

Management of Furrow Irrigated Sugarbeets for Maximum Production and Environmental Protection

Jerry Neufeld
Canyon County Extension Educator

Steve Reddy
Washington County Extension Educator

Dr. John Gallian
UI Sugarbeet Specialist



University of Idaho

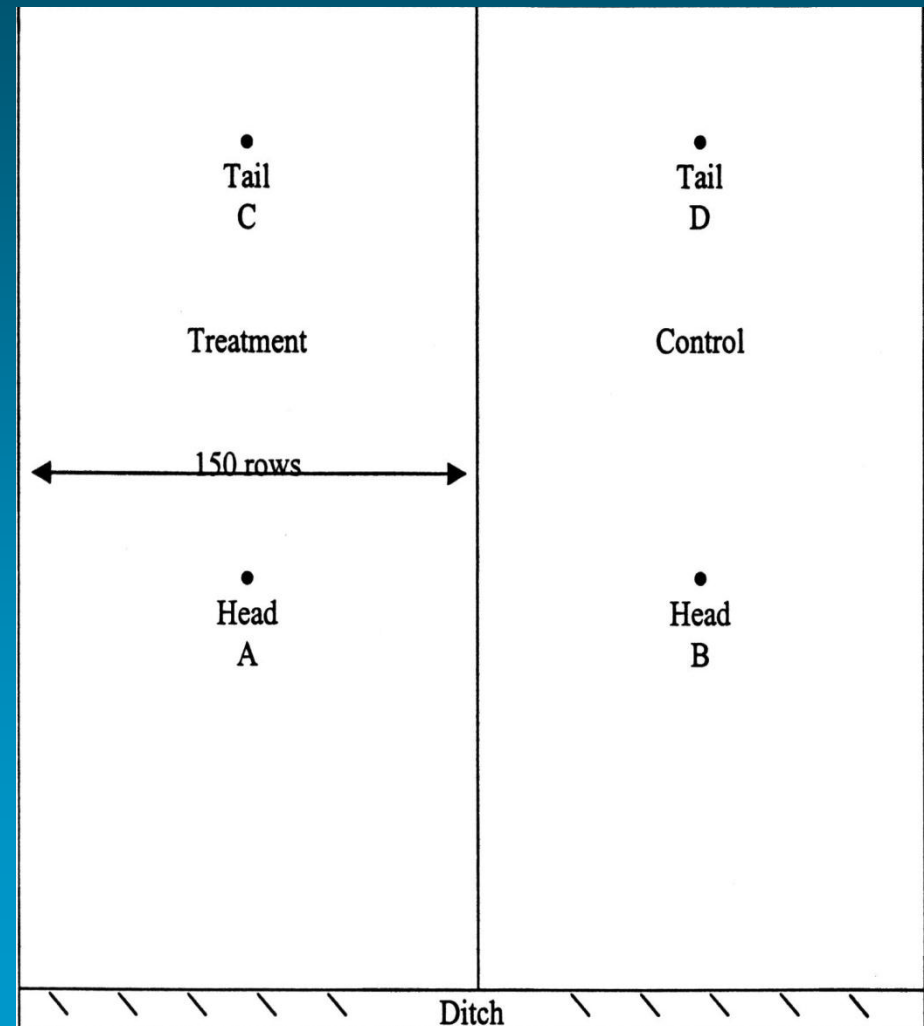
Cooperative Extension System

Description of Project

