

# Crop Protection China Market Opportunities and Challenges

<https://marketpublishers.com/r/C2ABF183069EN.html>

Date: October 2009

Pages: 160

Price: US\$ 11,917.00 (Single User License)

ID: C2ABF183069EN

## Abstracts

China is a traditional agricultural country, with a total area of 5,000 billion square meters stricken by plant diseases and insect pests each year. With only 7% of the world's arable land, China has fed 22% of the world's population, which is a great marvel in history. How do Chinese people achieve this- One answer is making good use of crop protection.

Crop protection is widely applied across the world and plays important roles in guaranteeing the safety of agricultural production and the quality of products, minimizing environmental pollution, safeguarding public health and promoting the sustainable development of agriculture in China. In recent years, crop protection has drawn more and more attention from the government and its status has been improved, due to the frequent outbreak of diseases, insect pests and weeds, and the stricter requirement on ecological environment, food quality and natural resources.

The total CP market value was USD11,499.39 million in 2008. With USD.6,191.50 million which accounts for 53.84% of total market value in 2008, seed plays the most important role in Chinese CP market. Chemical control has ranked the second largest market value of USD15,738.10 million in 2008, taking up 68.13%. CP machine, with USD827.93 million in 2008, also plays an important role. Though China is promoting environmentally friendly methods, such as physical control and biological control, these methods' value is still not very high. Their market value is only USD343.17 million, consisting of only 3.00%. But these methods will have very bright future.

As the largest agricultural and most populous country, China's plant structure of crops and grain situation have played a great important role in national strategic security. However, owing to frequent natural disasters, increasing entering of alien species and

serious pesticide resistance, the occurrence of crop diseases, insect pests and weeds is becoming more and more serious, which contributes to great challenges in crop protection, such as development and promotion of lowly toxic pesticides, the R&D of GM seeds. At the same time, it also bring many investment opportunities in the fields of seed trade, seed R&D, pesticide trade and pesticide R&D, etc. In this report, CCM will give a detailed introduction and summary about the trade and treatment of seeds, grain supply and demand, production and consumption of pesticides, control measures for crop diseases, insect pests and weeds and opportunities and challenges of CP market, etc.

MNCs, with their endeavors, captures 20% pesticide market, 50% vegetable seeds market and 4% corn seed market in 2008 in China.

## Contents

**Compared with the former edition in 2008, this edition enhances the following parts:**

- Supply and demand of grains
- Seeds situation
- Serious pest & malignant weed
- Crop protection value in China
- Biological control, includes Predatory mite and Parasitoid
- Physical control, embrace pest-killing lamps, sex attractant, insect screening and yellow board
- Seed treatment seed treatment agents
- Crop protection machinery
- MNCs' involvement in China crop protection industry
- Roles and market strategy of MNCs and their competition from local companies
- Opportunities and Challenges of crop protection in China
- How to enter China pesticides market

**The key findings in this report includes:**

- The total CP market value is USD11,499.39 million in 2008. Seed plays the most important role in Chinese CP market.
- Chemical control is still the main control method in China which will not be changed in the foreseeable future
- Physical control and Biological control will have a bright future in China
- With the promotion of Chinese government, seed treatment has developed quickly. Now, about 80% seed is treated and most of them are treated by peasants themselves with fungicide and insecticide, though some peasants choose seed coating agent.
- Above 350 CP machine manufacturers produce about 14 million CP machines in 2008 with 12 million sold in China. Now, China totally has about 80 million CP machines. Mechanical CP machines will be more popular in the future.
- Chinese peasants pay more attention to products quality
- MNCs, with their endeavors, captures 20% pesticide market, 50% vegetable seeds market and 4% corn seed market in 2008 in China.
- Glyphosate-resistance corn and GM rice are possibly to be approved in the next five years

**From this report, you will get the following knowledge about Chinese CP market:**

- Opportunity and challenge of CP market
- Current situation and forecast of crops and grain
- Current situation and forecast of pesticide industry
- Current situation and forecast of crop protection technologies
- Current situation and forecast of plant diseases, insect pests and weeds
- Current situation and forecast of seed and seed treatment
- Current situation and forecast of CP machines
- The regulations and policies and their influence on crop protection
- Relationship between pesticides and environment protection
- The purchase and use habit on CP products by peasants

**This report is helpful to:**

- Producers pay close attention to Chinese CP market, embracing pesticide, seed, natural enemy and machine producers etc.
- Traders pay close attention to Chinese CP market
- Analysts and consultants trying to gain insight into the Chinese CP market
- CP associations pay attention to Chinese CP market
- Governments pay attention to Chinese CP market

## List Of Tables

### LIST OF TABLES

Table 1 Stricken area of main diseases and insect pests in traditional crops, 2004-2009, (million hectares)

