if a grower determines that soybeans are not well-nodulated and likely to respond to nitrogen fertilization, we recommend supplemental nitrogen rates of 60 to 120 lb N/acre, which is a fairly broad range. The grower should determine the most appropriate rate based on the likelihood of significant residual nitrate-N from the preceding crop, soil texture, and other factors influencing yield potential.

If the canopy has not closed, soil injection of UAN solution or anhydrous ammonia is good options. Crop response to anhydrous ammonia may be slower than nitrogen solution due to the high initial concentration of ammonia and high pH in the injection band of anhydrous ammonia.

Fertigation of nitrogen solution through a center-pivot irrigation system is also a good application method. When injecting nitrogen solution into an irrigation system, it is probably best to keep the application rate to 30 lb N/acre per irrigation or below. Broadcast application of a nitrogen solution should be avoided due to the potential for leaf burn. Broadcast application of dry urea or ammonium nitrate is an acceptable application method, although there may be some potential for leaf burn if fertilizer granules lodge on the leaves.

Roger Elmore, Extension Cropping Systems Specialist
Richard Ferguson
Extension Soils Specialist
Both at the South Central REC
Saving your beans with the Blue Plate Test

_Sclerotinia sclerotiorum_ causes several economically important crop diseases, including white mold of dry beans (Phaseolus vulgaris) and Sclerotinia stem rot of soybeans (Glycine max). This pathogen has recently been designated as causing the major disease problems in vegetables and broad leaf row crops in the United States. In addition, it is difficult to control by resistance or cultural practice modification.

Use of a fungicide is one method that can be effective to control _Sclerotinia_ diseases; however, knowing when or if a fungicide is needed can be difficult. Disease symptoms cannot be used as a guide for implementing chemical control since they appear too late in the growing season for a fungicide application to be effective. We have developed a simple test that may predict potential disease and indicate when a fungicide application would be most effective.

The test uses "blue plates" which are placed under the crop canopy to test for disease potential. These plates contain a semi-selective agar medium containing bromophenol blue (a pH indicator) that detects an acid (oxalate) produced by _S. sclerotiorum_. Yellow haloes around fungal colonies on the plates indicate ascospore discharge and disease potential; a fungicide application should be considered.

A manual has been developed for field use, and it explains and illustrates how to use the blue plates to forecast white mold. Identification of white mold (_S. sclerotiorum_) mycelial colonies on the plates is the most important aspect of this method. Color plates help identify and count _Sclerotinia_ colonies. The assumption is made that there is a history of the disease in the field, plant development is vigorous, and the field will be managed for high yield. One set of blue plates will provide information on when a fungicide application will be most effective. It must be used by five days before full bloom. A second set of plates, placed in the field after full bloom, can aid irrigation scheduling. The manual and plate test will be tested by scouts and field managers in Nebraska in 2000. Modifications may be made based on their results and recommendations.

The Nebraska Dry Bean Commission has provided some funding for dry bean research and Elf Atochem Company will help distribute plates and manuals. Anyone interested in participating in this trial can contact

- Jim Schild, Extension educator, Scotts Bluff County, (308) 632-1480;
- Bob Harveson, Extension plant pathologist, Panhandle REC, (308) 632-1239; or
- Jim Steadman, professor, UNL Plant Pathology Department, (402) 472-3163.

_Jim Steadman, Professor Department of Plant Pathology_  
_{Bob Harveson} Extension Plant Pathologist Panhandle REC_
Assessing hail-damaged fields

During the last two weeks hail, high winds, and floods struck areas of the state, causing millions of dollars of losses to already drought-stressed crops. Where the rain were fast and heavy, much of it ran off, overfilling streams and causing flooding in southern and southeastern counties. In other cases the moisture soaked in and extended relief from the drought, coming one rain at a time this year.

Several hail storms damaged or destroyed fields in an area extending from western Nebraska south to central Kansas. With crop prices still relatively low and a major investment already expended for this crop, producers need to carefully consider their options following hail. Preliminary estimates are that in some counties, as much as 90% of the fields may have been affected. Producers will need to consider potential yield loss of the existing crop vs. replanting costs and potential reduced yields.

Assessment

Make an accurate assessment of losses. When possible, wait 7-10 days following the storm to determine loss. By that time, regrowth of living plants will have begun and discolored dead tissue will be apparent. Also, some plants initially surviving a storm may soon die because of disease infection entering at the site of plant damage.

