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Impact of foliar and soil applications of urea as top dressing on productivity of radish (*Raphanus sativus* L.) in sandy regosol

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An attempt was done to study the effect of foliar and soil applications of urea on productivity of radish (*Raphanus sativus* L.) in sandy regosol. This experiment was laid out in a Randomized Complete Block Design (RCBD) with four replicates and five treatments. Recommended rate of urea (90 kg/ha) was applied to soil as top dressing in control treatment (T_1) and this recommendation was practiced with additional foliar application of 0.1% urea (T_2) and also the recommended rate of soil application was reduced to 3/4, 1/2 and 1/4 with additional foliar spray in T_3, T_4 and T_5 respectively. The agronomic parameters such as leaf parameters (leaf area index, number of leaves, leaf width, leaf fresh weight and leaf length) and tuber parameters (length, diameter and fresh weight of tuberous root and also total root length) were measured at regular intervals. The results showed that there were no significant differences in leaf parameters except leaf width and leaf fresh weight and also in the tuber parameters except fresh weight of tuberous root among the treatments. Significant difference was observed in fresh weight of leaves between T_1 and T_3. There was remarkable difference in tuberous root weight between T_1 and T_5. In the present study, there was no significant difference observed in tuberous root yield among the treatments except T_5. The 1/2 recommended rate of urea applied to soil in combination with 0.1% foliar urea spray is more suitable practice of urea application as top dressing among the treatments. It is an economical and also the fertilizer can be saved as compared to control.

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