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Northeast Missouri Ag Connection

Your local link to MU for ag extension and research information http://agebb.missouri.edu/agconnection

New SCN Coalition is Launched

Soybean cyst nematode (SCN) is easily the most devastating soybean pathogen in North America. Alone, it is responsible for upwards of \$1 billion in yield loss each year. To combat this pest a group of University researchers, Extension specialists, and Ag business representatives have formed the SCN Coalition. This is the second SCN Coalition. The original started in late 1990s when SCN was wreaking havoc on soybean yields and producers had little knowledge of the pest. Unfortunately, the scenario is similar today because the simple solution from 20 years ago is starting to fail.

The first coalition, which lasted a couple of years, helped thousands of producers understand and manage the pest. Yield loss often goes unnoticed for several years because SCN attacks the roots. Above ground symptoms are minimal until SCN populations become high and damage is severe. With prolific growth, it does not take long for populations to become large. Each female produces 250 eggs and there are 3-6 generations in one season. Unlike other pathogens or pests, SCN is a consistent yield robber, it is not weather dependent and it is well adapted to survive through several years of non-host crops. Once a field is infested with SCN it cannot be eradicated, so it must be managed.

The simple, and effective, management tool 20 years ago was SCN-resistant soybean varieties. According to nematologists, for a variety to be resistant it should not allow more than 10 percent SCN reproduction when compared to a susceptible variety. In other words, a resistant variety should prevent 90 percent or more of the SCN in a field from reproducing. Unfortunately, almost all SCN-resistant varieties (over 95%) have resistance genes from the same breeding line called PI 88788. Producers have been using the same source of resistance for 20 some years. Growing soybean varieties with the same SCN resistance genes is just like continually using the same herbicide repeatedly to control a population of weeds. Eventually the weed develops a resistance and the herbicide is no longer effective. Nematode populations with the ability to reproduce on varieties with PI 88788 resistance are now common in the Midwest. In fact, 78 percent of SCN populations in Missouri have greater than 10 percent reproduction on PI 88788.

The understanding by producers of the severity regarding the SCN further complicates the issue. Researchers conducted a survey in 2015 and found that 45% of farmers did not think identifying SCN was important and of that group, 69% did not think SCN was a serious threat. This is likely because traditional resistant varieties were very effective for nearly 20 years and it allowed producers to stop focusing on SCN. Obviously, SCN is still a major issue as it has been confirmed in more than 30 states, Puerto Rico, and Canada. SCN continues to spread into new counties and fields each season and there is no slow down on the horizon.

For these reasons, the second coalition has been launched. It is a diverse partnership

to help the agriculture industry speak with one voice about soybean cyst nematode management. The first step in actively managing SCN is to determine what your field populations are. SCN experts like Dr. Greg Tylka from Iowa State, encourage producers to implement multiple tactics to manage SCN. Recommendations include growing nonhost crops (such as corn and wheat), selecting SCN-resistant soybean varieties with different breeding lines (sources of resistance) and to rotating varieties within a resistant source, and using nematode-protectant seed treatments.

The SCN Coalition's goal is to decrease SCN populations and increase yield potential. So "Know Your Number." "Take the Test. Beat the Best." Follow the coalition on twitter (@TheSCNCoalition) or Visit www.TheSCNcoalition.com for links to new

SCN management tools and technologies from SCN Coalition partners and for state-specific SCN management recommendations from local SCN experts. Specifically at the University of Missouri, Kaitlyn Bissonnette – Plant Pathologist and Melissa Mitchum – Nematologist are part of the coalition. For information on testing for SCN, go to sendiagnostics.com



Source: Wyatt Miller, agronomy specialist

New Tax Bill for the 2018 Tax Year

President Trump signed the new tax law, commonly called the Tax Cuts and Jobs Act, into law on December 22, 2017. This is the first major tax change in over thirty years and affects all taxpayers.

The law provides many changes for individuals and businesses. Some of the changes will expire at the end of 2025 and others will be permanent changes.

The new law continues with seven income tax brackets, but the percentages and amounts change. The changes will be favorable for most taxpayers. Many employees have already seen changes in paychecks due to employers changing withholdings attributable to the new percentages.

Following are a few items related to agriculture:

• Section 179 has been increased to \$1 million beginning January 1, 2018. In 2017, the amount was \$510,000.

Beginning in 2019, the amount will be indexed for inflation. This provision is permanent.

- Additional First-Year Depreciation allows for 100% bonus depreciation for five years for qualifying property acquired and placed into service after September 27, 2017. Beginning in 2023, a phase out begins and will end after the 2026 tax year. First-year depreciation provisions apply to used and new property.
- Farm Equipment Depreciation Historically most farm equipment was depreciated over seven years. The new law allows new farm equipment to be depreciated over five years. It removes the requirement that farm property be depreciated using the 150 percent declining balance method, except for 15 or 20 year property. This provision applies to property placed in service after December 31, 2017.
- Domestic Production Activities Deduction, commonly called DPAD, was a deduction for businesses producing most of their goods in the United States. This deduction has been eliminated.
- Cash Accounting has been expanded allowing more taxpayers to use it. Most taxpayers who meet a \$25 million gross receipts test are eligible to use the cash method including farming C corporations.
- Estate Tax has doubled the basic exclusion for estates of decedents dying during the tax years 2018-2025. The basic exclusion for each person is \$11.2 million beginning in 2018. Portability continues which allows a surviving spouse to elect to preserve the deceased spouse's unused exclusion. In 2026, the basic exclusion is set to return to the 2017 levels.

