Ultrasol® and Speedfol® in processing tomato increased net farmer income with 1.050 US$/ha

SQMC (Soquimich Comercial) initiated a 3 years trial work with Agrozzi - the biggest tomato processing company in Chile - in order to increase the yield of processing tomato by testing different irrigation systems with respect to the water supply, extraction curves and fertilization programmes" reports Claudio Valdes, Agronomic Engineer, M.Sc. at SQMC.

Applications

During the 2006-2007 season, SQMC's Specialty Plant Nutrition programme with Ultrasol® and Speedfol™ products (Tables 1 and 2) was compared to the traditional farmer's programme. The trial was carried out in the area of Sagrada Familia, Curicó. Each trial plot consisted of one hectare with 35.000 plants (1,4 * 0,2 m²/parcel). The plots were harvested and analyzed by Agrozzi. Statistical analysis was done with ANOVA, LSD at <0,05.

Table 1. SQMC soil applications

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	kg	N	P_2O_5	K_2O	CaO	MgO	SO_3
Base • Base	500	45	95	85	15	25	35
Development • Desarrollo							
Ultrasol™ Growth	120	30	12	12		1	
Ultrasol™ Calcium	100	15			27		
Ultrasol™ K	50	7		23			
Total • Total	270	52	12	35	27	1	0
Flowering - Fruit set • Floración - Amarre de fruto							
Ultrasol™ Calcium	40	6			11		
Ultrasol™ K	150	21		69			
Ultrasol™ Production	100	13	6	40			
Total • Total	290	40	6	109	11	0	
Fruit set - Initial colour • Amarre de fruto - Color inicial							
Ultrasol™ Production	192	25	12	77			
Ultrasol™ K	297	41		137			
Total • Total	489	66	12	214	0	0	
Initial colour - Harvest • Color inicial - Cosecha							
Ultrasol™ Pinta	150		8	72			24
Total • Total	150	0	8	72	0	0	24
Total stages Etapas totales	1.199	159	38	430	37	1	24
Base+Total stages Base+Etapas totales	1.699	204	133	515	52	26	59

Table 2. SQMC foliar applications.

Moment of application Momento de aplicación	Product Producto	Dose per application Dosis por aplicación	Applications Aplicaciones
Post-transplant Post-trasplante	Speedfol™ Amino Starter SC	2 l/ha	2
Flowering Floración	Speedfol™ B SP	1 kg/ha	2
Fruit growth Crecimiento de frutos	Speedfol™ Amino Calmag SL + Speedfol™ Amino Flower & Fruit SC	3 l/ha + 2 l/ha	2

Results

The yield was increased with 32% (25 MT/ha) when Ultrasol® products were used as compared to the farmer programme. The addition of Speedfol™ to the Ultrasol® programme added another 7 MT/ha as compared to the Ultrasol® programme (Table 3).

The highest average fruit weight was obtained when applying a combination of Ultrasol® and Speedfol™ (Table 4).

The addition of Ultrasol® applications resulted in a higher percentage of mature fruits (Table 5).

The Ultrasol® programme increased the farmer's net income with 656 US$ per ha. The programme in which both Ultrasol® and Speedfol™ were applied performed even

better: the farmer's net income increased with 1.054 US$/ha (Table 6).

Table 3.