Three Cooperative Extension NebGuides provide valuable information on evaluating damage:

- **Assessing Hail Damage to Corn** (G86-803), which includes illustrations and tables from the National Crop Insurance Association’s Corn Loss Instructions; and addresses losses due to stand reduction and defoliation as well as when the plant is most susceptible to damage. For 7-8 weeks after emergence the corn plant grows rapidly and becomes increasingly vulnerable to hail damage up through the tasseling stage. Once past tasseling, hail causes progressively less yield loss as the plant approaches maturity.

- **Soybean Yield Loss Due to Hail Damage** (G85-762), which includes stand loss tables and a worksheet to calculate total actual loss. With soybeans, yield loss predictions are based on: stage of growth and degree of plant damage, including leaf defoliation, stand reduction, stem damage and pod damage. Stand reduction refers to the number of plants actually killed by hail; defoliation is measured as a percentage of the leaf area destroyed by the storm; and stem damage covers stem cutoff (stems completely cut off and removed from the plant) and stems bent over or broken.

- **Sorghum Yield Loss Due to Hail Damage** (G86-812), which also includes illustrations, tables and a worksheet to calculate total actual loss. With sorghum, yield loss predictions are based on two factors: growth stage and plant damage. Plant damage may be either direct (stand reduction, stalk damage and head damage) or defoliation.

These publications are available at local Cooperative Extension offices or on the Web at www.ianr.unl.edu/pubs

Management

- Before doing anything with the field, notify the proper government agency and, if you plan to make a claim, your insurance provider.
- Discuss replant options and limits; when they’ll be able to determine the severity of the loss and their assessment of the loss.
- Next, consider your investment in the crop, additional expenses, and expected yield at this point. Weed and pest control will continue to be costly, and weed control may be even more difficult if the crop canopy is open. Be sure to consider herbicide replant options for this year as well as next year if applying herbicide this late in the season.
- One of the critical things to remember is that whenever you open the canopy, weeds will develop quickly and timely rescue treatments when the weeds are small will be most effective and cost

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### Precipitation in inches (% = % of normal)

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</table>
After the hail (Continued from page 139)

efficient. Otherwise weeds may grow quickly and make harvest difficult to impossible. In addition the weeds will use valuable moisture and nutrients and be very competitive with the crop. Once established they also will produce weed seed which can complicate weed control in future years.

If you plan to rotate to another crop next year, check the herbicide label carefully to ensure that herbicide carryover won’t be a problem. This can be especially critical with these late season applications when herbicides will have less time to degrade than applications made four to six weeks ago.

Hail and wind damaged fields may also face increased insect problems, depending on area infestations. Some insects like the later maturing corn and may flock to those fields, requiring continued diligence in scouting. Diseases too can flare in plants where hail or wind may have damaged the plant and created openings for pathogens to infect the plant.

If you determine loss is total and there’s a local use or market, consider planting forage crops or waiting and planting wheat in the fall in dryland conditions. In counties suffering from the drought, pastures and ranges are in short supply and sudan sorghum or forage millet may be good options for late summer use and wheat or triticale may provide some forage later in the fall or early spring.

Bin run com also may be a possibility, but be sure to check on whether planting corn is allowed under any government programs you’re participating in. With bin run seed, be sure to check the germination potential before planting. Drill in a couple bushels per acre to create a thick stand.

Also, be sure to check herbicide and rotation restrictions before any plantings.

Greater quantities of forage for winter feed also may be needed in some areas this year. When considering your options, consider the field’s soil texture. If the soil is subject to wind and water erosion, it will be important to provide cover to protect the soil. Even with a total loss, the field will need continued management to control weeds, reduce erosion, conserve soil moisture, and provide the best situation possible for the next crop.

Bob Klein, Extension Dryland Crops Specialist, West Central REC

33 Counties released for CRP haying and grazing

The U.S. Department of Agriculture (USDA) has released CRP for haying in all 33 counties previously released for CRP grazing.


Before haying, be sure to complete the appropriate forms at the local Farm Service Agency office.

Participants haying CRP acres may only take one cutting and may only harvest 50% of a given CRP field. Participants may not both graze and hay the same field. Participants will forfeit 25 percent of their annual CRP rental payment to take part in this program.

CRP hay cannot be sold. It must be used by the CRP participant or a livestock producer that rents or leases the CRP haying option.

Conditions will be reviewed on a monthly basis to determine whether continued haying is warranted. Haying will cease either when the state or county FSA determines it’s no longer warranted or on August 31.

Drought monitor

With recent rains, the portion of Nebraska classified as being in an extreme drought shifted from the southeast to the southwest, with much of the rest of the state still classified as being in a first stage to severe drought. While rains throughout much of the state have been beneficial, the recent spell of high temperatures in the 90s may negate some of the gains. Evapotranspiration rates are ranging from .20 inch to .30 inch a day for corn.

