Abestract

Dehydration is one of the restricting factors of production plants in arid and semi-arid regions is Some researchers have positive effects absorbents Alrtvbh fertilizers and plant resistance against water deficit reported in To investigate the effects of super absorbent polymer, potassium and manure on drought resistance winter skin test paper as a split plot randomized complete block design with three replications in Zabol University of Agriculture Agricultural Research Station in 1391 in the vicinity of the dam Sistan implemented. Treatments consisted of three irrigation regimes intervals 5, 8 and 11 days of treatment, use of manure as a source of potassium and super absorbent (control), 40 tons of manure per hectare of 100 kg K ha super absorbent polymer in the form of potassium sulphate and 300 kg per hectare, were considered. Sampling was conducted during growing and finishing period. A few features include: number of fruits per plant, fruit diameter, fruit weight, number of filled grains, grain hollow, seed weight, seed yield, number of branches, physiological features include: The fluorescence of chlorophyll a and b, total chlorophyll and carotenoids, relative humidity, leaf quality features include: seed protein, seed oil content and oil yield. Results showed a significant effect of irrigation on fruit diameter, carotenoid and protein content in grains, fertilizers also have a significant effect on the relative humidity, leaf chlorophyll a, b, number of branches, the carotenoids, fruit diameter, fruit yield the number of empty seeds, seed weight and seed yield. Super absorbent polymer with the greatest impact on the number of branches, chlorophyll a, b, content, fruit yield, seed weight, seed yield, seed oil content and oil yield was found. Qtvrtryn and the highest number of fruits per plant was obtained from the application of manure. The highest number of seeds per fruit of potassium sulfate fertilizer was applied.

Key words: Super absorbent polymer, Potassium, Manure, Drought, pumpkin

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Effect of super absorbent polymer, potassium and manure animal to drought steress on resistance of pumpkin (*Cucurbita pepo*)

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