

## **Managing Reniform Nematodes in Cotton with Crop Rotation in 2006.**

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### **Summary**

This multi-year rotation study was initiated in 2005. Its purpose is to study the effect of soybean, corn, and peanut rotations on cotton production in reniform nematode (*Rotylenchulus reniformis*) infested cotton fields and to determine if a nematicide would further increase cotton yield following crop rotation. In this study cotton is rotated with these crops at 1-, 2- and 3-year intervals. In 2006, cotton yield data was available from 1-year rotations only.

Peanut/cotton and corn/cotton rotations produced significantly higher yields than continuous cotton in 2006. The nematicide, Telone II, applied to cotton in the peanut/cotton and soybean/ cotton rotations increased yield slightly. Telone applied to continuous cotton produced a substantial yield increase and comparable to that of the corn/cotton rotation. Both 1- and 2- year rotations of corn and peanut decreased the reniform nematode populations to non-damaging levels in the fall. The reniform populations following two years of corn and peanut were lower than the one year of corn and peanut rotations. Whether these lower populations will result in higher cotton yields will not be known until next year when cotton yield data will be available.