



Ag Connection

Your local link to MU for ag extension and research information

<http://agebb.missouri.edu/agconnection>

For more information
please contact your
MU Extension Center:

Adair
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(573) 581-3231

Boone
(573) 445-9792

Callaway
(573) 642-0755

Chariton
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Clark
(660) 727-3339

Howard
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Knox
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(573) 767-5273

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(660) 327-4158

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(573) 633-2640

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(660) 265-4541

2020 Corn, Soybean and Grain Sorghum Variety Trial Results Available

The University of Missouri Variety Testing Program's motto is, "We test the best." This year seed companies entered some of their best corn, soybean and grain sorghum varieties. The program uses the most current scientific principles and procedures to compare varieties in unbiased trials across Missouri.

Plots were located in multiple locations around the state including farmers' fields and University of Missouri's agricultural experiment stations. Plots were replicated three times in each location and randomly planted across the field. These sites represent a wide range of soil types and weather conditions. Locations in North Missouri included Albany, Canton, Mooresville, Novelty and St. Joseph.

Corn was planted in 30-inch rows at 30,000 kernels per acre in the non-irrigated trials in North Missouri. Final corn yield was corrected to 15.5 percent moisture, but moisture at the time of harvest is also reported. As part of the trial, varieties were given a lodging rating just prior to harvest. Forty-one hybrids were entered in the north Missouri trials. The average yield of all varieties of non-irrigated corn in these five locations ranged from 246.1 bushels per acre to 203.0 bushels per acre.

Soybeans were planted in 30-inch rows at the rate of 160,000 seeds per acre. Final soybean yield was corrected to 13 percent moisture, but moisture at the time of harvest is reported. A lodging score and plant height were recorded at the time of harvest as well. The average yield in the north Missouri trials for 38 varieties in the group 3 maturity rating ranged from 64.1 to 53.4 bushels per acre. The average yield of the 36 varieties in the group 4 maturity rating ranged from 71.7 to 53.2 bushels per acre.

Grain sorghum varieties were tested in four locations around the state, including one in north Missouri. It was planted in 30-inch rows at the rate of 100,000 seeds per acre. Final grain sorghum yield was corrected to 14 percent moisture. Plant height was measured at maturity and a lodging score was given at harvest. Yield of the 22 varieties in the north Missouri trial ranged from 164.0 to 131.8 bushels per acre.

Yield is not the only factor to consider when selecting a variety. Standability, maturity, as well as insect and disease resistance are other important factors to take into consideration. The variety trial results from across the state are available online at www.varietystesting.missouri.edu.

Source: Valerie Tate, agronomy field specialist

Paycheck Protection Program

First and Second Draw Loans

The Small Business Administration (SBA) reopened the Paycheck Protection Program (PPP) on January 11 for First Draw loans and January 13 for Second Draw loans). Funds can be used for payroll costs, including benefits; mortgage interest; rent; utilities; worker protection costs related to COVID-19; uninsured property damage costs caused by looting or vandalism during 2020; some supplier costs; and expenses for operations.

Borrowers are eligible for full loan forgiveness if during the 8 to 24 week covered period following loan disbursement: (1) Employee and compensation levels are maintained; and (2) The loan proceeds are spent on eligible expenses with at least 60% going to payroll costs.

Businesses and their affiliates, with 500 or fewer employees can apply, as well as nonprofits, Veterans organizations, tribal concerns, self-employed individuals, sole proprietorships, and independent contractors. Some designated industries with over 500 employees can also apply.

Existing PPP borrowers who did not receive loan forgiveness by December 27, 2020 may: (1) reapply for a First Draw PPP Loan if they previously returned some or all of their First Draw PPP Loan funds, or (2) under certain circumstances, request to modify their First Draw PPP Loan amount if they did not accept the full amount for which they were eligible.

Borrowers can apply for a First or Second Draw PPP Loan until March 31, 2021, through any existing SBA 7(a) lender or through any federally insured depository institution, federally insured credit union, eligible non-bank lender, or Farm Credit System institution that is participating in PPP. At least \$15 billion is set aside for First Draw PPP loans and \$25 billion for the Second Draw with a maximum of 10 employees. The program also targets loans of \$250,000 or less for borrowers in low- or moderate-income neighborhoods.

