

## Aqua-Hort and Cut Roses

### Economic Aspects of Trials at Tsara Rozen Kenya.

The Aqua-Hort has now been tested at three different cut rose nurseries in Kenya: The Harvest, Tsara Rozen and Oserian. In all three nurseries were increased yields and less disease and pest problems observed.

The earlier trials in 2007 at Harvest Nurseries in Kenya showed big improvements in yield and quality by using the Aqua-Hort system in the cut rose production. Problems with Mites and Powdery were reduced to a large extent.

The trials were repeated at Tzara Rozen near Nairobi in 2008. The outcome was the same. Improvements in yield and quality. Also reduction in fertilizer consumption was obtained. In the first 9 weeks of 2009 Tzara Rozen has repeated the trials again. The crop being the Rosa T-Hybrid Variety Golden Claire. The control group having 3285 m<sup>2</sup> and the Aqua-Hort group 1704 m<sup>2</sup>.

The yields and the estimated economic consequences of using Aqua-Hort are shown below:

Stem Size	Price EUR	Stems per m <sup>2</sup> (9 weeks)		Turnover per m <sup>2</sup> (9 weeks)	
		Aqua-Hort	Control Group	Aqua-Hort	Control Group
90cm	0,30	0,61	0,00	0,18	0,00
80cm	0,20	3,60	1,15	0,72	0,23
70cm	0,14	7,31	2,27	1,02	0,32
60cm	0,09	5,75	6,23	0,52	0,56
50cm	0,07	4,27	8,11	0,30	0,57
40cm	0,06	0,00	2,37	0,00	0,14
<b>Total:</b>		<b>21,54</b>	<b>20,13</b>	<b>2,74</b>	<b>1,82</b>

	Aqua-Hort	Control Group	Difference
Turnover	2,74	1,82	0,92
Fertilizer Cost	0,26	0,42	-0,16
Spraying Costs	0,14	0,18	-0,04
Aqua-Hort machine cost	0,09	0,00	0,09
<b>Net Margin EUR/m<sup>2</sup></b>	<b>2,40</b>	<b>1,40</b>	<b>1,03</b>

The more and longer stem length provides for an extra turnover of 0,92 EUR. When taking into account the fertilizer, spraying and machine costs, the Aqua-Hort group shows an net gain of 1,03 EUR per square meter for the nine weeks.

Jan Molinar, the owner of Tzara Rosen, has translated the data into a yearly difference, taking the cropping pattern into consideration. He arrives at an increased production of 7,06% more stems and 18,55% more kilo plants produced.

The Oserian Nurseries has made a 6 weeks trials this year. In two, equal size groups, the Aqua-Hort group came out with 257300 stems compared to 196000 stems for the control group. A 31% increase in yields. Oserian also reports less pressure from Powdery and Mites in the Aqua-Hort group.

**Conclusion: The economic gains of using Aqua-Hort to cut roses are big and significant.**

Lisbeth Riis is in charge of Aqua-Hort in Kenya. Lisbeth has arranged the trials.