Using an Advisory Index for Managing Tomato Spotted Wilt Virus in North Carolina Peanuts.

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North Carolina peanut growers have seen an increase in the amount of tomato spotted wilt virus (TSWV) over the past few years. The increase in TSWV has forced researchers and growers to look for alternative ways to help combat this virus. TSWV is transmitted by thrips, which feed on the peanut plants. Both in furrow and foliar insecticides do a good job of controlling thrips, but have only a limited impact on the rate of virus transmission because the virus is transmitted to the peanut plants before the thrips are killed with systemic insecticides. There are no known controls measures for TSWV, but there are several steps growers can take to help reduce the incidence of the virus. Research in NC and VA has developed an advisory index for managing TSWV. The advisory can help growers reduce their risk by variety selection, planting date, plant population, insecticide selection, and tillage practices. Some varieties (Perry, NC 9, NC 7, NC 12C) pose a higher risk for virus, whereas Gregory, NC-V11, Georgia Green C99R have a lower risk. Peanuts planted prior to May 10 tend to have a higher risk to thrips injury than peanuts planted after that date. The index recommends planting 4 to 5 plants per linear foot of row, which will greatly reduce the risk of TSWV. However, fields planted with 2 or fewer plants per linear foot face a greater risk since the thrips are more likely to move into these fields. Establishing optimum plant stands is critical in managing this pest. While no single insecticide treatment is available to control TSWV there are some advantages to using them. Thimet 20G or phorate 20G may reduce the incidence of TSWV in a particular field. The influence of an insecticide on TSWV should not be the overriding consideration for product selection. A disadvantage to conventional tillage is higher thrips populations, which often leads to more TSWV. Growers using a strip tillage program tend to have less thrips injury and lower virus counts, however their yields tend to be lower as compared to a conventional tillage system. All of these production practices play a vital role in minimizing the amount TSWV in peanuts.