

Research on The effects of density on qualittative and quantitave yield of two asparagus varieties .

RAHMANI- GHOBADI- A

Seed and Plant Improvement Research Institute - KARAJ

Asparagus is one of the most delicious vetable containing various vitamins and minerals as well as calcium.

It is used as fresh or cooked and has also medical uses. This species belongs to cold or temperate regions. It is a perenial plant which can last in the field for 15 years . In Iran , this crop is planted in northern and southern regions. It is important not only for internal consumption, but also for exportation and foreign exchange income. Therefore, The comprehensive studies on cultivars seems necessary, for improvment of varieties and better cultivation system. To determine the best planting density of two commercial asparagus to gain better quality and quantity of edible shoot , a complete randomisd blocks design as experimental split plots was considered in four replications. The varieties were planted in main plots with three distances between plants (30,45 and 60 cm) in the sub plots. The distance between rows was always 100 cm. During conservation period The characters of edible shoot colour, shoot length and diameter, texture, health, condition and taste were recorded. The qualiatative characters of sugar content(titration , fehlinymethod) and water percentage(oven.m) , acidity (Titration .m) biomass (oven .m) was also considered. The yield of each theatment was weighed three times per week. The data was analysed in simple analysis at the end of 3rd year and then after combined analysis were performed.

variety x year , planting distance x year and varity x planting distance x year were considered for statistically analysis using duncen test . The results showed that: