Avoiding Problems When Converting Pasture And Hay Fields To Crops

BLUE SPRINGS, MO.

Current economics favor crops over beef cattle, so some producers are putting old pasture or hay fields into crop production. It is simple to use a burn-down herbicide, no-till plant with herbicide-resistant beans and then spray again. But many fields planted this way are showing severe nutritional problems, especially potash deficiency.

Severe potash deficiency will show up as yellowing on the edges of lower leaves. Many of the hay fields have not received adequate fertilizer for the nutrients removed. Three tons of fescue hay will remove 100 pounds of potash and 27 pounds of phosphate. In pastures, the nutrients will be rearranged so the potash and phosphate levels will be high near the water and shade areas and reduced in the rest of the field.

To increase your chances for a good yield, follow these steps:

1. Before planting, take a soil test and apply lime and fertilizer according to the test results. Apply lime six to 12 months before planting; a good soil pH is necessary for the nitrogen-producing nodules.

2. Use the soil probe to monitor for compaction problems. Compacted soil will restrict roots and compound the fertility problems. Fields might benefit from deep ripping or mulch tillage under the row.

3. Inoculate beans before planting. Soybeans need to produce rhizobium bacteria nodules to make nitrogen for the plant. Organic matter from the sod will provide some nitrogen the first year, but inoculating will allow the plant to provide its own nitrogen. Δ