

# **Financial Analysis of Chinese Listed Pesticide Enterprises in H1 2023**

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Researched & Prepared by:

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#### **Executive summary**

As of Sept., 2023, figures released in the 2023 semi-reports of the 28 selected major listed pesticide companies in China would be studied in this issue to learn China's situation of pesticide industry in H1 2023. Regarding the performance of revenue in H1 2023, 24 of them suffered decreases in semi-revenue on yearly basis. The total growth rate of them slipped to -22% year on year; only 4 enterprises had made positive revenue growths in the period, namely, Sino-Agri Leading Biosciences Co., Ltd., Jiangsu Flag Chemical Industry Co., Ltd., Sichuan Guoguang Agrochemical Co., Ltd. and Jiangsu Huifeng Bio Agriculture Co., Ltd. Meanwhile, a combined total of net profit attributable to equity holders of the listed company was calculated, dropping 67.40% YoY.

According to these 28 semi-annual reports, the total assets of selected listed pesticide companies witnessed changes between ±5% as of the end of H1 2023, representing a slight increase of 1.82% from that in the end of 2022. Meanwhile, the net asset attributable to equity holders of the listed company in total registered a 1.51% growth compared with the 2022 year-end result. Moreover, the total amount of net cash flow from operating activities of 28 selected pesticide enterprises decreased by 63.46% YoY; the 28 selected pesticide companies deployed 13.03% less investments on R&D compared with H1 2022 in general in H1 2023.

## Methodology

This report is about financial analysis of the 28 listed pesticide enterprises in China. It 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
- $\sqrt{\text{CCM's database}}$
- $\sqrt{Published}$  articles in periodicals, magazines, journals and third-party databases
- $\sqrt{}$  Statistics from governments and international institutes
- $\sqrt{1}$  Telephone interviews with domestic producers, joint ventures, service suppliers and governments
- $\sqrt{\text{Third-party data providers}}$
- $\sqrt{\text{Comments from industrial experts}}$
- $\sqrt{\text{Professional databases from other sources}}$

 $\sqrt{1}$  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.

#### - 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

The USD/CNY exchange rates are all averaged the exchange rates of People's Bank of China. Thereinto,

- 2023: USD1.00=RMB6.9199 for data of H1;
- 2022: USD1.00=RMB6.6972 for data of the year and USD1.00=RMB6.4370 for H1;

• 2021: USD1.00=RMB6.4615 for data of the year and USD1.00=RMB6.4806 for H1.

Unless otherwise specified, all the prices mentioned in this newsletter will include the VAT.

Year	Jan.	Feb.	March	April	Мау	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	6.4680	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
2023	6.9475	6.7492	6.9400	6.8805	6.9054	7.0965	7.2157	7.1283	7.1788	-	-	-	7.0047

Table 1 USD/CNY exchange rate, Jan. 2017–Sept. 2023

Source: The People's Bank of China

## 1 Rankings of listed pesticide companies in China

## 1.1 Listed pesticide companies in China

This report analyses figures released in the semi-reports for 2023 of the 28 selected major listed pesticide companies in China. Of these companies, 11 are headquartered in Jiangsu Province, 4 in Shandong Province, 3 in Sichuan Province, 3 in Zhejiang Province, 2 in Hubei Province and 2 in Beijing, and the rest 3 in Anhui Province, Guangdong Province and Hunan Province, respectively, whose performances within H1 2023 reflect the current situation of pesticide industry in China by and large.

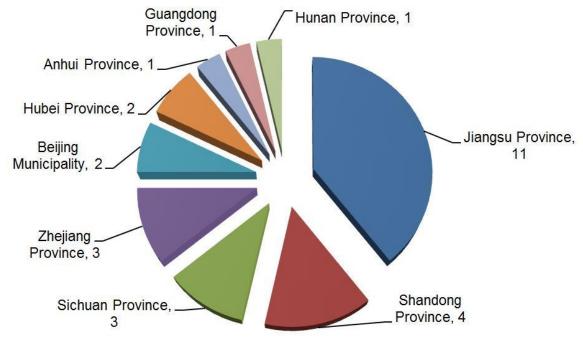
No.	Stock code	Company name (EN)	Company name (CN)	Abbreviation	Location	Date of establishment
1	002749	Sichuan Guoguang Agrochemical Co., Ltd.	四川国光农化股份有 限公司	Sichuan Guoguang	Sichuan Province	30 Dec., 1985
2	002496	Jiangsu Huifeng Bio Agriculture Co., Ltd.	江苏辉丰生物农业股 份有限公司	Jiangsu Huifeng	Jiangsu Province	26 May, 1989
3	002513	Jiangsu Lanfeng Biochemical Co., Ltd.	江苏蓝丰生物化工股 份有限公司	Jiangsu Lanfeng	Jiangsu Province	11 Oct., 1990
4	600389	Nantong Jiangshan Agrochemical & Chemicals Co., Ltd.	南通江山农药化工股 份有限公司	Nantong Jiangshan	Jiangsu Province	18 Oct., 1990
5	000525	Nanjing Red Sun Co., Ltd.	南京红太阳股份有限 公司	Nanjing Red Sun	Jiangsu Province	13 June, 1991
6	600596	Zhejiang Wynca Chemical Industrial Group Co., Ltd.	浙江新安化工集团股 份有限公司	Zhejiang Wynca	Zhejiang Province	12 May, 1993
7	600796	Zhejiang Qianjiang Biochemical Co., Ltd.	浙江钱江生物化学股 份有限公司	Qianjiang Biochemical	Zhejiang Province	28 Oct., 1993
8	600731	Hunan Haili Chemical Industry Co., Ltd.	湖南海利化工股份有 限公司	Hunan Haili	Hunan Province	15 April, 1994
9	600141	Hubei Xingfa Chemicals Group Co., Ltd.	湖北兴发化工集团股 份有限公司	Hubei Xingfa	Hubei Province	17 Aug., 1994
10	603585	Suli Co., Ltd.	江苏苏利精细化工股 份有限公司	Jiangsu Suli	Jiangsu Province	22 Dec., 1994
11	603810	Jiangsu Fengshan Group Co., Ltd.	江苏丰山集团股份有 限公司	Fengshan Group	Jiangsu Province	12 Sept., 1996
12	002734	Limin Group Co., Ltd.	利民化工股份有限公司	Limin Group	Jiangsu Province	17 Dec., 1996
13	000553	ADAMA Ltd.	安道麦股份有限公司	ADAMA	Hubei Province	27 March, 1998
14	002250	Lianhe Chemical Technology Co., Ltd.	联化科技股份有限公 司	Lianhetech	Zhejiang Province	14 Sept., 1998
15	002215	Shenzhen Noposion Crop Science Co., Ltd.*	深圳诺普信作物科学 股份有限公司	Shenzhen Noposion	Guangdong Province	18 Sept., 1999
16	603639	Hailir Pesticides and Chemicals Group Co., Ltd.	海利尔药业集团股份 有限公司	Hailir Group	Shandong Province	1 Dec., 1999
17	600486	Jiangsu Yangnong Chemical Co., Ltd.	江苏扬农化工股份有 限公司	Jiangsu Yangnong	Jiangsu Province	10 Dec., 1999

