

SOIL TEST INFORMATION SHEET NO. C-110

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Corn, Grain or Silage

1. The optimum soil pH for corn is 5.5-6.5. Agricultural limestone should be applied when the soil pH value is below 5.5. Limestone effectiveness is determined by the size of the particles and the Calcium Carbonate Equivalent (C.C.E.). The lime recommendation is based on a C.C.E. of 100. If the magnesium content of the soil is medium or lower, dolomitic limestone should be used. Do not overlime. Overliming can cause micronutrient deficiencies.
2. Recommended rates of N, P, and K can be applied either broadcast or banded preplant or after emergence. Nitrogen rates may be more efficient in very sandy soils or in heavy clays, with one-half to two-third applied preplant and the balance applied when the corn is 8-10 inches tall. Banding phosphorous will increase its efficiency when the soil pH is very acid or alkaline, or when soil test P levels are low or very low. Phosphorous can be applied on the fall when soil pH levels are 6.0-7.0. Potassium can be applied in the fall except where the soils are extremely sandy and leaching is a danger.
3. Research has shown benefits to using 3-5 gallons of 11-37-0 or equivalent in-furrow on corn at planting.
4. Silage is a very high remover of phosphorous and potassium. Therefore, the recommendations for these elements are much higher for silage crops than for grain crops.
5. Solid or liquid sources of fertilizer are essentially equal in their effectiveness to produce corn when applied in the same rate in the same manner.
6. Contact your county agent for additional information and help in your fertilization program. The agent also receives a copy of this report for the parish office files.