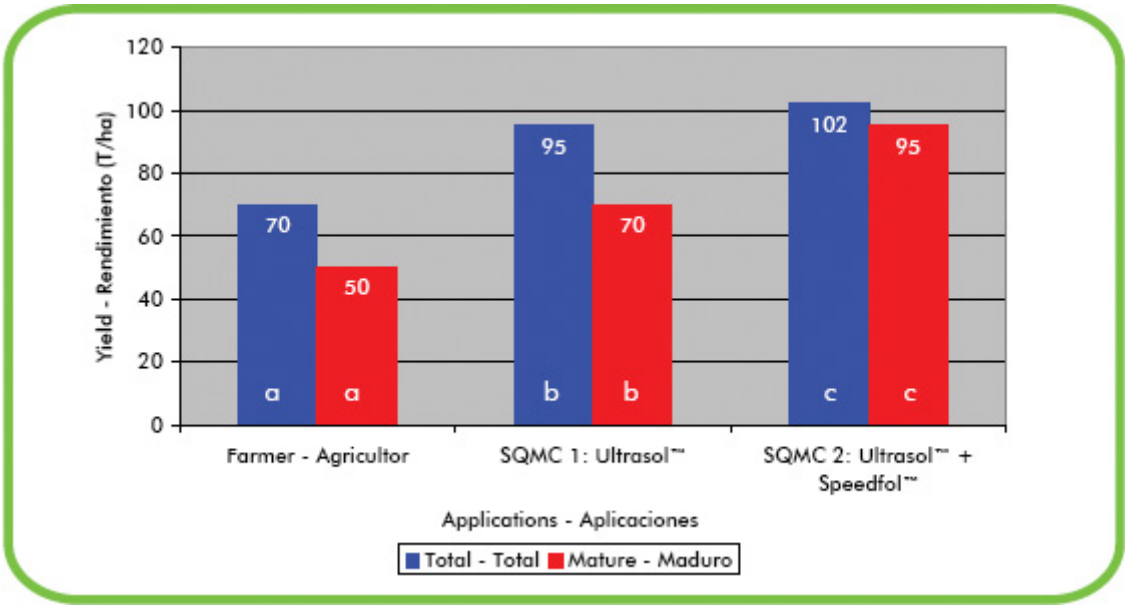

Table 4.

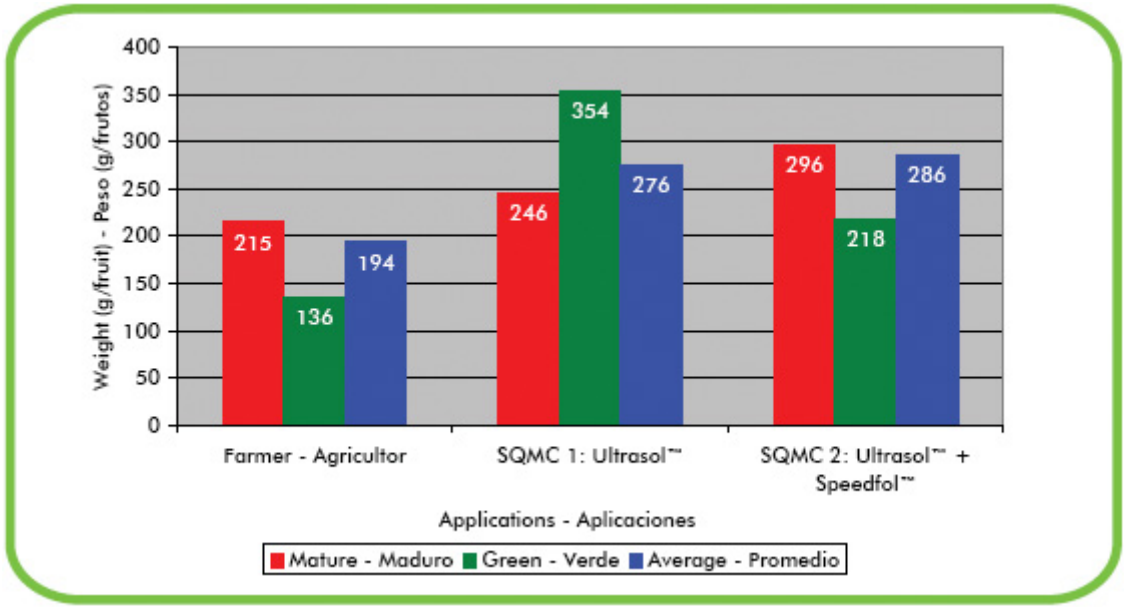

Table 5.

Applications Aplicaciones	Percentage of mature and green fruits per application Porcentaje de frutas maduras y verdes por aplicación	
	Mature Maduro	Green Verde
Farmer Agricultor	73	27
SQMC 1: Ultrasol™	77	23
SQMC 2: Ultrasol™ + Speedfol™	83	17

Table 6.

	Farmer's programme Programa del agricultor	SQMC 1: Ultrasol™	SQMC 2: Ultrasol™ + Speedfol™
Farmer's net income Ingresos netos del agricultor (US$/ha)	788	1.444	1.842
Difference Diferencia (US$/ha)	not applicable no aplica	+ 656	+ 1.054