Table 1.1-1 28 Major listed pesticide companies in China, as of Sept. 2023

No.	Stock code	Company name (EN)	Company name (CN)	Abbreviation	Location	Date of establishment
18	603599	Anhui Guangxin Agrochemical Co., Ltd.	安徽广信农化股份有 限公司	Anhui Guangxin	Anhui Province	15 March, 2000
19	002258	Lier Chemical Co., Ltd.	利尔化学股份有限公司	Lier Chemical	Sichuan Province	26 July, 2000
20	002391	Jiangsu Changqing Agrochemical Co., Ltd.	江苏长青农化股份有 限公司	Jiangsu Changqing	Jiangsu Province	4 Jan., 2001
21	603077	Sichuan Hebang Bio- technology Co., Ltd.	四川和邦生物科技股 份有限公司	Sichuan Hebang	Sichuan Province	1 Aug., 2002
22	603086	Shandong Cynda Chemical Co., Ltd.	山东先达农化股份有 限公司	Shandong Cynda	Shandong Province	20 Sept., 2002
23	300575	Jiangsu Flag Chemical Industry Co., Ltd.	江苏中旗科技股份有 限公司	Flagchem	Jiangsu Province	7 Aug., 2003
24	301035	Shandong Weifang Rainbow Chemical Co., Ltd.	山东潍坊润丰化工股 份有限公司	Weifang Rainbow	Shandong Province	23 June, 2005
25	833819	Nutrichem Co., Ltd.	北京颖泰嘉和生物科 技股份有限公司	Nutrichem	Beijing Municipality	1 July, 2005
26	300261	ABA Chemicals Corporation	雅本化学股份有限公 司	ABA CHEM	Jiangsu Province	13 Jan., 2006
27	003042	Shandong Sino-Agri United Biotechnology Co., Ltd.	山东中农联合生物科 技股份有限公司	Sino-Agri United	Shandong Province	19 Dec., 2006
28	603970	Sino-Agri Leading Biosciences Co., Ltd.	中农立华生物科技股 份有限公司	Sino-Agri Leading	Beijing Municipality	8 April, 2009

Note: Shenzhen Noposion Crop Science Co., Ltd., formerly Shenzhen Noposion Agrochemicals Co., Ltd., changed the company name on 7 June, 2023. Source: CCM

Figure 1.1-1 28 Major listed pesticide companies in China by region



Source: CCM

## 1.2 Ranking by total revenue

In H1 2023, the 28 selected listed pesticide companies amounted to USD14.52 billion in revenue, down by 22.07% YoY. Among them, the top four in terms of revenue were ADAMA Ltd., Hubei Xingfa Chemicals Group Co., Ltd., Zhejiang Wynca Chemical Industrial Group Co., Ltd. and Jiangsu Yangnong Chemical Co., Ltd., achieving revenues of USD1.00+ billion with yearly drops of 8.21%, 21.33%, 36.48% and 26.12%, respectively.

There were 24 companies suffered decreases in semi-revenue on the yearly basis, and the other four marked positive growths, namely Sino-Agri Leading Biosciences Co., Ltd., Jiangsu Flag Chemical Industry Co., Ltd., Sichuan Guoguang Agrochemical Co., Ltd. and Jiangsu Huifeng Bio Agriculture Co., Ltd.

Na	Pesticide Company	Total revenue	, million USD	Total revenue	, million RMB	YoY change based on RMB		
No.	Pesticide Company	H1 2023	2022	H1 2023	2022	H1 2023	2022	
1	ADAMA	2,493.27	5,581.72	17,253.20	37,381.92	-8.21%	20.44%	
2	Hubei Xingfa	1,966.75	4,525.87	13,609.70	30,310.65	-21.33%	26.81%	
3	Zhejiang Wynca	1,224.88	3,255.50	8,476.03	21,802.74	-36.48%	14.89%	
4	Jiangsu Yangnong	1,021.19	2,360.80	7,066.56	15,810.76	-26.12%	33.52%	
5	Sino-Agri Leading	908.29	1,746.82	6,285.30	11,698.77	3.15%	32.61%	
6	Weifang Rainbow	728.84	2,159.14	5,043.50	14,460.18	-35.16%	47.60%	
7	Lier Chemical	645.85	1,513.49	4,469.19	10,136.14	-11.99%	56.08%	
8	Sichuan Hebang	591.14	1,946.93	4,090.61	13,038.95	-45.31%	30.55%	
9	Anhui Guangxin	545.09	1,353.16	3,771.99	9,062.37	-16.23%	63.29%	
10	Lianhetech	529.67	1,174.44	3,665.30	7,865.47	-1.01%	19.41%	
11	Nutrichem	427.00	1,218.56	2,954.83	8,160.95	-30.93%	9.90%	
12	Nantong Jiangshan	386.21	1,246.61	2,672.53	8,348.77	-48.91%	28.76%	
13	Hailir Group	384.85	677.15	2,663.12	4,535.00	-5.24%	22.60%	
14	Shenzhen Noposion	368.03	636.86	2,546.75	4,265.17	-2.98%	-5.23%	
15	Limin Group	333.23	749.02	2,305.95	5,016.36	-17.90%	5.88%	
16	Jiangsu Changqing	289.56	633.64	2,003.73	4,243.59	-5.90%	12.72%	
17	Nanjing Red Sun	231.58	961.58	1,602.49	6,439.91	-53.90%	37.51%	
18	Flagchem	205.89	443.41	1,424.76	2,969.58	6.14%	35.42%	
19	Shandong Cynda	188.53	466.75	1,304.62	3,125.92	-21.59%	41.92%	
20	Hunan Haili	178.26	467.38	1,233.55	3,130.11	-14.00%	13.89%	

Table 1.2-1 Major listed pesticide companies in China by revenue, H1 2023 & 2022

No.	Pesticide Company	Total revenue,	million USD	Total revenue	, million RMB	YoY change based on RMB		
NO.	Pesticide Company	H1 2023	2022	H1 2023	2022	H1 2023	2022	
21	Jiangsu Suli	148.13	470.37	1,025.05	3,150.17	-37.62%	34.16%	
22	Sichuan Guoguang	137.82	246.13	953.68	1,648.41	8.94%	21.34%	
23	Sino-Agri United	129.69	288.69	897.42	1,933.42	-11.28%	18.97%	
24	Qianjiang Biochemical	125.35	299.96	867.39	2,008.86	-1.36%	-1.09%	
25	ABA CHEM	123.19	298.78	852.44	2,000.98	-22.32%	-3.42%	
26	Fengshan Group	102.67	255.21	710.49	1,709.17	-30.17%	12.59%	
27	Jiangsu Lanfeng	76.09	215.80	526.52	1,445.24	-36.08%	0.09%	
28	Jiangsu Huifeng	27.20	39.95	188.25	267.54	37.62%	-75.58%	
	Total	14,518.27	35,233.70	100,464.95	235,967.11	-22.07%	24.90%	

Source: Financial reports of the related companies & CCM

### 1.3 Ranking by net profit attributable to equity holders of the listed company

For H1 2023, the 28 selected listed pesticide companies reported a combined total of net profit attributable to equity holders of the listed company of USD899.87 million, down by 67.40% YoY. Among them, only 5 companies (=17.86% of the total) saw growths in net profits, as opposed to the rest 23 declining, including 4 in the red. In particular,

• The top four companies ranking by net profit were Jiangsu Yangnong Chemical Co., Ltd., Anhui Guangxin Agrochemical Co., Ltd., Sichuan Hebang Bio-technology Co., Ltd. and Hubei Xingfa Chemicals Group Co., Ltd., all with net profit of above USD85 million, yet registering sharp year-on-year decreases of 25.80%, 17.73%, 76.60% and 83.32%, separately;

• There were 13 listed enterprises marked yearly drops above 70%, accounting for 57% of those with declining incomes;

• Four companies making losses in H1 were Shandong Sino-Agri United Biotechnology Co., Ltd., Jiangsu Huifeng Bio Agriculture Co., Ltd., Jiangsu Lanfeng Biochemical Co., Ltd. and ADAMA Ltd.

