

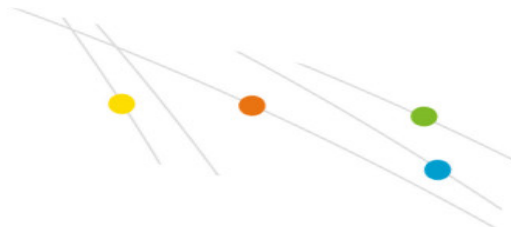
11% grapefruit yield increase with soil-applied Ultrasol® NKMag and foliar-applied Speedfol® NKMag

SQM China realizó una prueba de demostración en toronja para mostrar los beneficios en el rendimiento y las características de calidad de la toronja de las aplicaciones al suelo de Ultrasol® NKMag en combinación con aspersiones foliares de Speedfol® NKMag en el área principal de cultivo de toronja (33.000 ha) cerca de Zhangzhou (Tablas 1 y 2) en la provincia de Fujian. Ultrasol® NKMag y Speedfol® NKMag SP son formulaciones a base de nitrato de potasio, mejoradas con magnesio (13% N, 42% K₂O y 1,6% MgO) desarrolladas para el mercado chino.

En el Cuadro 1 se compara el programa de fertilización tradicional aplicado al suelo para toronja con el programa SPN aplicado al suelo de SQM. La Tabla 2 muestra el programa foliar con Speedfol® NKMag.

Cuadro 1. Comparación entre el programa de fertilizante tradicional aplicado al suelo y el programa de Nutrición Vegetal de Especialidad aplicado al suelo de SQM que incluye Ultrasol® NKMag.

Nº	Soil Time	Traditional		SQM´s SPN programme	
		Product	kg/tree	Product	kg/tree
1	End of April	15-15-15	1,0	15-15-15	0,5
				Ultrasol® NKMag	0,5
2	End of May	15-15-15	1,0	15-15-15	0,5
				Ultrasol® NKMag	0,5
3	End of June	15-15-15	1,0	Ultrasol® NKMag	0,5
4	Mid July	15-15-15	1,0	Ultrasol® NKMag	0,5
		Total 15-15-15	4,0	Total 15-15-15	1,0
				Total Ultrasol® NKMag	2,0



La primera referencia a este ensayo se hizo en el InterQonnection nr 4 (2013). Ahora, luego de una visita de seguimiento con el personal y el distribuidor de SQM China (Figura 1), Sonny Moerenhout (Gerente de Desarrollo de Mercado de SPN soluble en agua en SQM) informa sobre los resultados de esta prueba.

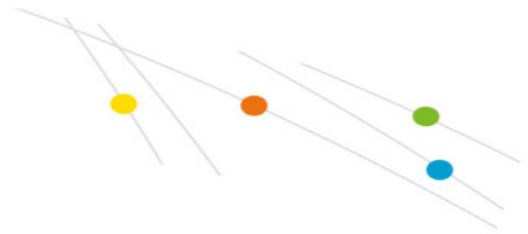
Cuadro 2. Programa SQM de aplicación foliar Speedfol® NKMag.

Nº	Foliar	Traditional		SQM´s SPN programme	
	Time	Product	%	Product	%
1	End of April	-	-	Speedfol® NKMag SP	0,2
2	20 days later	-	-	Speedfol® NKMag SP	0,2
3	20 days later	-	-	Speedfol® NKMag SP	0,2
4	Early July	-	-	Speedfol® NKMag SP	0,2
5	Early August	-	-	Speedfol® NKMag SP	0,2



Figura 1. De izquierda a derecha: Sr. Dai (GD Tianhe), Kevin Li (SQM China), Sonny Moerenhout, Sr. Zhang (minorista) y Henry Li (SQM China) en el campo de prueba de toronjas en Zhangzhou, provincia de Fujian.

At the moment of harvesting clear differences between the two plots were observed. In Table 3 the various plant performance characteristics for both treatments are compared.



The fruit peel was evenly coloured with SQM's SPN programme, compared to the mottled fruit appearance obtained with the traditional programme (Figure 2). In addition, with SQM's SPN programme fruits were harvested 10 days earlier, which resulted in a greater fruit selling price for the grower.

It is noteworthy to mention that after harvesting it was observed that trees, which received the traditional programme, manifested severe Mg deficiency symptoms. This was not the case in the SQM SPN programme, thanks to the inclusion of magnesium in the Ultrasol® NKMag and Speedfol® NKMag formulations.

Table 3. Comparison of the effect of both treatments on various plant performance characteristics.

Program	Leaf	Fruit uniformity	Fruit colour	°brix	Average fruit weight	Yield (kg/ha)	Fruit price (US\$/kg)
SQM's SPN programme	Broader, thicker and greener	More uniform	Even colouring	13	1,5	56.250	1,10
Traditional	Narrower, thinner and somewhat yellow	Not uniform	Uneven yellow and green colour	10	1,35	50.625	1,03

With SQM's SPN programme, the grapefruit yield was increased with 5625 kg/ha (+11%). In combination with the greater fruit selling price, and after deducting the costs of the fertilizers applied, this resulted in a net income increase of 8663 US\$/ha (+17%) (Figure 3).

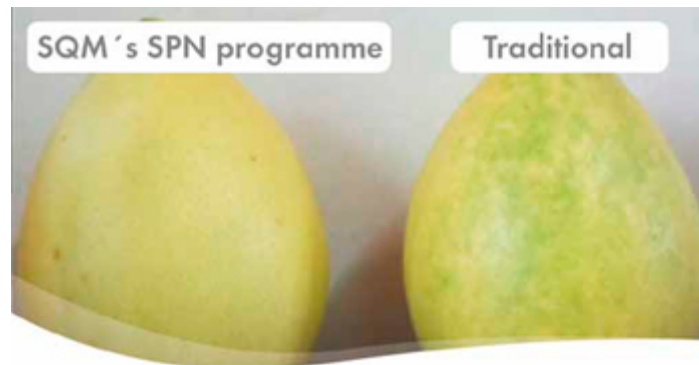


Figure 2. SQM's programme resulted in evenly coloured fruits, whereas the traditional programme resulted in a mottled fruit appearance.

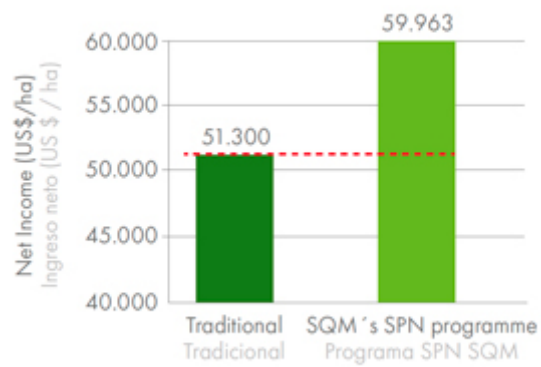


Figure 3. The financial benefits of SQM's SPN programme.