A borrower is generally eligible for a Second Draw PPP Loan if they previously received a First Draw PPP Loan and will or has used the full amount for eligible uses; has no more than 300 employees; and can demonstrate at least a 25% reduction in gross receipts between comparable quarters in 2019 and 2020.

For most borrowers, the maximum loan amount of a

Second Draw PPP Loan is 2.5x average monthly 2019 or 2020 payroll costs up to \$2 million. For borrowers in the Accommodation and Food Services sector, the maximum loan amount for a Second Draw PPP Loan is 3.5x average monthly 2019 or 2020 payroll costs up to \$2 million.

To promote access for smaller lenders and their customers, SBA initially only accepted Second Draw PPP Loan applications from community financial institutions starting on January 13, 2021. Shortly thereafter, it opened to all participating lenders for Second Draw PPP Loans. Visit www.sba.gov for more details.

Source: *Darla Campbell, ag business specialist*



2020 Show-Me Select Heifer Sale

The Northeast Missouri Show-Me-Select Replacement heifer sale averaged \$2,178 at F & T Livestock Market, Saturday, December 12.

The 14 producers of the 191 heifers were enrolled in the MU educational heifer management program. The heifers were bred to sires with both calving-ease and growth genetics. The top lot sold belonged to Keithley/Jackson and brought \$2,900.

The highest average price from a consignor was \$2,600 on five head from first time consignor Connor Eckman, Paris, MO. Other top consignors were Keithley/Jackson, Frankford, MO, \$2,578 on 23 head; McCutchan Angus, Monticello, MO, \$2,492 on 14 head and Gene and Kim Dryden, Hannibal, MO, \$2,285 on seven head.

The 34 buyers were responsible for just over \$416,000 worth of bred heifer exchanging hands in one hour. Twenty-seven repeat buyers purchased 152 head, or 80 percent of the total consignment. Calving surveys returned by these buyers provide important information that is given back to consignors to improve for future years.

The Show-Me-Select heifer development program takes nearly a year to complete. The heifers complete a pre-breeding examination usually four to eight weeks before to breeding. This exam includes a pelvic measurement, reproductive tract score, and weight. Heifers may be bred artificially or be exposed to natural service, however; the service sires must meet specific calving ease Expected Progeny Difference (EPD) requirements based on breed. This year 115

head, or 60 percent, of the heifers in the sale were synchronized and bred by artificial insemination (AI). In this sale, the choice to AI, showed a \$120 price advantage over those bred naturally.

All heifers must be pregnancy tested within 90 days of breeding by a veterinarian to determine expected calving date. The use of ultrasound has helped many of the veterinarians improve their accuracies on calving dates. During the development period the heifers undergo an extensive health program and are vaccinated at weaning, pre-breeding, and pregnancy examination as well as treated several times for internal and external parasites. Heifers are also screened for blemishes, condition, muscling and structural soundness by MU livestock specialists and USDA graders.

Averages of other Show-Me-Select sales from fall 2020 were Joplin, \$1,731 on 212 head; Kirksville, \$1,952 on 135 head; Kingsville, \$2,119 on 186 head; Fruitland, \$2,371 on 45 head; and Farmington, \$1,758 on 79 head.

This was the 24th year for the Show-Me-Select heifer sale in Palmyra, MO and over 41,306 heifers have been through the program and 7,193 head have been sold. If you are interested in participating contact your local MU Extension livestock specialist.

Source: *Daniel Mallory, livestock specialist*



Useful Guides for “Brushing up” on Chainsaw Safety

It is the time of year when much of the growing season chores are caught up and thoughts turn to winter and the numerous chainsaw tasks. Whether cutting wood for heating homes or clearing brush from fence rows, “brushing up” on chainsaw safety is a very critical step in accident prevention.

When selecting or maintaining a chainsaw, MU Guide G1954 covers the various types of chainsaws and features available on the market from electric to gas powered chainsaws. Chainsaws are classified as either primarily nonprofessional saws or professional saws with larger engine displacement.