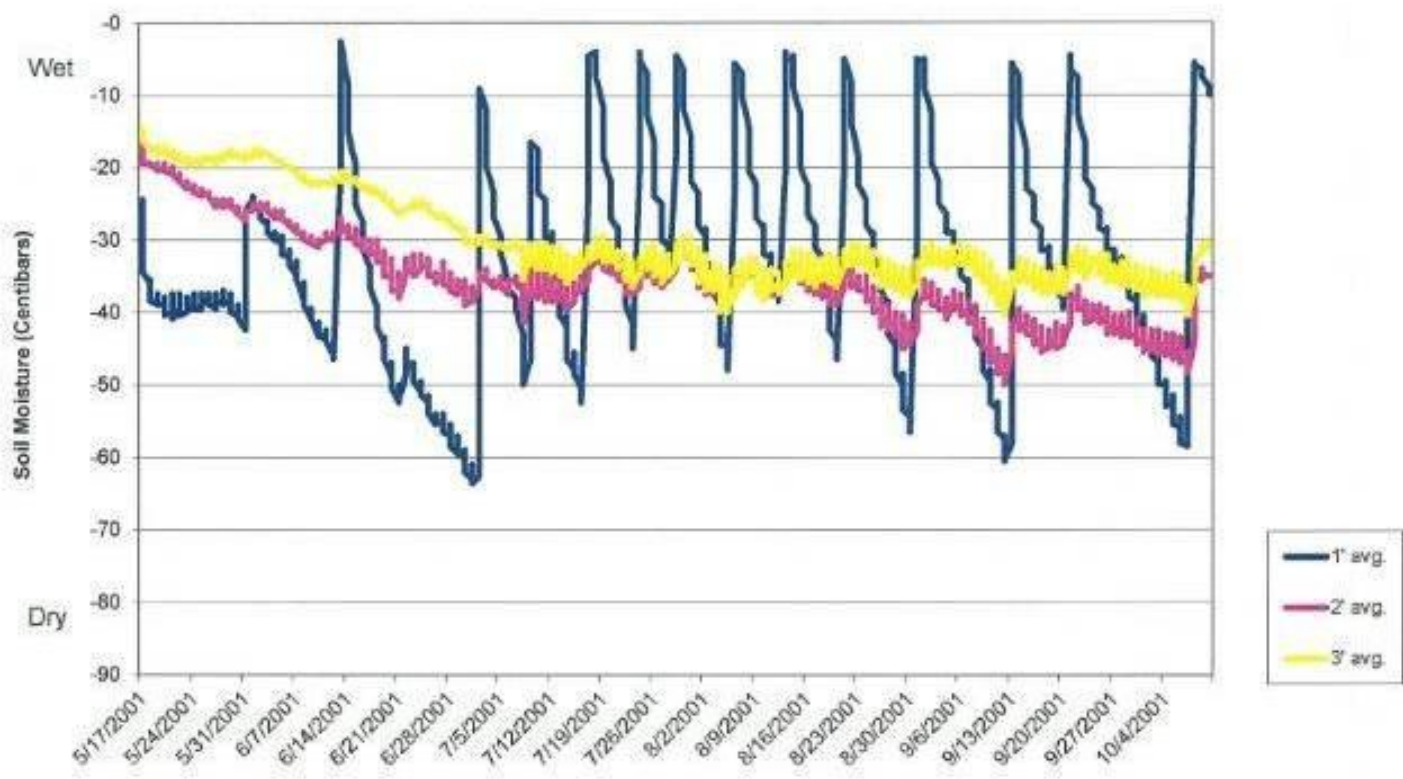
- Sugarbeet fields (Canyon and Washington Counties)
- Treatment and control plot in each field
- Control – irrigation and fertility managed according to growers normal practices
- Treatment – irrigation and fertility management based on soil moisture data, visual observation and soil sampling

