



Soil applied Ultrasol® NKMag + foliar applied Speedfol® NKMag SP enhance quality of grapefruit in China

Harmen Tjalling Holwerda (Global Market and Product Development Director at SQM) and Sonny Moerenhout (Market Development Manager water-soluble SPN at SQM) report on their visit to the grapefruit growing area (33.000 ha) near Zhangzhou, Fujian province, People's Republic of China (Fig. 1), where our colleague Kevin Li from SQM China has set up a trial to show the benefits of soil applied Ultrasol® NKMag combined with foliar applied Speedfol® NKMag SP.

Ultrasol® NKMag and Speedfol® NKMag SP consist of a modified potassium nitrate, enhanced with magnesium (13%N, 42% K<sub>2</sub>O and 1,6% MgO) developed for the Chinese market. Ultrasol® NKMag is available in 25 kg bags for fertigation and soil applications, whereas Speedfol® NKMag SP is being sold in 1 kg bags for spray applications (Fig. 2).





Figure 1. From left to right: Kevin Li, Mr Dai (GD Tianhe), Mr Zhang (retailer), Harmen Tjalling Holwerda, farmer, Mr Huang (GD Tianhe) and Sonny Moerenhout at the trial grapefruit farm location in Zhangzhou.



Figure 2. In China, Speedfol® NKMag SP is available in 1 kg bags.

A field day was organized to show the first results (Tables 1, 2 and 3, and Figs. 3 and 4) which attracted much attention and interest from other farmers in the Zhangzhou grapefruit area. The trial is to be concluded late October when the typical performance, quality evaluations of the peel and fruit yield will be assessed. The final results will be published in one of the upcoming InterQonnection editions.

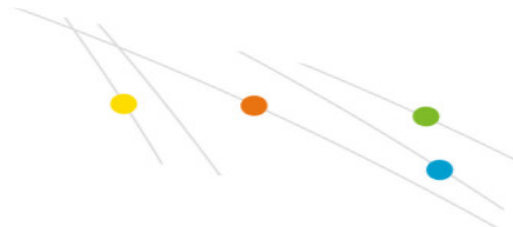


Table 1 shows the comparison between the soil applied traditional fertiliser programme for grapefruit and SQM's soil applied Specialty Plant Nutrition programme. Already at the end of June, promising results were observed after 3 soil applications with Ultrasol® NKMag (Table 1) and 3 foliar sprays with Speedfol® NKMag (Table 2). Table 3 gives a concise overview of the visual differences resulting from both programmes and is illustrated by means of Figs. 3 and 4.

Table 1. Comparison between the soil applied traditional fertiliser programme and SQM's soil applied Specialty Plant Nutrition programme including Ultrasol® NKMag.

Soil		Traditional		SQM's SPN programme	
Nº	Time	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

Table 2. SQM's foliar applied Speedfol® NKMag programme.

Foliar		Traditional		SQM's SPN programme	
Nº	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





Table 3. Comparison table for 4 essential parameters showing the quality and quantity benefits of SQM's SPN programme.

Parameters	Traditional	SQM's SPN programme
Leaf appearance	Green	Shiny green, stronger
Fruit colour	More yellow	Green
Fruit size	Smaller fruits	More Bigger Fruits
Fruit stem diameter	Smaller	Bigger



Figure 3. The leaf on the left results from the traditional programme. The shiny green and stronger leaf on the right benefitted from SQM's SPN programme.



Figure 4. The grapefruit on the left received the traditional programme. The greener one on the right benefitted from soil applied Ultrasol<sup>®</sup> NKMag combined with foliar applied Speedfol<sup>®</sup> NKMag SP.