



21.8.2011

KF 10 applications on yellow onions – Trial results.

Influence of foliar applications of KF10 to the yield of yellow (dry) onions was tested during 2011 crop season, in the fields of Gadash Haemek Farm, in central Jesrael Valley, northern Israel.

Soil type: heavy clay gromosol.

Onion variety: "Mikado", oval.

Cropping system: Open field, conventional.

Sowing rate: 25 plants per 1 meter, field seeded on raised beds, 76 inches wide, 6 rows per bed.

Trial system: random test blocks inside a commercial plot. 4 blocks in total, each block 30 meters long 3 beds wide (76 \*3 inches, 18 rows of onion). Each block divided to 3\*10 meters sub blocks – one for each treatment:

1. Control: Regular farm treatment.
2. Regular + 3 spray treatments of KF 10 in dose of 10 l/ha.
3. Regular+ 1 soil treatment of KF 10 in dose of 10 l/ha+ 2 spray treatments of KF 10 20 l/ha.

Treatment dates and stages of crop development:

1. 14.2.2011 – Two leaves
2. 15.3.2011 – 4-5 leaves.
3. 21.4.2011 – 6-7 leaves.

Testing parameters:

1. Visual assessment of crop vitality during growth season.
2. Weight of crop per field unit: in each sub – block, all onions from central 6 rows were manually collected and weighed, on 3.8.2011.

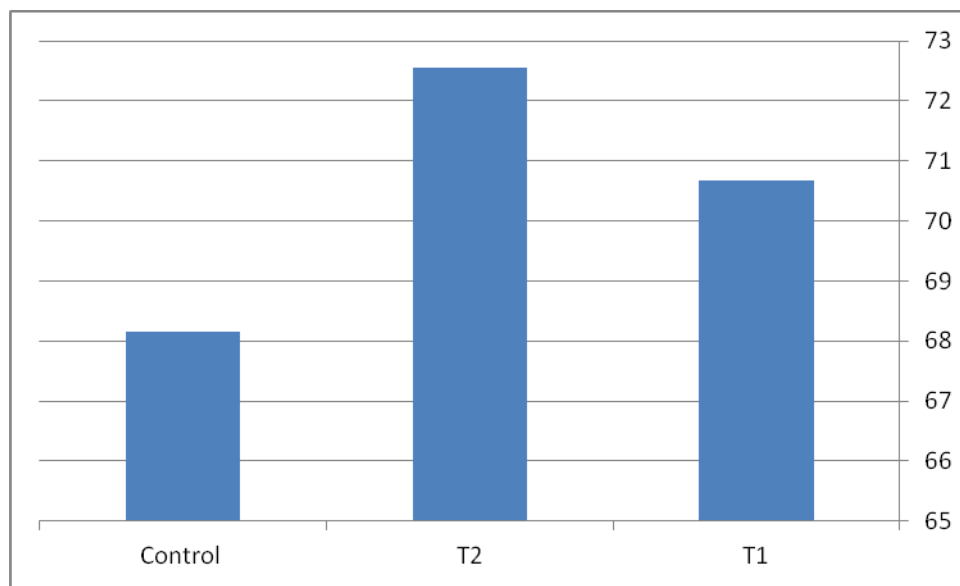


Findings:

1. No significant visual differences were observed during growth season.
2. Crop weight as follows:

|                   | Control  | T2      | T1       |
|-------------------|----------|---------|----------|
|                   | 139.04   | 133.55  | 151.49   |
|                   | 133.7    | 135.77  | 134.78   |
|                   | 117.64   | 154.04  | 135.54   |
|                   | 135.78   | 136.76  | 123.77   |
| Average per block | 131.54   | 140.03  | 136.395  |
| Total             | 526.16   | 560.12  | 545.58   |
| Kg/Ha Equivalet   | 68.15544 | 72.5544 | 70.67098 |

Yield results in units of Kg/ha are expressed in the graph below:





Treatment 1 yielded the equivalent to 2.52 tons per hectare more than the control. Treatment 2 yielded 1.9 t/ha more than treatment 1. Statistical analysis of the trial results reveals no significant difference between the two treatments. Significance was found between the two treatments and the control. The quantity results and the statistical analysis suggests that the added value for treatment no. 1 (which is the recommended commercial treatment by VGI) Vs the control is higher than that of treatment no. 2 Vs treatment no. 1.

Experiment was planned by Mr. Nabil Omri - SHAHAM, Israeli Ministry of Agriculture, and Mr. Hagai Raban – VGI Israel.

Data collection: Hagai Raban – VGI Israel, Natia Solodar – Deshen Tov,

Data Analysis: Uri Adler - SHAHAM, Israeli Ministry of Agriculture