Soil Management and Land Valuation Conference to be held in Ames

ISU’s oldest conference to discuss issues related to soil management and land valuation
04/13/2016 | By Wendong Zhang, Extension Economist, 515-294-2536, wdzhang@iastate.edu

AMES, Iowa – The 89th annual Soil Management and Land Valuation Conference, the longest running conference at Iowa State University, will be held on May 18 in the Scheman Building on the ISU campus. The conference, which runs from 8:30 a.m. - 4:30 p.m., is sponsored by the ISU College of Agriculture and Life Sciences and ISU Extension and Outreach. It is intended for farm managers, rural land appraisers, real estate brokers and others interested in the land market in Iowa.

The conference will feature discussions on six topics, with ISU Extension and Outreach researchers having a strong presence throughout the event. The overall theme will be the issues with implications for soil management and land valuation.

The Iowa Appraiser Examining Board has approved the conference for six hours of continuing education. The Iowa Real Estate Commission also has approved the conference for six hours of continuing education for renewal of a real estate and broker’s license.

Conference registration can be done online http://register.extension.iastate.edu/smlv/register-now with the event costing $100 for those who register on or before May 4 and $110 after May 4. Read more online at http://register.extension.iastate.edu/smlv/about.

Women, Land and Legacy Meeting May 12

Cerro Gordo County Extension along with Cerro Gordo County NRCS, FSA, Soil & Water Conservation District, and Farm Bureau, will hold a Women, Land & Legacy Meeting on Thursday, May 12, 2016 at the Lime Creek Nature Center north of Mason City.

A free light supper will be served from 5:30-6 pm followed by a program, "Monarch Mania," by Todd Von Ehwegian and a program on bee keeping by Randy Elsbernd. All women involved with farming or interested in farming are invited to attend. Please RSVP by May 11 by calling Becky or JoAnn at the Cerro Gordo County Extension and Outreach office, 641-423-0844.
ISU Test Results Provide Six-year Snapshot of Egg Safety

By Hongwei Xin, Egg Industry Center, 515-294-4240, hxin@iastate.edu

AMES, Iowa —Six years of Iowa State University testing show a dramatic decrease in the number of environmental samples taken from egg facilities that test positive for the Salmonella enteritidis bacterium causing human food poisoning. An analysis shows the percentage of environmental samples testing positive declined from 24.5 percent in 2010 to 2.5 percent in 2015. Potential reasons for the significant drop in positive samples may include an increase in flocks that are vaccinated for the salmonella bacterium, according to Xin. The supply of vaccine since 2010 has jumped dramatically, with the number of doses produced under USDA license reaching over 200 million in some years, more than quadruple what was produced in 2010. There also has been heightened awareness and training in Salmonella enteritidis prevention, he added.

The Egg Industry Center adds value to the egg industry by facilitating research and learning for egg producers, processors and consumers through national and international collaboration. Headquartered in the College of Agriculture and Life Sciences at Iowa State University, the vision of the Egg Industry Center is to assist a thriving egg industry in advancing egg production, processing and product development, building a new paradigm for how research is conducted and improving society's understanding and value of egg producers’ contributions to the economy, environment, community and consumer health and well-being. Read more online at http://www.cals.iastate.edu/news/releases/iowa-state-university-test -results-provide-six-year-snapshot-egg-safety.

Iowa Farm Outlook & News—ISU Department of Economics

April Demand Update (4/12/16) - The World Ag Supply and Demand Estimates update for April contained some modest changes for the crop balance sheets. For U.S. soybeans, the only changes were a 15 million bushel bump in export demand and a slight decline in seed demand, based on last month's Prospective Plantings report. Projected soybean ending stocks were lowered to 445 million bushels, but the midpoint of the 2015/16 season-average price range remains steady at $8.75 per bushel. For U.S. corn, the adjustments were mixed. Feed demand was reduced 50 million bushels, based on the quarterly disappearance pattern from the Grain Stocks report. Corn usage for ethanol was increased 25 million bushels as ethanol production has held near record levels over the 1st three months of the calendar year. Thus, corn ending stocks were raised 25 million bushels and the midpoint of the 2015/16 season-average price range fell 5 cents to $3.55 per bushel. Read more online at http://www2.econ.iastate.edu/ifo/.

World corn production for 2015/16 was increased by 3 million metric tons, with 1 million of that going to increased imports for Mexico and Southeast Asia and 2 million projected to be held in stock. China's feed usage of corn is projected to rise by 2 million metric tons, but that increase is expected to be met by drawing down existing internal stocks. World soybean production for 2015/16 was lowered slightly as declines in Chinese and Indian production offset an increase from Argentina. Global soybean trade was raised, based on stronger exports to China, Japan, and Mexico.

4 Inch Soil Temperature Maps for Iowa

Find soil temperatures for Iowa for yesterday, 2 days ago, and 3 days ago at http://extension.agron.iastate.edu/ NPKnowledge/soiltemphistory.html. County temperatures are derived from ISU observations by grid-interpolation.

