



Ultrasol® Apple increases production by 31% and improves the quality of the fruit

In order to demonstrate the effectiveness of Ultrasol® Apple, a trial was carried out in Saltillo (Coahuila, México) to assess the effects of a fertigation programme with Ultrasol® Apple against a traditional programme in terms of quality, vegetative tree growth and yield. The trial was carried out on a 7 year old apple variety Golden Delicious, grafted on a MM 106 rootstock, with a tree spacing of 5x3 m² and a density of 667 trees/ha.

The trial had a randomized block design and each treatment consisted of 10 replicates of 10 fruits; each taken to measure weight, equatorial diameter, pulp pressure and degrees Brix. Analysis of Variance (ANOVA) was applied to evaluate statistical differences between treatments. In case of a significant difference, Fisher's test was applied with a 5 % probability level.

Comparison table between the 2 fertigation programmes.

Days	0 - 10	10 - 50	50 - 100	100 - 150
Crop stage	Green leaf tips	Petal fall	Fruit size > 1"	Fruit fill
SQM	Ultrasol® Manzana 50 kg/ha	YaraLiva® Calcinit® 100 kg/ha	Ultrasol® Manzana 100 kg/ha + Ultrasol® micro Rexene® FeQ48 4kg/ha 100kg/ha	Ultrasol® Manzana 100 kg/ha + Ultrasol® micro Rexene® FeQ48 4kg/ha 100kg/ha
Traditional	Urea 50 kg/ha + Ultrasol® micro Rexene® FeQ48 4kg/ha 100kg/ha	Urea 50 kg/ha + Ultrasol® micro Rexene® FeQ48 4kg/ha 100kg/ha	nihil	Ultrasol® NKS 25kg/ha

The results of the applied treatments clearly affirm the effectiveness of Ultrasol® Apple:

- The effect on fresh fruit weight was on average + 31 % (left table here below).
- The effect on degrees Brix was on average + 7 %



-	kg/ha						g/ha					
	N	P ₂ O ₅	K ₂ O	CaO	MgO	S	Fe	Zn	B	Mn	Cu	Mo
SQM	46	38	75	27	5	6	580	50	38	50	25	25
Traditional	46	0	11	0	0	0	90	0	0	0	0	0

Conclusions:

The application of Ultrasol® Apple (40,3 MT/ha) resulted in 9,6 MT/ha or 31 % more yield as compared to the traditional programme (30,7 MT/ha) i.e. generated 7.241 US\$/ha more income for the farmer.

Applying Ultrasol® Apple also resulted in statistically significant differences in fruit weight, fruit diameter (size) and °Brix. No significant effect was found on pulp pressure, which means that increased fruit size did not occur at the expense of reduced fruit firmness.



Ultrasol® Apple is part of the Ultrasol® Cultivo range which was designed to meet the needs and demands of small growers.