

EFFECT OF CONCENTRATIONS AND SPRAYING FREQUENCY OF POTASSIUM ON GROWTH AND FRUITS AND SEEDS YIELD OF SUMMER SQUASH LOCAL CV.

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ABSTRACT

In the aim of studying the effect of four concentrations and spraying of potassium (0.0 , 1.0 , 2.0 , 3.0) gm K⁻¹ and four times of sprayed as (control , once , twice and three) times on growth and fruits and seeds yield plant⁻¹ of summer squash – local cv. . The experiment was carried out at the vegetable field /Faculty of Agric. And Forestry / Mosul University during spring seasons 2007and 2008 . The main results showed that potassium levels caused a significant increasing effect in most vegetative growth , reduction in male flowers and increasing in female flowers , while fruits yield and its components did not affected significantly in both seasons. Whereas , the highest seeds yield 96.81 gm plant⁻¹ produced from the application of 3.0 gm K l⁻¹ in 2007 season and 107.71 gm plant⁻¹ by using 2.0 gm Kl⁻¹ in 2008 . From other hand frequency spraying of potassium exhibited a significant effect in the most vegetative growth in addition to increase female flower which reflecting in high fruiting yield and seeding yield as well during both growing seasons .The best interaction treatment in fruits yield and most its component was (0.0 gm Kl⁻¹ + three spray) , while in fruit weight the interaction treatment (3.0 gm Kl⁻¹ + three spray) was preferable but it had non significant effect with the previous interaction treatment . The total yield of fruits plant⁻¹ was highly correlated with number of fruits plant⁻¹ , length and weight of fruit , sex ratio and number of female flowers , whereas, number of fruits held for seed extraction , seed weight fruit⁻¹ and fruit weight were positively correlated with seeds yield.

Key words : Potassium , Squash , yields, seeds