Soil Test Information and Soil Fertility Recommendations for Guar

Texas A&M University Soil Testing Laboratory
Oklahoma State University Soil Testing Lab

Texas A&M soil testing lab in College Station maintains basic charts to determine soil test recommendations for guar (and of course, many other crops). This information, attached here, is also available from the Internet at http://soil-testing.tamu.edu/topics/SWFTL/soiltesting.html

Little work in Texas has been conducted to validate soil test recommendations, but the information may be useful in understanding what the nutritional needs of guar may be. Texas N recommendations for guar are minimal to none, assuming that some degree of Rhizobium nodulation occurs (which has not been the case so far in West Texas). Potassium in West Texas normally exceeds the minimum needed for guar (and most other crops), so it is anticipated that most soils would not require K for guar. Phosphorus is more likely to be recommended if soil test P is low or very low.

Also included is Oklahoma State University guar fertility recommendations for N, P, and K on page 4 of the OSU bulletin, F-2225. This document is available via the Internet at http://www.agr.okstate.edu/plantsoilsci/extension/publications/Extension_Publications.html

As noted on the first page of the OSU soil test interpretations, OSU soil test values and subsequent recommendations should only be used for soil test values generated using the OSU test methods. The greatest potential discrepancy between OSU and Texas A&M recommendations would be the P test, where depending on which test is used based on the soil pH, the OSU test may not be as well suited to high pH soils.

In neither case of the above soil test information is yield goal mentioned as possible criteria in how much nutrient may be necessary. This information would alter recommendations in some instances. We believe that fertilizer requirements, particularly for dryland guar in West Texas, are low, but we don’t have much experience yet. Studies are planned to address some of these issues.

The attached information is provided courtesy of Calvin Trostle, Extension Agronomy, Lubbock,
806.746.6101, c-trostle@tamu.edu