

Observation:

Crop: Cucumber

Country: Germany

Region: Baden-Wurttemberg

Farmer: Günter and Ilona Stapf, Birkenhöfe 2, D – 74626 Bretzfeld, Germany

Conventional controlled farming

The area is dominated by wine, fruit, berries and vegetable growing farms. This farm got to know the products in 2011. The first trial was on cucumbers. The result on a small strip was that the cropping continued for more than a month longer than the other areas none treated. In 2012 the farmer was using Zeogrow on a field with a surface of 1,5 ha. The field is totally sprayed with an exception of about 20x5 m where no Zeogrow is used. (This surface is marked with white sticks to make sure that no Zeogrow is used there. The area is used by the local testing company for certain own products).



1. Gurkenanbau Bretzfeld Germany (24 07 2012)

Test Area (no Zeogrow) visibly marked with white sticks in the middle of the field, area total 1,5 ha



2. The farmer, Mr. Stapf received Zeogrow with the delegation from Vietnam in July, in the field, holding one of the cucumbers in his hand. This cucumber weighs about 1,5 - 1,7 kg and when fully matured about 2,5 - 3 kg. Visible a dark green colour of the leafs is observed, as they were sprayed with Zeogrow twice already. The first cropping of cucumbers will start soon.

The results in 2011 and area of treated cucumber presently: (1 ha)

1 ha treated with Zeogrow 0,2 - 0,3% solution 2-3 times, the produce was about **120 tons**

1 ha was untreated, the produce was about **80 tons**

Financial input of Zeogrow all inclusive (product 80 Euro/kg ha plus additional costs for spraying, labour, equipment etc) 200, - Euro/ha

Additional income due to Zeogrow about 40.000 kg, income worst case about 0, 35 Euro/kg

If own direct marketing is done (best case) the income is about 2, Euro/kg

Thus the increased income to the farmer (worst case): **14.000, - Euro**

Less 200, - Euro for the Zeogrow and spraying costs: **13.800, - Euro**



(24.07.2012 with Zeogrow 1,34 kg)



(10.8.2012) above with Zeogrow 3 applications of 3 % solution,
Below without Zeogrow

Weight 1,580 Kg

Weight 1,116 Kg

41% more yield

Stress gave the untreated cucumber the round form



Brix Number:

With Zeogrow 4

Without Zeogrow 3,1

higher Brix number by about 30%

The higher Brix number indicates:

- More taste, more vitamins, more aroma, more mineral salts
- Better quality (strong skin, avoiding insect bites, strong meat, no loss of water)
- Better storage quality