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Farm Update

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Cover Crop Options on Prevented Planting Acres

Delayed field drying will prevent some land from being planted this year. While this may be the best financial option, fallow crop land requires management. Bare fields result in a greater risk of erosion and becoming a nursery for waterhemp and johnsongrass proliferation this summer. Options for controlling weeds on fallow land include multiple tillage passes, multiple mowing passes, or multiple herbicide passes. All of these options have a time commitment and expense. The University of Kentucky recommendation is to start weed-free through whichever method you prefer and plant a cover crop that will suppress weeds and provide soil benefits that replicate the crop that was intended to be grown. A summer cover crop will help manage weeds, take up and reserve applied fertilizer, reduce erosion, and improve soil structure. If herbicides have already been applied, check the labels and ensure that cover crops will not be negatively impacted.

Sorghum sudangrass and pearl millet are warm-season grasses that establish easily and grow well in Kentucky. They both produce heavy biomass that can provide crop residue volume similar to corn. 2,4-D herbicide is labeled for use on sorghum sudan grass. One application would be beneficial for controlling waterhemp. It should be applied before waterhemp exceeds 4 inches in height and after the sorghum sudan grass is well established, has at least 6 leaves, and

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is between 5 and 10 inches in height. Also important is that an application of 2,4-D will reduce seed production. Use caution that 2,4-D has a 30-day pre-harvest interval if any is harvested for forage.

Cowpea and sunn hemp are warm-season legumes that establish easily and grow well in Kentucky. Annual lespedeza is another option, but it will produce the least biomass of these three. Seed availability may be more limited for the summer annual legume species. Other options include brassicas such as forage or tillage radish, and asters such as sunflower. These species are usually used as a part of mixtures rather than standalone seedings. Small-seeded legumes such as crimson clover tend to be more sensitive to seeding depth and can be harder to establish.

Only planting a grass summer cover crop provides the herbicide option described above. Only planting a legume provides the option of a Group 1 grass herbicide. Planting mixtures of grasses, legumes, and forbs eliminates the use of herbicides for weed control. Yet there are benefits to the mixes. Pairing summer annual grasses with legumes such as cowpea or sunn hemp could improve erosion prevention and add nitrogen.

If weed suppression is the primary goal, choose a cover crop with higher biomass potential. If higher biomass will lead to other challenges in the fall, select a cover crop with less biomass potential.

Nitrogen Soil Test

A lot of land was extensively flooded after nitrogen had been applied. Now, those farmers face the decision of applying additional nitrogen to ensure that the growing corn has enough. One option is to conduct a nitrate soil test to help decide. Soil samples should be taken

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down to 12 inches deep, and several samples should be taken in each field of both the low and higher ground. The samples should be mixed well, and a subsample sent for nitrate analysis.

If the nitrate-N is less than 11 ppm, there is a low amount of plant-available N in the soil.

Therefore, there is a good chance corn will respond to a sidedress application of N ranging from 100 to 150 lbs. N/acre. If the nitrate-N is between 11 and 25 ppm, there is a greater amount of plant-available N in the soil, indicating corn may or may not respond to sidedress N. The recommended sidedress N application at this soil test level is 0 to 100 lbs N/acre. If the soil test nitrate-N is close to 11 ppm, then higher sidedress N rates would be used. Lower rates would be used as nitrate-N approaches 25 ppm. The test is least accurate in this range, so the test results can only be used as a broad guide. If the soil test nitrate-N is greater than 25 ppm, there is adequate plant-available N in the soil, which indicates corn will probably not respond to sidedress N application.

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