

# Top 100 Pesticide Enterprises in China in 2023

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# Contents

Executive Summary1
Methodology2
1 Review of pesticide industry in China4
1.1 General situation of China's pesticide industry in 20224
1.2 Export volume and value of China's pesticide technical6
2 Top 100 Pesticide Enterprises in China in 20239
2.1 Overview of China's lists for Top pesticide players and Top brands9
2.1.1 Lists of Top Pesticide Enterprises and Pesticide Formulation Enterprises in
China, 2019–20239
2.1.2 2023 Top pesticide players by sales revenue
2.2 Top Pesticide Enterprises in China
2.2.1 China's Top 100 Pesticide Enterprises14
2.2.2 Geographical distribution of Top 100 Pesticide Enterprises21
2.3 Top Pesticide Formulation Enterprises in China22
2.3.1 China's Top 100 Pesticide Formulation Enterprises22
2.3.2 Geographical distribution of Top 100 Pesticide Formulation Enterprises .29
2.4 China's Top crop protection brands in 202231
LIST OF TABLES  Table 1.1-1 Output of pesticide technical in China by region in 2022
Table 1.1-2 Output ranking of China's mainstream pesticide production areas, 2018–2022
Table 1.2-1 Export volume and value of chemical pesticide in China by category, 2022 vs 2021
Table 1.2-2 Export volume and value of chemical pesticide in China by month, 2022
Table 1.2-3 List of the top 15 pesticide active ingredients by export value, 2022
Table 2.1.1-1 Revenue of China's top 100 and top 10 pesticide enterprises, 2018–2022
Table 2.1.1-2 Revenue of China's top 100 and top 10 pesticide formulation enterprises, 2018–2022
Table 2.1.1-3 Number of enterprises by annual revenue, 2018–2022
Table 2.1.2-1 Overlapping names in the two 2023 Top 100 Pesticide Enterprise Lists  Table 2.1.2-2 New entrants in the 2023 Pesticide Enterprise List
Table 2.1.2-3 New entrants in the 2023 Pesticide Enterprise List  Table 2.1.2-3 New entrants in the 2023 Pesticide Formulation Enterprise List
Table 2.2.1-1 List of 2023 China Top 100 Pesticide Enterprises
Table 2.2.1-2 List of the pesticide enterprises with growth rate of annual revenue exceeding 50%, 202
Table 2.2.2-1 Revenue of 2023 China Top 100 Pesticide Enterprises by province/region, 2022
Table 2.3.1-1 List of 2023 China Top 100 Pesticide Formulation Enterprises
Table 2.3.1-2 List of the formulation enterprises with annual growth rate of revenue exceeding 50%,
2023
Table 2.3.2-1 Revenue of 2023 China Top 100 Pesticide Formulation Enterprises by province/region,
2022
Table 2.4-1 List of 2022 China Crop Protection Popular Herbicide Brands
Table 2.4-2 List of 2022 China Crop Protection Popular Insecticide Brands

Table 2.4-3 List of 2022 China Crop Protection Popular Fungicide Brands

- Table 2.4-4 List of 2022 China Crop Protection Popular Plant Growth Regulator Brands
- Table 2.4-5 List of 2022 China Crop Protection Popular Biopesticide Brands
- Table 2.4-6 List of 2022 China Crop Protection Blockbuster Possible Products

#### LIST OF FIGURES

- Figure 1.1-1 Output of chemical pesticide technical in China in 2018–2022
- Figure 1.1-2 Geographical distribution of output of chemical pesticide technical in China, 2022
- Figure 2.1.1-1 Entry threshold for China top 100 pesticide enterprises, 2019–2023
- Figure 2.1.1-2 Entry threshold for China top 100 pesticide formulation enterprises, 2019–2023
- Figure 2.2.1-1 Shares of pesticide revenue of major enterprises in the 2023 China Top 100 Pesticide Enterprise List, 2022
- Figure 2.2.2-1 Number of 2023 Top 100 Pesticide Enterprises in China by province/region, 2022
- Figure 2.2.2-2 Share of pesticide revenue of 2023 China Top 100 Pesticide Enterprises by province/region, 2022
- Figure 2.3.1-1 Shares of pesticide revenue of major enterprises in the 2023 China Top 100 Pesticide Formulation Enterprise List
- Figure 2.3.2-1 Number of 2023 Top 100 Pesticide Formulation Enterprises in China by province/region, 2022
- Figure 2.3.2-2 Share of revenue of 2023 China Top 100 Pesticide Formulation Enterprises by province/region, 2022

#### **Executive Summary**

In 2022, with the prompt recovery of work and production, the industrial chain was back to normal operation, with an output nearly levelling with that in 2021, hitting 2,497,000 tonnes. As to exports, China's of pesticides hit a record high in 2022, registering increases in export value and volume, up by 34.23% and 6.65% year on year, respectively.

The revenue entry thresholds for China Top 100 Pesticide and Pesticide Formulation Enterprises have been raised over years, marking a CAGR of 18.38% and 11.65% from 2020 to 2023, respectively. On 16 May, China disclosed the 2023 top 100 pesticide/formulation enterprise lists based on their overall sales performance in 2022. The total sales of the top 100 pesticide enterprises in 2022 increased by 28.76%, and the threshold for entering the list was lifted by 31.35%. Regarding the listed top 100 formulation enterprises realised 29.19% year-on-year growth in 2022 sales collectively; the top 2 positions go to Guangdong Zhongxun Agri-science Corporation and Shenzhen Noposion Agrochemicals Co., Ltd., located in South China.

In the 2023 list of popular pesticide brands, popular pesticide brands in China in 2022 referring to 90 products from 84 enterprises were publicised.

#### Methodology

The report is drafted by diverse methods as follows:

#### - Desk research

The sources of desk research are various, including published magazines, journals, government statistics, industrial statistics, customs 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. When necessary, checks have been made with Chinese agrochemical players.

#### - Internet

CCM contacted with players in the domestic agrochemical industry through B2B websites and software as well as obtained registration information on the internet.

#### - Data processing and presentation

The data collected and compiled are sourced from:

- √ China Crop Protection Industry Association
- √ CCM's database
- √ Published articles in periodicals, magazines, journals and third-party databases
- √ Statistics from governments and international institutes
- $\sqrt{\text{Telephone interviews with domestic producers, joint ventures, service suppliers and governments}$
- √ 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.

Table A USD/CNY exchange rate, Jan. 2017–Dec. 2022

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
2017	6.8918	6.8713	6.8932	6.8845	6.8827	6.8019	6.7772	6.7148	6.5909	6.6493	6.6300	6.6067	6.7662
2018	6.5079	6.3045	6.3352	6.2764	6.3670	6.4078	6.6157	6.8293	6.8347	6.8957	6.9670	6.9431	6.6070
2019	6.8482	6.7081	6.6957	6.7193	6.7344	6.8896	6.8716	6.8938	7.0883	7.0726	7.0437	7.0262	6.8826
2020	6.9614	6.9249	6.9811	7.0771	7.0690	7.1315	7.0710	6.9980	6.8498	6.7796	6.7050	6.5921	6.9284
2021	6.5408	6.4623	6.4754	6.5584	6.4895	6.3572	6.4709	6.4660	6.468	6.4604	6.4192	6.3693	6.4615
2022	6.3794	6.3580	6.3014	6.3509	6.5672	6.6651	6.6863	6.7467	6.8821	7.0992	7.2081	7.1225	6.6972

Source: CCM

#### - Unit

USD: US dollar, currency unit in the US

RMB: currency unit in China, also named Renminbi Tonne: ton, equals to metric ton in this report

/t: per tonne

t/a: tonne per year, tonne/annum

Table B Abbreviations and full names

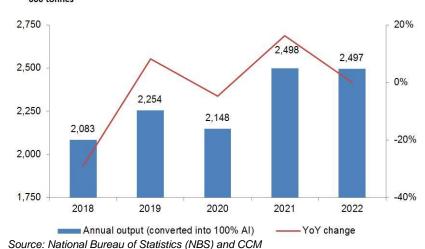
Abbreviation	Full Name
ССРІА	China Crop Protection Industry Association
AS	Aqueous solution
DC	Dispersible concentrate
EC	Emulsifiable concentrate
EW	Emulsion, oil in water
FS	Flowable concentrate for seed treatment
FSC	Flowable concentrate for seed coating
ME	Micro-emulsion
OD	Oil dispersion
SC	Suspension concentrate
SE	Suspoemulsion
SG	Water soluble granule
SL	Soluble concentrate
SP	Water soluble powder
тк	Technical concentrate
WG	Water dispersible granule
WP	Wettable powder
ZC	Mixed formulations of CS and SC

#### 1 Review of pesticide industry in China

#### 1.1 General situation of China's pesticide industry in 2022

In 2022, the pesticide industry was back on its feet due to the accelerating resumption of work and production, with a benefit growth rate climbing in H1 and then subsiding in the second half of the year, especially in Q4, representing a significant growth for the whole year. According to the National Bureau of Statistics (NBS), the output of China's pesticides reached 2,497,000 tonnes in 2022, almost flatlined from the previous year.

Figure 1.1-1 Output of chemical pesticide technical in China in 2018–2022



By geographical region, Jiangsu Province was the largest pesticide technical producing province (by volume) with the output of 594,700 tonnes in 2022, accounting for about 24% of the domestic total, followed by Shandong Province with 378,500 tonnes, up by 29.80% YoY.

In 2022, the overall output of Sichuan Province marked annual decrease by 6.88% YoY to 286,800 tonnes, pulling Sichuan down from the second place in 2021 to the third in 2022 among others across the country. In contrast, Guangdong Province, Liaoning Province and Inner Mongolia Autonomous Region saw strong growth in pesticide production of 36%, 23% and 16% YoY respectively, thanks to the sound control on the COVID-19 and prompt resumption of pesticide operation and production.

