

# Subsurface Drip Irrigation in Alfalfa: A Grower's Initial Experience

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## ABSTRACT

To evaluate drip systems for alfalfa on our farm, we installed drip irrigation on one field from a block of four, all of which are flood irrigated. All were planted to the same variety and at roughly the same time. Detailed records were kept to track water use and hay production over the course of the 2009 season.

**Key Words:** alfalfa, irrigation, drip irrigation, water-use, management

## INTRODUCTION

We have been installing drip irrigation on our farm over the past three years. Our standard installation has been on 60" spacing and we have designed the systems primarily for processing tomatoes. As our acreage of drip has increased, we have been concerned that the addition of these systems may lead to a decrease in acres for our alfalfa production. We decided to install a drip system in an alfalfa field to see if it would be a viable option for production in our area.

*Economics.* The per-acre cost for the system was about \$1,400 per acre for the alfalfa field. Since our water cost is fairly low, the system must either increase the life of the stand or increase the yield in order to be viable.

## PROCEDURES

We collected data throughout the season on yield, water use and hay quality from the block of four fields.

## CONCLUSION

The first year provided some interesting data. Water use was dramatically lower in the drip irrigated field. Yield was about equal to the other fields. The major problem with the drip has been rodent pressure. At this point it is too early to tell what the final result will be of this trial.

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