



## **Processing Tomatoes Fertilization Field Trials at Gadash Haemek, Israel, Summer 2010.**

Trial No 1: Effect of KF 10 applications on yields of Organic Processing tomatoes.

Trial No. 2: Effect of KF 10 applications on yields of Organic Processing tomatoes.

**Initiation and Planning: Hagai Raban – VGI Israel/Gadash Haemek Farm, Roey Raban – Gadash Haemek Farm.**

**Field operation and fertilizer applications: Yiftach Hevron – Gadash Haemek.**

**Manual harvest of trial plots, collection and recording of yield data: Natia Solodar – "Deshen Tov", Hagai Raban - VGI Israel/Gadash Haemek Farm.**

### **Trial No. 1 – Description:**

Commercial field size of 6.3 Ha, Variety AB 2, Planting date 11.4.2010, Planting rate: 27000 plants/Ha, Fertilization: 40 Cu/M per Ha of compost+ 5000 Kg of processed chicken manure per Hectare prior to planting, 250 liters/Ha of liquid organic fertilizer "Nifert 30" through irrigation system during June 2010.

KF 10 was applied to a section of the plot in size of 0.55 Ha, through the drip irrigation system. Applications were given from peak of flowering to early color brake. Application dates: 17.5, 1.6, 28.6.2010. Each application was given in rate equivalent to 10 liters of KF 10 per Hectare.

Harvest of trial+ control yield was done manually on 27.7.2010. Randomly chosen 6 plots of 9.6 square meters each were picked from the KF 10 treated section, and another randomly chosen 6 plots in same size were picked from non treated section. Commercial harvest of the whole field was done on 1.8.2010.

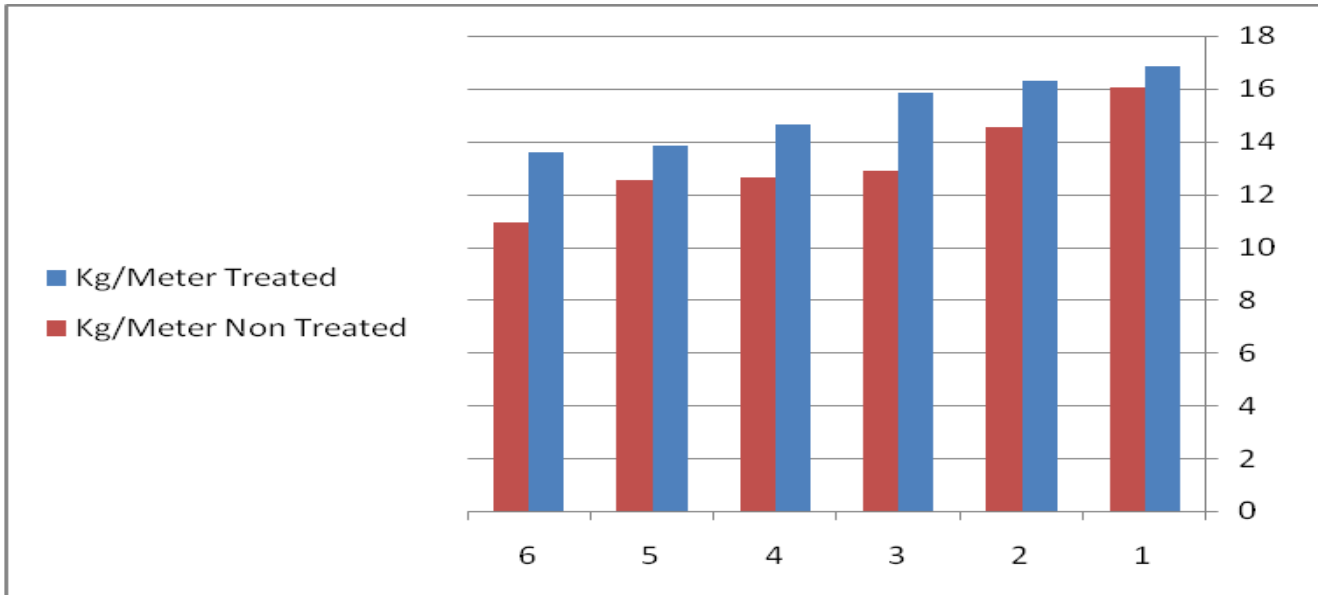
Gross commercial yield: 113 tons/Ha

Average yield in trial plots from area treated with KF 10: 15.17 Kg per square meter.

