Extension Shoppers Guide article for 3-26-13

## **Spring Planting of Alfalfa**

Written by: Dr. Jim Shroyer, K-State Research and Extension Crop Production Specialist Submitted by: David Kehler, County Extension Director/Agriculture Agent

Producers looking to benefit from the surge in hay prices may want to consider planting alfalfa this spring. If so, the time to start planning for spring planting is now.

Before planting alfalfa, producers should be sure to have the soil tested for pH, phosphorus (P), and potassium (K). There is still time to get this done before a spring planting, and the results will pay off for the life of the stand – usually five to seven years.

Alfalfa does best when the soil pH ranges from 6.5 to 7.5. If the soil pH is less than 6.5, production will be reduced. At very low pH levels, the stand may be thin and weedy. Applying lime, if needed, before planting alfalfa will pay big dividends.

Alfalfa is a big user of P. For every ton of alfalfa removed from a field, 10-12 pounds of P are removed. Past research in Kansas has shown that applying and incorporating P fertilizer, if recommended by a soil test analysis, results in large increases in productivity. In a no-till situation, P fertilizer can be surface-applied and still have a long-term beneficial effect on yields.

It's best to plant alfalfa no-till or reduced-till, if possible. Minimizing tillage can decrease planting costs and help maintain soil moisture levels. Alfalfa can be successfully no-tilled into wheat straw or row crop stubble. No-till will help create a firm, moist soil at planting time; save time; and cut costs.

Whether no-tilled or tilled, make sure there are no weeds growing when alfalfa is planted. Also, be sure there is not herbicide carryover from a previous crop that could injure the seedling alfalfa.

When seeding alfalfa, plant seed <sup>1</sup>/<sub>4</sub> to <sup>1</sup>/<sub>2</sub> inch deep. Plant about <sup>3</sup>/<sub>4</sub> inch deep in sandy soils, unless the field is irrigated. For dryland production, use a seeding rate of 8 to 12 pounds per acre in the west, and 12 to 16 pounds per acre in central and eastern Kansas. For irrigation production, use 15 to 20 pounds of seed per acre in all soils

When selecting seed, producers should be sure to use certified, treated seed. Varieties with a fall dormancy rating of 3 to 4 are best for the northern part of the state. For southern areas of the state, select a variety with a fall dormancy rating of 4 to 5. It is also important to select a variety with resistance to one or more of the following: phytophthora root rot, bacterial wilt, fusarium wilt, verticillium wilt, anthracnose, pea aphid, spotted alfalfa aphid, and other diseases and insects. This will help increase the longevity of the stand.

Producers should be sure the seed is inoculated to help ensure the nitrogen fixation necessary for optimum production.

For more information on alfalfa production, stop by the Butler County Extension Office for a copy of the Alfalfa Production Handbook and other publications. They are also available on the ksre.ksu.edu web site.