No.	Pesticide Company	holders of the	outable to equity listed company, n USD	Net profit attril holders of the list R	YoY change based on RMB		
		H1 2023	2022	H1 2023	2022	RMB           H1 2023         20           -25.80%         46           -17.73%         56           -76.60%         26           -83.32%         36	2022
1	Jiangsu Yangnong	162.40	267.90	1,123.80	1,794.21	-25.80%	46.82%
2	Anhui Guangxin	147.82	345.77	1,022.90	2,315.67	-17.73%	56.53%
3	Sichuan Hebang	89.10	568.42	616.53	3,806.81	-76.60%	26.12%
4	Hubei Xingfa	87.95	873.77	608.59	5,851.78	-83.32%	36.67%
5	Lier Chemical	69.32	270.63	479.69	1,812.48	-54.21%	69.01%
6	Weifang Rainbow	61.33	211.02	424.39	1,413.24	-52.19%	76.72%

Table 1.3-1 Major listed pesticide companies in China by net profit, H1 2023 & 2022

No.	Pesticide Company	Net profit attributa holders of the list million L	ed company,	Net profit attribu holders of the listed RM	d company, million	YoY change based on RMB		
	Company	H1 2023	2022	H1 2023	2022	H1 2023	2022	
7	Shenzhen Noposion	48.81	49.04	337.79	328.44	5.29%	7.57%	
8	Hailir Group	47.80	68.69	330.78	460.01	0.47%	2.28%	
9	Nantong Jiangshan	28.00	275.40	193.73	1,844.42	-84.03%	125.91%	
10	Jiangsu Changqing	24.93	39.17	172.53	262.35	-14.48%	5.56%	
11	Flagchem	24.88	62.72	172.14	420.03	-3.94%	96.63%	
12	Sichuan Guoguang	24.38	16.96	168.69	113.59	20.11%	-44.90%	
13	Hunan Haili	23.57	52.60	163.09	352.27	-11.01%	32.10%	
14	Sino-Agri Leading	22.01	31.41	152.28	210.33	9.56%	23.50%	
15	Nutrichem	21.70	157.81	150.13	1,056.89	-78.46%	121.93%	
16	Zhejiang Wynca	16.42	441.17	113.63	2,954.58	-95.13%	11.31%	
17	ABA CHEM	13.98	30.30	96.74	202.95	-26.04%	11.60%	
18	Qianjiang Biochemical	12.21	30.77	84.47	206.05	6.85%	39.28%	
19	Limin Group	8.31	32.71	57.53	219.04	-61.98%	-28.63%	
20	Shandong Cynda	7.45	56.92	51.55	381.20	-73.94%	114.90%	
21	Jiangsu Suli	5.82	47.08	40.24	315.31	-79.79%	30.60%	
22	Lianhetech	3.55	104.05	24.59	696.84	-87.97%	120.93%	
23	Nanjing Red Sun	2.60	109.34	18.02	732.30	-97.08%	119.56%	
24	Fengshan Group	2.51	14.82	17.37	99.23	-76.61%	-13.51%	
25	Sino-Agri United	-1.71	10.92	-11.84	73.14	-128.52%	-25.82%	
26	Jiangsu Huifeng	-7.02	-67.93	-48.57	-454.95	-26.42%	-247.84%	
27	Jiangsu Lanfeng	-13.25	-47.88	-91.66	-320.69	-5840.52%	34.71%	
28	ADAMA	-34.99	90.99	-242.16	609.39	-133.08%	287.17%	
	Total	899.87	4,144.55	6,226.98	27,756.91	-67.40%	79.13%	

Source: Financial reports of the related companies & CCM

## 1.4 Ranking by total asset

As of 30 June, 2023, the total assets of the 28 selected listed pesticide companies amounted to USD46.70 billion, representing a slight increase of 1.82% from USD47.39 billion in the end of 2022; most of them witnessed changes between  $\pm$ 5%. However, two companies marked over 8% of negative growths in this regard, i. e. Sino-Agri Leading Biosciences Co., Ltd. and Nantong Jiangshan Agrochemical & Chemicals Co., Ltd., down by 9.86% and 8.07%, separately.

ADAMA Ltd. topped the list with USD8.66 billion of total assets as of the end of H1 2023, up by 3.31% against the result on 31 Dec., 2022. Notably, both Shenzhen Noposion Crop Science Co., Ltd. and Hunan Haili Chemical Industry Co., Ltd. enjoyed double-digit increases, namely 14.49% and 14.09%, respectively.

Na	Destiside Commons	Total assets, milli	on USD	Total assets, milli	on RMB	Change
No.	Pesticide Company	End of 30 June, 2023	End of 2022	End of 30 June, 2023	End of 2022	Change
1	ADAMA	8,656.47	8,657.42	59,901.90	57,980.49	3.31%
2	Hubei Xingfa	6,119.40	6,216.03	42,345.60	41,630.00	1.72%
3	Sichuan Hebang	3,426.99	3,598.91	23,714.43	24,102.63	-1.61%
4	Zhejiang Wynca	2,904.13	2,873.63	20,096.27	19,245.28	4.42%
5	Jiangsu Yangnong	2,224.24	2,208.90	15,391.50	14,793.46	4.04%
6	Lianhetech	2,120.03	2,241.04	14,670.40	15,008.66	-2.25%
7	Anhui Guangxin	2,080.04	2,068.25	14,393.64	13,851.51	3.91%
8	Lier Chemical	1,964.02	1,921.15	13,590.82	12,866.35	5.63%
9	Nutrichem	1,845.40	1,873.41	12,769.98	12,546.60	1.78%
10	Weifang Rainbow	1,668.40	1,731.90	11,545.15	11,598.87	-0.46%
11	Shenzhen Noposion	1,621.57	1,463.49	11,221.11	9,801.27	14.49%
12	Nanjing Red Sun	1,453.50	1,535.09	10,058.08	10,280.80	-2.17%
13	Jiangsu Changqing	1,127.70	1,115.99	7,803.57	7,473.98	4.41%
14	Limin Group	985.37	1,053.59	6,818.67	7,056.12	-3.37%
15	Qianjiang Biochemical	937.45	999.96	6,487.05	6,696.91	-3.13%
16	Hailir Group	864.62	871.65	5,983.08	5,837.60	2.49%
17	Nantong Jiangshan	848.45	972.51	5,871.18	6,513.10	-9.86%
18	Sino-Agri Leading	829.80	932.67	5,742.11	6,246.30	-8.07%
19	Jiangsu Suli	736.77	793.54	5,098.36	5,314.46	-4.07%
20	Hunan Haili	647.21	586.13	4,478.63	3,925.43	14.09%

Table 1.4-1 Major listed pesticide companies in China by total assets as of 30 June, 2023 vs 2022

	Total	46,700.02	47,390.15	323,159.48	317,381.32	1.82%
28	Jiangsu Lanfeng	210.82	220.32	1,458.84	1,475.54	-1.13%
27	Sichuan Guoguang	357.14	337.27	2,471.35	2,258.75	9.41%
26	Fengshan Group	383.88	398.26	2,656.44	2,667.20	-0.40%
25	Jiangsu Huifeng	466.67	488.10	3,229.32	3,268.93	-1.21%
24	Sino-Agri United	495.30	528.10	3,427.42	3,536.78	-3.09%
23	Shandong Cynda	509.66	500.63	3,526.80	3,352.79	5.19%
22	ABA CHEM	606.24	598.52	4,195.13	4,008.42	4.66%
21	Flagchem	608.77	603.27	4,212.65	4,040.20	4.27%

Source: Semi-annual reports of 2023 of the related companies & CCM

## 1.5 Ranking by net asset attributable to equity holders of the listed company

According to the semi-annual reports of the 28 selected listed pesticide companies, as of 30 June, 2023, the net asset attributable to equity holders of the listed company was USD23.36 billion in total, up by 1.51% compared with the 2022 year-end result.

As of the end of H1 2023, ADAMA Ltd., Hubei Xingfa Chemicals Group Co., Ltd. and Sichuan Hebang Biotechnology Co., Ltd. were the top three pesticide businesses ranked by net asset attributable to equity holders of the listed company among the 28. To be detailed, ADAMA Ltd. achieved USD3.42 billion in net asset, representing a 2.25% increase from that in the end of 2022. In the regard of growth rate, Hunan Haili Chemical Industry Co., Ltd. ranked first with an increase of 41.64% to USD418.77 million from USD305.48 million as of 31 Dec., 2022.