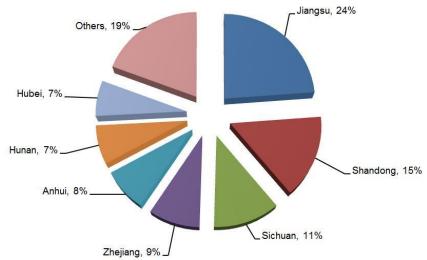
Table 1.1-1 Output of pesticide technical in China by region in 2022

Region	Output (converted into 100% AI), tonne	YoY Change
Jiangsu Province	594,700	8.28%
Shandong Province	378,500	29.80%
Sichuan Province	286,800	-6.88%
Zhejiang Province	220,800	-6.87%
Anhui Province	192,900	-13.96%
Hunan Province	177,800	5.52%
Hubei Province	163,700	6.99%
Ningxia Hui Autonomous Region	61,700	4.05%
Jiangxi Province	59,600	-30.62%

Region	Output (converted into 100% AI), tonne	YoY Change
Henan Province	55,500	-44.83%
Hebei Province	55,300	4.93%
Gansu Province	53,700	12.82%
Inner Mongolia Autonomous Region	40,700	15.95%
Liaoning Province	35,900	22.95%
Guangdong Province	31,000	35.96%
Guangxi Zhuang Autonomous Region	21,600	-25.52%
Jilin Province	21,300	15.14%
Others	45,500	-47.22%
Total	2,497,000	-0.06%

Source: NBS and CCM

Figure 1.1-2 Geographical distribution of output of chemical pesticide technical in China, 2022



Source: NBS and CCM

Table 1.1-2 Output ranking of China's mainstream pesticide production areas, 2018–2022

Province/Region	2022	2021	2020	2019	2018
Jiangsu Province	1	1	1	1	
Shandong Province	2	3	2	4	
Sichuan Province	3	2	3	2	
Zhejiang Province	4	4	4	3	
Anhui Province	5	5	5	6	
Hunan Province	6	6	7	12	

Province/Region	2022	2021	2020	2019	2018
Hubei Province	7	7	6	5	4
Ningxia Hui Autonomous Region	8	9	11	13	10
Henan Province	9	8	8	7	6
Hebei Province	10	10	12	10	11
Gansu Province	11	11	10	17	17
Inner Mongolia Autonomous Region	12	12	9	9	9

Source: NBS and CCM

Over the years, China's pesticide industry has experienced balanced domestic supply and demand, only taking a blow from the global economy downturn. The outbreak of Russian-Ukraine dispute in 2022 has doubled down the economic turmoil in the world and flared the food and energy crisis. For now and the future, it is crucial for China to prioritise focus on the technological problems that strangle the pesticide industrial development, raise core competitiveness by enhancing the strengths and making up the deficiencies, and quicken the advance towards the middle-and-high end of the global value chain.

#### 1.2 Export volume and value of China's pesticide technical

In recent years, the policy of zero growth in the use of fertilisers and pesticides implemented by China's government makes export trade an important way out for China's pesticides. According to the data from Tranalysis, China's pesticide industry earned a total export value of USD10.2 billion in 2022, up by 34.23% compared with the previous year. In terms of Al volumes of China's pesticides, China's export of pesticide technical was about 771,166 tonnes in 2022, up by 6.65% year on year.

The total export value & volume of herbicides, insecticides and fungicides have fluctuated in varying degrees. In particular, both herbicides and fungicides had increased largely in export value, while insecticides saw a year-on-year decrease of 2.08% in value. The AI volume of China's herbicides registered a 7.89% yearly increase to 612,663 tonnes, accounting for 79.4% of China's total technical volume of pesticide.

Table 1.2-1 Export volume and value of chemical pesticide in China by category, 2022 vs 2021

Cotomony	Expor	t value, million US	SD	Export volume, '000 tonnes			
Category	2022	2021	Trend	2022	2021	Trend	
Pesticides	10,202.38	7,600.81	34.23%	771.166	723.112	6.65%	
- Herbicides	7,315.85	4,875.47	50.05%	612.663	567.867	7.89%	
- Insecticides	1,789.70	1,827.69	-2.08%	72.345	68.815	5.13%	
- Fungicides	1,096.83	897.64	22.19%	86.159	86.429	-0.31%	

Note: The volume in this table is converted into 100% Al.

Source: Tranalysis

In 2022, China's export market of pesticides hit a record high. The export volume of pesticide technicals witnessed drops in Nov. and Dec. 2022, but large growths in other months, especially those in Q1—the figures of yearly increase were 120.77%, 95.29% and 92.80%, respectively.

Table 1.2-2 Export volume and value of chemical pesticide in China by month, 2022

Month	Value, million USD	YoY change (by value)	Volume, '000 tonne	YoY change (by volume)
Jan.	916.414	120.77%	64.20	40.27%
Feb.	902.663	95.29%	65.77	30.61%
March	1,025.297	92.80%	75.74	22.13%
April	782.973	33.08%	55.53	-1.77%
May	1,042.459	57.72%	83.82	36.94%
June	1,008.283	81.73%	81.40	44.16%
July	1,000.341	54.40%	79.41	17.22%
Aug.	877.374	8.76%	68.40	-1.35%
Sept.	757.814	5.96%	58.61	-16.21%
Oct.	777.749	27.80%	56.57	5.03%
Nov.	589.094	-20.50%	41.91	-32.73%
Dec.	521.923	-39.89%	39.82	-41.09%
Total	10,202.383	34.23%	771.17	6.65%

Note: The volume in this table is converted into 100% AI.

Source: Tranalysis

# -List of top 15 pesticide technicals by export value in 2022

As to the export value and volume of China's pesticide technicals, 15 highest-valued pesticides in China in 2022 were listed. Top 5 of them were glyphosate, glufosinate ammonium, paraquat, atrazine and imidacloprid, taking up 48.7% of the total export value or 55.1% of the total export volume, respectively. Notably, China's export volumes of glyphosate and picloram (converted into 100% AI) were 284,672 tonnes and 4,872 tonnes in 2022, down by 8.33% and 22.88% compared with that in the previous year, yet the export value of their technicals amounted to USD3,078 million or USD174.58 million, up 45.83% and 61.50% year on year; while mesotrione technical, both of its export value and volume marked double-digit yearly drops for sluggish demand in 2022.

Table 1.2-3 List of the top 15 pesticide active ingredients by export value, 2022

No.	Product	Export value, million USD	YoY change (by value)	Export volume, '000 tonne	YoY change (by volume)
1	Glyphosate	3,077.86	45.83%	284.672	-8.33%
2	Glufosinate ammonium	805.37	187.67%	27.289	160.40%
3	Paraquat	424.96	62.42%	36.887	7.94%
4	Atrazine	349.10	43.86%	64.150	5.78%
5	Imidacloprid	313.00	92.21%	12.068	66.12%
6	Clethodim	297.87	90.04%	12.146	44.90%
7	Azoxystrobin	266.93	116.50%	6.229	98.96%
8	Chlorothalonil	189.89	-5.91%	49.575	7.01%
9	Bifenthrin	186.16	57.93%	3.145	24.31%
10	Dicamba	182.24	7.63%	14.238	2.78%
11	Picloram	174.58	61.50%	4.872	-22.88%
12	2,4-D	163.49	74.70%	43.028	39.68%
13	Thiamethoxam	155.76	176.38%	7.523	134.19%
14	Mesotrione	151.26	-31.78%	6.128	-24.95%
15	Diquat	140.77	294.26%	3.802	165.38%

Note: The volume in this table is converted into 100% Al. Source: Tranalysis

#### 2 Top 100 Pesticide Enterprises in China in 2023

#### 2.1 Overview of China's lists for Top pesticide players and Top brands

#### 2.1.1 Lists of Top Pesticide Enterprises and Pesticide Formulation Enterprises in China, 2019–2023

The lists of China Top 100 Pesticide Enterprises and China Top 100 Pesticide Formulation Enterprises are released annually by China Crop Protection Industry Association (CCPIA) based on the sales revenue on agrochemicals of the prior year. According to the 2019–2023 lists, the pesticide revenue of the top 10 (pesticide technical) enterprises accounting for above 38% of the total of top 100 on average, with the record-high share reaching 39.84% in the 2023 list. As for the pesticide formulation enterprises, the combined revenue of the top 10 in 2019–2023 averaged at 37.14% of the total of top 100, with the share in the 2023 list dwindling to 36.52%.

Specifically, the 2023 listed top 10 pesticide enterprises raked in USD19.5 billion in revenue in 2022, up by 95.64% compared to the top 10 listed in 2018 (=USD10.1 billion) and up by 29.48% compared to the top 10 listed in 2021. The revenue of the 2023 listed top 100 enterprises grew by 28.76% compared with that of the top 100 listed in 2022.

The revenue of the 2023 listed top 10 pesticide formulation enterprises hit USD2.97 billion in 2022, up by 15.35% YoY or 70.57% compared with that of the top 10 listed in 2019 (=USD1.77 billion).

Table 2.1.1-1 Revenue of China's top 100 and top 10 pesticide enterprises, 2018–2022

Year	Reve	enue of top 100 p	pesticide enterprises	Revenue of top 10 p	Duamantian	
	million USD	million RMB	YoY change based on RMB	million USD	million RMB	Proportion
2018	26,004	171,809	11.38%	10,096	66,704	38.82%
2019	26,677	183,608	6.87%	10,206	70,245	38.26%
2020	30,098	208,531	13.57%	11,452	79,341	38.05%
2021	39,374	254,414	22.00%	15,598	100,788	39.62%
2022	48,912	327,575	28.76%	19,486	130,502	39.84%

Source: CCPIA and CCM

Table 2.1.1-2 Revenue of China's top 100 and top 10 pesticide formulation enterpises, 2018–2022

Year	Reven	ue of top 100 fo	rmulation enterprises	Revenue of top 10 for	Duenentien	
Teal	million USD	million RMB	YoY change based on RMB	million USD	million RMB	Proportion
2018	-	-	-	1,767	11,677	/
2019	5,005	34,448	41.52%	1,838	12,652	36.73%
2020	5,601	38,806	12.65%	2,094	14,510	37.39%
2021	7,046	45,525	17.31%	2,672	17,267	37.93%
2022	8,143	54,533	19.79%	2,974	19,918	36.52%

Note: The data of revenue of top 100 formulation enterprises in 2019 was missed as the lists before 2020 only include 50 enterprises.

Source: CCPIA and CCM

It's worth mentioning that the entry threshold of the top 100 pesticide enterprises first reached RMB300 million (USD44.79 million) in the 2017 list, and hovered around RMB400 million (USD59.73 million) in the 2019 and 2020 lists. For the 2022 list, the barrier went up to RMB500 million (USD74.66 million) for the first time.

In the 2019 list, there were only 5 enterprises with revenue above RMB5 billion (USD74.66 million), while the number added to 19 in the 2023 list, nearly four-fold of that in the 2019 list.

Table 2.1.1-3 Number of enterprises by annual revenue, 2018–2022

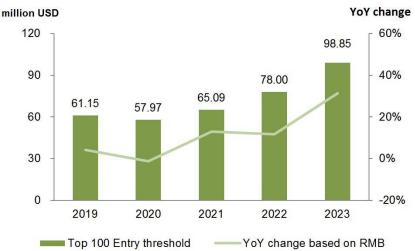
Year	Number of enterprises by annual revenue								
real	>RMB500 million	>RMB1 billion	>RMB5 billion						
2018	86	56	5						
2019	95	59	4						
2020	96	64	6						
2021	100	68	11						
2022	100	77	19						

Source: CCPIA and CCM

#### -Entry threshold for China top 100 pesticide enterprises, 2019–2023

The threshold for entry to the list of China's top 100 pesticide enterprises has been raised overall during 2019–2023, except for the decline in the 2020 list (=-1.24% YoY). The revenue entry dropped from USD61 million (RMB404 million) in 2018 to USD58 million (RMB399 million) in 2019, then presented double-digit increases from 2019 to 2022, reaching USD99 million (RMB662 million) in the 2023 list, up by 65.9% compared with that in the 2020 list.

