

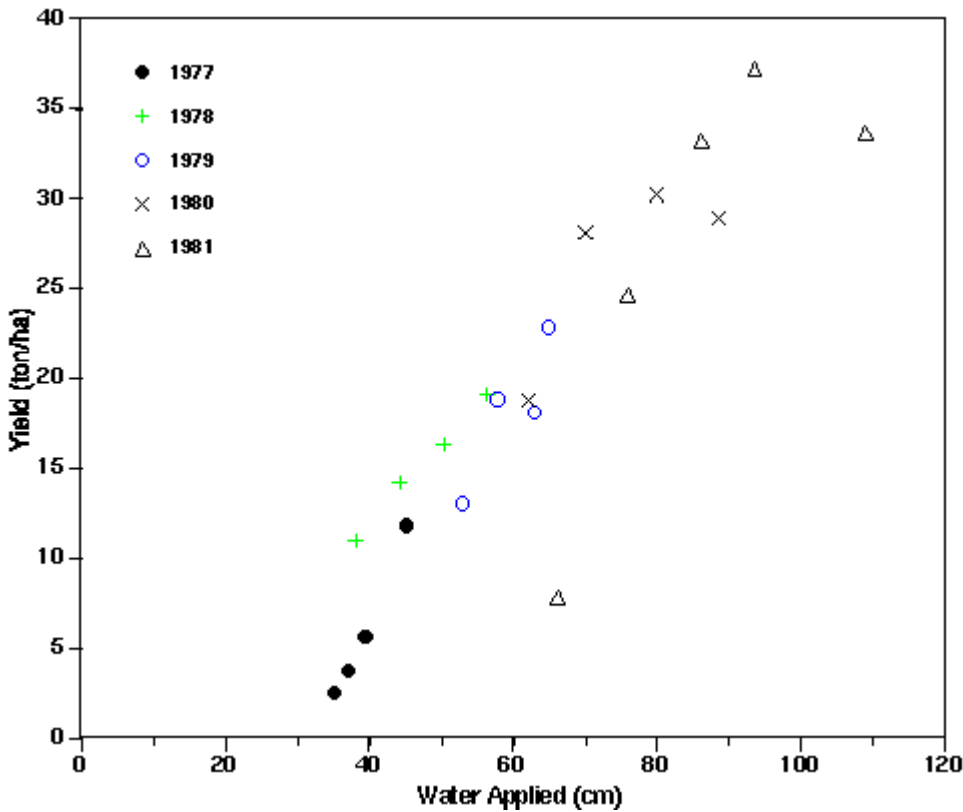


NEW MEXICO CLIMATE CENTER

New Mexico Crop Information

Chile Water Production function or the relationship between Evapotranspiration and yield

Water applied can be assumed to equal evapotranspiration or water used by crop under deficit irrigation and high irrigation efficiency of drip irrigation used in this experiment.



Yield of green chile versus water applied (rainfall included) for the years 1977-1981

$$\text{yield} = -12.1 + 0.5168 \text{ water applied}$$

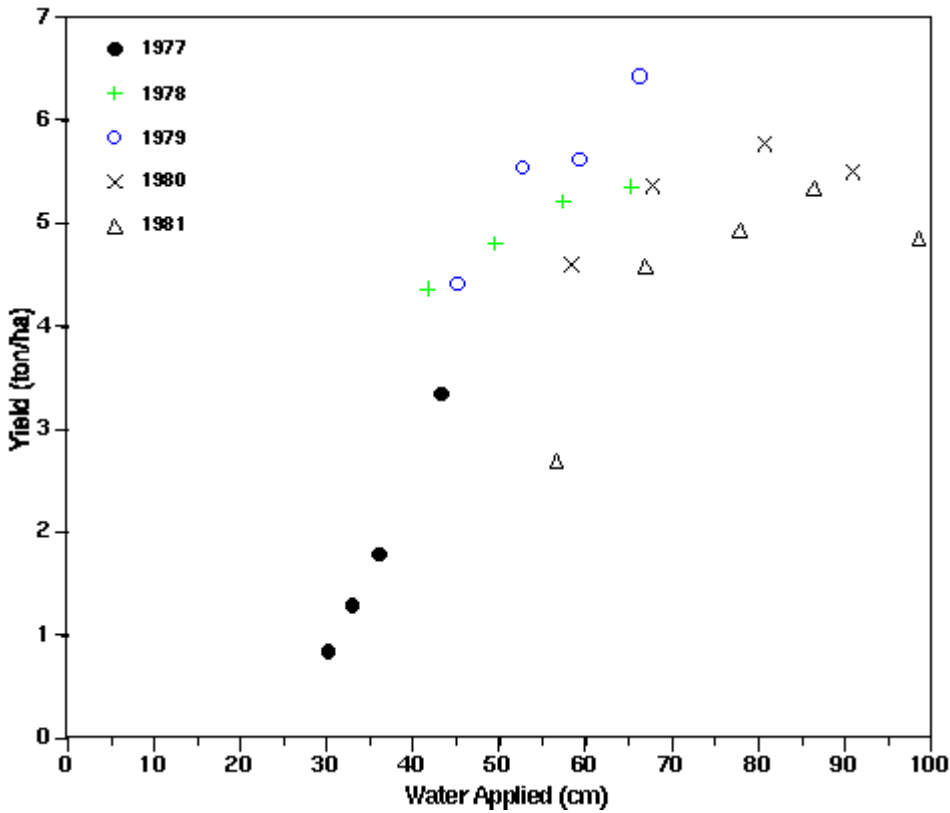
yield ton/ha

water applied cm

coefficient of determination 0.93

point 1981 water=109 yield = 93 excluded from regression analysis

point 1981 water= 66.3 yield=7.8 excluded from regression analysis



yield= -2.98 + 0.149 water applied

yield ton/ha

water applied cm

coefficient of determination= 0.90

data for 1977 and 1979 only used in regression

Yield of red chile versus water applied (excluding rain) for the year 1977-1981

The reference for this work is [Wierenga, P.J. 1983. Yield and Quality of Trickle Irrigated Chile NMSU Agr. Experiment Station Bulletin 703](#)

If you have any questions please contact

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