

PLANT PERFORMANCE

NOVEMBER 10, 2010



Occasional salt injury in Buried Drip



No injury in Surface Drip

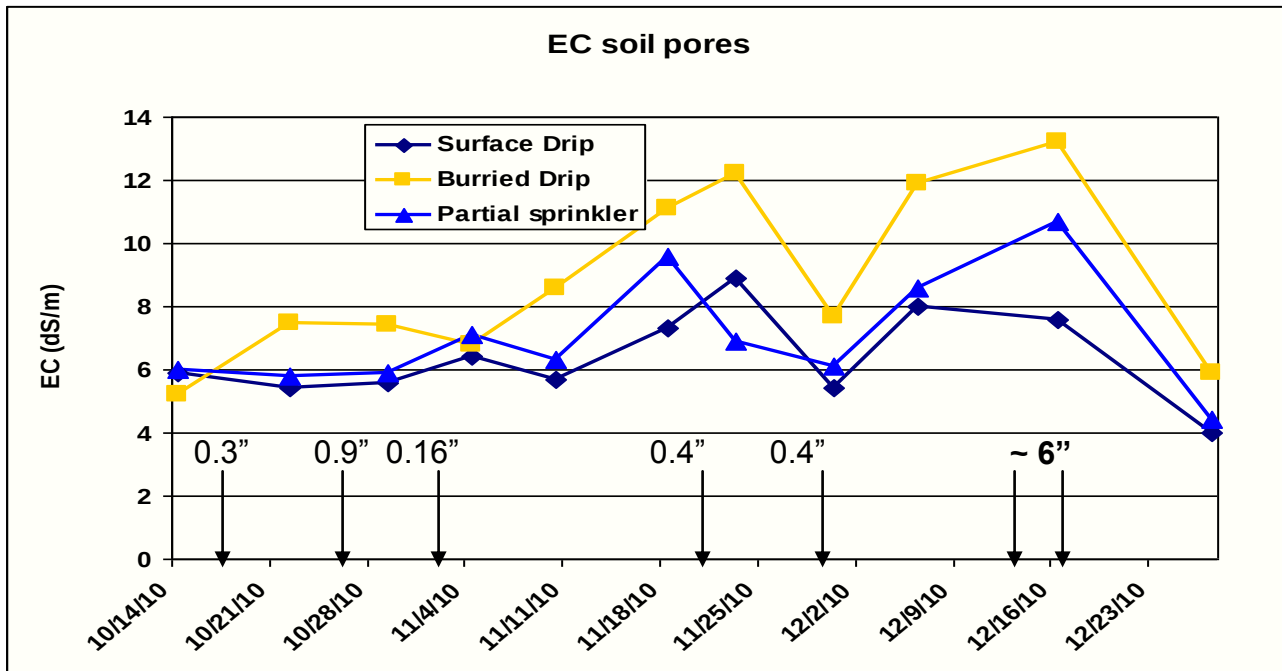


Partial Sprinkler

ELECTRICAL CONDUCTIVITY OF SOIL PORES

Starting Nov 10 we observed significant differences among treatments in EC in planting holes at 3 inch depths