Figure 2.1.1-1 Entry threshold for China top 100 pesticide enterprises, 2019–2023

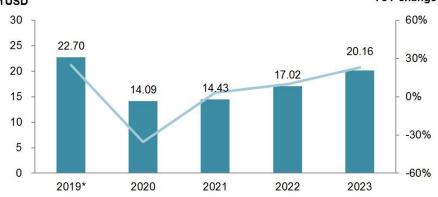


Source: CCPIA and CCM

## -Entry threshold for China top 100 pesticide formulation enterprises, 2019-2023

In terms of the list of top 100 pesticide formulation enterprises, the entry threshold also represented an uptrend. Notably, the 2019 list only included top 50 enterprises by pesticide revenue, with an entry revenue of USD22.70 million (RMB193 million) in 2018, which explains the sharp decrease in the list of 2020, when the top 50 list was changed to a top 100 one. By 2023 the entry threshold went to USD20.16 million (RMB135 million), up by 39% compared with that in 2020, namely USD14.09 million (RMB97 million) of revenue in 2019.

Figure 2.1.1-2 Entry threshold for China top 100 pesticide formulation enterprises, 2019–2023 **YoY change** 



Entry threshold for Top 100 formulation enterprises —— YoY change based on RMB Note: The entry threshold to the 2019 list was for the top 50 pesticide formulation enterprises.

Source: CCPIA and CCM

## 2.1.2 2023 Top pesticide players by sales revenue

The China Crop Protection Industry Association (CCPIA) posted the List of 2023 China Top 100 Pesticide Enterprises (hereinafter referred to as the pesticide list) and the List of 2023 China Top 100 Pesticide Formulation Enterprises (hereinafter referred to as the formulation list) ranking by sales in 2022 on the 10th Analysis Meeting of Economic Operation in Pesticide Industry held on 16 May, 2023.

In general, both total revenue and the entry threshold for the 2023 listed top 100 pesticide/formulation enterprises increased and the sales of the top 10 for both lists accounted for above 36% of the total. Statistics show that the scale of formulation manufacturers was small compared with that of technical ones on average, but the overall sales performance has increased significantly.

There were 23 companies listed in the two 2023 Top 100 lists at the same time. Besides, some subsidiaries owned by the same parent company are listed as well.

Table 2.1.2-1 Overlapping names in the two 2023 Top 100 Pesticide Enterprise Lists

No.	Enterprise (EN)	Enterprise (CN)	2022 Revenue, million USD	YoY Change based on RMB	Ranking in the pesticide list	Ranking in the formulation list
1	Guangdong Zhongxun Agri-science Corporation	广东中迅农科股 份有限公司	618.62	30.45%	25	1
2	Shenzhen Noposion Agrochemicals Co., Ltd.	深圳诺普信农化 股份有限公司	612.05	26.16%	26	2
3	Jiangxi Zhengbang Crop Protection Co., Ltd.	江西正邦作物保 护股份有限公司	290.42	-8.86%	41	3
4	Guangxi Tianyuan Biochemistry Co., Ltd.	广西田园生化股 份有限公司	259.06	7.16%	48	4
5	BASF Crop Protection (Jiangsu) Co., Ltd.	巴斯夫植物保护 (江苏)有限公司	247.86	28.09%	53	5
6	Jiangsu Essence Agrochemicals Co., Ltd.	江苏艾津作物科 技集团有限公司	212.18	13.05%	63	6
7	Jiangsu Rotam Chemistry Co., Ltd.	江苏龙灯化学有 限公司	203.52	-8.71%	67	7
8	Qiaochang Modern Agriculture Co., Ltd.	侨昌现代农业有 限公司	191.42	9.95%	69	8

No.	Enterprise (EN)	Enterprise (CN)	2022 Revenue, million USD	YoY Change based on RMB	Ranking in the pesticide list	Ranking in the formulation list
9	Sichuan Guoguang Agrochemical Co., Ltd.	四川国光农化股 份有限公司	172.46	21.71%	73	9
10	Pilar (Shanghai) Biotech Co., Ltd.	上海明德立达生 物科技有限公司	166.49	31.95%	74	10
11	Zhejiang Welldone Chemicals Co., Ltd.	浙江威尔达化工 有限公司	162.46	19.82%	75	11
12	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	陕西美邦药业集 团股份有限公司	135.13	7.48%	79	13
13	Jinan Tianbang Chemical Co., Ltd.	济南天邦化工有 限公司	131.85	29.28%	81	14
14	Sinon Chemical (China) Co., Ltd.	兴农药业(中国)有 限公司	129.76	72.42%	82	15
15	Anhui Richen Plant Protection Engineering Co., Ltd.	安徽瑞辰植保工程有限公司	129.61	474.83%	83	16
	FMC (Suzhou) Crop Care Co., Ltd.	苏州富美实植物 保护剂有限公司	129.46	-6.27%	84	17
16	FMC (Shanghai) Agricultural Sciences Co., Ltd.	富美实(上海)农业 科技有限公司	239.00	-4.53%	55	/
17	Guangxi Yiduoshou Biotechnology Co., Ltd.	广西易多收生物 科技有限公司	126.92	9.11%	87	18
18	Chongqing Shurong Crop Science Co., Ltd.	重庆树荣作物科 学有限公司	124.83	-9.91%	89	19
19	Anhui Zhongbang Biological Engineering Co., Ltd.	安徽众邦生物工程有限公司	123.63	12.65%	90	20
20	Jixixian Qingfeng Tianying Biochemical Co., Ltd.	绩溪县庆丰天鹰 生化有限公司	116.47	65.96%	92	21
04	Syngenta (Suzhou) Crop Protection Co., Ltd.	先正达(苏州)作物 保护有限公司	103.48	35.62%	95	22
21	Syngenta Nantong Crop Protection Co., Ltd.	先正达南通作物 保护有限公司	535.00	32.77%	28	/
22	Yixing Yizhou Chemical Products Co., Ltd.	宜兴市宜州化学 制品有限公司	103.18	52.20%	96	23
23	Jilin Bada Pesticide Co., Ltd.	吉林省八达农药 有限公司	98.85	24.44%	100	24

There are 8 new entrants in the pesticide list and 14 new ones in the formulation list, compared with the lists of the previous year.

# Key takeaways:

• Sinon Chemical (China) Co., Ltd., Anhui Richen Plant Protection Engineering Co., Ltd. and Jixixian Qingfeng Tianying Biochemical Co., Ltd. broke into the 2023 pesticide list as the 82nd (15th in the formulation list), 83rd (16th in the formulation list) and 92nd (21st in the formulation list), respectively—all

only entered the 2022 formulation list before.

- Yixing Yizhou Chemical Products Co., Ltd. appeared in both lists for the first time, with the annual sales of USD103 million (RMB691 million) in 2022, claiming the 96th in the pesticide list (or 23rd in the formulation list).
- In addition, as to the formulation pesticide enterprise list, Norsyn Crop Technology Co., Ltd. hit No. 26, with the annual sales of USD95 million (RMB634 million).

Table 2.1.2-2 New entrants in the 2023 Pesticide Enterprise List

No.	Enterprise	Pesticide revenue in 2022, million USD	Pesticide revenue in 2022, million RMB	Ranking
1	Sinon Chemical (China) Co., Ltd.	130	869	82
2	Anhui Richen Plant Protection Engineering Co., Ltd.	130	868	83
3	Zhongnongfa Henan Agrochemical Co., Ltd.	129	866	85
4	Jixixian Qingfeng Tianying Biochemical Co., Ltd.	116	780	92
5	Jiangsu Chunjiang Runtian Agrochemical Co., Ltd.	110	736	94
6	Yixing Yizhou Chemical Products Co., Ltd.	103	691	96
7	Wuqiao Pesticides Co., Ltd.	103	691	96
8	Zhejiang Avilive Chemical Co., Ltd.	100	673	98

Table 2.1.2-3 New entrants in the 2023 Pesticide Formulation Enterprise List

No.	Enterprise	Pesticide revenue in 2022, million USD	Pesticide revenue in 2022, million RMB	Ranking
1	Norsyn Crop Technology Co.,Ltd.	95	634	26
2	Yizhi Agricultural Technology Co. Ltd.	64	431	37
3	Jiangsu Kwin Group Co., Ltd.	64	428	38
4	Sixf Crop Protection Co., Ltd.	63	425	39
5	Shandong Lebont Chemical Co., Ltd.	59	398	43
6	Shaanxi Hengtian Biological Agriculture Co., Ltd.	57	380	45
7	Shanghai Hulian Biological Pharmaceutical (Xiayi) Co., Ltd.	53	358	47
8	Shandong Bainong Sida Biotechnology Co., Ltd.	51	341	51
9	Wanrong Crop Science & Technology Co., Ltd.	48	321	55
10	Shenyang Harvest Agrochemical Co., Ltd.	31	208	76
11	Shanxi Qixing Pesticide Co., Ltd.	26	173	85
12	Anhui Jiahui Chemical Technology Co.	23	155	88

No.	Enterprise	Pesticide revenue in 2022, million USD	Pesticide revenue in 2022, million RMB	Ranking
13	Jiangxi Weilite Biotechnology Co.	22	147	94
14	Anhui Share World Bio-Tech Co., Ltd.	21	141	96

#### 2.2 Top Pesticide Enterprises in China

#### 2.2.1 China's Top 100 Pesticide Enterprises

In the pesticide list, at least 84 among the top 100 achieved an increase in 2022 sales revenue. Statistics show that the total sales of the top 100 pesticide enterprises reached USD48.91 million (RMB327.58 million), with a yearly increase (based on RMB, the same as below) of 28.76% vs. the growth of 22% in the previous year; In 2023, the threshold for entry rose to USD99 million (RMB662 million) from USD78 million (RMB504 million), up 31.35% compared with last year.

In terms of sales performance in 2022, the top 19 enterprises meet sales above the level of USD747 million (RMB5 billion). 77 enterprises' sales in the year were within the range of USD149 million (RMB1 billion) to USD747 million (RMB5 billion), 20 more than last year.

The 2023 top four enterprises remained the same compared with the 2022 list and the top 10 raked in USD19.49 billion (RMB130.5 billion) in pesticide business, up by 29.48% over the previous year, accounting for 39.84% of the total sales on the list.

- ADAMA Ltd. takes the lead with over USD5.04 billion (RMB33.77 billion) of revenue, which is more than double its follower Jiangsu Yangnong Chemical Co., Ltd. (2nd)'s USD2.32 billion (RMB15.56 billion) of revenue.
- The 3rd and 4th go to Shandong Weifang Rainbow Chemical Co., Ltd. and Sino-Agri Leading Biosciences Co., Ltd., with sales of USD2.16 billion (RMB14.46 billion) and USD1.75 billion (RMB11.69 billion) in 2022 and up by 49.36% YoY and 32.72% YoY, separately.

