

SOIL TEST INFORMATION SHEET NO. V-410

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Sweet Potatoes

1. Sweet potatoes grown on the traditional sweet potato soils i.e. loessial hills, terraces and upland (hill) soils usually require 30-60 pounds of nitrogen per acre. If the organic matter content is 0.5% then use the higher rate, 45 to 60 pounds of nitrogen per acre. If the organic matter is above 1.5%, the nitrogen application should be reduced to 30-45 pounds or less per acre.
2. On light textured alluvial soils, apply 0-30 pounds of nitrogen per acre. In most cases, sweet potatoes grown on alluvial soils do not require nitrogen applications. If soils contain 1.5% organic matter or more, excessive nitrogen may be furnished to the crop during the growing season so that plants will become excessively vegetative at the expense of storage root production.
3. A low soil pH (5.0-5.2) is preferable for sweet potatoes because of the danger of soil rot infection, a disease that is more prevalent in soils with a pH of 5.4 and above. Newer varieties such as Beauregard and Travis have resistance to the soil rot organism, so high soil pH is of less concern with these newer varieties.
4. There is some indication that a soil pH below about 4.8 can reduce sweet potato yields because of manganese toxicity. This disorder is characterized by chlorotic spots between the veins on fully developed leaves. If soil pH is below 4.8, apply enough lime as indicated by soil test to raise pH to 4.8-5.2.
5. Boron deficiency has been observed in sweet potatoes grown on low pH soils. However, the symptoms usually show up after potatoes have been stored a while. Boron at the same rate of ½ pound per acre preplant should correct the deficiency.
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.