

SOIL TEST INFORMATION SHEET – FP-101

Food Plots – Non-legumes

Cool Season Annuals: Ryegrass, Wheat, Oats, Rye, Triticale, Turnips, Rape, and Radishes or Combination of These Species

1. The soil should be limed when the soil pH is 5.8 or lower. Use dolomitic lime if the soil test magnesium level is medium or lower. Optimal pH range for most wildlife forage crops is 6.0 to 6.5.
2. On soils with pH values above 5.8 with a medium or lower level of magnesium, apply 150 lbs. / acre of K-Mag (Sulfate of Potash Magnesia). Use a prepared seedbed and apply 40 - 60 lbs. / acre of nitrogen and the total recommended rates of phosphorus and potassium at or shortly before planting.
3. Apply another 40 - 60 lbs. / acre of nitrogen as a top dress application in late November / early December, or when the cool season annual is well established.
4. If the sulfur level is less than 15 ppm, apply 50 lbs. / acre of Ammonium sulfate at or shortly before planting.

Food Plots - Legumes

Cool Season | Warm Season: Alfalfa, Clovers, Winter Peas | Soybeans, Cowpeas, Lablab, Vetch, and Alyce Clover

1. Low soil pH is more critical for legumes than for non-legumes. Lime should be applied in the summer or the fall prior to planting at the rate required to achieve optimal pH range (6.0 to 6.5). Use dolomitic lime if the magnesium levels are medium or lower.
2. On soils with pH values of 6.0 with a medium or lower level of magnesium, apply 150 lbs. / acre of K-Mag (Sulfate of Potash Magnesia).
3. For warm season legumes, apply the recommended rates of phosphorus and potassium in the spring/summer before or at planting. For cool season legumes, apply the recommended rates of phosphorus and potassium in the fall before or at planting.
4. If the sulfur level is less than 15 ppm, apply 50 lbs. / acre of Ammonium sulfate at or shortly before planting.
5. For perennial legumes (e.g. clover), it is important to apply recommended rates of nitrogen prior to planting, and not in any subsequent fertilizations, to keep from encouraging weed competition from non-legume species.
6. Legumes should be inoculated with the appropriate Rhizobium Bacteria to aid in nitrogen fixation. Consult your local extension agent regarding the proper inoculant code.

Food Plots- Non-legume | Legume Mixture

Cool Season Annual Cereal Grains with Legumes (Ex: Wheat + Clover)

1. Low soil pH is more critical for legumes than for non-legumes. Lime should be applied in the summer or the fall prior to planting. Use dolomitic lime if the magnesium levels are medium or lower.
2. On soils with pH values of 6.0 or greater, with a medium or lower level of magnesium, apply 150lbs./acre of K-Mag (Sulfate of Potash Magnesia).
3. All the recommended rates of phosphorus, potassium, and 40 - 60 lbs./acre of nitrogen should be applied at or shortly before planting. Apply an additional 40 - 60 lbs./acre of nitrogen as a top dress application after the cereal grains or other non-legumes are well established. If the mixture is comprised of legumes at greater than 30%, additional nitrogen is not required.
4. If the sulfur level is less than 15 ppm, apply 50 lbs./acre of Ammonium sulfate at or shortly before planting.

Revised by Extension Wildlife Specialist Luke Stamper