

PLANTING STRIP TILL TOBACCO

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ABSTRACT

Traditional flue-cured tobacco production systems on southeastern coastal plain soils of the US involve disking, bedding, and cultivation. Data showing the positive benefits of this production system are significant. Only limited research using proven conservation tillage systems on flue-cured tobacco exists. We conducted a four year study evaluating strip till as a method of producing flue-cured tobacco. Our data supported many of the conventional concepts. Reduced tillage resulted in lower yields which could be partially overcome with in-row cultivation. Planting flat with no cultivation resulted in increased lodging. Reduced tillage did result in lower bacterial wilt and tomato spotted wilt virus.

In strip till tobacco here, a strip till unit with a subsoiler and rolling basket was used. Tobacco was planted flat directly into strip till area. Tobacco variety was NC297. We planted April 20 and used starter fertilizer and imidocloprid. We treated with gramoxone, sulfentrazone, clomazone, chlorpyrifos, and metalaxyl prior to planting. Fertility was 75 lbs N, 40 lbs P₂O₅, and 120 lbs K₂O. We normally fumigate with 1,3 dichlorpropene + chloropicrin, but didn't here because of limited time.

Our research convinced us that more research is needed on reduced tillage flue-cured tobacco production.