

II-1 Production Situation of Agrochemical Industry in China

II-1.1 Summary of Production

With consumers and government pay more attention on food safety, highly efficient and low toxic agrochemicals are more and more popular, especially after China prohibited the five highly toxic pesticides. Before 2000, the five high toxic pesticides accounted for over 40% of insecticide market, in 2006 it decreased to less than 10% and in 2007, it is officially prohibited. A large market opens to those highly efficient and low toxic agrochemicals.

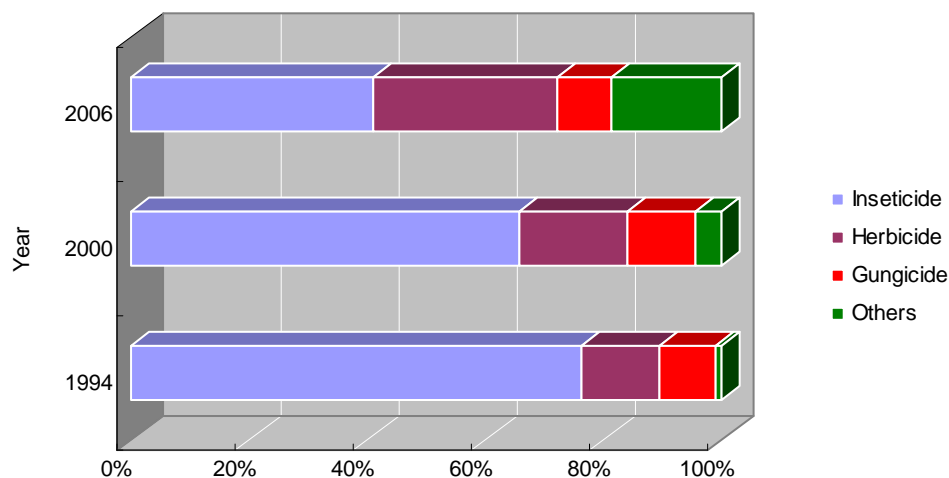
In 2006, the capacity of agrochemicals has reached 1,874,216t/a, while the output is 1,235,251 tonnes.

Table II-1.1-1 Capacity and Output of Technical Agrochemicals in the Past Years

Year	Insecticide		Herbicide		Fungicide		Others		Total	
	Cap.(t/a)	Output(t)	Cap.(t/a)	Output(t)	Cap.(t/a)	Output(t)	Cap.(t/a)	Output(t)	Cap.(t/a)	Output(t)
1994	400,000	200,904	75,000	34,056	69,000	25,080	7,700	2,900	551,700	262,940
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003										
2004										
2005										
2006										

Before 2000s, insecticide accounted for over 70 % of the total output. With changes of China's agriculture structure, situation has changed, especially for the herbicide. This is contributed to the demand from global market.

Figure II-1.1-1 Technical Agrochemicals Structure in the Past Years



II-2 Brief Introduction to the Major Agrochemicals in China

II-2.1 Insecticide

Table II-2.1-1 Current Production Situation of Insecticide

Item	Category	Cap. '07(t/a)	Percentage	Output '06(t)	Percentage
DDT	Organochlorine insecticide				
Acephate	Organophosphorus insecticide				
Trichlorfon	Organochlorine insecticide				
Chlorpyrifos	Organophosphorus insecticide				
Pyrethroid Insecticides	Pyrethroid insecticide				
Omethoate	Organophosphorus insecticide				
Imidacloprid	Other insecticide				
Malathion	Organ phosphorus insecticide				
Dimethoate	Organophosphorus insecticide				
Phosalone	Organophosphorus insecticide				
Endosulfan	Organochlorine insecticide				
Abamectin	Biological insecticide				
Others					
Total					

China produces over 100 technical grade insecticides and over 1,500 formulated insecticides at present. Organic insecticide is the largest category among all the categories of insecticide. It accounts for over 95% of the total output. Organophosphorus insecticide and organochlorine insecticide are the key species. Though in recent years, biological insecticide has developed fast, with the growth rate of 20~40%, biological insecticide will not play a significant role in the next 5~10 years, because of its high price of biological insecticide.

II-2.1.1 DDT

➤ About Production

Though China produces DDT for many years, till 2003, when the use of the five poisonous insecticides was prohibited, the output of DDT increases fast. And in 2007, it is the largest insecticide, with the technical capacity of 90,500t/a. The output of formulation is [REDACTED] tonnes in 2006.

➤ About Technology

China DDT manufacturers produce DDT, based on the technology of trichlorfon. Through reducing one molecular of HCL from trichlorfon, DDT is produced.

➤ About Manufacturers

There are 137 licensed technical and formulation manufacturers. Shandong province, Henan province, and Hubei province are the production bases.

Table II-2.2.1-1 Key Chinese Manufacturers of Technical DDT in 2007

Company	Technical capacity(t/a)	Specifications
[REDACTED]	[REDACTED]	95% Technical, 80% EC, 50% EC
[REDACTED]	[REDACTED]	95% Technical, 80% EC, 50% EC
[REDACTED]	[REDACTED]	95% Technical, 80% EC, 50% EC
[REDACTED]	[REDACTED]	95% Technical, 80% EC, 50% EC
[REDACTED]	[REDACTED]	95% Technical, 80% EC, 50% EC
[REDACTED]	6,000	95% Technical, 80% EC, 50% EC
[REDACTED]	6,000	95% Technical, 80% EC, 50% EC
[REDACTED]	2,500	95% Technical, 80% EC, 50% EC
Total	90,500	