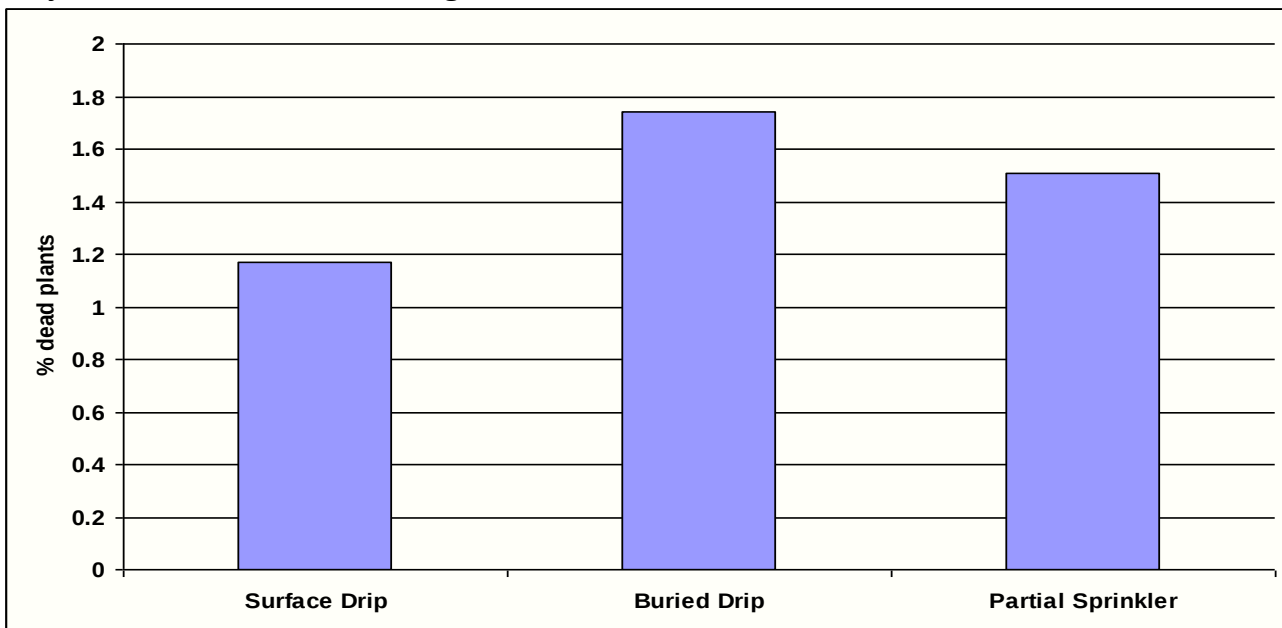
Arrows indicate rain events



PREVIOUS SEASON: SIMILAR but had mild Santa Ana winds

PLANT MORTALITY

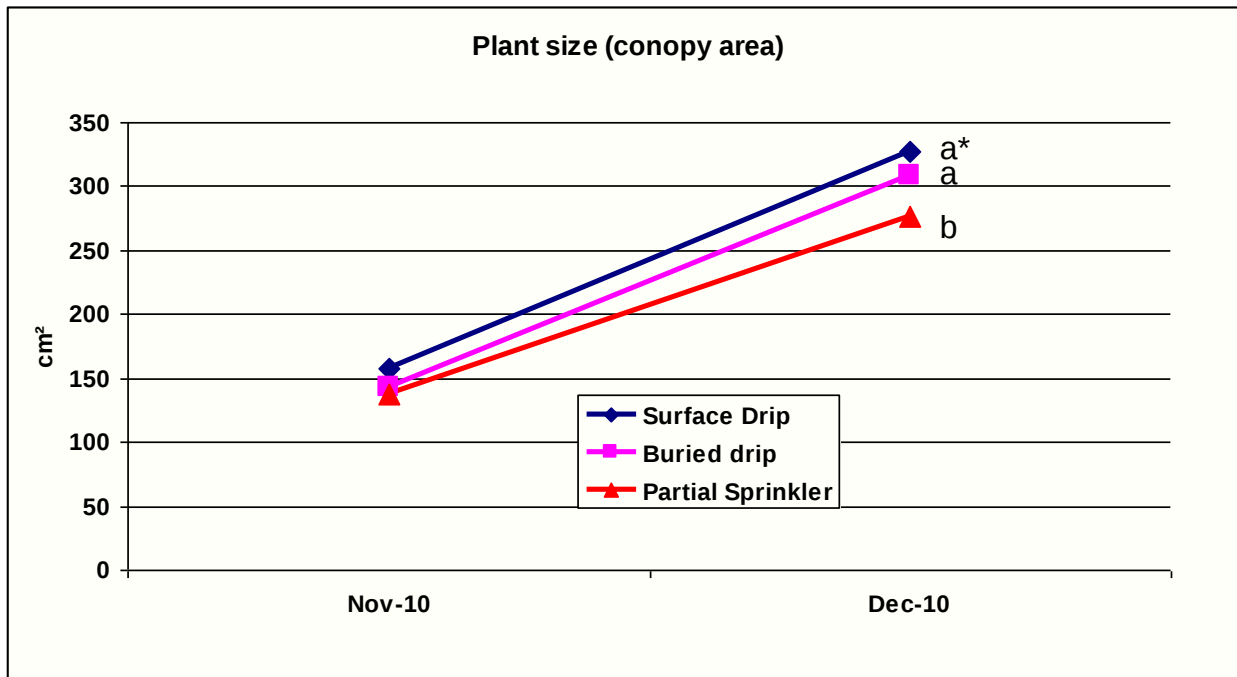
Very low and not different among treatments



PREVIOUS SEASON: SIMILAR

PLANT CANOPY SIZE

Canopy of plants in partial sprinkler was smaller than in surface drip treatment and those plants grew somewhat slower than in drip treatments



* Means with the same letter are not significantly different at $P=0.05$

PREVIOUS SEASON: Plants in standard sprinkler irrigation were 13 to 18% smaller than in all other treatments (which were similar)

LEAF SPOT DISEASES

We did not observe significant incidence of *Zythia* or *Ramularia*.

