

Overview of Seed Treatment in China

The First Edition
April 2019

Researched & Prepared by:

Kcomber Inc.

Copyright by Kcomber Inc.

Any publication, distribution or copying of the content in this report is prohibited.

Contents

Executive summary	1
Methodology.....	2
1 Introduction of seed treatment in China.....	3
1.1 Nomenclature and Codes of Pesticide Formulations 2017.....	3
1.2 Development of seed treatment in China.....	3
2 Registration of seed treatment in China.....	4
2.1 Number of registrations	4
2.2 Pesticide category	4
2.3 Formulation type.....	5
2.4 Active ingredients	5
2.5 Toxicity	6
2.6 Crops.....	7
2.7 Target.....	7
2.8 Registrant.....	8
2.9 Characteristics.....	9
3 Market of seed treatment in China.....	10
3.1 Application.....	10
3.2 Forecast	10

LIST OF TABLES

Table 1.1-1 Nomenclature and codes of pesticide formulations GB/T 19378-2017
Table 1.2-1 Development of fungicides in seed treatment
Table 1.2-2 Development of Insecticide in seed treatment
Table 2.2-1 Category of seed treatment in China, as of 4 March, 2019
Table 2.3-1 Formulation type of seed treatment in China, as of 4 March, 2019
Table 2.4-1 Top 11 active ingredients of seed treatment single formulation in China, as of 4 March, 2019
Table 2.4-2 Top 12 active ingredients of mix seed treatment in China, as of 4 March, 2019
Table 2.5-1 Toxicity of seed treatment in China, as of 4 March, 2019
Table 2.6-1 Crops of seed treatment in China, as of 4 March, 2019
Table 2.7-1 Top five pest targets of seed treatment in China, as of 4 March, 2019
Table 2.7-2 Top eight disease targets of seed treatment in China, as of 4 March, 2019
Table 2.8-1 Top 12 registrants of seed treatment in China, as of 4 March, 2019

LIST OF FIGURES

Figure 2.1-1 Number of annual new registrations of seed treatment in China, 2010–2018

1. Introduction

Seed treatment, as a comprehensive plant protection technology, is the most effective and cost-efficient means to protect crop seeds from biotic or abiotic stresses. As serious disease and pest outbreaks take place now and then, labor cost creeps up every year and the government advocates zero increase of pesticide usage, seed treatment sector attracts more and more attention.

Starting from the registration of seed treatment products, this report provides information about annual registration, formulation type, active ingredient, toxicity, target crop and control target of seed treatment in China, analyses the current situation in application and forecasts on the market growth in China.

At present, there are 16 formulation types of seed treatments registered in China, with a high concentration in certain types though. Among them, Flowable concentrate for seed treatment, water dispersible powder for slurry seed treatment and suspension concentrate for seed treatment are the top three, respectively accounting for 78%, 7% and 6% of the total registered amount of seed treatments in China. According to the statistics from National Agricultural Technology Extension and Service Centre, treated seeds were used in about 67 million ha. (1 billion mu) planting area in China in 2018. The development of seed treatment market has been accelerating in recent years, and the output value of domestic market has grown at 8%–10% annually.

- ✓ Introduction of seed treatment in China
- ✓ Registration of seed treatment in China
- ✓ Market of seed treatment in China
- ✓ Development trend of seed treatment in China

2. Approach for this report

The report is drafted by diverse methods as follows:

- Desk research

The sources of desk research are various, including published magazines, journals, government websites and statistics, industrial statistics, association seminars as well as information from the Internet. A lot of work has gone into the compilation and analysis of the obtained information.

- Internet

CCM visited government websites and contacted with players in the domestic agrochemical industry through B2B websites and software.

- Data processing and presentation

The data collected and compiled are sourced from:

- CCM's database
- Published articles in periodicals, magazines, journals and third-party databases
- Statistics from governments and international institutes
- Telephone interviews with domestic producers, joint ventures, service suppliers and governments
- Third-party data providers
- Comments from industrial experts
- Professional databases from other sources
- Information from the internet

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions were held in order to analyse the data and draw the conclusions.

3. Executive summary

Seed treatment is made from pesticides (insecticides, fungicides, hormones and fertilizer, etc.) and auxiliary agents as slow release agents, film forming agents, wetting agents, dispersants, and penetrants after advanced processing. It can be applied directly or after dilution on the surface of seeds, forming a protective film, a pesticide formulation with certain strength and permeability. Since the first formal registration of a seed treatment product was approved in 1985—35% metalaxyl seed dressing, which can help control millet downy mildew, seed treatment has developed for more than 30 years in China.

At present, there are 16 formulation types of seed treatments registered in China, with a high concentration in certain types though. Among them, Flowable concentrate for seed treatment, water dispersible powder for slurry seed treatment and suspension concentrate for seed treatment are the top three, respectively accounting for 78%, 7% and 6% of the total registered amount of seed treatments in China.

A total of 15 crops have been registered on which seed treatments could be applied in China. Corn, wheat, rice, cotton, peanut and soybean are major targeted crops. By now, corn tops the list in terms of seed treatment registrations in China, with more than 300 registered seed treatments can be used on its seed. It is also worth mentioning that in recent years, the number of seed treatments applied to rice seed has been increasing mainly because of planting method changing from seed soaking to direct-seeding.

4. What's in this report?

Note: Key data/information in this sample page is hidden, while in the report it is not.

1 Introduction of seed treatment in China

1.1 Nomenclature and Codes of Pesticide Formulations 2017

Table 1.1-1 Nomenclature and codes of pesticide formulations GB/T 19378-2017

Category	Formulation	Code
Seed treatment solid formulations	XXX	XXX
	XXX	XXX
Seed treatment liquid formulations	XXX	XXX
	XXX	XXX
	XXX	XXX

Source: Standardization Administration of China

1.2 Development of seed treatment in China

Table 1.2-1 Development of fungicides in seed treatment

Development stages	Fungicide	Representatives
XXX	XXX	XXX
XXX	XXX	XXX
	XXX	XXX
	XXX	XXX
...
XXX	XXX	XXX
	XXX	XXX

Source: CCM

Table 1.2-2 Development of insecticide in seed treatment

Development stages	Insecticide	Representatives
XXX	XXX	XXX
	XXX	XXX
	XXX	XXX
XXX	XXX	XXX
	XXX	XXX
	XXX	XXX
XXX	XXX	XXX
	XXX	XXX

Source: CCM

2 Registration of seed treatment in China

2.1 Number of registrations

Before 2000, the development of seed treating was very slow; as of 2000, only 5 seed treatments were registered in China. After 2000, the number of registered products began to grow faster. In 2012, 35 new seed treatments were registered, nearly double the number in 2010. Since then, the number of new registrations of seed treatments rockets year by year in general. Despite a significant decrease in 2016, still, nearly 70 new seed treatments were registered. In 2017 and 2018, the number of seed treatment registrations again surpassed the 2015 level. Main reasons behind this round of increase are the green development of agriculture and the relative shortage of rural labor force, which provide opportunities for the development of seed treatments.

...

If you want more information, please feel free to contact us

Tel: +86-20-37616606 Fax: +86-20-37616968

Email: econtact@cnchemicals.com