Eliminating TSW Impact on Peanut with Rotation.

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Tomato spotted wilt virus has made significant changes to the way peanuts are grown in the southeast. There was no defense against the disease when it first occurred and yield and quality losses were severe. Symptoms first began around 1990 with losses reaching about 15% in 1997 followed by another peak in 2005 when about a 9% yield loss occurred. Scientist in the tri-state area developed a TSWV index to help reduce losses from this disease. There are no varieties that are immune to TSWV but some have tolerance and this along with planting date, plant population, insecticide use, row patterns, tillage and use of Classic or not all influence the amount of disease that can occur. Strip tillage into cover crops has been shown to reduce the incidence by about 50%. Our research has shown that peanuts can be striptilled into killed bahiagrass reducing TSW by another 50% (very little TSW observed) allowing susceptible varieties to be planted at the normal planting date (pre TSW problems) while making yields that can only be made in the conventional system when planted 3-4 weeks later. This paper will discuss these and other advantages to this system and the reason this should be the 8th factor to consider in the TSWV index model.