BSN SEED PRIMING PRODUCT HELPS DELIVER EXCELLENT RESULTS

RLF's Product Widely Promoted in Xinjiang Province

Authorised for release by:

Melanie Wu,
Deputy General Manager, RLF China,
and translated by Echo Dong

Background

In April and May each year, Xinjiang Province experiences wet, cold and windy days. Unsatisfactory emergence of seedlings is the most common spring ploughing problem.

For cotton, the emergence rate of seedlings must first of all be assured before the number of cotton plants are selected per mu of land. Therefore, how to improve the emergence and seedling preservation rate, as well as the early and strong emergence and health of all seedlings is an urgent problem to be solved for the current cotton production.

The content of phosphorus and other micro nutrients in the seed directly affects seed vigour. If it is lacking it results in the loss of explosiveness when the cotton is unearthed, 'top shell unearthed', uneven emergence, weak seedling strength, inability to quickly expand the cotyledon for photosynthesis, and the lack of nutrient absorption by the root system. These conditions all directly affect the later development of buds and bolls.

This is why RLF advocates the nutrient plan for early emergence, early flowering and early budding.

As a safe seed nutrition product, **BSN** can provide nutrition for the first four weeks of cotton growth. It improves the seedling rate, promotes cotton seedlings to have more and stronger roots, and lays the foundation for higher yield.

The Demonstration Trials

In 2019, RLF **BSN** was widely promoted in seven cotton areas in Xinjiang. This covered 200,000mu of cotton grown involved several different varieties in both the south and north of Xinjiang. The RLF Technical Team followed up 6,000mu of the cotton harvested and gained very valuable, first-hand knowledge of the experience of growers. The excellent field performance was unanimously praised by the growers.

The following case studies highlight the application effects achieved. The features were:

✓ No.1. Strong Resistance to Climatic Effects

Crops in Xinjiang are easily affected by cold, wind, frost and so on. BSN comprehensively supplements the required nutrition for seeds and stimulates its vitality. This effectively improves seed resistance to these harsh conditions.

Trial Date	20th May 2019
Trial Location	Xialeke Village, Awati County, Aksu District
Trial Grower	Li Yongcheng
Trial Comment	Due to continuous heavy rain in this area from 3rd May, most of the cotton fields were resown. However, the seedling protection rate of the 30mu of cotton field treated with **BSN** Seed Priming was about 80%.

Control crop which was resown after continuous heavy rain.

Cotton treated with RLF **BSN**

✓ **No.2. Saves Time, Labour and Money**

Generally, if the emergence rate of cotton is higher than 85%, there is no need to hook seedlings. After applying **BSN** Seed Priming, the cotton field of Mr. Mao from the 150 regiment in Shihezi area basically produced more than 90% of the whole number of seedlings. Further, as a whole they had many more fibrous roots and thick rhizomes. He strongly recognised the application effects of **BSN**.

Grower Mr Mao from the 150 regiment in Shihezi

✓ **No.3. Rapid and Neat Emergence with Strong Topsoil Ability, Deep Root with Multiple Capillary Roots and No Delay in Growth Period.**

At the beginning of 2019, due entirely to the influence of weather, the cotton rotted, was then replanted, but sprouted unevenly and grew slowly. This resulted in the delay of the usual cotton growth period and yield reduction. But the **BSN** Seed Priming crop gave excellent performance in many regions in the northern Xinjiang, such as the 101 regiment, the 103 regiment, Fangcao Lake and several other areas.

What follows highlights one test crop.

Trial Date	23rd May 2019
Trial Location	Ninth Company of Fangcao Lake
Trial Grower	Zhu Fangjun

✓ No.4. More Assurance for Seed Quality

Currently, many major Seed Companies in China use RLF's Seed Priming product **BSN** for treatment prior to sale.

The RLF Technical Team also reviewed two further but different crops – a corn crop and a rapeseed crop – that had been planted using seed primed with **BSN**.

The grower showing samples of his cotton crop during the test process

The Jiuquan Corn Seed Production Base Evaluation

For the corn seedlings planted on the same day and under the same management conditions, those treated with RLF products were strong and neat with enhanced disease resistance that allowed them to thrive and survive the low temperatures.


Zhangye Corn Seed Production Base


Control
对照


RLF-treated
实验


实验


Control
RLF-treated

The Qinghai Rape Seed Field Evaluation

Showing the RLF-treated rape field, where the seedlings appeared orderly and and growing healthily

About RLF BSN Seed Priming Product

Eight Main Benefits:

1. **Safe transfer of nutrients** within close proximity to the seed embryo ensuring high availability to the young seedling.
2. **Increased yield regardless of soil fertiliser rate** as it has been scientifically demonstrated that the seed's internal nutrient concentrations are improved.
3. **Is effective in all soil types** as it functions within the seed and embryo regardless of the soil pH.
4. **Fixes variability in seed lots** as it corrects the nutrient variability that is naturally found in all seeds.
5. **Greater root mass** because of the immediate effect of establishing a robust and larger root system quickly.
6. **Early vigour and stronger plant growth** as it provides the seed with the nutrient it requires for healthy, robust growth during the early weeks of development.
7. **Higher yields, quality and value** are a feature because the crops carry the benefits directly through to the farmer with higher yields, better quality and consistent crop results.
8. **Is good business investment for the farmer** as the cost represents a small percentage of the financial gains achieved and is a positive return for every dollar invested.

It can therefore effectively improve the emergence rate of seedlings, realise the early, complete, uniform and strong seedlings, simplify the field management, and lay a solid foundation for centralised bud emergence, flowering, boll formation and catkins, so that the seeds can win as they leave the 'starting blocks' in their race to full productivity.

BSN™

Seed Priming