

## Doctor Seed

*"Enhancing agricultural yields through environmentally friendly solutions."*

### TEAM LEADER

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**Dr. Seed Company, Ltd.** is a research and development company that provides hi-tech solutions to increase agricultural yields of crops with different growing environments and production cycles.

### The Market

At present, China is sustaining an enormous population while industrialization has been limited to a few coastal regions. It is estimated that by 2030, China's population will exceed two billion. If each person consumes just enough food to survive, this will already translate into a projected per capita consumption of 290 kilograms worth of food, meaning China will face a shortage of foodstuffs amounting to 207 million tons. This is equivalent to the total export of foodstuffs worldwide in 1994. If each person in China consumes an average of 400 kilograms worth of food annually, similar to that of most developed countries, China would then need to import 369 million tons of foodstuffs, nearly twice the total export of foodstuffs worldwide at present. According to a study conducted by the U.S. Agricultural Department, it is impossible for the world to sustain the growth in demand for food in China.

### *The Future*

Wheat is the most responsive crop species to seed treatment, followed by potato and corn. Wheat makes up approximately 60 percent of the European chemical seed treatment market and 50 percent of the total world market.

According to a research report by H&J Company, the total sales of the world

seeds processing market reached USD 4.8 billion in 2005, with an estimated (expected) average annual increase of 10% until 2010.

### The Product



The Plasma Seed Processor, the Company's flagship product, was inspired by germination experiments conducted on Chinese seed-breeding satellites. Research revealed that seeds exposed to cosmic radiation tend to produce significantly higher yields as a result of their exposure to free ion particles. The Plasma Seed Processor simulates such an environment in a laboratorial setting achieving a similar effect in improving the quality of seeds and, ultimately, overall yield. Laboratory experiments also demonstrated that processed seeds have shown apparent signs of revitalization when compared to the controlled sample. The processed seeds had a more transparent coat, higher ion exchange ability, faster enzymatic transfer, and higher content of dissoluble sugar and albumen, which resulted in a more developed root system and faster growth. More importantly, the resulting crops were more resilient towards hazardous weather such as storms and draughts. Overall, the processed seeds produced plants that were healthier than the controlled sample in every stage of growth. The average increase in yield per acre is summarized in Table 1:

Table 1

Type of Crops	Increase in Yield (%)
Corn, Barley, Rice, Wheat	8-12
Soy Bean, Peanut	10-15
Vegetables	15-25
Cash Crops	15-25

Note: Several plant species generated increased yields of up to 70 percent.



### The Management

The chairman of Dr. Seed Company, Ltd. is Mr. Ce Wu. A graduate of Jilin University with a major in mechanical engineering, he served as the Secretary of the Metallurgy Committee of the Jilin province for 20 years. After his retirement, Dr. Wu spent an excess of 10 years in the agricultural and environmental industry, constantly exploring new means to increase crop yield amidst the rapidly increasing demand for foodstuffs in China. After years of research, he was able to register a set

of patents involving plasma technology which includes that which is used in the Company's core product, the plasma seed processor. Mr. Wu now is also serving as a visiting professor at Dalian University of Technology.

Under the guidance of the CEO, Dr. Xiao Yu Wu, the management team is comprised of highly qualified multinational executives from six different countries with an average of five years working experience. They have graduated from world renowned universities such as Cornell University, Duke University, University of Texas, and Peking University, with majors in management, marketing, human resource, chemical engineering, and physics. Their highly diverse backgrounds contribute to a comprehensive understanding of both domestic and international consumers.

## Marketing

### *Target Market*

As our aim is to increase the crop yield of plants and vegetables to sustain the growing demand for foodstuffs in China, our product is targeted directly at small farming towns and municipalities throughout the country. While one machine may only be affordable to large agricultural companies, given Dr. Seed's capacity to process 800 kilograms/hour, one machine could support the production needs of a small town. Government contracts will ensure our machines will be affordable to grassroots level farmers who make up 68 percent of the Chinese population.

### *Sales Promotion*

Doctor Seed is currently endorsed by the Agricultural Department of the Jilin Province, whereby 50 percent of all machines purchased by farming villages and municipalities are subsidized by the government – further increasing the affordability of the product to grassroots level consumers. Similar contracts have been proposed or are under negotiation in other provinces throughout China.

### International Sales

Government contracts that would bring this technology to agricultural countries throughout Asia will be pursued in our international expansion plan. Thailand will serve as our pilot international market and talks concerning the use of our product have already been entered into with its Ministry of Agriculture.

### Financial Plan

Revenue will begin in 2006 and target to break even in late 2007. Based upon currently accepted industry averages, the initial set-up cost will be \$1,500,000. First five years' total revenue will be \$3million, \$10 million, \$20million, \$32million, and \$50million respectively. With the expansion into the international market in three to five years, sales and profit is expected to increase dramatically. Average annual revenue growth will be 52%, with a projected 5-year NPV of \$3,500,000.

Dr. Seed seeks sophisticated investors experienced in the marketplace to fund \$1,500,000 of 25% equity financing (through two staged offerings) to fund manufacturing setup/tooling expenses and introduce the product to market. The equity

will be issued as common stock with the expectation of a liquidity event for all investors in 2008. In order to achieve the highest return for the investors, the company intends to launch an IPO to allow for investor exit.