For more farm, ranch, and rural family information, see http://ruralroutes.unl.edu
July 17 Market Journal broadcast addresses ag labor, current markets

Guest speakers on this week’s Market Journal will address ag labor, market trends, and provide a little insight into the perspective of a grain elevator manager.

The second broadcast of the NU Cooperative Extension satellite conference will be this Monday, July 17 from 8 to 9:30 p.m. The show, which is broadcast monthly, is directed to the state’s farmers and includes tips on reducing grain risk management and increasing profits. Doug Jose, NU Extension Ag Economist, hosts the show. Guests for the July 17 show will include:

- Roy Smith, Nebraska producer and market analyst, on the corn and soybean markets;
- Lynn Lutgen, UNL ag economist, on wheat markets and the acreage report;
- Chris Pieper, grain merchandiser, Waverly Coop, on “How Basis is Determine and Basis Trends.”
- Larry Swain, University of Wisconsin—River Falls, on “Effective Communication with Farm Employ-

2000 wheat production down 10%

Nebraska’s 2000 winter wheat crop is forecast at 66.5 million bushels, down 10% from last month, according to the Nebraska Agricultural Statistics Service. This production is 23% below last year’s crop and down 20% from 1998. The July 1 yield forecast, at 38 bushels per acre, is down 10 bushels from the record high 48 bushel yield of 1999 and down 4 bushels from last month.

The smaller yield forecast is the result of dry conditions during June in the Panhandle and Southwestern counties during the last stages of development. June precipitation averaged between 20-40% of normal during June for the western growing regions. Crop development at the end of June was well ahead of normal, with near 50% of the acreage harvested.

Acreage to be harvested for grain, forecast at 1.75 million acres, is unchanged from last month but 3% below 1999. Harvested acreage is expected to be 95% of the 1.85 million acres planted.

Last year, 90% of the planted acreage was harvested for grain. By July 1, 73% of the crop was considered ripe, two weeks ahead of the 16% average. Harvest was winding down in southern Nebraska, with combining active in lower Panhandle counties.

Wheat crop condition rated 14% very poor, 30% poor, 41% fair and 15% good.

Growing carbon?

USDA publication examines the issue

“Growing Carbon: A New Crop That Helps Agricultural Producers and the Climate, Too” has been published to provide information for producers and the general public on the linkage between natural resource conservation and greenhouse gas reduction.

The brochure addresses climate change and the greenhouse effect, what could happen to agriculture in the United States as the climate changes, how agricultural producers reduce greenhouse gas emissions, how producers increase the storage of carbon on agricultural lands, the multiple environmental and economic benefits of these practices, international climate change agreements and U.S. agriculture, domestic policy, and the potential market for carbon.

Information is also provided on contacts for conservation practices and programs, research on conservation and climate change, USDA global change activities, climate change, and biofuels.

The brochure was sponsored by USDA’s Natural Resources Conservation Service, the USDA National Agroforestry Center, the Soil and Water Conservation Society (SWCS), and Environmental Defense, a national nonprofit organization that links science, economics, and law to create solutions to environmental problems.

Copies are available from state USDA Natural Resources Conservation Service offices, by calling 1-888-LANDCARE, or from the SWCS web site — http://www.swcs.org.

More than 800 searchable Extension publications are available on the Web at www.ianr.unl.edu/pubs
Your input is needed!

University of Nebraska Cooperative Extension programs are currently organized around 12 action teams. Several teams relate to agricultural production, including Integrated Crop Management, Integrated Animal Systems, Natural Resources and Environmental Management, and Enhancing Food Safety in the Food Chain.

To ensure that our programming meets your needs we would like your input on program priorities related to Integrated Crop Management. Currently the Integrated Crop Management Team is organized around the seven focus areas listed below. Please rank these areas in importance to you. If you think there are other important focus areas that we should be addressing please list them at the bottom of this sheet.

Thank you for your input. *Bob Wright, ICM Team chair.*

**Integrated Crop Management Team focus areas**

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Rank of importance to you</th>
</tr>
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<tbody>
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<td>Maintain agricultural profitability</td>
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<tr>
<td>Genetically modified organisms/biotechnology</td>
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<tr>
<td>Site-specific management</td>
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<td>Integrated systems and niche markets</td>
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<tr>
<td>Decreased tillage/soil conservation</td>
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<td>Comprehensive nutrient management</td>
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<td>Weather/climate impacts on crop production</td>
<td></td>
</tr>
</tbody>
</table>

Other issues to address:

Please send this form to:

*Bob Wright*
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