

Strip Tillage versus Conventional Tillage: Fresh Insight on a Long-Standing Controversy

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The desirability of tillage systems has long been an object of debate. This is of particular importance to agriculture in the Southeast given the capital role played by row crops such as peanut (*Arachis hypogea* L.). Using the eddy-covariance technique, this study evaluates both water-use efficiency (WUE) and yield in conservation/strip-tillage versus conventional tillage. Initial results from the present study suggest that during early, mid and late stages of peanut growth, strip tillage peanuts resulted in significantly greater WUE i.e. 105%, 51% and, 32% improvement than those grown in conventional tillage. Furthermore, strip-tillage yielded 33% more pods than conventional tillage. Additional studies in contrasting environmental conditions are underway to provide growers more effective cultivation practices and irrigation strategies.