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Effect of soil versus foliar fertilization on growth and yield of *Lycopersicon esculentum* Mill (Tomato)

The effect soil versus foliar fertilization on growth and yield of tomato grown in the field and in pots were examined. The experiment had isix treatments, each replicated four times in a RCB design. The recommended rate of P (90 Kg ha $^{-1}$) as a cone. Super phosphate was applied to the soil for all the treatments. N as urea and K as muriate of potash (135 and 90 Kg ha $^{-1}$ respectively) were applied both to soil and foliar application in different proportions according to different treatments.

The treatments consisted of 100% soil fertilization (control) (T1), 100% basal soil fertilization +100% top dressing foliar fertilization (T2), 50% soil and foliar basal fertilization +100% top dressing foliar fertilization (T3), 50% soil and 50% foliar basal and top dressing fertilization (T4), 100% basal and top dressing fertilizer applied with irrigation water (T5) and 100% basal top dressing foliar fertilization (T6). Number of leaves and number of branches per plant were recorded every 2 weeks and fruit yield per plant was recorded at harvesting.
Similar trend of growth and yield performances were recorded from both pot and field experiments. But the growth and yield performance was higher in pot experiment than field experiment. Even though, there was no significant difference in growth performance at early stages of growth, number of leaves and number of branches per plant were significantly higher in T3, T4, T5 and T6 treatments compared to the control at later stages. Significantly higher fruit yields were recorded from the same treatments It was also observed that late blight disease damage was lower in foliar fertilized plants compared to the soil fertilization plants.