

# RESULTS OF RLF FERTIGATION PRODUCTS ON APPLE CROP

A Review of Results from Shaanxi Province China

3<sup>rd</sup> November 2016









### INTRODUCTION

In January 2016, seven demonstration sites were set up as part of Rural Liquid Fertilisers' Apple Nutrition Scheme.

The aim of the test was to establish whether RLF's Fertigation and Furrow Injection products **Plant Milk High N** and **Plant Milk High K** could achieve two things:



China

- could they replace the conventional fertiliser top-dressing practice
- 2. could they deliver advantages over the conventional fertiliser programs with the same level of investment

The area chosen for the demonstration site was the growing area of Baishui in Shaanxi Province China.











Furrow Injection

Fertigation









## **DESIGN OF THE APPLE TEST PROGRAM**

Dependent upon the growers assessment of the soil fertility and load within the demonstration sites, the grower would follow the protocols set out for this experiment:

## Fields treated with RLF Products

These fields would have:

- **Plant Milk High N** applied three to four times at the application rate of 5-kg each time, to be followed by ....
- Plant Milk High K applied on six occasions at an application rate of 5-kg to 10-kg each time, but at 15-day intervals.

## **Control Fields**

These fields would be the same as the demonstration fields, insofar as soil fertility was concerned, but the grower was to follow his normal fertiliser practice, but at the same level of investment as to the treated fields.













### THE PRODUCT USED

**Plant Milk High-N** is a specialised fertigation or irrigation fertiliser engineered to deliver a multi-spectrum fertiliser and nutrient package directly to the plant through irrigation or furrow (ground) injection. It contains a high concentration of five vital macro-nutrients (nitrogen, phosphorus, potassium, magnesium and sulphur) plus six additional essential micro-nutrients (manganese, molybdenum, iron, boron, zinc and copper) in one single, stable solution.

**Plant Milk High-N** ensures greater plant protection, increased growth and improved yield qualities. This is a highly effective method of delivering nutrient to the plant via the root structure.

Most importantly, Plant Milk High-N is high in available nitrogen (N).

Plant Milk High-K is also a specialised fertigation or irrigation fertiliser engineered to deliver a multi-spectrum fertiliser and nutrient package directly to the plant through irrigation or furrow (ground) injection. It gives greater plant protection, increased growth and improved yield qualities because it contains a high concentration of three vital macro-nutrients (nitrogen, phosphorus and potassium) plus three additional essential micro-nutrients (manganese, zinc and copper) in one single, stable solution. This is a highly effective method of delivery of nutrient to the plant via the root structure.

**Plant Milk High-K** is high in available potassium (K).

Both of these products are specialised products for irrigation and contain chelates, soluble carbohydrates, phosphorylated metabolites and organic compounds that are readily consumed by soil micro-organisms in order to stimulate soil biological activity and generate greater crop health.











#### **OUTCOMES OF THE APPLE TEST PROGRAM**

RLF Sales Manager for Shaanxi Province, Dong Fang returned to the apple growers on 10 October 2016 to check on the progress and outcomes of the Apple Test Demonstration program. He was accompanied by the local retailer who had provided the farmers with their RLF product.

Here are three farmer stories.





# Apple Site No. 1

Farmer Yuan Zhengxiao was very pleased to report that the performance of the field that was treated with Plant Milk High-N and Plant Milk High-K was demonstrated by better leaf colour in the early stage of growth, and healthier looking fruit formation particularly on the skin's surface. The obvious differences however were highlighted when sugar content was measured. The treated fruit produced a sugar degree of 0.5 more than the Control group fruit.













# Apple Site No. 2

Farmer Zhao Gaojun was also pleased to have his comments recorded when interviewed about his experience. He stated that the previous year's nutrient deficiency, displayed by yellowing leaves, had been solved through the use of Plant Milk products. This year his crop had very good leaf colour — and much improved when compared to the fruit of the Control crop. After the bag removing the fruit showed good surface area and uniform shape. And best of all was the sugar measurement that gave 20°C in the Demonstration field and 17.5°C in the Control field.

#### **Measure of Sugar Content**













## **OUTCOMES OF THE APPLE TEST PROGRAM**



## Apple Site No. 3

Farmer Zhao Zhongwen showed how much better his Demonstration field was when compared to his Control field. His orchard that was treated with Plant Milk High-N and Plant Milk High-K showed lustrous dark green foliage. Further, the yield was significantly higher than from the Control field at harvest time. His sugar content measurement also increased from 15.5°C in Control to 16.5°C in the Demonstration field.













## CONCLUSION

The farmers who participated in this Demonstration Trial of RLF **Plant Milk High-N** and **Plant Milk High-K** were all very pleased with the results.

Several beneficial outcomes and comments were recorded. They included:

- the leaf is healthier looking with a dark lustrous green colour
- the nutrient deficiency problems of previous years were solved
- the yield was increased at harvest time

- the fruit had good skin surface area and uniform shape
- the value of the crop to the farmer is increased as a result

But most importantly the farmers all recorded higher sugar content measurements in the fruit that had been harvested from the Demonstration fields treated with RLF product.



