No.	Pesticide Company	Net asset attributable to the listed company,		Net asset attributable to e the listed company, r	Change	
		End of 30 June, 2023	End of 2022	End of 30 June, 2023	End of 2022	U
1	ADAMA	3,416.89	3,452.88	23,644.51	23,124.66	2.25%
2	Hubei Xingfa	2,868.33	3,032.28	19,848.57	20,307.80	-2.26%
3	Sichuan Hebang	2,802.52	2,854.68	19,393.14	19,118.36	1.44%
4	Zhejiang Wynca	1,566.23	1,723.89	10,838.14	11,545.26	-6.12%
5	Jiangsu Yangnong	1,339.40	1,274.41	9,268.52	8,534.96	8.59%
6	Anhui Guangxin	1,309.71	1,295.80	9,063.07	8,678.21	4.43%
7	Lier Chemical	1,062.93	1,085.48	7,355.35	7,269.67	1.18%
8	Lianhetech	1,001.83	1,037.94	6,932.53	6,951.26	-0.27%
9	Weifang Rainbow	895.80	923.41	6,198.82	6,184.27	0.24%

Table 1.5-1 Major listed pesticide companies in China by net asset as of 30 June, 2023 vs 2022

No.	Pesticide			Net asset attributable to e the listed company, r		Change
NO.	Company	End of 30 June, 2023	End of 2022	End of 30 June, 2023	End of 2022	Change
10	Nutrichem	872.66	883.84	6,038.71	5,919.27	2.02%
11	Jiangsu Changqing	676.41	692.41	4,680.68	4,637.22	0.94%
12	Shenzhen Noposion	558.18	547.72	3,862.52	3,668.16	5.30%
13	Nantong Jiangshan	506.51	494.17	3,505.03	3,309.59	5.91%
14	Hailir Group	467.13	479.60	3,232.46	3,211.95	0.64%
15	Qianjiang Biochemical	435.21	450.13	3,011.58	3,014.59	-0.10%
16	Hunan Haili	418.77	305.48	2,897.86	2,045.87	41.64%
17	Limin Group	400.03	417.86	2,768.17	2,798.47	-1.08%
18	Jiangsu Suli	368.61	390.70	2,550.73	2,616.56	-2.52%
19	ABA CHEM	353.81	356.50	2,448.33	2,387.57	2.55%
20	Shandong Cynda	311.90	324.96	2,158.29	2,176.34	-0.83%
21	Flagchem	310.36	305.55	2,147.63	2,046.30	4.95%
22	Jiangsu Huifeng	276.18	292.46	1,911.15	1,958.66	-2.43%
23	Sino-Agri United	238.89	250.73	1,653.07	1,679.18	-1.55%
24	Sichuan Guoguang	236.71	220.90	1,638.04	1,479.42	10.72%
25	Fengshan Group	234.40	238.82	1,622.00	1,599.45	1.41%
26	Sino-Agri Leading	199.15	196.82	1,378.11	1,318.14	4.55%
27	Nanjing Red Sun	188.16	189.82	1,302.07	1,271.29	2.42%
28	Jiangsu Lanfeng	38.40	53.39	265.73	357.59	- 25.69%
	Total	23,355.08	23,772.63	161,614.82	159,210.06	1.51%

Source: Semi-annual reports of 2023 of the related companies & CCM

## 1.6 Ranking by net cash flow from operating activities

In H1 2023, 28 selected pesticide enterprises held USD739.78 million of net cash flow from operating activities in total, slipping with a change of 63.46% YoY.

Jiangsu Yangnong Chemical Co., Ltd. gained USD372.59 million of net cash flow collectively in H1 2023,

topping the list and followed by Anhui Guangxin Agrochemical Co., Ltd., Lianhe Chemical Technology Co., Ltd. and Hubei Xingfa Chemicals Group Co., Ltd. 11 out of the listed enterprises marked positive growths, each up by over 38% compared with H1 2022 and Sichuan Guoguang Agrochemical Co., Ltd. with a 1,100.66% increase in particular.

No.	Pesticide			Net cash flow	from operating million RMB	YoY change based on RMB		
	Company	H1 2023	2022	H1 2023	2022	H1 2023	2022	
1	Jiangsu Yangnong	372.59	317.19	2,578.30	2,124.26	49.50%	46.10%	
2	Anhui Guangxin	155.79	437.20	1,078.08	2,927.99	-26.34%	107.57%	
3	Lianhetech	94.15	95.38	651.54	638.76	38.46%	-13.42%	
4	Hubei Xingfa	64.00	1,027.82	442.90	6,883.53	-89.08%	28.52%	
5	Sichuan Hebang	49.01	394.83	339.14	2,644.26	-80.48%	-19.15%	
6	Nantong Jiangshan	46.30	264.84	320.38	1,773.70	-70.15%	78.48%	
7	Lier Chemical	45.82	387.71	317.10	2,596.56	-75.54%	97.12%	
8	Hunan Haili	44.74	37.19	309.60	249.09	802.79%	113.50%	
9	Hailir Group	40.29	103.73	278.80	694.69	186.75%	58.45%	
10	Jiangsu Suli	32.57	77.56	225.39	519.44	-4.84%	79.93%	
11	Nanjing Red Sun	31.27	170.58	216.38	1,142.42	-51.17%	227.68%	
12	Flagchem	29.29	77.00	202.68	515.68	-40.97%	266.72%	
13	Sichuan Guoguang	26.16	20.57	181.01	137.77	1,100.66%	-58.00%	
14	ABA CHEM	15.20	12.10	105.19	81.07	317.63%	-80.82%	
15	Shandong Cynda	14.21	54.42	98.32	364.45	-60.17%	62.62%	
16	Jiangsu Changqing	11.63	126.19	80.50	845.09	-76.36%	97.13%	
17	Qianjiang Biochemical	0.85	60.02	5.89	401.94	-87.21%	9.03%	
18	Limin Group	0.72	95.94	5.00	642.54	-98.02%	978.12%	
19	Jiangsu Huifeng	0.28	-5.49	1.91	-36.77	102.88%	-149.53%	
20	Jiangsu Lanfeng	-0.81	-9.61	-5.62	-64.34	86.16%	-645.38%	
21	Sino-Agri United	-2.17	-6.03	-15.02	-40.39	89.51%	-174.24%	
22	ADAMA	-9.38	140.47	-64.88	940.75	95.18%	-79.38%	

Table 1.6-1 Major listed pesticide companies in China by net cash flow as of 30 June, 2023

No.	Pesticide Company <sup>–</sup>	Net cash flow from operating activities, million USD			from operating million RMB	YoY change based on RMB	
		H1 2023	2022	H1 2023	2022	H1 2023	2022
23	Fengshan Group	-10.18	27.69	-70.47	185.45	-574.71%	210.33%
24	Zhejiang Wynca	-26.35	433.96	-182.31	2,906.34	-108.68%	1.00%
25	Nutrichem	-41.82	218.16	-289.42	1,461.04	-163.20%	189.69%
26	Shenzhen Noposion	-49.85	26.10	-344.94	174.77	60.11%	-58.54%
27	Weifang Rainbow	-59.30	204.66	-410.34	1,370.66	-159.80%	73.27%
28	Sino-Agri Leading	-135.25	229.29	-935.90	1,535.61	-971.51%	371.89%
	Total	739.78	5,019.46	5,119.20	33,616.33	-63.46%	22.75%

Source: Financial reports of the related companies & CCM

## 1.7 Ranking by R&D expense

An aggregate of USD439.35 million was deployed to the Research & Development (R&D) section by the 28 selected pesticide companies in H1 2023, down by 13.03% year on year in general.

As to the amount of R&D expenditure, Hubei Xingfa Chemicals Group Co., Ltd. took the first place by contributing USD74.96 million, followed by Zhejiang Wynca Chemical Industrial Group Co., Ltd., ADAMA Ltd., Lianhe Chemical Technology Co., Ltd. and Jiangsu Yangnong Chemical Co., Ltd., etc. In particular, Sino-Agri Leading Biosciences Co., Ltd. boasted the largest growth rate, with investment of USD3.72 million in the first half of 2023, up 124.62% from H1 2022.

