



## THE KEY TO HIGH CORN YIELD

# How a Specialised Crop Nutrition Program Plays a Key Role

Authorised for release by :

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## **Spiking Stage is Critical**

The spiking stage is a critical period for the growth for corn.

During this period, the stems and leaves of corn grow vigorously. The male and female plants begin to differentiate, the vegetative growth and reproductive growth of the plant develop simultaneously, and the input values of water consumption and fertiliser use are at their greatest.

At the same time, this is when agricultural pests are most frequent. Therefore, the effective panicle and grain numbers, and the plant's growth and development have an important influence on the corn yield at this particular stage of growth. So, the key to high corn yield relies heavily on ensuring strong plants with close crop management during this period.

As the saying goes, "the key to growing crops is good management".

RLF Manager for the Inner Mongolia Autonomous Region, Zhao Daqing recently visited the local corn growers. By sharing the demonstration farmer's fertiliser and management approach during this key growth stage for the corn crop, he hopes it will enlighten a vast number of corn growers.



The ear length of the RLF treated corn reaches almost 30cm











# **Comparing the Corn Fields**





The visual difference between the Demonstration field and the Control field can be seen. And the reason for these differences is because of the different fertiliser management approaches.











### **Demonstration Field Fertiliser Program**

The product used in the demonstration field:

15th June 2017	Fertigation with <b>Plant Milk High-N</b> at 2.5 Jin (1.5 kg) per mu land.
23rd June 2017	Fertigation with <b>Plant Milk High-K</b> at 2.5 Jin (1.5 kg) per mu land.
29th June 2017	Fertigation with <b>Plant Milk High-K</b> at 2.5 Jin (1.5 kg) per mu land.
9th July 2017	Fertigation with <b>Plant Milk High-K</b> at 2.5 Jin (1.5 kg) per mu land.



#### **Control Field Fertiliser Program**

Fertigation with common Urea at 10 Jin (6 kg) per mu land.

#### **Observations and Measurements**

It is known that the spiking stage is the period that needs the most fertiliser and the maximum fertiliser intensity in the whole growth cycle of a corn crop. The absorption amounts of nitrogen, phosphorus and potassium accounts for 50%, 52% and 75% of the total growth period of corn respectively. Good management can ensure healthy plant growth, promote ear development and floret differentiation and increase the grain number. RLF fertigation products **Plant Milk High-N** and **Plant Milk High-K** can sufficiently meet the nutritional needs of corn during this period of time and lay a solid foundation for late lodging resistance and increased yield.



Fertigation

The RLF Sales and Support Team selected and compared the corn from both the Demonstration and Control Fields. They also conducted field measurements and records on the plant height, ear height, ear length, stem diameter and leaf width of corn.













# The specific data was as follows:

Field	Plant height	Ear height	Ear length	Stem diameter	Leaf width
Demonstration field	2.6m	0.8m	29cm	4.0cm	11.5cm
CK Field	2.4m	0.84m	28cm	3.5cm	10.7cm





Measuring ear height Measuring leaf width





Measuring plant height Measuring stem diameter











#### Comparison on stem diameter





### **Benefits of the Products Used on Corn**

### The excellent results:

- The use of RLF specialised Fertigation **Plant Milk** liquid fertiliser products effectively improved the growth in the early stage of crop growth, so that nutrients were absorbed evenly. The balanced nutrition overcame the blind absorption of nitrogenous fertiliser.
- It effectively changed the height of ear growth for the better, improving lodging resistance and increases overall yield.
- The promotion of **Plant Milk High-N** and **Plant Milk High-K** products gave peace of mind for the corn farmers of the Inner Mongolia Autonomous Region because of the certainty that this balanced fertiliser program continued to support the crop through the entire growth cycle. However, it was especially so during the important spiking stage when high level nutrients are needed by the plant. This fact readily dispelled many of the doubts that farmers in the region may have previously held about the effect of liquid fertilisers on corn.



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