Table 2 Major regulations and policies on pesticide management

Table 3 Estimated progresses in crop protection technologies in next 5 years

Table 4 R & D of China crop protection in next five years

Table II-1 Challenges in China's seeds, crops and grains in the next five years

Table II-2 Opportunities of China's seeds, crops and grains in the next five years

Table II-1.1 Planting area of different crops in China, 2004-2009 (103 hectares)

Table II-2.2.1.1 Rice supply and demand, 2004-2009

Table II-2.2.2.1 Corn supply and demand, 2004-2009

Table II-2.2.3.1 Wheat supply and demand, 2004-2009

Table II-2.2.4.1 Soybean supply and demand, 2004-2009

Table II-3.2.1 China's market structure of seed products in 2008

Table II-3.2.2 China's import and export situation of vegetable seeds, 2004-2008

Table II-3.3.1 Major Chinese seed companies

Table II-3.3.2 Major overseas seed companies

Table II-4.1.1 Regional distribution of nature reserves in China in 2007, by number

Table II-4.1.2 Regional distribution of nature reserves in China in 2007, by area (hectares)

Table II-4.4.1 Regulations of GM products since 1990

Table II-4.5.1 Regulations of grain security since 1990

Table III-1 Challenges in China's plant diseases, insect pests and weeds control in the next five years

Table III-2 Opportunities in China's plant diseases, insect pests and weeds control in the next five years

Table III-1.1.1 Total stricken area of major diseases in traditional crops, 2004-2009, million hectares

Table III-1.1.2 Total stricken area of major diseases in rice in 2004-2009, million hectares

Table III-1.1.3 Total stricken area of major diseases in wheat in 2004-2009, million hectares

Table III-1.1.4 Total stricken area of major diseases in corn in 2004-2009, million hectares

Table III-1.1.5 Total stricken area of major diseases in corn, 2004-2009, million hectares

Table III-1.2.1 Major insect pests that seriously threaten crops in China

Table III-1.2.2 Total stricken area of omnivorous insect pests in 2004-2009, million hectares

Table III-1.2.3 Total stricken area of major insect pests in traditional crops, 2004-2009, million hectares

Table III-1.2.4 Total stricken area of major insect pests in rice, 2004-2009, million hectares

Table III-1.2.5 Total stricken area of major insect pests in wheat, 2004-2009, million hectares

Table III-1.2.6 Total stricken area of major insect pests in cotton, 2004-2009, million hectares

Table III-1.2.7 Total stricken area of major insect pests in corn, 2004-2009, million hectares

Table III-1.3.1 Major weeds that seriously threaten traditional crops in China

Table III-2.1 Serious insect pests, diseases and weeds threatening traditional crops in China

Table IV-2.1.1.1 Institutes which developed radars used to monitor insects

Table III-2.2 Alien species of insect pests, diseases and weeds in China

Table IV-2.2.1.1 Many pesticide-resistant insect pests and disease in China

Table IV-2.2.2.1 Key parasitoids and their target in China

Table IV-2.2.2.2 Imported natural enemies for the prevention and control of insect pests

Table IV-2.2.5.1 Administration departments responsible for crop quarantine

Table IV-2.3.1 Main achievements in genetic modification and breeding of crops

Table IV-5.1 Comparison between MNCs and local companies

Table IV-6.1 Opportunity of Chinese CP market in next five years

Table IV-6.2 Challenge of Chinese CP market in next five years

Table V-1.1 Number of pesticide producers with three certificates in Mainland China, 2003-Sep. 2009

Table V-1.2 Top 50 pesticide companies in China in 2006, by sales income (million USD)

Table V-1.3 Top 40 technical producers in China by capacity, 2008 (tonne)

Table V-1.4 Major producers of insecticide in China, ranking by capacity, 2008

Table V-1.5 Major producers of herbicides in China, ranking by capacity, 2008

Table V-1.6 Major producers of fungicides in China, ranking by capacity, 2008

Table V-1.7 Capacity and output of pesticides in China, 1994-2008 (tonne)

Table V-1.8 Registration volume of water-based formulations in China

Table V-1.9 Pesticides output in China by region, 2003~2007 (tonne)

Table V-1.10 Pesticides import & export in China by volume and value, 1993~2007 (tonne; million USD)

Table V-1.11 Pesticides export volume and value, break down by technical and

formulation, 2007

Table V-1.12 Pesticides import & export, break down by category (converted to 100% technical, tonne)

Table V-1.13 Application area of pesticides by category, 2006-2009 (million hectares)

Table V-1.14 Distribution of pesticide consumption by province, 2007 (tonne)

Table V-2.1 New registration of pesticide formulations in China, 2006-2008

Table V-2.2 Sales income of China's pesticides (million USD)

Table V-2.3 Potential pesticides in China, 2009 -1

Table V-2.4 Potential pesticides in China, 2009 -2

Table V-3.1 Key enterprises running chain-store operation of agricultural materials

Table V-4.1 Regulations on re-registration of pesticide producers and threshold of new ones

Table VI-1 Number of respondents and their planted crop

Table VI-3.1 Some cases related to counterfeit crop protection products, 2007~2009

Table VI-3.2 Major unreasonable behaviors of Chinese peasants in using crop protection products

Table VII-2.1.1 Major factors influencing development of diseases, insect pests and weeds.