In addition, on March 23, 2018 the President signed the Omnibus spending bill into law, which included provisions to "level the playing field" for selling grain to cooperatives. The Tax Cuts and Jobs Act included Section 199A, which had an unintended advantage for patrons selling grain to cooperatives in which they were a member. If you have specific tax bill questions, please contact your local University of Missouri Extension Ag Business Specialist.

Source: Mary Sobba, ag business specialist



Garden Tips for May

May is a busy month for gardening. To ensure you have a successful gardening season, follow these gardening tips:

Ornamentals

- Fertilize azaleas after bloom. Use a formulation that has an acid reaction.
- Apples, crabapples and hawthorns susceptible to rust disease should have protective fungicidal sprays applied beginning when these trees bloom.
- Continue monitoring pines, especially scotch and mugo, for sawfly activity on new shoots.
- Do not remove spring bulb foliage until it turns yellow and dies down, or next year's flower production will be reduced.
- Begin planting warm-season annuals.
- Plant summer bulbs such as gladiolus, caladiums, dahlias, cannas, and elephant ears.
- Scale crawlers are active now. Infested pines and euonymus should be treated with an insecticide at this time.
- Pinch back mums to promote bushy growth.

Vegetables

- Set out vegetable transplants, herbs and plant sweet potatoes.
- Stake or cage tomato plants at planting time.
- Direct seed crops like cucumber, melons and pumpkins.
- Growing lettuce under screening materials will slow bolting and extend harvests into hot weather.
- Place cutworm collars around young transplants. Collars are can be made from cardboard strips.
- Isolate sweet, super sweet and popcorn varieties to prevent cross-pollination.
- Harvest asparagus for continued spear production. Control asparagus beetles as needed.
- Thin plantings of carrots and beets to avoid overcrowding.
- Control caterpillars on broccoli and cabbage plants by handpicking or use biological sprays such as B.T.
- Remove rhubarb seed stalks as they appear.
- Watch for striped and spotted cucumber beetles. Both may spread wilt and mosaic diseases to squash and cucumber plants.

<u>Fruits</u>

- Mulch blueberries with pine needles or sawdust.
- Do not spray fruit trees while in bloom. Refer to local Extension publications for a fruit spray schedule.

<u>Turfgrass</u>

- Mow lawns at 2 to 3.5 inch height.
- Apply post-emergence broadleaf weed controls if needed.
- Watch for the emergence of sod webworms.

Source: Jennifer Schutter, horticulture specialist

Northeast Missouri Bull Sale

The 46th Annual Northeast Missouri Performance Tested Bull Sale was held in Palmyra on March 31. The overall average on forty-three bulls was \$2,995.

The high breed average was Polled Hereford at \$3,667. Other breed averages were SimAngus \$3,500, and Angus \$2,931.

High selling bulls in the sale were Angus and Polled Hereford consigned by Kris and Tracy Graupman, Palmyra, MO and Keithley/Jackson, Frankford, MO and sold for \$6,700 and \$5,900 respectively. They were purchased by Keithley/Jackson, Frankford, MO and Baker Family Farms, Atlanta, MO. Fifteen other bulls sold for \$3,000 or higher.

Other top selling bulls included Shannon Farms, Angus at \$5,600; Donald Drebes, top Simmental at \$3,500.

Bulls offered in this sale met certain predetermined standards in order to be eligible for this sale. Bulls must be in the upper 50th percentile in two out of four EPD (Expected Progeny Difference) traits: CE or BW, WW, YW, or Milk, yearling height 49 inches or above, weight at a year 1100 pounds or above, semen tested and examined for breeding soundness. In addition bulls must meet the following health requirements: tested and found negative for Brucellosis and BVD-PI, vaccinated against Leptospirosis, and must follow state requirements for trichomoniasis.

The annual meeting of the Northeast Missouri Beef Cattle Improvement Association, which sponsors the bull sale, was held April 5 at the Rialto Banquet Hall in Hannibal with 95 members and guests attending. Several awards were presented at the banquet.

Plaques were presented to the owners of the high indexing bulls in the sale. Angus went to Tracy and Kris Graupman, and Hereford went to Keithley/Jackson.

Other awards presented, included Outstanding Seedstock Producer, Donald Drebes, Monroe City, MO; Outstanding Commercial Producer, Randy Baker, LaPlata, MO; and Outstanding Service to Daniel Mallory, Perry, MO

The sale is a cooperative effort between the Northeast Missouri BCIA and University of Missouri Extension. For details on participating, contact your nearest Extension Livestock Specialist. The next sale will be March 30, 2019 at F & T Livestock Market, Palmyra, MO.

Source: Daniel Mallory, livestock specialist



Area Grazing Schools

Several grazing schools have been scheduled for 2018. MU Extension partners with USDA NRCS and county Soil and Water Conservation Districts for the educational schools. Below is a partial list of the 2018 schools.

Boone / Howard counties

June 14 - 15 Fayette, MO For details call: 660.248.3358 ext. 3

Putnam County

September 20 - 21 Unionville, MO For details call: Valerie Tate 660-895-5123

Ralls County

June 7 - 8 For details call: Lucas Brass 573.985.8611 ext. 110

Additional schools are expected to be added to the list. For locations across the state visit https://mofgc.org/grazing-schools/