Average yield in trial plots from area not treated with KF 10: 13.26 Kg per square meter.



**Trial Vs control yields for trail No 1 are described in the following graph:**



### **Trial No. 2 – Description:**

Commercial field size of 10.5 Ha, Variety H9780, Planting date 11.4.2010, Planting rate: 27000 plants/Ha, Fertilization: 40 Cu/M per Ha of farm yard manure per Hectare prior to planting, 250 units/Ha of mineral N, 50 units per Ha of mineral P in commercial fertilizers through drip system.

KF 10 was applied to a section of the plot in size of 5 Ha, through the drip irrigation system. Applications were given from peak of flowering to early color brake. Application dates: 18.5, 7.6. Each application was given in rate equivalent to 10 liters of KF 10 per Hectare.

Harvest of trial+ control yield was done manually on 2.8.2010. Randomly chosen 6 plots of 9.6 square meters each were picked from the KF 10 treated section, and another randomly chosen 6 plots in same size were picked from non treated section.

Commercial harvest of the whole filed was done on 3.8.2010.

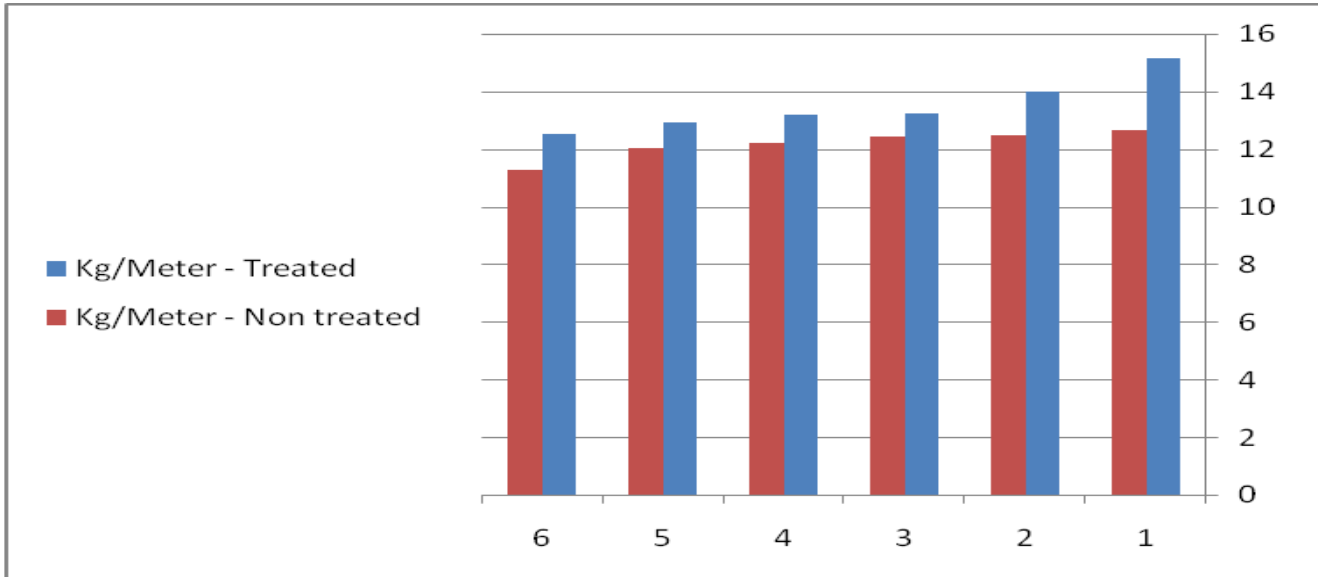
Gross commercial yield: 121 tons/Ha

Average yield in trial plots from area treated with KF 10: 15.17 Kg per square meter.

Average yield in trial plots from area not treated with KF 10: 13.26 Kg per square meter.



**Trial Vs control yields for trail No 2 are described in the following graph:**



**In both trials, yield differences between the field section treated with KF 10, and the section not treated with KF 10 – were found to be statistically significant. For statistical analysis the Nueman Keuls Trial was used.**