Table VII-3.1 Major factors influencing crop protection technology development

Table VII-3.2 Estimated progress in crop protection technologies in next 5 years

Table VII-4.1 R & D of China crop protection in next five years

Table VII-5.2.1 Assumptions of the Future GDP Growth in China

Table VII-5.2.2 Historical growth rate of pesticide output, 2005-2008

Table VII-5.2.3 Trends influencing pesticide development



## List Of Figures

### LIST OF FIGURES

Figure 1 Market value of CP, 2007~2009

Figure II-1.1 Planting structure of crops in China in 2009

Figure II-1.1.1.1 Planting areas of three main cereal crops, 2004-2009

Figure II-1.1.1.2 Distribution of rice planting in China in 2007

Figure II-1.1.1.3 Distribution of rice planting in main provinces in 2007

Figure II-1.1.1.4 Distribution of corn planting in China in 2007

Figure II-1.1.1.5 Distribution of corn planting in main provinces in 2007

Figure II-1.1.1.6 Distribution of wheat planting in main provinces in 2007

Figure II-1.1.2.1 Planting areas of soybean, rapeseed and peanut in China, 2004-2009

Figure II-1.1.3.1 Planting areas of sugarcane and beet in China, 2004-2009

Figure II-1.1.3.2 Distribution of sugarcane planting in main provinces in 2007

Figure II-1.1.3.3 Distribution of beet planting in main provinces in 2007

Figure II-1.1.4.1 Cotton planting area in China, 2004-2009

Figure II-1.1.4.2 Distribution of cotton planting area in China in 2007

Figure II-1.1.4.3 Distribution of cotton planting in main provinces in 2007

Figure II-1.2.2.1 Planting structure of GM crops in China

Figure II-1.2.2.2 Planting area of cotton and Bt cotton in China, 2004-2009

Figure II-1.2.2.3 Distribution of Bt cotton planting in China in 2007

Figure II-1.2.2.4 Localization rate of Bt cotton in China, 1998-2007

Figure II-2.1.1.1 Output, consumption and output growth rate of grains, 2004 -2009

Figure II-2.1.1.2 Unit output of grains, 2004 - 2009

Figure II-2.1.2.1 Consumption structure of grain in 2008

Figure II-3.1.1 Market value and annual growth rate of seed, 2006-2009

Figure II-3.2.1 China's import and export situation of seeds, 2004-2008

Figure II-3.2.2 The international market share of China's vegetable seeds, 2004-2008

Figure III-1 Total stricken area of crop diseases and insect pests, 2004-2009

Figure III-2 Structure of grain loss caused by plant diseases, insect pests and weeds

Figure III-1.1.1 Proportion of the traditional crop planting area hit by major diseases, 2004-2009

Figure III-1.1.2 Proportion of the rice planting area hit by major diseases, 2004-2009

Figure III-1.1.3 Proportion of the wheat planting area hit by major diseases, 2004-2009

Figure III-1.1.4 Proportion of the corn planting area hit by major diseases, 2004-2009

Figure III-1.1.5 Proportion of the cotton planting area hit by major diseases, 2004-2009

Figure III-1.2.1 Total stricken area of omnivorous insect pests, 2004-2009, million hectares



Figure III-1.2.2 Proportion of total stricken area of traditional crops hit by major insect pests, 2004-2009

Figure III-1.2.3 Proportion of the area hit by major insect pests in rice, 2004-2009

Figure III-1.2.4 Proportion of the stricken area of major insect pests in wheat, 2004-2009

Figure III-1.2.5 Proportion of the stricken area of major insect pests in cotton, 2004-2009

Figure III-1.2.6 Proportion of the stricken area of major insect pests in corn, 2004-2009

Figure IV-1.1 Market value of CP, 2007-2009

Figure IV-1.2 Market value structure of CP, 2007-2009

Figure IV-2.1.1.1 RS Technologies used in monitoring and forecasting insect pests and diseases in crops

