BSN SUPERSTRIKE TRIAL DELIVER RESULTS

Comparing Two Rice Fields Shows How Vital it is to Fertilise the Seed

By:

Echo Dong
Marketing Officer
China

What is in this IN

This IN documents a field trip undertaken by the RLF Technical Team in Hubei Province China. Using photographs and measurements, it shows the differences between the Control field and the field treated with RLF **BSN Superstrike (BSNSS)**.

The Test Fields and Method

In order to validate the application effects of RLF product on rice, the Sales Manager in Hubei Province, Bai Yigen conducted a trial using **BSN Superstrike**.

He enlisted the help of RLF Technnical Director, Ma Deliang on 26th April 2017 in Nanyang Village, Zhangtiansi Town, Gongan County, Jingzhou City, Hubei Province to measure the success of the trial.

Sixty people witnessed the test process.

At the demonstration field

- Two fields were selected and sown with early season rice.
- One field was sown with rice treated with **BSN Superstrike**, and one field was labeled as the Control field and subjected to normal farmer practice.
- It should be emphasised that the control field was sown 3 days in advance of the BSN-treated field.

The Test Fields

Same fields close-up

The Excellent Results

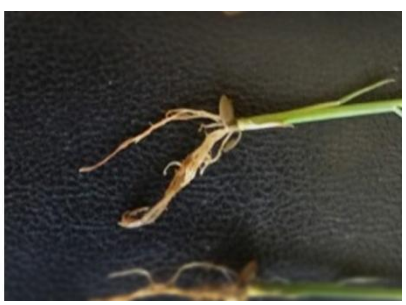
The following photographic images highlight the differences.

The Root Systems

By contrast, we find that the application effects of **BSNSS** are highly significant.

The rice treated with **BSNSS** forms a thick and strong root system. And there are many white roots as well as fine roots putting themselves down to the soil. These all play an important role in supporting the rice crop and guarding it against future drought or lodging resistance. Strong and healthy root systems set the plant up for excellent grain set and yield performance.

Same roots close-up



Bigger, Stronger Root Systems

The Thickness of the Stems

When measured, the rice stem that was treated with **BSNSS** is 0.5mm thicker than the Control rice plant.

Control	3.0mm
BSN Treated	3.5mm
Difference	0.5mm

17%
Thicker Stems with BSN Treated

The Number of Tillers

By comparison, the **BSNSS** treated rice has earlier tiller growth. Almost all of the rice has germinated with at least one tiller – most with more than one, and some up to three.

Importantly, the tillers are healthy and strong.

There are no dead tillers affected by low temperature and the first leaf of the rice seedling is light green.

In comparison, only some of the Control rice crop shows tiller growth, with many becoming ineffective tillers because of the low temperature. Often the first leaf of tillering has withered and died.

Greater number of healthy and strong tillers with BSN Treated

The Leaf Width

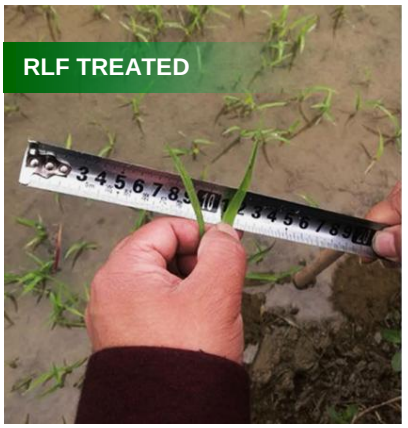
The leaf width of the rice treated with **BSNSS** is 7mm.

The rice of the Control field is 4mm.

Because the leaf width of **BSNSS** treated rice is 3mm wider than that of the Control field rice, improved photosynthesis of seedling, with increased utilisation of fertiliser should be expected.

Control	4mm
BSN Treated	7mm
Difference	+ 3mm

75%
More Leaf Width with BSN Treated



Findings of the Test Comparisons

By comparing the root, tiller growth, leaf width and seedling potential, the rice treated with RLF **BSN Superstrike** has significantly better characteristics and effects. These are :

- ✓ the development of vigorous root systems with healthy white roots as well as fine hair roots
- ✓ earlier, and stronger tiller growth with good cold and drought resistant effect
- ✓ vigorous and even seedling growth with healthy and lasting top growth

Seed Priming

Although the Control rice field was sown three days in advance of the RLF treated rice field, and was top-dressed before the comparison measurements test, the root systems were still weak. And there were many black roots. At the same time, the first tiller had died and become an ineffective tiller. The emergent sprouts were irregular.