Table 2.2.1-1 List of 2023 China Top 100 Pesticide Enterprises

	Enterprise	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking	Ranking change
No.		2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	in 2023	
1	ADAMA Ltd.	33,769	5,042	28,047	4,341	20.40%	16.16%	1	0
2	Jiangsu Yangnong Chemical Co., Ltd.	15,555	2,323	11,710	1,812	32.84%	28.16%	2	0
3	Shandong Weifang Rainbo w Chemical Co., Ltd.	14,460	2,159	9,681	1,498	49.36%	44.11%	3	0
4	Sino-Agri Leading Biosciences Co., Ltd.	11,687	1,745	8,806	1,363	32.72%	28.05%	4	0
5	Lianyungang Liben Crop Science Co., Ltd.	10,490	1,566	7,599	1,176	38.04%	33.19%	6	1
6	Zhejiang Wynca Chemical Industrial Group Co., Ltd.	9,596	1,433	7,640	1,182	25.60%	21.18%	5	-1
7	Lier Chemical Co., Ltd.	9,217	1,376	5,999	928	53.64%	48.24%	10	3
8	Anhui Guangxin Agrochemical Co., Ltd.	9,062	1,353	3,361	520	169.62%	160.13%	21	13

		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking	Ranking
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	in 2023	change
9	Hubei Xingfa Chemicals Group Co., Ltd.	8,670	1,295	7,548	1,168	14.86%	10.82%	7	-2
10	Nutrichem Co., Ltd.	7,996	1,194	7,288	1,128	9.71%	5.85%	8	-2
11	Fuhua Tongda Chemical Co., Ltd.	7,399	1,105	6,470	1,001	14.36%	10.33%	9	-2
12	Zhejiang Zhongshan Chemical Industry Group Co., Ltd.	6,870	1,026	3,808	589	80.41%	74.06%	18	6
13	Nanjing Red Sun Co., Ltd.	6,373	952	4,672	723	36.41%	31.61%	12	-1
14	Yongnong BioSciences Co., Ltd.	6,098	911	3,239	501	88.27%	81.64%	24	10
15	Nantong Jiangshan Agrochemical & Chemicals Co., Ltd.	5,890	879	3,907	605	50.76%	45.45%	16	1
16	Sichuan Hebang Biotechnology Co., Ltd.	5,850	873	5,249	812	11.45%	7.53%	11	-5
17	Lianhe Chemical Technology Co., Ltd.	5,793	865	4,277	662	35.45%	30.68%	14	-3
18	Shandong Binnong Technology Co., Ltd.	5,553	829	3,891	602	42.71%	37.69%	17	-1
19	Jiangsu Sevencontinent Green Chemical Co., Ltd.	5,149	769	4,573	708	12.60%	8.63%	13	-6
20	Limin Group Co., Ltd.	4,508	673	4,240	656	6.32%	2.58%	15	-5
21	CAC Nantong Chemical Co., Ltd.	4,477	668	3,354	519	33.48%	28.78%	22	1
22	Hailir Pesticides and Chemicals Group Co., Ltd.	4,449	664	3,607	558	23.34%	19.00%	20	-2
23	Shandong Luba Chemical Co., Ltd.	4,437	663	2,914	451	52.26%	46.91%	26	3
24	Jiangsu Changqing Agrochemical Co., Ltd.	4,169	622	3,683	570	13.20%	9.21%	19	-5
25	Guangdong Zhongxun Agri-science Corporation	4,143	619	3,176	492	30.45%	25.86%	25	0
26	Shenzhen Noposion Agrochemicals Co., Ltd.	4,099	612	3,249	503	26.16%	21.72%	23	-3
27	Guangdong Liwei Chemical Industry Co., Ltd.	3,597	537	2,626	406	36.98%	32.16%	28	1
28	Syngenta Nantong Crop Protection Co., Ltd.	3,586	535	2,701	418	32.77%	28.09%	27	-1
29	Shandong Cynda	3,102	463	2,179	337	42.36%	37.35%	31	2

No.	Enterprise	Pesticide revenue in 2022, million RMB	Pesticide revenue in 2022, million USD	Pesticide revenue in 2021, million RMB	Pesticide revenue in 2021, million USD	YoY C based on RMB	hange based on USD	Ranking in 2023	Ranking change
	Chemical Co., Ltd.								
30	Jiangsu Flag Chemical Industry Co., Ltd.	2,945	440	2,169	336	35.78%	31.00%	32	2
31	Yifan Biotechnology Group Co., Ltd.	2,918	436	2,486	385	17.38%	13.25%	29	-2
32	Ningbo Sunjoy Agroscience Co., Ltd.	2,884	431	2,245	347	28.46%	23.94%	30	-2
33	Jiangsu Good Harvest- Weien Agrochemical Co., Ltd.	2,715	405	1,744	270	55.68%	50.20%	42	9
34	Hunan Haili Chemical Industry Co.,Ltd.	2,630	393	1,825	282	44.11%	39.04%	39	5
35	Bayer Cropscience (China) Co., Ltd.	2,354	351	2,099	325	12.15%	8.20%	35	0
36	Trust Crop Protection Technology Co., Ltd.	2,350	351	1,745	270	34.67%	29.93%	41	5
37	Qilu Pharmaceutical (Inner Mongolia) Co., Ltd.	2,338	349	1,958	303	19.41%	15.21%	36	-1
38	Shandong Jingbo Agrochemicals Technology Co., Ltd.	2,184	326	1,870	289	16.79%	12.68%	38	0
39	Corteva (China) Investment Co., Ltd.	2,149	321	1,927	298	11.52%	7.60%	37	-2
40	Hebei Xingbai Agricultural Technology Co., Ltd.	2,038	304	2,151	333	-5.25%	-8.59%	33	-7
41	Jiangxi Zhengbang Crop Protection Co., Ltd.	1,945	290	2,134	330	-8.86%	-12.06%	34	-7
42	Fuze Biotechnology Co. Ltd.	1,919	287	1,243	192	54.38%	48.95%	60	18
43	Henan HDF Chemical Co., Ltd.	1,907	285	948	147	101.16%	94.08%	70	27
44	Ningbo Tide Imp. & Exp. Co., Ltd.	1,857	277	1,562	242	18.89%	14.70%	48	4
45	Jiangsu Institute of Ecomones Co., Ltd.	1,842	275	1,767	273	4.24%	0.58%	40	-5
46	Shandong Sino-Agri United Biotechnology Co., Ltd.	1,804	269	1,530	237	17.91%	13.76%	50	4
47	Hebei Lansen Biotech Co., Ltd.	1,747	261	1,230	190	42.03%	37.03%	61	14
48	Guangxi Tianyuan Biochemistry Co., Ltd.	1,735	259	1,619	251	7.16%	3.39%	45	-3

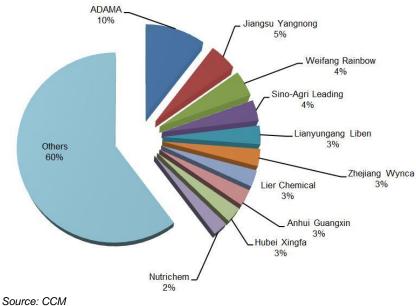
		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking	Ranking
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	in 2023	change
49	Qingdao Hansen Biologic Science Co., Ltd.	1,708	255	1,613	250	5.89%	2.16%	46	-3
50	Jiangsu Fengshan Group Co., Ltd.	1,707	255	1,518	235	12.45%	8.49%	51	1
51	Anhui Huaxing Chemical Industry Co., Ltd.	1,706	255	1,650	255	3.39%	-0.24%	44	-7
52	Synwill Co., Ltd.	1,705	255	1,458	226	16.94%	12.83%	53	1
53	BASF Crop Protection (Jiangsu) Co., Ltd.	1,660	248	1,296	201	28.09%	23.58%	57	4
54	Zhejiang Heben Pesticide & Chemicals Co., Ltd.	1,633	244	1,597	247	2.25%	-1.34%	47	-7
55	FMC (Shanghai) Agricultural Sciences Co., Ltd.	1,600	239	1,676	259	-4.53%	-7.89%	43	-12
56	Suli Co., Ltd.	1,528	228	1,125	174	35.82%	31.04%	64	8
57	Maxunitech Inc.	1,508	225	1,102	171	36.84%	32.03%	66	9
58	Hubei Benxing Agrochemical Co., Ltd.	1,493	223	1,550	240	-3.68%	-7.07%	49	-9
59	Zhejiang Jinfanda Biochemical Co., Ltd.	1,492	223	1,373	212	8.67%	4.84%	55	-4
60	Anhui Jiuyi Agriculture Co., Ltd.	1,475	220	886	137	66.48%	60.62%	78	18
61	Jiangsu Lanfeng Bio- chemical Co., Ltd.	1,445	216	1,444	223	0.07%	-3.45%	54	-7
62	Anhui Fengle Agrochemical Co., Ltd.	1,444	216	1,372	212	5.25%	1.54%	56	-6
63	Jiangsu Essence Agrochemicals Co., Ltd.	1,421	212	1,257	195	13.05%	9.07%	59	-4
64	Shandong A & Fine Agrochemicals Co., Ltd.	1,393	208	1,012	157	37.65%	32.80%	68	4
65	Shandong Kesai Agrochem Holdings Co., Ltd.	1,387	207	1,289	199	7.60%	3.82%	58	-7
66	Shandong Huayang Pesticide Chemical Industry Group Co., Ltd.	1,367	204	1,171	181	16.74%	12.63%	62	-4
67	Jiangsu Rotam Chemistry Co., Ltd.	1,363	204	1,493	231	-8.71%	-11.92%	52	-15
68	Jiangsu Sword Agrochemicals Co., Ltd.	1,310	196	930	144	40.86%	35.90%	72	4
69	Qiaochang Modern Agriculture Co., Ltd.	1,282	191	1,166	180	9.95%	6.08%	63	-6