Cold Temperatures and Burndown Herbicides

April 11, 2016, By Bob Hartzler, ISU Professor of Agronomy, hartzler@iastate.edu

The weather forecast appears to be favorable for field activities so people will be anxious to get into the field. A concern for many will be the effect of the widespread freeze on the performance of burndown herbicides. Unfortunately, there is no simple blanket statement that can be made since the plant response will vary depending on weed species, weed size, and the herbicides used.

Postemergence herbicides—A statement found on most postemergence herbicide labels is ‘Apply when weeds are actively growing.’ This is by far the most important consideration in determining whether to apply a postemergence product. Most weeds that emerge in March are adapted to sub-freezing temperatures and will not be killed by frost; however, it takes time for them to recover from these events. Performance of herbicides will be reduced if applied too soon following a frost. How long does it take to recover? Again, no simple answer since it depends on the weed species, severity of the frost, and weather conditions that follow the freeze. Closely monitoring the weeds for evidence of new growth is the best way to determine recovery. Read more online at http:// crops.extension.iastate.edu/cropnews/2016/04/cold-temperatures-and-burndown-herbicides. Photo: Frost damaged giant ragweed seedlings—wise decision would be to wait for true leaves to emerge.
Public-Private Partnership Strengthens Nutrient Reduction Strategy Measurement Progress

By John Lawrence, College of Agriculture and Life Sciences, 515-294-7801, jdlaw@iastate.edu

AMES, Iowa — Iowa State University is beginning a state-funded project in partnership with the Iowa Nutrient Research and Education Council (INREC) to explore how to measure Iowa farmers’ progress in reducing nutrients moving from fields into rivers and streams.

Last year the Iowa Legislature passed legislation funding the effort led by the College of Agriculture and Life Sciences at Iowa State, supported by up to $410,000 per year for three years. INREC will receive $250,000 per year for the in-field progress measurement project as part of that appropriation.

The public-private partnership on the project is an important step in measuring nutrient load reductions stemming from Iowa’s implementation of practices and progress on water-quality goals outlined in the Iowa Nutrient Reduction Strategy.

The Iowa Nutrient Reduction Strategy is a science and technology-based approach to assess and reduce nutrients delivered to Iowa waterways and the Gulf of Mexico. It was developed by the Iowa Department of Agriculture and Land Stewardship, Iowa Department of Natural Resources and Iowa State.

INREC will aggregate data and analyze the impact of water-quality improvement practices, such as soil and water conservation practices and structures or technologies implemented to slow or reduce runoff. Iowa State researchers will use the field level data to estimate nutrient load reduction for the state. Read more at http://www.cals.iastate.edu/news/releases/public-private-partnership-strengthens-nutrient-reduction-strategy-measurement.

Soil Health Benefits for Sustaining Crop Production

April 13, 2016, By Mahdi M Al-Kaisi, Soil Management and Environment, 515 294 8304, malkaisi@iastate.edu

Tillage effects on soil health - The increased use of intensive tillage and other management practices in row crop production systems can increase soil erosion, reduce soil health and water quality, and the capacity to achieve sustainable agricultural production systems. Soil erosion is always associated with tillage intensity, especially during the spring season when soils are most vulnerable to water erosion due to lack of vegetation or residue cover to protect the soil surface from high rain intensity.

Conservation practices improve soil health - Soil management and conservation practices that protect soil health are not only economically and environmentally necessary, but the right approach to sustain and increase soil resiliency. These conservation plans would include no-tillage and reduced tillage (i.e., strip-tillage), which leave post-harvest crop residue to cover the soil surface. In addition, many soil conservation plans include practices such as cover crops, the construction of grass waterways, terraces, buffer strips, and pasture erosion control systems with manure application and soil testing.

Summary

- The benefits of healthy soils in sustaining crop production are most evident when growing conditions are less than ideal. Healthy soils increase the capacity of crops to withstand weather variability and short term extreme precipitation events and intra-seasonal drought.
- Soil health functionality is highly influenced by soil organic matter, a central soil property that influences soil physical, biological, and chemical functions.
- The interrelationships between soil organic matter and management inputs such as tillage and cropping systems can be documented through the evaluation of soil health indicators of biological, physical, and chemical properties.
- Best management practices that build soil health and sustain productivity are many and can lead to better ecosystem and societal services. The implementation of such practices should be considered on regional and site specific basis. Site specific adoption of different tillage and conservation practices integrated within the overall production system can effectively increase crop productivity and soil ecosystem services. These conservation practices include, but are not limited to, no-tillage, strip-tillage, cover crops, perennials, grass waterways, terraces, buffer strips, and other erosion control measures.
- A systems approach to conservation management of row cropping systems is important to enhance soil health and improve water quality. As an effective solution to building soil health and improving water quality, conservation practices should be an integral and essential component of nutrient reduction loss, sediment and nutrient loading plans.

Read more online at http://crops.extension.iastate.edu/cropnews/2016/04/soil-health-benefits-sustaining-crop-production.