Evaluation of Peanut Production Practices on the Incidence of *Tomato spotted wilt virus*.

R.L. BRANDENBURG*, B.M. ROYALS, Department of Entomology, North Carolina State University, Raleigh, NC 27695-7613, D.L. JORDAN, Department of Crop Science, North Carolina State University, Raleigh, NC 27695-7620 and D.A. HERBERT, JR. Department of Entomology, Virginia Polytechnic Institute and State University, Suffolk, VA 23437

Tomato spotted wilt virus has become a serious problem for peanut producers in North Carolina for the past five years. The problem has been aggressively addressed with research and education programs that were initiated in 2000. Research programs have focused on evaluating successful components of the Georgia tomato spotted wilt virus advisory program. The results of trials in North Carolina on the impact of cultural and production on the incidence of tomato spotted wilt have been very consistent with similar studies in Georgia. Cooler, wet weather in 2003 significantly reduced the incidence of symptomatic plants in the field, but analysis of taproot tissue determined a high percentage of plants tested positive for presence of the virus. Early planting dates suffered from the highest incidence of virus and multiple applications of foliar insecticides did not reduce the incidence of virus despite significant reductions in thrips injury to the plants. The impact of at-plant, in furrow use of the systemic insecticides phorate and aldicarb still remains unclear relative to virus incidence and yield potential.