No.	Destiside Compony	R&D expenses	R&D expenses, million USD		s, million RMB	YoY change based on RMB	
NO.	Pesticide Company	H1 2023	2022	H1 2023	2022	H1 2023	2022
1	Hubei Xingfa	74.96	183.99	518.73	1,232.20	-20.91%	42.92%
2	Zhejiang Wynca	41.41	116.90	286.52	782.88	-20.15%	36.92%
3	ADAMA	37.92	86.28	262.38	577.86	-4.50%	15.25%
4	Lianhetech	32.05	58.94	221.76	394.71	30.68%	24.47%
5	Jiangsu Yangnong	32.01	74.36	221.49	498.02	-11.25%	33.33%
6	Lier Chemical	26.33	54.62	182.20	365.79	17.38%	48.04%
7	Anhui Guangxin	25.31	60.65	175.15	406.19	-20.19%	45.84%
8	Hailir Group	20.19	34.95	139.70	234.06	27.85%	43.31%
9	Weifang Rainbow	18.30	50.03	126.65	335.09	-47.98%	7.25%
10	Jiangsu Changqing	15.38	30.25	106.40	202.58	17.27%	34.76%

Table 1.7-1 Major listed pesticide companies in China by R&D expense, H1 2023 & 2022

		R&D expenses, million USD Pesticide Company		R&D expenses	s, million RMB	YoY change based on RMB		
No.	Pesticide Company	H1 2023	2022	H1 2023	2022	H1 2023	2022	
11	Nutrichem	13.58	31.36	93.96	210.00	-12.23%	12.17%	
12	Nanjing Red Sun	11.58	42.61	80.14	285.37	-42.90%	69.96%	
13	Nantong Jiangshan	9.98	39.35	69.08	263.54	-57.34%	11.06%	
14	Hunan Haili	9.64	21.79	66.71	145.94	-1.74%	39.67%	
15	Limin Group	9.61	29.20	66.51	195.55	-9.20%	6.50%	
16	ABA CHEM	8.62	19.83	59.68	132.77	7.81%	6.33%	
17	Shenzhen Noposion	8.48	18.76	58.67	125.62	4.57%	16.99%	
18	Shandong Cynda	8.37	21.54	57.89	144.29	-13.27%	47.14%	
19	Jiangsu Suli	7.67	20.64	53.10	138.23	-23.87%	22.34%	
20	Sino-Agri United	6.18	15.52	42.74	103.91	-11.65%	41.12%	
21	Flagchem	5.54	10.50	38.31	70.29	24.74%	22.52%	
22	Sichuan Guoguang	4.10	8.42	28.37	56.39	17.84%	18.24%	
23	Sino-Agri Leading	3.72	6.84	25.73	45.79	124.62%	22.01%	
24	Fengshan Group	2.85	7.38	19.71	49.46	-9.25%	12.07%	
25	Sichuan Hebang	2.62	10.14	18.11	67.93	6.84%	103.92%	
26	Qianjiang Biochemical	2.19	4.70	15.17	31.45	7.64%	-1.81%	
27	Jiangsu Lanfeng	0.65	1.74	4.53	11.65	99.76%	-9.80%	
28	Jiangsu Huifeng	0.13	0.32	0.89	2.11	1.47%	-92.69%	
	Total	439.35	1,061.59	3,040.28	7,109.67	-13.03%	30.00%	

Source: Financial reports of the related companies & CCM

## 2 Analysis of listed pesticide companies in China

## 2.1 Sichuan Guoguang Agrochemical Co., Ltd.

According to the semi-annual report, Sichuan Guoguang Agrochemical Co., Ltd. (Sichuan Guoguang, Stock Code: 002749) brought in a revenue of USD137.82 million (RMB953.68 million) in H1 2023 (+8.94% YoY) and earned USD24.38 million (RMB168.69 million) in net profit attributable to equity holders of the listed company (+20.11% YoY); meanwhile, the company achieved a 41.38% gross margin, which increased by 1.38 and 3.51 percentage points compared to 40% in H1 2022 and 37.87% in 2022, respectively. It is mainly thanks to steady sales growths consolidated into the financial statements from Sichuan Guoguang's newly-acquired enterprises, which focus on plant growth regulators, when China's planting of high-value-added crops have increased in recent years.

By products, Sichuan Guoguang's pesticide income reached USD95.27 million (RMB659.29 million, =69.13% of the total) in H1 2023, up by 8.96% YoY; by region, the domestic sales hit USD137.02 million (RMB948.15 million, =99.42% of the total), up by 8.34% YoY.

Sichuan Guoguang mainly engages in the R&D, production and sale of pesticide formulations (plant growth regulators in majority) and high-end water-soluble fertilisers. As of 30 June, 2023, the company had obtained 297 registration certificates for pesticide products (50 bio-pesticides included) and 100 for fertilisers.

ltem	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	137.82	246.13	8.94%	21.34%
Net profit attributable to equity holders of the listed company	24.38	16.96	20.11%	-44.90%
ltem	End of 30 June, 2023	End of 2022	Chan	ge
Total assets	357.14	337.27		9.41%
Net asset attributable to equity holders of the listed company	236.71	220.90		10.72%

## Table 2.1-1 Major financial performance indicators of Sichuan Guoguang, million USD

Note: All changes above are based on RMB.

Source: Sichuan Guoguang's financial reports

#### Table 2.1-2 Segment revenue of Sichuan Guoguang, H1 2023 vs H1 2022

ltem	H1 2023		H1 20	22	YoY obongo based on PMP
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Pesticides	95,274,040	69.13%	93,998,625	69.12%	8.96%
Fertilisers	36,466,706	26.46%	35,435,554	26.06%	10.63%
Others	5,153,089	3.74%	6,565,812	4.83%	-15.63%
Total	137,816,589	100.00%	135,999,991	100.00%	8.94%

Source: Sichuan Guoguang's semi-annual report of 2023

## 2.2 Jiangsu Huifeng Bio Agriculture Co., Ltd.

In H1 2023, thanks to increasing trades of chemicals, Jiangsu Huifeng Bio Agriculture Co., Ltd. (Jiangsu Huifeng, Stock Code: 002496)'s revenue hiked 37.62% YoY to USD27.20 million (RMB188.25 million). However, as the operating cost grew faster at 67.81% YoY to USD21.52 million (RMB148.91 million), the net profit attributable to equity holders of the listed company presented a loss of -USD7.02 million (-RMB48.57 million), down 26.42% YoY, and the gross margin came in at 20.90%, down 14.23 and 12.56 percentage points from that in H1 2022 (=35.13%) and 2022 (=33.46%) respectively. That is mainly because the high-profitable formulation businesses shrank in H1. In addition, due to retrieve of current accounts and less cash paid out in trade, the H1 net cash flow surged 102.88% YoY to USD276,320.53 (RMB1.91 million) from - USD10.31 million (-RMB66.38 million).

Jiangsu Huifeng mainly engages in businesses of chemical pesticide formulations and biostimulants, petrochemical storage supply chain and project investments. In H1 2023, pesticide formulations contributed 41.25% of the total revenue at USD11.22 million (RMB77.66 million), down by 8.11% YoY from USD13.13 million (RMB94.00 million) in H1 2022 (=61.78% of the total).

Table 2.2-1 Major financial	performance ind	licators of J	Jiangsu	Huifeng,	, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	27.20	39.95	37.62%	-75.58%
Net profit attributable to equity holders of the listed company	-7.02	-67.93	-26.42%	-247.84%
Item	End of 30 June, 2023	End of 2022	Chan	ge
Item Total assets			Chan	<b>ge</b> -1.21%

Note: All changes above are based on RMB.

