

Ethanol will demand more crops

Federal expectations are to provide for 38 percent of ethanol needs from cellulosic sources, such as crop residue, wood, specialty crops, like kenaf, and traditional forage crops without interfering with projected food and fiber needs.

Crop residue is not viable because removing greater than 25 percent is detrimental to soil and water conservation.

Wood can meet short-term supplies but is not sustainable due to growth rates. Additionally, it apparently will take much longer to develop the digestion process for wood compared to grasses, which is projected to be defined within five years. Existing perennial pastures and hay production are excluded because they are needed to meet the projected food and feed requirements.

It's been estimated that 55 million more acres of forage crops, mostly perennial warm-season grasses, are needed at an average yield of 5 tons per acre to meet the federal expectations for cellulosic ethanol.

Most of the country has identified prospective biofuel species based on an average annual yield of 5 tons per acre, using switchgrass as the stan-

dard; however, the national average reported hay yield is only 2.3

AG SENSE



By Leonard Lauriault

perennial warm-season grasses very well in New Mexico (actually, they do a pretty good job of growing without much help from us, just look at the bar ditches).

Cellulosic biofuel crops, like grasses and trees, are relatively low value crops and, consequently, must be low input regarding water, fertilizer, and harvest costs. Also, to hold transportation costs to a minimum, ethanol plants need to be located in areas of higher productivity and most of New Mexico will not meet the demand without a considerable amount of thinking outside of the box. Over the next

tons per acre. So, we'll actually need over 100 million acres dedicated to biofuel production. We can grow an annual

five years, we need to see how our grasses compare to switchgrass and learn how to manage them for increased harvestable yield with minimal inputs. Some research has begun and more will have to follow to answer the many questions about cellulosic ethanol and its place in New Mexico.

In the meantime, some producers will want to jump on the cellulosic band wagon. First, remember, we've got five years before the cellulose will be needed.

Second, resist plowing out CRP fields. High grain prices cannot last because sugar- and starch-based ethanol production is not even sustainable in the short-term. In fact, a plant in Minnesota has already closed because there wasn't enough water locally to operate the digestion processes (a catalytic conversion process is being developed that uses no water). Additionally, the

already established grasses in those CRP fields, including weeping lovegrass, may prove to be valuable for cellulosic biofuel when the need arises in five years. Until then, continue drawing your payments or take advantage of high hay prices. Grazing also is an option for CRP fields. Discuss these options with your local FSA and NRCS offices.

Third, all biofuel crops need to have an alternative use. Again, this makes the forage crops more valuable. If you're bound to get into the bioenergy business, plant something you can sell for hay.

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