Description of Project

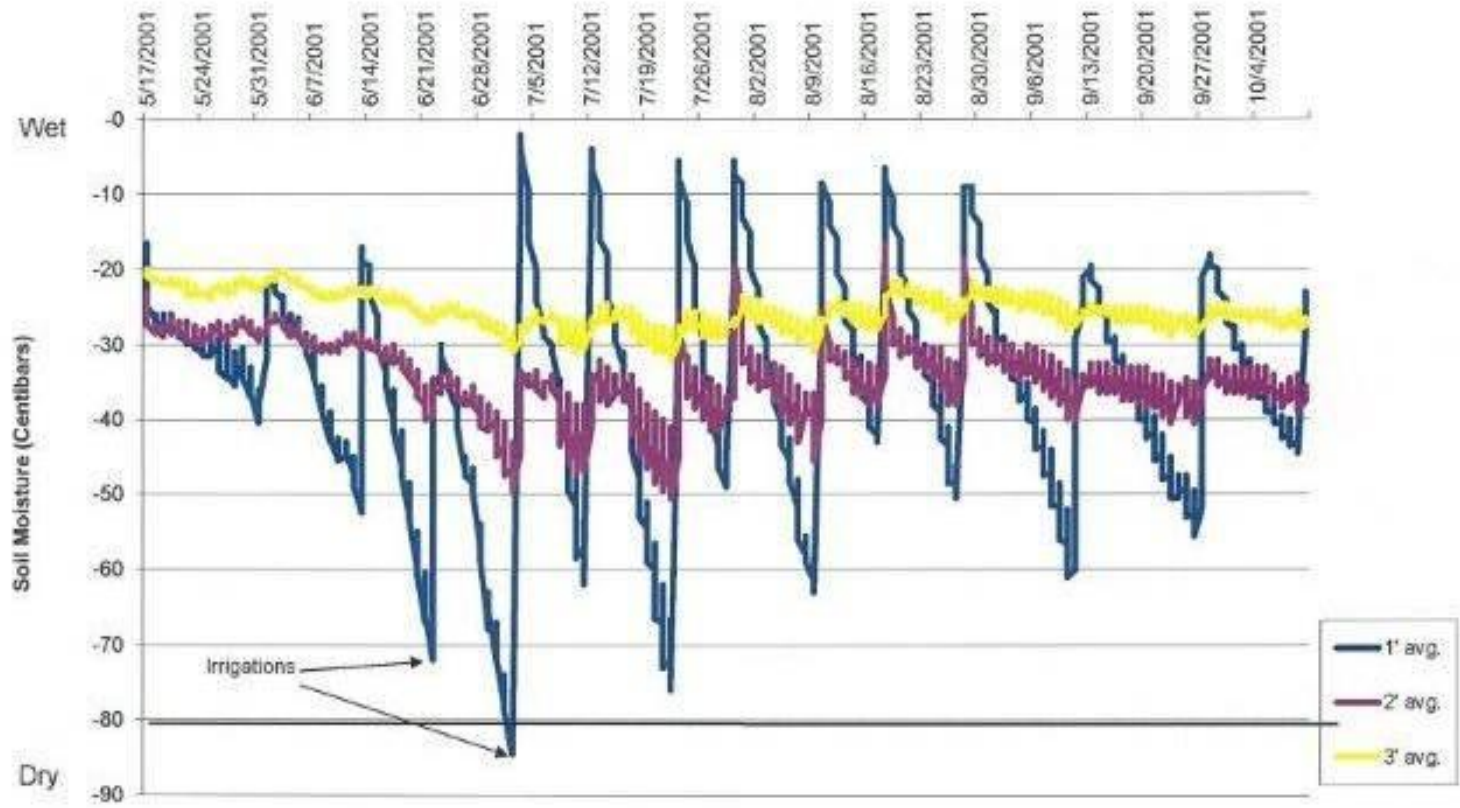
- Watermark soil moisture sensors and AM400 dataloggers (3X per day)
- Neutron probe (1X per week)
- Soil samples



Watermark Soil Moisture (Control)
2001



Watermark Soil Moisture (Treatment) 2001



Summary

2000

- T used 14.5% less water
- T yield 1.7 t/ac greater
- Sugars the same
- T used 50 lbs/ac less N

2001

- T used 19.4% less water
- T yield 1.7 t/ac greater
- Sugars the same
- T used 50 lbs/ac less N

2002

- T used 18.0% less water
- T yield 0.9 t/ac less
- Sugars the same
- T used 50 lbs/ac less N

END