Source: Jiangsu Huifeng's financial reports

#### Table 2.2-2 Segment revenue of Jiangsu Huifeng, H1 2023 vs H1 2022, USD

	H1 20	H1 2023		22	YoY change based on
Item	Revenue, USD	Proportion	Revenue, USD	Proportion	RMB
Pesticide formulations	11,222,010	41.25%	13,128,227	61.78%	-8.11%
Oil, chemical, storage and transportation	13,605,025	50.01%	4,096,067	19.28%	257.07%
Others	2,376,482	8.74%	4,025,002	18.94%	-36.53%
Total	27,203,516	100.00%	21,249,296	100.00%	37.62%

Source: Jiangsu Huifeng's semi-annual report of 2023

## 2.3 Jiangsu Lanfeng Biochemical Co., Ltd.

In H1 2023, Jiangsu Lanfeng Bio-chemical Co., Ltd. (Jiangsu Lanfeng, Stock Code: 002513) recorded a revenue descending by 36.08% YoY to USD76.09 million (RMB526.52 million), and a double-down deficit in net profit attributable to equity holders of the listed company, which plummeted by 5,840.52% YoY to -USD13.25 million (-RMB91.66 million) from -USD0.24 million (-RMB1.54 million) in H1 2022. The slumping operating performance mainly reeled from periodic volatility of macro economy, cyclical fluctuations in the pesticide industry and changes in supply and demand, which led to creeping consumption of inventory from downstream channel, continuous dipping product prices and slack market trade volumes. Meanwhile, intermittent production suspension of main products (thiophanate-methyl, carbosulfan, hexazinone and others) due to phosgene production equipment overhauls had caused rising operating cost and sharply decreased output.

As of Aug. 2023, Jiangsu Lanfeng owned 105 pesticide registration certificates for technical and formulations of insecticides, fungicides and herbicides. In recent years, the company has been intensifying R&D innovation, and established a phosgene research institute named Jiangsu Lanfeng Environmental and Material Technology Research Institute Co., Ltd. in Nov. 2022, aiming to prompt the transformation of phosgene production plant, develop downstream products of phosgene, meanwhile cutting production costs of upstream intermediates, pesticide TCs and downstream formulations.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022	
Total revenue	76.09	215.80	-36.08%	0.09%	
Net profit attributable to equity holders of the listed company	-13.25	-47.88	-5,840.52%	34.71%	
ltem	End of 30 June, 2023	End of 2022	Chang	je	
Total assets	210.82	220.32		-1.13%	
			-25.69%		

## Table 2.3-1 Major financial performance indicators of Jiangsu Lanfeng, million USD

Note: All changes above are based on RMB.

Source: Jiangsu Lanfeng's financial reports

## Table 2.3-2 Segment revenue of Jiangsu Lanfeng, H1 2023 vs H1 2022

ltem	H1 20	23	H1 20	22	YoY change based on RMB	
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	TOT Change based on KMB	
Pesticides	68,640,668	90.21%	103,361,647	75.25%	-28.61%	
Intermediates	3,089,190	4.06%	10,083,843	7.34%	-67.07%	
Others	4,358,493	5.73%	23,915,047	17.41%	-80.41%	
Total	76,088,351	100.00%	137,360,537	100.00%	-40.45%	

Source: Jiangsu Lanfeng's semi-annual report of 2023

## 2.4 Nantong Jiangshan Agrochemical & Chemicals Co., Ltd.

According to Nantong Jiangshan Agrochemical & Chemicals Co., Ltd. (Nantong Jiangshan, Stock Code: 600389)'s semi-annual report for 2023, Nantong Jiangshan made a revenue of USD386.21 million (RMB2.67 billion), down 48.91% YoY (vs. up 65.87% YoY in H1 2022); the net profit attributable to equity holders of the listed company amounted to USD28.00 million (RMB193.73 million), down 84.03% YoY (vs. up 295.10% YoY in H1 2022), as results of sharp declines in glyphosate price and sales. In particular:

• The H1 gross margin was 15.59%, plummeting 18.25, 16.44 and 8.64 percentage points compared with that in H1 2022 (=33.84%), 2022 (=32.03%) and 2021 (=24.05%), seperately;

• Plunge in net profit had led to a net cash flow generated from operating activities tumbling to USD46.30 million (RMB320.38 million), down 70.15% YoY from USD166.73 million (RMB1.07 billion) in H1 2022;

• As of 30 June, 2023, the company's total assets shriveled 9.86% to USD848.45 million (RMB5.87 billion) from USD972.51 million (RMB6.51 billion) in the end of 2022, compared with the 23.60% increase in the end of H1 2022 (vs the end of 2021).

Table 2.4-1 Major financial pe	erformance indicators	of Nantong Jiangs	han, million USD

ltem	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	386.21	1,246.61	-48.91%	28.76%
Net profit attributable to equity holders of the listed company	28.00	275.40	-84.03%	125.91%
			Change	
Item	End of 30 June, 2023	End of 2022	Chan	ge
Item Total assets	-		Chan	<b>ge</b> -9.86%

Note: All changes above are based on RMB.

Source: Nantong Jiangshan's financial reports

#### Table 2.4-2 Segment revenue of Nantong Jiangshan, H1 2023 vs H1 2022

ltem	H1 20	23	H1 20	22	YeV shanne based on DMD
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Pesticides	236,450,701	61.22%	601,147,908	73.98%	-57.72%
Chemical products	97,064,554	25.13%	123,481,304	15.20%	-15.50%
Cogeneration business	46,336,892	12.00%	53,058,230	6.53%	-6.12%
Others	6,357,658	1.65%	34,903,315	4.30%	-80.42%
Total	386,209,804	100.00%	812,590,757	100.00%	-48.91%

Source: Nantong Jiangshan's semi-annual report of 2023

## 2.5 Nanjing Red Sun Co., Ltd.

In H1 2023, Nanjing Red Sun Co., Ltd. (Nanjing Red Sun, Stock Code: 000525) brought in a revenue of USD231.58 million (RMB1.60 billion) and a net profit attributable to equity holders of the listed company of USD2.6 million (RMB18.02 million), which plunged 53.90% and 97.08% YoY, respectively, as a result of global declines in both sales volumes and prices of pesticide on stagnant consumption of channel stocks affected by multiple detrimental factors.

Nanjing Red Sun mainly engages in the production and sale of pesticide technical and formulations as well as the sale of fertilisers and ecological fertilisers. In H1 2023, the pesticide income was USD228.48 million (RMB1.58 billion), accounting for 98.66% of the total; by region, the domestic sales collected USD153.04 million (RMB1.06 billion, =66.08% of the total), slumping by 65.47% YoY. Notably, the R&D expense in H1 came in at USD11.58 million (RMB80.14 million), down 42.9% YoY from USD21.80 million (RMB140.35 million) in the same period last year,

Progress of major construction projects of Nanjing Red Sun in H1 2023:

• In May 2023, Chongqing Huage Biochemical Co., Ltd., a wholly-owned subsidiary of Nanjing Red Sun, had the 2,000 t/a chlorantraniliprole product chain entering trial production;

• The 100,000 t/a glufosinate-P product chain project by biological method had started construction;

• The company's new construction of "Zero-carbon Factory" has gone through legal procedures and is upon commencement, meanwhile the production lines for over 10,000 t/a novel insecticides will be built.

