Agricultural businesses can apply for EIDL now

On Monday, May 4, the U.S. Small Business Administration opened up Economic Injury Disaster Loan applications on a limited basis specifically to agricultural businesses. The application is available at www.SBA.gov/Disaster.

At this time, ONLY agricultural business applications will be accepted due to limitations in funding availability and the unprecedented number of applications already received.

Agricultural businesses include those engaged in the production of food and fiber, ranching, and raising of livestock, aquaculture, and all other farming and agricultural related industries (as defined by section 18(b) of the Small Business Act (15 U.S.C. 647(b)).

SBA is encouraging all eligible agricultural businesses with 500 or fewer employees wishing to apply to begin preparing their business financial information needed for their application. Those needing assistance in preparing business financial information can reach out to the Missouri Small Business Development Centers to receive confidential one-on-one assistance. Sign up for services at missouri.ecenterdirect.com/signup.

About the Missouri SBDC

The Missouri Small Business Development Centers help business owners make confident decisions to start, grow and sell their businesses. Services are provided to all Missouri counties and the city of St. Louis in the form of training events and one-to-one counseling by appointment. Missouri SBDC is funded in part through a cooperative agreement with the U.S. Small Business Administration and is a partner of University of Missouri Extension.

MU research: Corn emerging in 1-week window has little impact on yield

COLUMBIA – Research by University of Missouri Extension agronomists shows that there is little yield difference in unevenly emerged corn.

MU Extension agronomist Bill Wiebold researched corn emergence's effect on yield in 2010 and 2011.

Wiebold tagged individual plants from emergence through harvest. He compared the weight and height of early-emerging, mid-emerging and late-emerging plants.

He then hand-harvested and shelled corn ears, weighed kernels and calculated yield. He found little yield difference if plants emerged within a week of each other.

Wiebold's research dispels concerns that yields decrease when smaller, later-emerging plants compete for nutrients and sunlight with larger, earlier-emerging plants.

Uneven soil moisture and uneven temperatures in the seed zone are the primary reasons for uneven emergence. Other reasons include soil crusting, shallow seed depth, poor soil contact, cool weather and too few growing degree days to develop strong root systems.

Emergence times may vary between parts of a field, from one row to the next, or even from one plant to the next.

Uneven corn is certainly undesirable, but most uneven stands do not warrant replanting, says MU Extension specialist Greg Luce.

Luce cites research from Wisconsin and Illinois extension agronomists showing a 6-9% yield loss in unevenly emerged plots having a week and a half delay. When they compared the yield loss due to later replant, their data showed less than a 5% yield recoup gained from replanting. Luce adds that the final population is most critical.

To help farmers estimate dollar gain or loss from replanting, Wiebold and MU Extension agronomist Ray Massey created the MU Replant Decision Aid. The spreadsheet can be downloaded along with the MU Extension guide "Corn and Soybean Replant Decisions" at extension2.missouri.edu/g4091.

Luce says the right planting depth improves chances for a good stand with even emergence and better yield potential. New research from USDA Agricultural Research Service soil scientist Newell Kitchen and MU master's student Stirling Stewart shows planting depth corresponds to the window for emergence.

"Too shallow planting leads to far more problems than planting too deep," Luce says. "From my experiences, bad things happen when corn seed is planted shallower than 1.5 inches. The ideal target is 1.75 to 2.25 inch, but depending on soil type and conditions, seeds may be planted up to 3 inches without any effect on stand establishment."

Source: William Wiebold, 573-673-4128 (cell); 573-882-0621; Greg Luce, 573-473-7079

MU's 'chill-dren of the corn' warn of chilling effects of planting cold

COLUMBIA – University of Missouri Extension specialists say corn planting in cool soils increases risk of poor emergence, weak stands and disease.

MU Extension agronomist Bill Wiebold's research shows that planting too soon can slow emergence and reduce stand numbers.

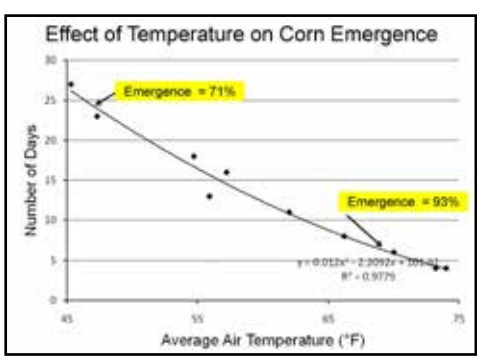
After a week of temperatures in the 20s and 30s, Missouri farmers are going full-bore with corn planting, says MU Extension agronomist Greg Luce.

The April 20 USDA Crop Progress Report said that during the previous week, temperatures in Missouri averaged 43.5 degrees, 12.7 degrees below average, and hardly a warm welcome to corn planting. The state's corn planting rose to 11 percent, 14 percentage points below the five-year average.

Wiebold's two-year study on planting date's effect on corn emergence shows why planting into cool soils may not be the best strategy. Wiebold completed the study about 10 years ago, he says, so it does not consider the effect of today's seed treatments.

Wiebold planted six hybrids of corn in test plots at MU's Bradford Research Center on different dates between the end of March and the middle of June. He took counts of emerged plants. His data showed that corn took longer to emerge when air temperatures were low. Stand counts also dropped.

Corn planted in late March took as much as 27 days to emerge. Mid-June corn popped through in four days. Not only did cold-planted corn seed take longer to emerge, fewer plants emerged—71% compared to 93% on warmer days.



Luce cautions farmers to avoid shallow planting during cooler weather. Guidelines suggest a 2-inch depth for uniform emergence.

Wiebold says it is still early to talk about replant decisions, but farmers may want to review the MU Extension guide "Corn and Soybean Replant Decisions."

The guide tells how to count and calculate stands, figure replant costs and compare yield potentials. The guide, available for free download at extension2.missouri.edu/g4091, provides worksheets to help growers make decisions for different regions of Missouri.

MU Extension plant pathologist Kaitlyn Bissonnette says corn planted in cool, wet soil also faces risk of Pythium root rot.

Conditions that delay seedling development and emergence can result in seed decay. Pythium species can cause the seed to rot before germinating or cause pre- or post-emergence damping off. Affected seeds may be discolored and soft and rot rapidly. Roots also may be discolored and break off easily when removed from the soil.