Therefore the only conclusion to be reached was that the application effects of **BSN Superstrike** on rice are significant.

This demonstration was very well received and test sites such as these have a very high promotional value.

The rice demonstration field visitors

About BSN Superstrike

A very simple recipe for the farmers.

For 20 Jin rice seed (10 kilograms), combine 100ml **BSN Superstrike** plus 500ml water. Mix evenly with the hands.

BSN Superstrike

This specialised RLF crop nutrition product is a fertiliser for seeds.

It has an engineered delivery system that allows the seed to absorb a multi-nutrient formulation with increased phosphorus. Phosphorus is essential for the healthy and quick development of the root system that in turn supports healthier top growth because the root system can supply the optimum level of nutrients to the plant. This is a High-analysis, Broad-spectrum crop nutrition product. It :

- ✓ is easy to apply with quick uptake of nutrient
- ✓ 'kick-starts' germination
- ✓ supplies energy for robust early growth
- ✓ sets higher yield potential
- ✓ protects the plants against the effects of climate
- ✓ helps guard against disease
- ✓ is the new world standard for modern crop nutrition practice
- ✓ delivers greater financial benefit for the farmer

RLFs Technical Team Value-adds to the Demonstration Day

RLF Technnical Director, Ma Deliang delivered a special lecture on the application effects of **BSN Superstrike** on rice.

With his presentation he advised that about 40% of crop yield is determined by the seed. That, each seed is different in internal nutrient composition, and that the difference of nutrient balance in the seeds is much smaller after using **BSNSS** which is suitable for field crops.

And it can balance the nutrition of the seeds, enhance the seed germination, and improve germination rate.

The indoor seminar

Summary

Field days and demonstration trials such as these are invaluable for spreading the message of RLF's specialised crop nutrition products.

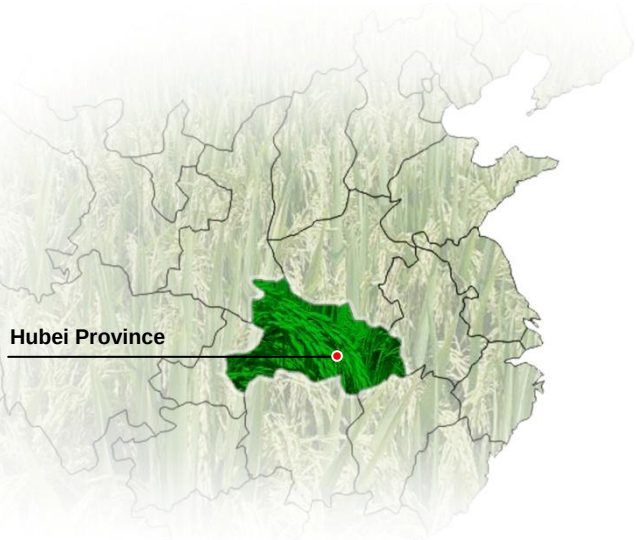
With the simple addition of fertilising the seed, as evidenced by this trial, farmers can considerably improve the quality and quantity of their harvest.

These are the changes that China's agricultural industry and government is looking for as the traditional methods are slowly modified to bring about greater returns, in terms of rice production, rice quality and also the financial and economic outcomes.

RLF is committed to continuing its outreach to farmers with small-scale operations such as the one under review in this Insight.

About the Rice Production Region

The Hubei Province is located in the middle part of the Yangtze River Basin. This area is regarded as the 'Golden Rice Belt' in China.



It is also a transitional area between North and South China, and within this zone both single and double cropping rice systems co-exist. Indica rice, Japonica rice and Glutinous rice are all cultivated concurrently. In brief, the Hubei Province is rich in rice production resources.

Rice is the predominant crop in Hubei province.

It has the largest allocation of production area of all agricultural crops. The sown area of rice accounts for about 50% of the grain crops in the whole Province. The total output is about 70%, and the commodity quantity is equivalent to approximately 80% of market share.

Typical rice cultivation fields in Hubei Province

Improving Rice Production

As it is a huge region for rice production in China, government agricultural requirements now expect farmers to focus on the production of high quality rice. Farmers must look to modern crop nutrition and protection practices to improve both quality and yield. So, how to produce high quality rice? Many farmers choose RLF's specialty seed fertiliser product **BSN Superstrike** or **BSN Ultra**.

Agricultural Focus now requires Farmers to Grow High Quality Rice