### Table 2.5-1 Major financial performance indicators of Nanjing Red Sun, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022	
Total revenue	231.58	961.58	-53.90%	37.51%	
Net profit attributable to equity holders of the listed company	2.60	109.34	-97.08%	119.56%	
Item	End of 30 June, 2023	End of 2022	Change		
Total assets	1,453.50	1,535.09	-2.17%		
Net asset attributable to equity holders of the listed company	188.16	189.82	2.42%		

Note: All changes above are based on RMB. Source: Nanjing Red Sun's financial reports

#### Table 2.5-2 Segment revenue of Nanjing Red Sun, H1 2023 vs H1 2022

ltem	H1 2023		H1 2022		YoY change based on RMB
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	Tor change based on Rivib
Pesticides	228,480,078	98.66%	534,673,220	99.00%	-54.06%
Others	3,097,288	1.34%	5,402,674	1.00%	-38.37%
Total	231,577,366	100.00%	540,075,894	100.00%	-53.90%

Source: Nanjing Red Sun's semi-annual report of 2023

## 2.6 Zhejiang Wynca Chemical Industrial Group Co., Ltd.

In H1 2023, battered by plummeting prices and sales volumes of glyphosate, Zhejiang Wynca Chemical Industrial Group Co., Ltd. (Zhejiang Wynca, Stock Code: 600596) brought in a revenue of USD1.22 billion (RMB8.48 billion), down 36.48% YoY, and the net profit attributable to equity holders of the listed company slumped 95.13% YoY, touching USD16.42 million (RMB113.63 million). To be detailed, the revenue of the crop protection section (self-produced and trading agrochemicals, =43.82% of the total) was USD536.78 million (RMB3.71 billion), down 48.06% YoY.

In aggregate, Zhejiang Wynca sold 41,800 tonnes of glyphosate technical in H1 2023; a 3,000 t/a glufosinate-ammonium project run by its subsidiary Ningxia Wynca Technology Co., Ltd. was put into trial production on 20 March, 2023.

During the reporting period, the R&D expenditure of Zhejiang Wynca hit USD41.41 million (RMB286.52 million), up by 36.92% YoY; the company had developed 249 new products in the period, with 144 industrialised, carried out 25 technological cooperation projects with other science and research institutes, and newly applied for 37 patents, with 24 authorised.

### Table 2.6-1 Major financial performance indicators of Zhejiang Wynca, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	1,224.88	3,255.50	-36.48%	14.89%
Net profit attributable to equity holders of the listed company	16.42	441.17	-95.13%	11.31%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	2,904.13	2,873.63	4.42%	
Net asset attributable to equity holders of the listed company	1,566.23	1,723.89		-6.12%

Note: All changes above are based on RMB. Source: Zhejiang Wynca's financial reports

## Table 2.6-2 Segment revenue of Zhejiang Wynca, H1 2023 vs H1 2022

ltem	H1 2023		H1 20	22	VeV shanga based on DMD
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Agrichemicals (self-produced)	405,541,651	33.11%	730,246,236	35.23%	-40.30%
Agrichemicals from outside	131,241,777	10.71%	380,746,341	18.37%	-62.94%
Organosilicon businesses	157,056,918	12.82%	425,509,395	20.53%	-60.32%
New chemical materials	108,112,018	8.83%	108,937,532	5.26%	6.69%
Others	422,925,360	34.53%	427,465,256	20.62%	6.36%
Total	1,224,877,725	100.00%	2,072,904,759	100.00%	-36.48%

Source: Zhejiang Wynca's semi-annual report of 2023

## 2.7 Hunan Haili Chemical Industry Co., Ltd.

In H1 2023, Hunan Haili Chemical Industry Co., Ltd. (Hunan Haili, Stock Code: 600731)'s revenue decreased 14.00% YoY to USD178.26 million (RMB1.23 billion), and the net profit attributable to equity holders of the listed company went down 11.01% to USD23.57 million (RMB163.09 million). Notably, as the return of payment for goods increased, the net cash flow generated from operating activities soared 802.79% YoY from -USD6.84 million (-RMB44.05 million) to USD44.74 million (RMB309.60 million) in H1 2023.

Moreover, increasing funds had been allocated to construction-in-progress during the reporting period, up 42.08% to USD33.05 million (RMB228.71 million), with some project details as follows:

• Ningxia Haili Technology Co., Ltd., wholly owned by Hunan Haili, had commenced 46 building projects with a progress of 88% as of the end of June 2023;

• Haili Guixi New Material Technology Co., Ltd. (77.42% owned by Hunan Haili) had invested USD6.87 million (RMB47.53 million) on and completed 70% of the pirimiphos-methyl project (Phase II), with construction of pirimiphos-methyl workshops, wastewater pre-treatment workshops and supporting facilities basically finished, and main production equipment for pirimiphos-methyl 85% installed;

• In Feb. 2023, Hunan Haili Yongxing Technology Co., Ltd., another wholly-owned subsidiary of Hunan Haili, had bought a land of 136,556 m<sup>2</sup> for constructing a production plant.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	178.26	467.38	-14.00%	13.89%
Net profit attributable to equity holders of the listed company	23.57	52.60	-11.01%	32.10%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	647.21	586.13	14.09%	
Net asset attributable to equity holders of the listed company	418.77	305.48		41.64%

#### Table 2.7-1 Major financial performance indicators of Hunan Haili, million USD

Note: All changes above are based on RMB.

Source: Hunan Haili's financial reports

#### Table 2.7-2 Segment revenue of Hunan Haili, H1 2023 vs H1 2022

	H1 20	23	H1 20	22	YoY change based on
Item	Revenue, USD	Proportion	Revenue, USD	Proportion	RMB
Chemical pesticides, fine chemicals and Li-ion battery	178,036,465	99.87%	222,161,667	99.70%	-13.85%
Others	224,780	0.13%	672,715	0.30%	-64.08%
Total	178,261,245	100.00%	222,834,383	100.00%	-14.00%

Source: Hunan Haili's semi-annual report of 2023

## 2.8 Hubei Xingfa Chemicals Group Co., Ltd.

In H1 2023, Hubei Xingfa Chemicals Group Co., Ltd. (Hubei Xingfa, Stock Code: 600141) suffered slumping operating results from tepid economic recovery, exacerbated competition and shrinking demand in the chemical industry, with revenue down by 21.33% YoY to USD1.97 billion (RMB13.61 billion) and net profit attributable to equity holders of the listed company plunging 83.32% YoY to USD87.95 million (USD608.59 million); the net cash flow from operating activities also tumbled from USD630.14 million (RMB4.06 billion) in H1 2022 to USD64.00 million (RMB442.90 million), down by 89.08% YoY, as declining product prices had rolled down income in cash.

In H1 2023, the company's periodic products saw varied slides in price, output and sale, with some in sharp deficit. For example:

• Glyphosate and glycine: USD334.08 million (RMB2.31 billion, =16.99% of the total) in revenue, down 64.84% YoY;

• Phosphate ore, yellow phosphorus and fine phosphate salts: USD450.36 million (RMB3.12 billion, =22.90% of the total) in revenue, down 22.98% YoY;

• Chlor-alkali and organosilicon products: USD202.73 million (RMB1.40 billion, =10.31% of the total) in revenue, down 51.63% YoY.

Notably, the company's inventory value ending the reporting period diminished by 39.17% to USD221.60 million (RMB1.53 billion) from USD391.65 million (RMB2.52 billion) in the end of 2022 due to decreases in glyphosate and organosilicon stocks.

H1 2023	2022	YoY change of H1 2023	YoY change of 2022	
1,966.75	4,525.87	-21.33%	26.81%	
87.95	873.77	-83.32%	36.67%	
End of 30 June, 2023	End of 2022	Change		
6,119.40	6,216.03		1.72%	
		-2.26%		
	1,966.75 87.95 End of 30 June, 2023	1,966.75       4,525.87         87.95       873.77         End of 30 June,       End of         2023       2022	H1 2023         2022         2023           1,966.75         4,525.87         -21.33%           87.95         873.77         -83.32%           End of 30 June, 2023         End of 2022         Chan	

Table 2.8-1 Major financial performance indicators of Hubei Xingfa, million USD

Note: All changes above are based on RMB.

