Effects of Nitrogen, Potassium , and irrigation on quantitative and qualitative characteristics of Thomson navel orange

Moradi. Bijan , and Y. Ebrahim

Kotra. Citrus. Research Station, Nashtarud, Tonekabon

The objective of this study was evaluation of N,K, and irrigation on qualitative and quantitative charasteristics (yield, No.of fruit, weight of fruit, Tss, TA, Vitamin C. juice content).

The emperiment was conducted on Thomson navel oranges. The trees on poncirus rootstocks were planted in Kotra Citrus Research Station in 1975 at spacing 6x7m. The experiment consisted of 18 treatments: 2 levels of soil moisture and 3 rates of N and K. Soil moisture levels (irrigation) were the main plots, and N and K rates were the subplots in a split plot design. Treatments were replicated 4 times.

The results show that K fertilizers increased yield and number of fruits but decreased TA. The interaction of Nitrogen, and water increased yield, number of fruits and juice content. irrigation decreased TA.