

Variation among Peanut Genotypes in Susceptibility to Thrips Vectored Tomato Spotted Wilt Virus.

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Tobacco thrips, *Frankliniella fusca* (Hinds), populations and, Tomato spotted wilt virus (TSWV) incidence and severity were monitored in field plots of Virginia-type peanut (*Arachis hypogaea* L.) cultivars Gregory and Perry and twenty-two advanced lines. The tests were conducted at the Peanut Belt Research Station in Lewiston, NC during the 2004 and 2005 field seasons. Across both years, final incidence of TSWV and the number of adult thrips varied significantly among lines. Differences among lines, in the number of infected, but non-symptomatic plants and in the occurrence of late season "yellowing" also varied significantly. TSWV infection was confirmed by ImmunoStrip® assay (Agdia ISK 39300) in 86% and 100% of visually symptomatic plants, 10% and 40% of non-symptomatic, and 92% and 98% of late-season yellows during 2004 and 2005, respectively. No differences were detected among lines in the number of tobacco thrips larvae or in the severity of disease and thrips-damage ratings. No significant correlation was detected between TSWV incidence and the average number of thrips collected over lines.