		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking	Panking
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	in 2023	Ranking change
70	Zhejiang Xinnong Chemical Co., Ltd.	1,248	186	1,119	173	11.53%	7.60%	65	-5
71	Zhejiang Udragon Pesticides and Chemicals Co., Ltd.	1,238	185	913	141	35.60%	30.82%	75	4
72	Lion Agrevo (Jiangsu) Co., Ltd.	1,190	178	947	147	25.66%	21.24%	71	-1
73	Sichuan Guoguang Agrochemical Co., Ltd.	1,155	172	949	147	21.71%	17.42%	69	-4
74	Pilar (Shanghai) Biotech Co., Ltd.	1,115	166	845	131	31.95%	27.31%	79	5
75	Zhejiang Welldone Chemicals Co., Ltd.	1,088	162	908	141	19.82%	15.61%	76	1
76	Jilin Jinqiu Pesticide Co., Ltd.	1,057	158	675	104	56.59%	51.08%	87	11
77	SUNO (Guangde) Biotech Co., Ltd.	1,040	155	558	86	86.38%	79.82%	92	15
78	Jiangsu Baozong & Baoda Pharmaceutical Co., Ltd.	971	145	845	131	14.91%	10.87%	79	1
79	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	905	135	842	130	7.48%	3.70%	81	2
80	Hebei Guanlong Agrochemical Co., Ltd.	904	135	906	140	-0.22%	-3.73%	77	-3
81	Jinan Tianbang Chemical Co., Ltd.	883	132	683	106	29.28%	24.73%	86	5
82	Sinon Chemical (China) Co., Ltd.	869	130	504	78	72.42%	66.35%	/	/
83	Anhui Richen Plant Protection Engineering Co., Ltd.	868	130	151	23	474.83%	454.60%	/	/
84	FMC (Suzhou) Crop Care Co., Ltd.	867	129	925	143	-6.27%	-9.57%	74	-10
85	Zhongnongfa Henan Agrochemical Co., Ltd.	866	129	/	/	/	/	/	/
86	Jiangsu Repont Agrochemical Co., Ltd.	861	129	1,046	162	-17.69%	-20.58%	67	-19
87	Guangxi Yiduoshou Biotechnology Co., Ltd.	850	127	779	121	9.11%	5.27%	82	-5
88	Zibo NAB Agrochemicals Limited	844	126	719	111	17.39%	13.25%	84	-4
89	Chongqing Shurong Crop Science Co., Ltd.	836	125	928	144	-9.91%	-13.08%	73	-16
90	Anhui Zhongbang	828	124	735	114	12.65%	8.69%	83	-7

		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking in 2023	Ranking change
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD		
	Biological Engineering Co., Ltd.								
91	Jiangsu Weunite Fine Chemical Co., Ltd.	797	119	504	78	58.13%	52.57%	100	9
92	Jixixian Qingfeng Tianying Biochemical Co., Ltd.	780	116	470	73	65.96%	60.12%	/	/
93	Jiangsu Yong'an Chemical Co., Ltd.	768	115	530	82	44.91%	39.81%	95	2
94	Jiangsu Chunjiang Runtian Agrochemical Co., Ltd.	736	110	/	/	/	/	/	/
95	Syngenta (Suzhou) Crop Protection Co., Ltd.	693	103	511	79	35.62%	30.84%	99	4
96	Yixing Yizhou Chemical Products Co., Ltd.	691	103	454	70	52.20%	46.85%	/	/
96	Wuqiao Pesticides Co., Ltd.	691	103	/	/	/	/	/	/
98	Zhejiang Avilive Chemical Co., Ltd.	673	100	/	/	/	/	/	/
99	Qilu Synva Pharmaceutical Co., Ltd.	669	100	565	87	18.41%	14.24%	91	-8
100	Jilin Bada Pesticide Co., Ltd.	662	99	532	82	24.44%	20.06%	94	-6

Note: 1. Fuze Biotechnology Co. Ltd. (No.42 in this list) refers to "Beijing Kangbang Fuze Biotech Co., Ltd." in the previous issue. 2. Qilu Synva Pharmaceutical Co., Ltd. (No. 99 in this list), is a wholly-owned subsidiary of Qilu Pharmaceutical (Inner Mongolia) Co., Ltd. (No. 37 in this list).

Figure 2.2.1-1 Shares of pesticide revenue of major enterprises in the 2023 China Top 100 Pesticide Enterprise List, 2022



By annual growth, 17 enterprises listed here reported over 50% increases in 2022 sales; while 9 marked sales decline—3 less than the list for one year before.

Table 2.2.1-2 List of the pesticide enterprises with growth rate of annual revenue exceeding 50%, 2022

		Yo	Y Change	Pesticide	Pesticide		
No.	Enterprise	based on RMB	Pesticide revenue in 2022, million RMB	revenue in 2022, million RMB	revenue in 2022, million USD	Ranking in 2023	Ranking change
1	Anhui Richen Plant Protection Engineering Co., Ltd.	474.83%	454.60%	868	130	83	/
2	Anhui Guangxin Agrochemical Co., Ltd.	169.62%	160.13%	9,062	1,353	8	13
3	Henan HDF Chemical Co., Ltd.	101.16%	94.08%	1,907	285	43	27
4	Yongnong BioSciences Co., Ltd.	88.27%	81.64%	6,098	911	14	10
5	SUNO (Guangde) Biotech Co., Ltd.	86.38%	79.82%	1,040	155	77	15
6	Zhejiang Zhongshan Chemical Industry Group Co., Ltd.	80.41%	74.06%	6,870	1,026	12	6
7	Sinon Chemical (China) Co., Ltd.	72.42%	66.35%	869	130	82	/
8	Anhui Jiuyi Agriculture Co., Ltd.	66.48%	60.62%	1,475	220	60	18
9	Jixixian Qingfeng Tianying Biochemical Co., Ltd.	65.96%	60.12%	780	116	92	1
10	Jiangsu Weunite Fine Chemical Co., Ltd.	58.13%	52.57%	797	119	91	9
11	Jilin Jinqiu Pesticide Co., Ltd.	56.59%	51.08%	1,057	158	76	11
12	Jiangsu Good Harvest- Weien Agrochemical Co., Ltd.	55.68%	50.20%	2,715	405	33	9
13	Fuze Biotechnology Co. Ltd.	54.38%	48.95%	1,919	287	42	18
14	Lier Chemical Co., Ltd.	53.64%	48.24%	9,217	1,376	7	3
15	Shandong Luba Chemical Co., Ltd.	52.26%	46.91%	4,437	663	23	3
16	Yixing Yizhou Chemical Products Co., Ltd.	52.20%	46.85%	691	103	96	/
17	Nantong Jiangshan Agrochemical & Chemicals Co., Ltd.	50.76%	45.45%	5,890	879	15	1

#### 2.2.2 Geographical distribution of Top 100 Pesticide Enterprises

Analysis of the geographical distribution of 2023 China Top 100 pesticide enterprises shows that the top three provinces ranked by pesticide revenue in 2022 are Jiangsu, Zhejiang and Shandong. The pesticide revenue of the three provinces accounts for 55.72% of the total.

In the 2023 list, the total pesticide revenue in Jiangsu Province in 2022 was USD13.37 billion (RMB89.57 billion), accounting for 27.34% of the total; Jiangsu Province has 30 enterprises in the 2023 top 100 list, such number down by 1 from the 2022 listed ones. Zhejiang Province, raked in pesticide revenue of USD7.09 billion (RMB47.45 billion) and ranks the second here, with 15 enterprises in the list. Shandong Province holds the third, with 15 enterprises listed totalling pesticide revenue of USD6.80 billion (RMB45.52 billion).

Figure 2.2.2-1 Number of 2023 Top 100 Pesticide Enterprises in China by province/region, 2022 Number of enterprise

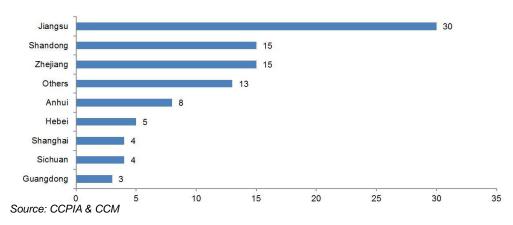
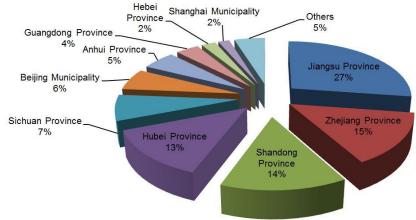


Table 2.2.2-1 Revenue of 2023 China Top 100 Pesticide Enterprises by province/region, 2022

No.	Province/Region	Pesticide revenue in 2022, million RMB	Pesticide revenue in 2022, million USD
1	Jiangsu Province	89,565	13,373
2	Zhejiang Province	47,447	7,085
3	Shandong Province	45,522	6,797
4	Hubei Province	43,932	6,560
5	Sichuan Province	23,621	3,527
6	Beijing Municipality	19,683	2,939
7	Anhui Province	17,203	2,569
8	Guangdong Province	11,839	1,768
9	Hebei Province	7,299	1,090
10	Shanghai Municipality	5,733	856
11	Henan Province	2,773	414
12	Hunan Province	2,630	393
13	Guangxi Zhuang Autonomous Region	2,585	386
14	Inner Mongolia Autonomous Region	2,338	349

No.	Province/Region	Pesticide revenue in 2022, million RMB	Pesticide revenue in 2022, million USD
15	Jiangxi Province	1,945	290
16	Jilin Province	1,719	257
17	Shaanxi Province	905	135
18	Chongqing Municipality	836	125
	Total	327,575	48,912

Figure 2.2.2-2 Share of pesticide revenue of 2023 China Top 100 Pesticide Enterprises by province/region, 2022



Source: CCPIA & CCM

# 2.3 Top Pesticide Formulation Enterprises in China

#### 2.3.1 China's Top 100 Pesticide Formulation Enterprises

Taking advantages of industry transformation and upgrading of pesticide formulation business promoted in China, the 2023 Top 100 China formulation enterprises achieved total revenue of USD8.14 billion (RMB54.53 billion), a yearly increase of 29.19%.

The average revenue of the top 100 enterprises from formulation business amounted to USD81 million (RMB545 million) in 2022, up by 19.72% YoY. The aggregate sales of the top 10 formulation enterprises approached USD2.97 billion (RMB19.92 billion), accounting for 36.52% of the total, marking an increase of 15.36% over the previous year. The overall sales from formulations have increased significantly in 2022 with Top1–12 raking in above USD149.32 million (RMB1 billion) each, and totalling 33 enterprises hit their sales above USD74.66 million (RMB500 million), 6 more than last year. The threshold for entry to the 2023 formulation list reaches USD20 million (RMB135 million), up by 22.73% year on year.

Specifically, Guangdong Zhongxun Agri-science Corporation came out on top, with sales of USD619 million (RMB4.14 billion); Shenzhen Noposion Agrochemicals Co., Ltd. held the second place this year, with sales of USD612 million (RMB4.10 billion) in 2022. The 3rd, 4th and 5th places are claimed by Jiangxi Zhengbang Crop Protection Co., Ltd., Guangxi Tianyuan Biochemistry Co., Ltd. and BASF Crop Protection (Jiangsu) Co., Ltd.

