EVALUATING THE IMPORTANCE OF THE SEED

Seminar held to promote the value of seed health

by Echo Dong, Marketing Officer

Overview

The inaugural Seed Value and Health Promotion meeting was heralded a great success.

It was held in Jinan, Shandong Province, China on 26th September 2016, and experts from across the seed, crop protection and crop nutrition sectors attended. Each sector presented papers and facilitated discussion in an effort to get this important message out to the agricultural industry as it seeks to develop more efficiently and usher in more modern farming practice.

It has been recognised that the seed industry has an urgent need for transformation and is being affected by price downturn, seed market oversupply and increasing competition.

It was the consensus of the meeting that the competencies and opportunities for the seed industry lie with the promotion of seed value by producing high-end seed products. And, by focusing on seed health and incorporating (or integrating) this step into fertiliser routines.

The Keynote Presentations

1. The **Deputy Head of China Chemical Industry News Zhang Jianqiu** in his welcome address, said “the decrease in global food prices, and overcapacity in the seed market has lead to greater competition”. He went on to say, “we are entering a new, transformative phase, and the issues of healthy seed production and enhancing the value of the seed must be addressed. This is the challenge we must overcome”. He added “that he was pleased that the *AgriGoods* Herald was making a contribution to this issue by hosting this important meeting".

2. The **Vice Chairman of the China National Seed Association**, **Deng Guanglian** expressed affirmation for the meeting. He said, "the government has attached great importance to the seed industry in recent years, and that the seed industry is gradually changing from the planned economy to the market economy". Some of the key points that he outlined in his address were that :

- some problems have emerged with the rapid development of the seed industry, increased market concentration and strengthened industry contributions
- although the industry pays attention to several quality indicators such as cleanliness, purity and germination rate, these have been severely tested in recent years because of regular catastrophic climate conditions like drought, low temperature and cold climate
- the intensive, large-scale production model has become the development trend and existing technology has been unable to meet the need of production
- not only are new ways required for seed breeding and processing, but also for plant protection, crop nutrition and other agricultural mechanisms to solve these problems

Deng Guanglian commended the *AgriGoods* Herald and thanked them for gathering all the agricultural experts and key companies working in the seed, crop protection and crop nutrition sectors together so that the importance of seed health could be discussed, and the information on technological advances could be shared for the benefit of all farmers.

3. **Associate Professor Guan Yajing** from the Zhejiang University introduced the concepts of radicle elongation, accelerated aging, conductivity and a controlled deterioration test as being functions that could be considered for the national standard. She said, "by improving the competitiveness of the seed – that is to say we should improve the quality, reduce costs and increase profits, as a way of improving seed value".

4. Shandong Agricultural University **Professor Zhang Chunging** spoke of the factors that affect the quality of maize seeds in particular. These being the lack of keepable parent characteristics (i.e. purity control), and effects from current seed drying and threshing and processing machinery and processes. He proposed a fixed system cycle technique to maintain parent seed characteristics and to utilise production technology like isolation to eliminate inbreed seedlings and impure seeds. He went on to say "and also to take advantage of classification technology to ensure the continuing supply of highly energetic (high purity) parent seeds".

5. **Mr Ken Hancock, Managing Director, Rural Liquid Fertilisers** (RLF) talked to the meeting about seed nutrition (or seed priming) to imbibe multi element liquid fertiliser into the seed. Fertilising the seed is a concept that is a key focus for RLF. Priming the seed gives it increased vigour as it elevates all the nutrients needed by the seed to optimum levels, and gives the seed the best possible start. It provides ongoing support to the seed for the crucial first 2 – 3 weeks in the ground and helps set the seed for greater yield potential. He told the meeting, "farmers are concerned about base and follow-up fertiliser, but often forget the value of seed nutrition.

If more attention was paid to the nutrition of the seed, the plant would have greater ability to access the soil-based nutrients because of its stronger root growth". RLF has invested considerable scientific research and development expertise into a product specially engineered to give seed the best start from day-1 of germination.

6. **RLF's General Manager China, Dr Mike Lu** delivered an address to the meeting about **BSN Superstrike**, the RLF product specially designed as seed nutrition (fertiliser for seeds). He talked of its balanced nutritional fertiliser package of phosphorus, zinc, molybdenum, copper, manganese and other trace elements. "It can be fully absorbed by the seed within half an hour", he said. "And is can improve the vitality of the seed and enhance crop yield". He went on to describe how fertiliser absorption to the seed and the leaf is much higher than with soil-based fertilisers alone.

With the implementation of zero growth policy, the use of a new fertiliser product like **BSN Superstrike**, together with a foliar fertiliser (therefore a fully integrated approach) can effectively improve the utilisation of all fertiliser by the plant. As a result he said, "that crop production will enter a period of rapid growth and development".

7. DA BEI NONG Group's (Seed Health Centre China Agricultural University) **General Manager Ma Yongjun** informed the meeting that the demand for seed health testing is increasing day by day because of the acceleration of the seed market. Because of this demand he said, "that last year the DA BEI NONG GROUP was established to carry out seed-health related research". This joint venture harnessed the scientific research strength of the University together with the industrial advantages of the Group, with the main aim being "to service seed enterprise with technological innovation".

Some of the ways being trialled were, pesticide formulation, general seed health, new biological pesticides which can provide seed health testing, coated seed quality inspection, developing a new formula for seed testing, seed vigour detection and seed security testing amongst other things.

8. **Dr Lu Yuejian from BASF China** introduced the development trend towards global seed health in line with the demand for increased seed processing. He said, "that the total sales of global seed processing products are set to reach $5.6bn by 2020". He reported that the multinational agricultural companies are paying more attention to the use of biological seed treatment products to replace the traditional chemical products. These advances will bring about an important technological turning point as the seed itself is strengthened to deal with it's environment.

He said "the outcomes of these advances will engender cooperation between seed and seed processing enterprises, meet the climatic and environmental changes and help with the resistance to pests and disease".

A Proud Participant

RLF is very proud to be part of meetings and seminars such as this. It has much to offer the seed and seed-health sectors of global agriculture, and is always willing to share its expertise, trial data and product knowledge.

Mr Ken Hancock travelled from Australia to be present at the event and said, "it is only by participating in important discussions such as these, and sharing ideas from across all speciality sectors that the necessary changes can be brought about".