Figure IV-2.2.2.1 Market value structure of biological control, 2007~Oct. 2009

Figure IV-2.2.3.1 Market value structure of physical control, 2007- Oct. 2009

Figure V-1.1 Product structure of pesticides in China, 1998-2009

Figure V-1.2 Product structure of pesticides in China, 2008

Figure V-1.3 Pesticide output growth in China, 1986~2009

Figure V-1.4 Capacity and output of pesticide in China, 1994-2008

Figure V-1.5 Regional distribution of pesticide production in China by output, 2007

Figure V-1.6 Pesticide export volume and corresponding proportion in total output, 1998-2008

Figure V-1.7 Average export price of pesticides by category, 2001-2008

Figure V-1.8 Pesticide apparent consumption in China, 1997-2008 (converted to 100% technical,'000 tonnes)

Figure V-1.9 Consumption situation of pesticides in China by volume, 2004~2008 (converted to technical 100%)

Figure V-1.10 Pesticide consumption breakdown by major crops, 2007

Figure V-2.1 Gross output value of China's pesticide, 2000-2009

Figure V-3.1 Distribution channels of pesticides in China -1

Figure V-3.2 Distribution channels of pesticides in China -2

Figure VI-1 Peasants' views on factors for selecting CP products

Figure VI-2 Peasants' views on factors for selecting CP products

Figure VI-3 Population structure in China, 1999-2008

Figure VI-1.1 Population of rural migrant workers, 2001-2007

Figure VI-1.2 Proportion of people in rural migrant workers by sex, 2008

Figure VI-1.3 Proportion of people in rural migrant workers by age, 2008

Figure VI-3.1 Educational background situation of Chinese peasants, 1998-2007 (proportion of educated ones to the total peasant's population)

Figure VI-4.1 Per capita net income of urban and rural people, 1998-2008

Figure VI-4.2 Agricultural allowance, 2004-2008

Figure VII-1.1.1.1 Price index for fertilizer and pesticide in China  
Figure VII-1.1.1.2 Population engaged in agriculture in China  
Figure VII-1.1.1.3 Area of cultivated land in China, 2004~2008, (000' ha.)  
Figure VII-1.1.2.1.1 Grain crops' planting area in China, 2009~2014  
Figure VII-1.1.2.1.2 Forecast on grain output in China, 2009~2014  
Figure VII-1.1.2.2.1 Forecast on planting areas of rapeseed and peanut in China, 2009~2014  
Figure VII-1.1.2.2.2 Forecast on output of rapeseed and peanut in China, 2009~2014  
Figure VII-1.1.2.3.1 Forecast on cotton planting area in China, 2009~2014 ('000 ha.)  
Figure VII-1.1.2.3.2 Forecast on cotton output in China, 2009~2014  
Figure VII-1.2.1.1 Forecast on rice planting area in China, 2009~2014  
Figure VII-1.2.1.2 Forecast on rice output in China, 2009~2014  
Figure VII-1.2.2.1 Forecast on wheat planting area in China, 2009~2014  
Figure VII-1.2.2.2 Forecast on wheat output in China, 2009~2014  
Figure VII-1.2.3.1 Forecast on corn planting area in China, 2009~2014  
Figure VII-1.2.3.2 Forecast on corn output in China, 2009~2014  
Figure VII-1.2.4.1 Forecast on soybean planting area in China, 2009~2014  
Figure VII-1.2.4.2 Forecast on soybean output in China, 2009~2014  
Figure VII-2.2.1 Forecast on stricken area of crop diseases and insect pests in China, 2009~2014  
Figure VII-2.2.2 Forecast on total stricken area of crop weeds in China, 2009~2014  
Figure VII-2.2.1.1 Forecast on total stricken area of major diseases in traditional crops, 2009-2014  
Figure VII-2.2.2.1 Forecast on total stricken area of major insect pests in traditional crops, 2009-2014  
Figure VII-2.2.3.1 Forecast on total stricken area of weeds in traditional crops, 2009-2014  
Figure VII-5.1.1 Income growth of Chinese peasants, 2003-2008  
Figure VII-5.1.2 Number of people engaged in agriculture  
Figure VII-5.1.3 Government's investment in agriculture 2003-2008  
Figure VII-5.2.1 China's GDP growth in 2003-2008  
Figure VII-5.2.2 Projection on output of pesticide, 2009-2014  
Figure VII-5.2.3 Projection on demand of pesticide, 2009-2014

## **COMPANIES MENTIONED**

Shenzhen Biocentury Trangene (China) Co., Ltd. Shandong Denghai Seeds Co., Ltd.  
Beijing Origin Agritech Co., Ltd. Nanjing Redsun Co., Ltd. Jiangsu Yangnong Chemical Group Co., Ltd....

## I would like to order

Product name: Crop Protection China Market Opportunities and Challenges

Product link: <https://marketpublishers.com/r/C2ABF183069EN.html>

Price: US\$ 11,917.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/C2ABF183069EN.html>