Table 2.3.1-1 List of 2023 China Top 100 Pesticide Formulation Enterprises

	<b>.</b>	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking	Ranking change
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	in 2023	
1	Guangdong Zhongxun Agri-science Corporation	4,143	619	3,176	492	30.45%	25.86%	2	1
2	Shenzhen Noposion Agrochemicals Co., Ltd.	4,099	612	3,249	503	26.16%	21.72%	1	-1
3	Jiangxi Zhengbang Crop Protection Co., Ltd.	1,945	290	2,134	330	-8.86%	-12.06%	3	0
4	Guangxi Tianyuan Biochemistry Co., Ltd.	1,735	259	1,619	251	7.16%	3.39%	4	0
5	BASF Crop Protection (Jiangsu) Co., Ltd.	1,660	248	1,296	201	28.09%	23.58%	6	1
6	Jiangsu Essence Agrochemicals Co., Ltd.	1,421	212	1,257	195	13.05%	9.07%	7	1
7	Jiangsu Rotam Chemistry Co., Ltd.	1,363	204	1,493	231	-8.71%	-11.92%	5	-2
8	Qiaochang Modern Agriculture Co., Ltd.	1,282	191	1,166	180	9.95%	6.08%	8	0
9	Sichuan Guoguang Agrochemical Co., Ltd.	1,155	172	949	147	21.71%	17.42%	9	0
10	Pilar (Shanghai) Biotech Co., Ltd.	1,115	166	845	131	31.95%	27.31%	14	4
11	Zhejiang Welldone Chemicals Co., Ltd.	1,088	162	908	141	19.82%	15.61%	13	2
12	Shandong Kesaijinong Biotechnology Co., Ltd.	1,054	157	920	142	14.57%	10.53%	12	0
13	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	905	135	842	130	7.48%	3.70%	15	2
14	Jinan Tianbang Chemical Co., Ltd.	883	132	683	106	29.28%	24.73%	18	4
15	Sinon Chemical (China) Co., Ltd.	869	130	504	78	72.42%	66.35%	27	12
16	Anhui Richen Plant Protection Engineering Co., Ltd.	868	130	151	23	474.83%	454.60%	81	65
17	FMC (Suzhou) Crop Care Co., Ltd.	867	129	925	143	-6.27%	-9.57%	11	-6
18	Guangxi Yiduoshou Biotechnology Co., Ltd.	850	127	779	121	9.11%	5.27%	16	-2
19	Chongqing Shurong Crop Science Co., Ltd.	836	125	928	144	-9.91%	-13.08%	10	-9
20	Anhui Zhongbang Biological Engineering Co., Ltd.	828	124	735	114	12.65%	8.69%	17	-3

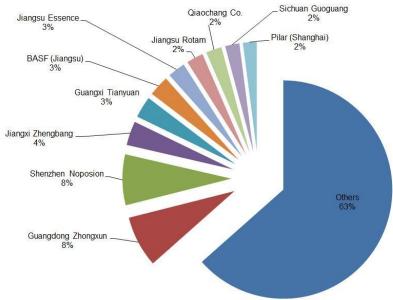
		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange		Panking
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	Ranking in 2023	Ranking change
21	Jixixian Qingfeng Tianying Biochemical Co., Ltd.	780	116	470	73	65.96%	60.12%	29	8
22	Syngenta (Suzhou) Crop Protection Co., Ltd.	693	103	511	79	35.62%	30.84%	26	4
23	Yixing Yizhou Chemical Products Co., Ltd.	691	103	454	70	52.20%	46.85%	32	9
24	Jilin Bada Pesticide Co., Ltd.	662	99	532	82	24.44%	20.06%	22	-2
25	Shandong Vicome Greenland Chemical Co., Ltd.	652	97	515	80	26.60%	22.15%	25	0
26	Norsyn Crop Technology Co.,Ltd	634	95	544	84	16.54%	12.44%	/	/
27	Hainan Zhengye Zhongnong High-tech Stock Co., Ltd.	560	84	517	80	8.32%	4.51%	24	-3
28	Hunan Suncas Agricultural Development Co., Ltd.	557	83	384	59	45.05%	39.95%	36	8
29	Anhui Chaonong High-tech Chemical Co., Ltd.	580	87	218	34	166.06%	156.69%	58	29
30	Jiangmen Plant Protection Co., Ltd.	522	78	458	71	13.97%	9.96%	30	0
31	Qingdao Jin'er Agrochemicals (Group) R&D Co., Ltd.	519	77	495	77	4.85%	1.16%	28	-3
32	Shanghai Yuelian Biotech Co., Ltd.	515	77	422	65	22.04%	17.74%	33	1
33	Anhui Huilong Group Youngsun Pesticides Co., Ltd.	510	76	456	71	11.84%	7.91%	31	-2
34	Jinan Zhongke Green Biotechnology Co., Ltd.	454	68	420	65	8.10%	4.29%	34	0
35	Hebei Zhongtian Bangzheng Biotechnology Co., Ltd.	453	68	402	62	12.69%	8.72%	35	0
36	Shandong Zhongxin Kenong Biological Technology Co., Ltd.	452	67	369	57	22.49%	18.18%	37	1
37	Yizhi Agricultural Technology Co. Ltd.	431	64	/	/	/	/	/	/
38	Jiangsu Kwin Group Co., Ltd.	428	64	/	/	/	/	/	/
39	Sixf Crop Protection Co., Ltd.	425	63	/	/	/	/	/	/
40	Bengbu Shengdan Biochemical Co., Ltd.	421	63	180	28	133.89%	125.66%	70	30

		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Panking	Ranking
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	Ranking in 2023	change
41	Yixing Xingnong Chemical Products Co., Ltd.	403	60	528	82	-23.67%	-26.36%	23	-18
42	Hebei Zhongbao Green Agricultural Science and Technology Co., Ltd.	400	60	351	54	13.96%	9.95%	41	-1
43	Shandong Lebont Chemical Co., Ltd.	398	59	/	/	/	/	/	/
44	Tianjin Huayu Pesticide Co., Ltd.	381	57	356	55	7.02%	3.26%	39	-5
45	Shaanxi Hengtian Biological Agriculture Co., Ltd.	380	57	1	1	/	/	/	/
46	Zhejiang Tianfeng Biological Science Co., Ltd.	362	54	338	52	7.10%	3.33%	42	-4
47	Shanghai Hulian Biological Pharmaceutical (Xiayi) Co., Ltd.	358	53	1	1	/	/	/	/
48	Hebei Rongwei Biological Pharmaceutical Co., Ltd.	356	53	270	42	31.85%	27.21%	46	-2
49	Jiangxi Buffett Chemical Co., Ltd.	351	52	258	40	36.05%	31.26%	49	0
50	Zhejiang Sega Science and Technology Co., Ltd.	346	52	352	54	-1.70%	-5.16%	40	-10
51	Shandong Runyang Chemical Co., Ltd.	341	51	300	46	13.67%	9.67%	45	-6
51	Shandong Bainong Sida Biotechnology Co., Ltd.	341	51	/	1	/	/	/	/
53	Shandong Lvbang Crop Science Co., Ltd.	329	49	266	41	23.68%	19.33%	47	-6
54	Hangzhou Bonghua Biological Technology Co. Ltd.	325	49	198	31	64.14%	58.36%	65	11
55	Wanrong Crop Science & Technology Co., Ltd.	321	48	/	1	/	/	/	/
56	Yancheng Limin Chemical Co., Ltd.	315	47	247	38	27.53%	23.04%	50	-6
57	Nantong Lihua Agrochemical Co., Ltd.	314	47	245	38	28.16%	23.65%	52	-5
58	Zhejiang Jishun Plant Technology Co., Ltd.	286	43	200	31	43.00%	37.97%	63	5
59	Dezhou Xianglong Biochemical Co., Ltd.	282	42	214	33	31.78%	27.14%	60	1
60	Shandong Zouping Pesticides Co., Ltd.	280	42	266	41	5.26%	1.56%	47	-13

No.	Enterprise	Pesticide revenue in 2022, million RMB	Pesticide revenue in 2022, million USD	Pesticide revenue in 2021, million RMB	Pesticide revenue in 2021, million USD	YoY C based on RMB	hange based on USD	Ranking in 2023	Ranking change
61	Shaanxi Xidahuate Co., Ltd.	279	42	247	38	12.96%	8.98%	50	-11
62	Jiangsu Dongbao Agrochemical Co., Ltd.	274	41	231	36	18.61%	14.44%	53	-9
63	Lanxi Jinghang Biotechnology Co., Ltd.	272	41	171	26	59.06%	53.47%	75	12
64	Jiangsu State Farms Biochemistry Co., Ltd.	264	39	178	28	48.31%	43.09%	73	9
65	Shijiazhuang Nongxin Biotechnology Co.,Ltd.	254	38	231	36	9.96%	6.09%	53	-12
66	Shandong Shengpeng Technology Co., Ltd.	248	37	187	29	32.62%	27.95%	67	1
67	Jinan Yinong Chemical Co., Ltd.	247	37	210	33	17.62%	13.48%	62	-5
68	Tianjin Highpoint Plant Protection Co., Ltd.	241	36	226	35	6.64%	2.88%	55	-13
69	Anhui Lantian Agricultural Development Co., Ltd.	238	36	164	25	45.12%	40.01%	77	8
70	Shaanxi Kanghelifeng Bioscience and Pharmacy Co., Ltd.	236	35	220	34	7.27%	3.50%	57	-13
71	Zhenjiang Pioneer Cropscience Co., Ltd.	230	34	113	17	103.54%	96.38%	97	26
72	Shanghai Shengnong Pesticide Co., Ltd.	229	34	215	33	6.51%	2.76%	59	-13
73	Innovation Meiland (Hefei) Co.,Ltd.	213	32	184	28	15.76%	11.69%	68	-5
73	Tianjin Boke Baisheng Technology Co., Ltd.	213	32	154	24	38.31%	33.44%	80	7
75	Shanghai HKC Ltd.	209	31	225	35	-7.11%	-10.38%	56	-19
76	Shenyang Harvest Agrochemical Co., Ltd.	208	31	/	/	/	/	/	/
77	Chengdu Newsun Crop Science Co., Ltd.	205	31	200	31	2.50%	-1.11%	63	-14
78	Guangdong ZhenGe Biotechnology Co., Ltd.	202	30	195	30	3.59%	-0.06%	66	-12
79	Hefei Henong Pesticide Co., Ltd.	190	28	179	28	6.15%	2.41%	72	-7
80	Anhui Shengfeng Biochemical Co., Ltd.	187	28	155	24	20.65%	16.40%	79	-1
81	Liyang Zhongnan Chemical Industry Co., Ltd.	186	28	115	18	61.74%	56.05%	95	14

		Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	Pesticide revenue in	YoY C	hange	Ranking	Ranking
No.	Enterprise	2022, million RMB	2022, million USD	2021, million RMB	2021, million USD	based on RMB	based on USD	in 2023	change
82	Anyang Ruipu Agrochemical Co., Ltd.	181	27	160	25	13.13%	9.14%	78	-4
83	Zhejiang Tianyi Biotechnology Co., Ltd.	180	27	167	26	7.78%	3.99%	76	-7
84	Shandong Changqing Pesticide Factory Co., Ltd.	177	26	177	27	0.00%	-3.52%	74	-10
85	Xi'an MTI Co., Ltd.	173	26	/	/	/	/	/	/
86	Shanxi Qixing Pesticide Co., Ltd.	163	24	120	19	35.83%	31.05%	94	8
87	Zhejiang Longyou East Anasac Crop Science Co., Ltd.	160	24	130	20	23.08%	18.75%	88	1
88	Anhui Jiahui Chemical Technology Co., Ltd.	155	23	/	/	/	/	/	/
89	Shandong Danong Pharmaceutical Co., Ltd.	153	23	148	23	3.38%	-0.26%	83	-6
90	Hebei Boken Agriculture Co., Ltd.	152	23	136	21	11.76%	7.83%	87	-3
91	Shaanxi Xiannong Biological Science amd Technology Co., Ltd.	151	23	142	22	6.34%	2.60%	85	-6
91	Shandong Yannong Biotechnology Co., Ltd.	151	23	149	23	1.34%	-2.22%	82	-9
93	Nanjing BaoFeng Pesticide Co., Ltd.	149	22	125	19	19.20%	15.00%	89	-4
94	Huizhou Yinnong Technology Co., Ltd.	147	22	181	28	-18.78%	-21.64%	69	-25
94	Jiangxi Weilite Biotechnology Co., Ltd.	147	22	/	/	/	/	/	/
96	Anhui Share World Bio- Tech Co., Ltd.	141	21	/	/	/	/	/	/
97	Zibo Meitian Pesticide Co., Ltd.	140	21	121	19	15.70%	11.63%	92	-5
97	Jiangmen Daguangming Agrochemical Xinhui Co., Ltd.	140	21	137	21	2.19%	-1.41%	86	-11
99	Jiangsu Futian Agrochemicals Co.,Ltd.	139	21	114	18	21.93%	17.64%	96	-3
100	Nanjing NAU Pesticide Technology Co., Ltd.	135	20	110	17	22.73%	18.41%	99	-1

Figure 2.3.1-1 Shares of pesticide revenue of major enterprises in the 2023 China Top 100 Pesticide Formulation Enterprise List



Source: CCM

As to annual growth, 77 enterprises recorded increases and 1 remained stable in sales, while 8 saw sales decline—this number is down by 6 compared with the list for one year before.

Notably, 10 formulation enterprises reported 50%+ increases of sales in 2022, among which Anhui Richen Plant Protection Engineering Co., Ltd. topped in growth rate, bringing in sales of USD130 million (RMB868 million), up by 474.83% from USD23 million (RMB151 million) in 2021; it took the 16th place in the formulation list, up 65 in ranking. In contrast, Yixing Xingnong Chemical Products Co., Ltd. (No. 41 in the list) witnessed the steepest drop in revenue from USD82 million (RMB528 million) in 2021 to USD60 million (RMB403 million) in 2022, down by 23.67%.

Table 2.3.1-2 List of the formulation enterprises with annual growth rate of revenue exceeding 50%, 2023

	Fortessories	YoY C	hange	Pesticide revenue	Pesticide revenue	Ranking	Ranking
No.	Enterprise	based on RMB	based on USD	in 2022, million RMB	n in 2022, million USD	in 2023	change
1	Anhui Richen Plant Protection Engineering Co., Ltd.	474.83%	454.60%	868	130	16	65
2	Anhui Chaonong Hightech Chemical Co., Ltd.	166.06%	156.69%	580	87	29	29
3	Bengbu Shengdan Biochemical Co., Ltd.	133.89%	125.66%	421	63	40	30
4	Zhenjiang Pioneer Cropscience Co., Ltd.	103.54%	96.38%	230	34	71	26
5	Sinon Chemical (China) Co., Ltd.	72.42%	66.35%	869	130	15	12
6	Jixixian Qingfeng Tianying Biochemical Co., Ltd.	65.96%	60.12%	780	116	21	8
7	Hangzhou Bonghua Biological Technology Co. Ltd.	64.14%	58.36%	325	49	54	11

	Enterprise	YoY Change		Pesticide revenue	Pesticide revenue	Ranking	Ranking	
No.		based on RMB	based on USD	in 2022, million RMB	in 2022, million USD	in 2023	change	
8	Liyang Zhongnan Chemical Industry Co., Ltd.	61.74%	56.05%	186	28	81	14	
9	Lanxi Jinghang Biotechnology Co., Ltd.	59.06%	53.47%	272	41	63	12	
10	Yixing Yizhou Chemical Products Co., Ltd.	52.20%	46.85%	691	103	23	9	

#### 2.3.2 Geographical distribution of Top 100 Pesticide Formulation Enterprises

Through the analysis of the geographical distribution of 2023 China Top 100 pesticide formulation enterprises, it is known that Jiangsu Province had 17 companies entering the list, with an aggregate sale of USD1.42 billion (RMB9.53 billion), up by 12% YoY, accounting for 17.48% of the total and ranking the first out of 19 provinces/regions in China. Guangdong Province ranked the second, still with only 6 companies on the list, hitting the revenue of USD1.38 billion (RMB9.25 billion), up by 25% YoY. Although Shandong Province has 19 companies into the list, it claimed the third place, with a combined revenue reaching USD1.25 billion (RMB8.38 billion), up by 26.82% YoY, accounting for 15.37% of the total.

In 2023, two enterprises from Guangdong Province still secured the top 2 in the list with exchanged ranking from last year, namely Guangdong Zhongxun Agri-science Corporation and Shenzhen Noposion Agrochemicals Co., Ltd.

Figure 2.3.2-1 Number of 2023 Top 100 Pesticide Formulation Enterprises in China by province/region, 2022 Number of enterprise

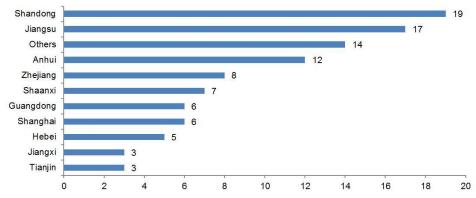
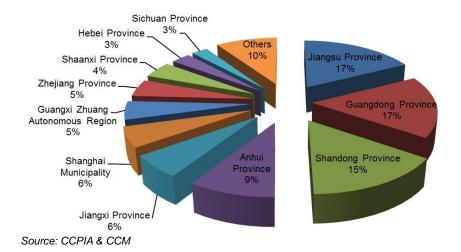


Table 2.3.2-1 Revenue of 2023 China Top 100 Pesticide Formulation Enterprises by province/region, 2022

No.	Province/Region	Pesticide revenue in 2022, million RMB	Pesticide revenue in 2022, million USD
1	Jiangsu Province	9,532	1,423
2	Guangdong Province	9,253	1,382
3	Shandong Province	8,383	1,252
4	Anhui Province	5,111	763
5	Shanghai Municipality	3,295	492
6	Zhejiang Province	3,019	451
7	Shaanxi Province	2,758	412
8	Guangxi Zhuang Autonomous Region	2,585	386
9	Jiangxi Province	2,443	365
10	Hebei Province	1,615	241
11	Sichuan Province	1,360	203
12	Jilin Province	983	147
13	Chongqing Municipality	836	125
14	Tianjin Municipality	835	125
15	Henan Province	606	90
16	Hainan Province	560	84
17	Hunan Province	557	83
18	Fujian Province	431	64
19	Liaoning Province	208	31
20	Shanxi Province	163	24
	Total	54,533	8,143

Figure 2.3.2-2 Share of revenue of 2023 China Top 100 Pesticide Formulation Enterprises by province/region, 2022



# 2.4 China's Top crop protection brands in 2022

Since 2015, the CCPIA has selected and awarded China crop protection popular pesticide brands based on multiple factors such as market sales, brand value, market share and product performance. These lists could not only reflect the market demand and development potential of the pesticide products, but also play an important role in measuring the strength of domestic products and predicting the domestic market. The list of popular pesticide brands in China in 2022 represents 90 products made by 84 enterprises, covering 22 fungicide products, 18 insecticide products, 12 herbicide products, 11 plant growth regulator products, 10 biopesticide products, and 17 blockbuster possible products.

Table 2.4-1 List of 2022 China Crop Protection Popular Herbicide Brands

No.	Enterprise	Brand	Active ingredient	Content	Туре
1	Jiangsu Sevencontinent Green Chemical Co., Ltd.	Qizhou Jingtiandi	Glufosinate ammonium	200 g/L	AS
2	Yongnong BioSciences Co., Ltd.	Jinbaisu	Glufosinate-p	10%	SL
3	Corteva (China) Investment Co., Ltd.	Lingsike∙Dan	Florpyrauxifen-benzyl	3%	EC
4	BASF (China) Co., Ltd.	Baowei	Topramezone	30%	SC
5	Shandong Runyang Chemical Co., Ltd.	Hong'eryuan	Glufosinate-ammonium-Fluoroglycofenethyl	21%	OD
6	Syngenta (Suzhou) Crop Protection Co., Ltd.	Jindu'er	S-Metolachlor	960 g/L	EC
7	Zhejiang Zhongshan Chemical Industry Group Co., Ltd.	Baosanjin	Nicosulfuron-Mesotrione-Atrazine	35%	OD
8	Jilin Jinqiu Pesticide Co., Ltd.	Quandifeng	2,4-D-ethylhexyl-Atrazine-Acetochlor	76%	SE
9	Anhui Zhongbang Biological Engineering Co., Ltd.	Zongbang Mali	Metamifop	15%	OD
10	Yixing Yizhou Chemical Products Co., Ltd.	Yizhou	Clodinafop-propargyl	15%	EW
11	Anhui Huilong Group Youngsun Pesticides Co., Ltd.	Yinshan Yousuido	Pyroxsulam	8%	OD
12	Jiangxi Buffett Chemical Co., Ltd.	Duanjin	Penoxsulam-Metamifop	12%	OD