This guide covers the various components for consideration when selecting a chainsaw. Proper operational checklists and maintenance schedules are also addressed. Attention should be given to personal

protective equipment and, an often overlooked, first aid kit that is readily available.

After selecting a chainsaw, it is time to address safe operation. MU guide G1959 provides some clear guidelines for operating a chainsaw safely. Before beginning any chainsaw task, consider the respective personal protection equipment necessary such as hard hat, safety glasses or goggles, ear muffs or ear plugs, gloves, the type and fit of clothes, chain saw chaps and even the boots worn.

Preventative equipment maintenance is a must and will reduce the amount of down time and danger involved in the operation. Sharp saws with proper chain tension, clean air filters, and quality chain lubricant will improve success. Additional safety considerations are addressed.

Chainsaw “Do Not’s”

do not work alone
do not work on a ladder
do not hold the saw
above shoulder height
do not work at night.

Attention to operational safety is critical when considering the forces used to cut wood that can conversely work against safe operation. Kickback can occur with initial chain contact near the end of the bar which kicks the advancing chain toward the operator. Pushback is the term to describe when the top of the bar is being used for cutting and the chain is pinched. The reactional force pushes the saw rapidly back toward the operator. Pull-in occurs typically when the saw is not rotating at full speed and the bottom of the bar approaches the cutting surface. In each of these examples, care should be given to proper chainsaw grip and location of the bar at all times.

Felling, Limbing and Bucking Trees, MU guide G1958, includes the safe procedures for dropping a tree where desired, removal of branches and cutting into appropriate lengths.

All three of these guides deserve a good read prior to any season of chainsaw use. They can be found at the following websites or contact your local Extension Center.

Selecting and Maintaining a Chain Saw

<https://extension.missouri.edu/publications/g1954>

Felling, Limbing and Bucking Trees

<https://extension.missouri.edu/publications/g1958>

Operating a Chain Saw Safely

<https://extension.missouri.edu/publications/g1959>

Source: *Todd Lorenz, agronomy specialist*

PPAT Schedule

The following list is for in-person training. Pre-registration is required with limited seating.

Training is also available online or by study guide. For questions call Valerie Tate (660)-985-5123 or Dhruba Dhakal (573) 581-3231.

Adair County - Feb. 9 @ 10 a.m., or 2 p.m. or 6 p.m.
MU Extension office 660-665-9866

Clark County - Feb. 2 @ 10 a.m. or 2 p.m. Scotland Fire
Dept. 660-465-7255

Chariton County - Mar. 8 @ 10 a.m. & 1 p.m. Chariton
County Courthouse big courtroom 660-288-3239

Howard County - Feb. 4 @ 6 p.m. Howard County
Extension Center 660-248-2272

Knox County - Feb. 3 @ 10 a.m. & 2 p.m. & 6 p.m.
Greenley Research Center 660-397-2179

Lewis County - Feb. 25 @ 2 p.m. or 6 p.m. Courtroom
573-767-5273

Macon County - Feb. 17 or 24 @ 10 a.m. or 2 p.m. or
6 p.m. MU Extension office 660-385-2173

Marion County - Feb. 25 @ 10 a.m. & 1 p.m. Marion
County Courthouse, Commissioner Room 573-769-2177

Monroe County - Feb. 22 @ 10 a.m. & 1 p.m. Monroe
County Extension Center 660-327-4128

Putnam County - Feb. 23 @ 2 p.m. 4-H Building
660-947-2705

Ralls County - Mar. 2 @ 10 a.m. & 1 p.m. Mark Twain
H.S. Vo Ag Bldg, Center, MO 573-985-3911

Randolph County - Feb. 17 @ 10 a.m. & 1 p.m. Randolph
County Extension Center 660-269-9656

Schuyler County - Feb. 4 @ 2 p.m. Courthouse basement
660-457-3469

Shelby County - Mar. 17 @ 10 a.m. & 1 p.m. Shelby
County Extension Center 573-633-2640

Sullivan County - Feb. 19 @ 10 a.m. or 2 p.m. City Hall
Community Room 660-265-4541

Return Service Requested



Northeast Missouri
Ag Connection
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