

# EFFECTS OF GREENHOUSE SPRAY DRENCH QUADRIS ON RHIZOCTONIA STEM ROT IN FIELDS FOLLOWING PEANUTS



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## ABSTRACT:

Quadris is labeled for a single greenhouse application for control of diseases caused by *Rhizoctonia spp.* In 2017 we treated seedlings with Quadris @ 0.14 oz/1,000 ft<sup>2</sup> tank mixed with Admire Pro (@1.0 oz/1,000 tray cells) as a spray on /rinse off drench to see if such a treatment would reduce loss from Rhizoctonia stem rot in the field without damaging plants. These losses generally occur in the first 7-21 days after transplant.

## THE OBJECTIVES FOR 2017 WERE TWOFOLD:

1. Observe any damage caused by our Quadris treatment
2. Observe and record any incidence of Rhizoctonia stem rot.

## METHODS:

Eight trials were set up where tobacco was grown in rotation with peanuts. Each trial was a randomized complete block with four trays of Quadris treated plants set adjacent to rows of untreated plants (Figure 1). All plants were treated with Actigard and Admire Pro in the greenhouse. Plots were evaluated every week for the first three weeks after transplanting.



Figure 1. Quadris row (pink) adjacent to untreated row (blue).

## RESULTS:

The 2017 transplant season was unusually warm and dry, conditions generally not favorable for development of Rhizoctonia stem rot and very little was seen in any of these trials. No plant damage associated with Quadris treatment was seen. Stand in Quadris treated and untreated tobacco was very good, ranging from 97%-100%. There were no differences ( $p=0.05$ ) in stand in any of the individual trials. However when each trial was entered as a rep a significant ( $p=0.05$ ) improvement in stand with Quadris was seen.

TREATMENT	% STAND
Quadris	99.4
Untreated	99.0
LSD (0.05)	0.3

## CONCLUSION:

While there was no significant benefit associated with quadris at any one location ( $p=0.05$ ) when data was combined there was a significant ( $p=0.05$ ) small improvement in stand across the experiment associated with quadris application. Our second objective was accomplished in that we did not notice any negative effects from the treatment. We will continue this research in 2018.