PREVIOUS SEASON: SIMILAR and 75% less than in standard sprinkler



PLANT DRY BIOMASS: NEW ROOTS AND LEAVES

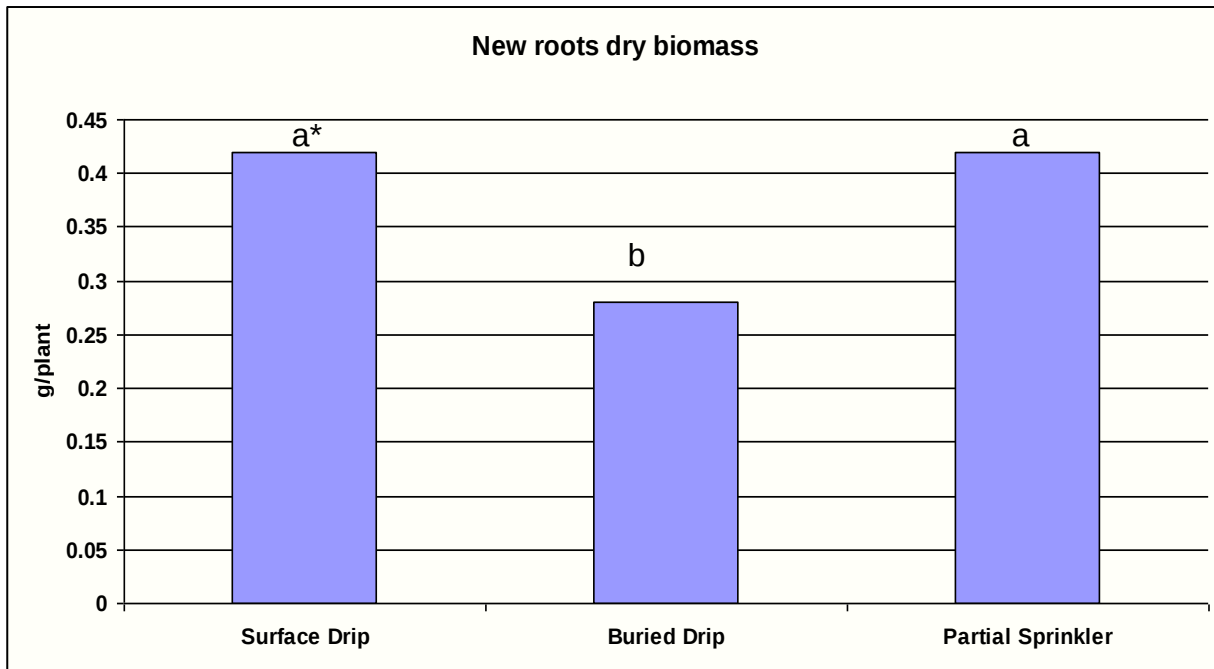


LEAVES

Above-ground new biomass (leaves) - no significant differences among treatments or in-bed locations.
PREVIOUS SEASON: SIMILAR

ROOTS

Below ground (new roots biomass): 33% less with buried drip compared to surface drip or partial sprinkler



*Means with the same letter are not significantly different at $P=0.05$

PREVIOUS SEASON: SIMILAR

BIOMASS IN DIFFERENT BED ROWS

No consistent effect of plant row on plant biomass

PREVIOUS SEASON: side rows had lower EC and greater root biomass than central rows

EARLY FRUIT PRODUCTION: NUMBER OF RED FRUIT

In first 4 weeks of fruiting – no significant differences in the # of red fruit among treatments

PREVIOUS SEASON: SIMILAR, but whole –field scale yield in **drip-only treatment yielded 13% more and partial sprinkler 8% more compared to conventional sprinkler irrigation.**