

Possible alternative crops for late planting situations in Missouri

by Rob Myers

Unusually wet weather in Missouri during 2019 has created a situation where some farmers are looking for crops that can be planted later than corn or soybeans. Of course, in many parts of the state, soybeans are a reasonable “mid-summer” crop, usually able to still produce a crop if planted by early July. However, some alternative crops have been proven to work for planting a little later than soybeans and to be agronomically adapted to Missouri.

Sunflowers, buckwheat, and cowpeas are three fast-maturing crops that have a history of use in Missouri for late planting. The main challenge with each is markets. A brief summary of these three crops is below. Producers are advised to check the label for any residual herbicides that may have been applied early in the season to make sure the herbicide(s) are compatible with the alternative crop being considered. Besides grain/oilseed crops, another option is for farmers to consider planting a summer annual forage crop instead of a crop for seed harvest. Also, cover crops can be considered that have dual use potential as forages, or simply to suppress weeds and protect the soil.

Sunflowers

Probably the most extensively used alternative to soybeans for mid-summer planting in Missouri has been sunflowers. In general, sunflowers can be planted about 10 to 14 days later than soybeans, in part because they are faster maturing, and in part because they can tolerate a light frost in the fall better than soybeans, and still keep growing. Sunflowers can usually tolerate a frost down to about 28 or 29 F. Sunflowers also have the advantage for mid-summer planting of being fairly drought tolerant and vigorous in growth. A variety of herbicides are available for sunflowers and they can be planted no-till or following tillage. As with other alternative crops, the primary limitation to their use is finding a market. Most farmers who have grown sunflowers in Missouri have marketed them for birdseed, either finding a birdseed packaging company

or arranging to have them cleaned and bagged through a local seed cleaner. When growing sunflowers for the birdseed market, an oilseed variety should be used. Dozens of oilseed hybrid sunflower varieties are on the market, with most major seed companies offering at least a few varieties. Variety trial information on sunflowers is available at:

<https://www.sunflowernsa.com/growers/yield-and-survey/yield-trials-hybrid-disease-ratings/>

For information on how to grow sunflowers, see:

<https://extension2.missouri.edu/g4701>

Buckwheat

Among the potential alternative grain crops that can be grown in Missouri, buckwheat is the fastest maturing and the one that can be planted latest. In central Missouri, buckwheat has been successfully planted in early August for fall harvest. It could be planted up through late July in northern Missouri or as late as mid-August in southeast Missouri. Buckwheat it planted with a grain drill and grows rapidly, starting to develop flowers and then seeds within 30 days after emerging. The later it is planted in the summer, the faster it matures, but it also stays shorter, typically only getting about two feet tall if planted after mid-July. In early summer, it will get a little taller, potentially up to 3 feet tall. Buckwheat grain is most often used for human food, and the majority of what is grown in the U.S. is shipped to Japan. A challenge in Missouri is lack of local markets. Most buyers are a considerable distance away, so those interested in growing it either need to arrange for long-haul trucking or be creative in finding local uses, possible for the cover crop seed market. Relatively few varieties of buckwheat are available, but buyers using it for food made specify the variety to be grown.

For information on how to grow buckwheat, see:

<https://extension2.missouri.edu/g4163>

Cowpeas

Among the large-seeded legume (pulse) crops, cowpeas are the best adapted to planting in Missouri in mid-summer. Faster maturing than soybeans and more drought tolerant than soybeans, cowpeas have a history of being double cropped after wheat in southeast Missouri. Cowpea varieties are of two general types, those that are more upright and bush-like, and those that are lower growing and more viney. The most commonly available cowpea variety in Missouri is iron clay cowpea, which is a viney type often sold for cover crop or forage use. For the seed market, other varieties are typically preferred. Cowpeas

usually yield somewhat less than soybeans, and as with other alternative crops, the market situation should be carefully researched before planting.

For more information on how to grow cowpeas, see: <https://www.extension.iastate.edu/alternativeag/cropproduction/cowpea.html>