Table 2.4-2 List of 2022 China Crop Protection Popular Insecticide Brands

No.	Enterprise	Brand	Active ingredient	Content	Туре
1	BASF (China) Co., Ltd.	Geligao	Broflanilide	100 g/L	SC
2	Syngenta Nantong Crop Protection Co., Ltd.	Liangtai	Chlorantraniliprole-Abamectin	6%	sc
3	Hebei Zhongtian Bangzheng Biological Technology Co., Ltd.	Zhongtian Mansha	Etoxazole-Bifenazate	45%	sc
4	Dongguan Ruidefeng Biotechnology Co., Ltd.	Ruidefeng Xianrui	Abamectin-Triflumezopyrim	11%	sc
5	FMC Corporation	Beineiwei	Cyantraniliprole	10%	OD
6	Hebei Veyong Bio-chemical Co., Ltd.	Jinlanrui	Emamectin benzoate-Indoxacarb	15%	sc
7	Jilin Bada Pesticide Co., Ltd.	Hengda Miaozheng	Thiram-Carbofuran	15%	FS
8	Shanghai Shengnong Pesticide Co., Ltd.	Aiqiu	Emamectin benzoate-Pyriproxifen	20%	sc
9	Sinochem International Crop Care Company Limited	Tengshou	Fenaminstrobin-Difenoconazole-Thiamethoxam	45%	FS
10	Jiangsu Fengshan Group Co., Ltd.	Daofen	Indoxacarb	30%	sc
11	Shandong Zhongxin Kenong Biological Technology Co., Ltd.	Babiao	Emamectin benzoate-Chlorfenapyr	10%	sc
12	Bayer Cropscience (China) Co., Ltd.	Aobairui	Imidacloprid-Tebuconazole	32%	FS
13	Shanghai Hulian Biological Pharmaceutical (Xiayi) Co., Ltd.	Jianfei	Nitenpyram-Pymetrozine	80%	WG
14	Shandong Dehao Chemical Co., Ltd.	Handun	Pyraclostrobin-Clothianidin	11%	FS
15	Shaanxi Hengtian Biological Agriculture Co., Ltd.	Anjian	Flonicamid-Acetamiprid	35%	WG
16	Shandong A & Fine Agrochemicals Co., Ltd.	Jiaji	Chlorfenapyr ·Tolfenpyrad	20%	sc
17	Shandong Bainong Sida Biotechnology Co., Ltd.	Ruika	Thiamethoxam·Lambda-cyhalothrin	22%	ZC
18	Hebei Nongxin Biotechnology Co., Ltd.	Nongxin Leader	Spirotetramat-Pyriproxifen	25%	sc
					L

Source: CCPIA & CCM

Table 2.4-3 List of 2022 China Crop Protection Popular Fungicide Brands

No.	Enterprise	Brand	Active ingredient	Content	Туре
1	Syngenta Nantong Crop Protection Co., Ltd.	Meitian	Pydiflumetofen-Difenoconazole	200 g/L	sc
2	BASF (China) Co., Ltd.	Jianda	Pyraclostrobin-Fluxapyroxad	42.4%	sc
3	Liyang Zhongnan Chemical Industry Co., Ltd.	Lemaibao	Prothioconazole-Tebuconazole	40%	sc
4	Corteva (China) Investment Co., Ltd.	Zengwei Yinglv	Oxathiapiprolin	10%	OD

No.	Enterprise	Brand	Active ingredient	Content	Туре
5	Shenzhen Noposion Agrochemicals Co., Ltd.	Wenbao	Trifloxystrobin-Tebuconazole	42%	SC
6	FMC (Suzhou) Crop Care Co., Ltd.	Puhaiyin	Iprodione	500 g/L	SC
7	Xi'an MTI Co., Ltd.	Aleitai	Bupirimate	25%	ME
8	Shandong Kangqiao Biotechnology Co., Ltd.	Xiduojin	Pyraclostrobin-Epoxiconazole	38%	SC
9	Yancheng Limin Chemical Co., Ltd.	Huanglongdingxiu	Tebuconazole	430 g/L	SC
10	Sinochem International Crop Care Company Limited	Chuanglu	Pyrisoxazole	25%	EW
11	Guizhou Daoyuan Biotechnology Co., Ltd.	Maitianxi	Tebuconazole-Albendazole	15%	SC
12	Jiangxi Weilite Biotechnology Co.	Yidun	Metalaxyl- M-Fludioxonil-Azoxystrobin	11%	FS
13	Nantong Shizhuang Chemical Co., Ltd.	Longxin	Dazomet	98%	GR
14	Zhejiang Longwan Chemicals Co., Ltd.	Longsuda	Kasugamycin-Thiodiazole copper	20%	SC
15	Jiangmen Plant Protection Co., Ltd.	Chunxian	Kasugamycin-Oxine-copper	36%	SC
16	Shaanxi Kanghelifeng Bioscience and Pharmacy Co., Ltd.	Baijiali	Bromothalonil-Prochloraz	30%	WP
17	Fujian Sino-dashing Bio-engineering Co., Ltd.	Genzheng	Hymexazol-Metalaxyl	3%	AS
18	Shijiazhuang Sentay Chemical Co., Ltd.	Taizan	Pyraclostrobin-Difenoconazole	30%	SC
19	Shaanxi Xidahuate Co., Ltd.	Huate Yezhiqing	Benzisothiazolinone-Oligosaccharins	5%	SC
20	Hainan Bosswell Biotechnology Co., Ltd.	Yanqun	Kasugamycin-Copper abietate	18%	SC
21	Liuzhou Huinong Chemical Co., Ltd.	Mandangdang	Fluazinam	500 g/L	sc
22	Zhejiang Tonglu Huifeng Biosciences Co., Ltd	Wulibao	Jingangmycin A·Tebuconazole	15%	SC

Table 2.4-4 List of 2022 China Crop Protection Popular Plant Growth Regulator Brands

No.	Enterprise	Brand	Active ingredient	Content	Туре
1	Jiangsu Sword Agrochemicals Co., Ltd.	Jianpai	Paclobutrazol	15%	WP
2	Shaanxi Yitianfeng Crop Technology Co., Ltd.	Juxing	Sodium nitrophenolate-Diethyl aminoethyl hexanoate	3%	AS
3	Zhengzhou Zhengshi Chemical Co., Ltd.	Jindiao	Prohexadione calcium	15%	WG
4	Zhejiang Dapeng Pharmaceutical Co., Ltd.	Dapeng Huanxing	6-Benzylamino-purine	30%	SC
5	Shandong Shibang Agrochemicals Co., Ltd.	Tianbeiwang	Tebuthiuron-28-Homobrassinolide	0.16%	SL

No.	Enterprise	Brand	Active ingredient	Content	Туре
6	Brightmart Cropscience Co., Ltd.	Liguoliang	14-Hydroxylated brassinosteroid Diethyl aminoethyl hexanoate	8%	AS
7	Shanxi Haozhida Biotechnology Co., Ltd.	Maijujin	aijujin Uniconazole-Mepiquat chloride		ME
8	Zhejiang Longyou East Anasac Crop Science Co., Ltd.	Youmeiya	Cyanamide	50%	AS
9	Jiangxi New Reyphon Biochemical Co., Ltd.	Guoqi	6-Benzylamino-purine-Gibberellic acid A4,A7	3.6%	EC
10	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	Jiase	Choline chloride-Triacontanol	30%	SC
11	Sichuan Lanyue Science and Technology Co., Ltd.	Aidun	6-Benzylamino-purine-Ethephon	30%	AS

Table 2.4-5 List of 2022 China Crop Protection Popular Biopesticide Brands

No.	Enterprise	Brand	Active ingredient	Content	Туре
1	Corteva (China) Investment Co., Ltd.	Ailvshi	Spinetoram	60 g/L	sc
2	Hainan Zhengye Zhongnong High-tech Stock Co., Ltd.	Zhengye Haidaosu	Oligosaccharins	5%	AS
3	Hunan Suncas Agricultural Development Co., Ltd.	Yalishi	Rhodovulum sulfidophilum HNI-1	200 million CFU/mL	SC
4	Pilar (Shanghai) Biotech Co., Ltd.	Mingnongxin	Zhongshengmycin-Oligosaccharins	10%	WP
5	Chengdu Green Gold Biotechnology Co., Ltd.	Awala	Azadirachtin	1%	WG
6	North China Pharmaceutical Group Aino Co., Ltd.	Ainuo Biaobo	Bacillus methylotrophicus 9912	3 billion spore/g	WP
7	Wuhan Kernel Bio-tech Co., Ltd.	Zhendi	Paenibacillus polymyxa KN-03	500 million CFU/g	SC
8	Chengdu Newsun Crop Science Co., Ltd.	Jingshuang	Allicin	5%	ME
9	Anhui Huaxing Chemical Industry Co., Ltd.	Huaxing Laosha	Spinosad	10%	SC
10	Qingdao Rishengyuan Crop Nutrition Co., Ltd.	Chengrang	D-limonene	18%	SL

Source: CCPIA & CCM

Table 2.4-6 List of 2022 China Crop Protection Blockbuster Possible Products

No.	Enterprise	Brand	Active ingredient	Content	Туре
1	Shaanxi Biogen Crop Science Co., Ltd.	Gaojiang	Lambda-cyhalothrin-Clothianidin	12%	SC
2	Jiangsu Pesticide Research Institute Co., Ltd.	Jinxing	Tebuconazole-Phenamacril	480 g/L	SC
3	Anhui Jiuyi Agriculture Co., Ltd.	Badou	Tembotrione-Atrazine	24%	OD

No.	Enterprise	Brand	Active ingredient	Content	Туре
4	Jinan Tianbang Chemical Co., Ltd.	Leimingdao	Glufosinate-p	10%	SL
5	Shandong Danong Pharmaceutical Co., Ltd.	Danong Yifeng	Clothianidin	5%	GR
6	Qingdao Jin'er Agrochemicals (Group) R&D Co., Ltd.	Jin'erdi Zhuangyuan	Fludioxonil-Thifluzamide-Clothianidin	6.2%	FS
7	Lianyungang Liben Crop Science Co., Ltd.	Liben-Dasheng	Chlorantraniliprole-Lufenuron	10%	SC
8	Sixf Crop Protection Co., Ltd.	Daweishen	Chlorantraniliprole-Chlorfenapyr	25%	SC
9	Henan Hansi Crop Protection Co., Ltd.	Dingleshou	Pyraclostrobin-Epoxiconazole	30%	SC
10	Anhui Fengle Agrochemical Co., Ltd.	Fengle Dajiangjun	Chlorantraniliprole-Abamectin- aminomethyl	12%	sc
11	Henan Vision Agricultural Science and Technology Co., Ltd.	Chajingling	Dinotefuran-Abamectin-aminomethyl	11%	OD
12	Laoting Yoloo Bio-technology Co., Ltd.	Tiemu	Fluopicolide-Metalaxyl-M	30%	SE
13	Huizhou Yinnong Technology Co., Ltd.	Dawenxi	Flumorph-Initium	60%	WG
14	Jiangxi Zhengbang Crop Protection Co., Ltd.	Huoyangyang	Dinotefuran-Flonicamid	30%	sc
15	Guangxi Xinjintai Chemical Co., Ltd.	Jiandaoshou	Metamifop	20%	OD
16	Jiangxi Zhonghe Chemical Industry Co., Ltd.	Shandianxia	Chlorfenapyr ·Tolfenpyrad	30%	sc
17	Shandong Jingbo Agrochemicals Technology Co., Ltd.	Jingbo Yingshou	Kresoxim-methyl-Epoxiconazole	23%	sc

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