Source: Hubei Xingfa's financial reports

#### Table 2.8-2 Segment revenue of Hubei Xingfa, H1 2023 vs H1 2022

	H1 20	H1 2023		22	YoY change based on
ltem	Revenue, USD Proportion Revenue, USD			Proportion	RMB
Agrochemicals and organosilicon products	1,934,953,364	98.38%	2,651,135,881	98.65%	-21.54%
Others	31,794,537	1.62%	36,338,045	1.35%	-5.94%
Total	1,966,747,900	100.00%	2,687,473,926	100.00%	-21.33%

Source: Hubei Xingfa's semi-annual report of 2023

## 2.9 Suli Co., Ltd.

In 2023, Suli Co., Ltd. (Jiangsu Suli, Stock Code: 603585)'s semi-annual report showed operating results as bellow:

• The operating income decreased 37.62% YoY to USD148.13 million (RMB1.03 billion) in H1 2023, as opposed to yearly growths in 2022 (+34.16%) and 2021 (+47.86%);

• The net profit attributable to equity holders of the listed company plunged 79.79% YoY to USD5.82 million (RMB40.24 million), in comparison with YoY expansion of 30.60% in 2022 or 42.99% in 2021;

• Although the operating costs diminished 31.36% YoY from USD191.71 million (RMB1.23 billion) in H1 2022 to USD122.41 million (RMB847.04 million), the gross margin went down sharply by 7.54 percentage points to 17.37% from 24.91% in H1 2022.

Reasons for the above performance:

• As a result of backlogged inventory and tepid consumer demand at home and abroad, the whole market presented sluggish trades and continuous declining pesticide prices; Jiangsu Suli's main technicals (such as azoxystrobin technical) and intermediate products (decabromodiphenyl ethane and hydrogen bromide) suffered decreases in both selling prices and volumes;

• Regarding operating costs, the raw material cost reduced due to sliding prices, as well as less use on shrivelled business scale; transportation cost was undercut owing to shrinking scale and lowered sea freight;

• In general, the decrease in product prices outstripped that in raw material prices, which incurred slump in gross margin.

H1 2023	2022	YoY change of H1 2023	YoY change of 2022	
148.13	470.37	-37.62%	34.16%	
5.82	47.08	-79.79%	30.60%	
End of 30 June, 2023	End of 2022	Change		
736.77	793.96		-4.12%	
		-2.52%		
	148.13 5.82 End of 30 June, 2023	148.13       470.37         5.82       47.08         End of 30 June,       End of         2023       2022	H1 2023         2022         2023           148.13         470.37         -37.62%           5.82         47.08         -79.79%           End of 30 June, 2023         End of 2022         Chan	

Table 2.9-1 Major financial performance indicators of Jiangsu Suli, million USD

Note: All changes above are based on RMB.

Source: Jiangsu Suli's financial reports

## Table 2.9-2 Segment revenue of Jiangsu Suli, H1 2023 vs H1 2022

ltem	H1 20	23	H1 20	22	YoY change based on RMB
item	Revenue, USD	Proportion	Revenue, USD	Proportion	Tor change based on RMB
Pesticides and intermediates	90,269,930	60.94%	114,928,932	45.02%	-15.56%
Flame retardants and intermediates	36,199,881	24.44%	87,825,030	34.40%	-55.69%
Fine chemicals	15,255,861	10.30%	42,710,294	16.73%	-61.60%
Others	6,404,658	4.32%	9,830,035	3.85%	-29.96%
Total	148,130,329	100.00%	255,294,291	100.00%	-37.62%

Source: Jiangsu Suli's semi-annual report of 2023

## 2.10 Jiangsu Fengshan Group Co., Ltd.

According to the semi-annual report for 2023, Jiangsu Fengshan Group Co., Ltd. (Fengshan Group, Stock Code: 603810) saw the operating income down 30.17% YoY to USD102.67 million (RMB710.49 million) and the net profit attributable to equity holders of the listed company plummet 76.61% YoY to USD2.51 million (RMB17.37 million); the gross margin (=13.52%) also took a dive, down 2.85, 3.15 and 6.52 percentage points compared with that in H1 2022 (=16.37%), 2022 (=16.67%) and 2021 (=20.04%), respectively. The waning operating benefit and profitability were attributable to lack of demand for and slumping exports of pesticides.

As of Aug., 2023, progresses of Jiangsu Fengshan's pesticide projects were as follows:

• Fengshan Group's self-funded 3,000 t/a triclopyr project planned in 2022 had entered production;

• the 1,700 t/a quizalofop-P-ethyl and 1,083 t/a potassium chloride by-product production line technological transformation project and 500 t/a quizalofop-P-tefuryl technological transformation project were under trial production commissioning;

• the 130,000 t/a 4-chlorotoluene and other fine chemical project was in the pipeline, designed to run by Hubei Fengshan New Material Technology Co., Ltd., a wholly-owned subsidiary of Fengshan Group established on 14 Sept., 2022;

• Jiangsu Fengshan Biochemical Technology Co., Ltd., a wholly-owned subsidiary of Fengshan Group founded on 14 Oct., 2022, projected to dabble in bio-pesticide business.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022	
Total revenue	102.67	255.21	-30.17%	12.59%	
Net profit attributable to equity holders of the listed company	2.51	14.82	-76.61%	-13.51%	
Item	End of 30 June, 2023	End of 2022	Change		
Total assets	383.88	398.26	-0.40		
			1.419		

Table 2.10-1 Major financial performance indicators of Fengshan Group, million USD

Note: All changes above are based on RMB.

Source: Fengshan Group's financial reports

#### Table 2.10-2 Segment revenue of Fengshan Group, H1 2023 vs H1 2022

ltem	H1 2023				H1 2022		YoY change based on RMB
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	TOT Change based on Rivib		
Pesticides	102,555,675	99.89%	158,026,299	99.98%	-30.23%		
Others	117,335	0.11%	38,791	0.02%	225.17%		
Total	102,673,009	100.00%	158,065,091	100.00%	-30.17%		

Source: Fengshan Group's semi-annual report of 2023

## 2.11 Limin Group Co., Ltd.

According to the semi-annual report of Limin Group Co., Ltd. (Limin Group, Stock Code: 002734), the company's revenue of H1 2023 came in at USD333.23 million (RMB2.31 billion), down by 17.90% YoY; the net profit attributable to equity holders of the listed company was USD8.31 million (RMB57.53 million), slumping by 61.98% YoY. However, its gross profit margin in H1 remained stable at 19.05% (vs. 18.38% in H1 2022 and 18.84% in the whole 2022).

In H1, Limin Group's business of fungicides brought in USD157.52 million (RMB1.09 billion, =47.27% of the total), up by 3.59% YoY, with the gross profit margin increasing by about 6.95 percentage points to 25.82%. However, both of its businesses from insecticides and herbicides marked yearly decreases of 32%+. To be specific, the revenue of insecticides hit USD99.52 million (=29.86% of the total), while that of herbicides was USD41.56 million (=12.47% of the total), down by 35.96% YoY and 32.70% YoY, respectively.

As of Aug., 2023, Limin Group's pesticide technical and formulation capacities totalled 112,100 t/a and 114,400 t/a, respectivey. In H1 2023, the company was advancing intermediate, technical and formulation industrial chain integration projects as follows:

• 12,000 t/a fosetyl-aluminium project, 5,000 t/a glufosinate-ammonium project entered trial production;

• Limin Group's crop protection series technological renovation project passed expert review, including building production lines for 1,100 t/a difenoconazole technical, 500 t/a tembotrione technical, 1,000 t/a mesotrione technical, 3,000 t/a zineb technical and series by-products;

• 10,000 t/a glufosinate-P project of its wholly-owned subsidiary Hebei Veyong Bio-Chemical Co., Ltd. (96.71% directly and 3.29% indirectly owned by Limin Group) obtained investment filing licence;

• Another wholly-owned subsidiary Inner Mongolia New Veyong Bio-chemical Co., Ltd. (96.71% directly and 3.29% indirectly owned by Limin Group)'s novel green bio-product manufacturing project entered trial production;

• Its subsidiary Hebei Shuangji Chemical Co., Ltd. (79.51% owned by Limin Group) was initially positioned as the base to produce intermediates.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	333.23	749.02	-17.90%	5.88%
Net profit attributable to equity holders of the listed company	8.31	32.71	-61.98%	-28.63%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	985.37	1,053.59	-3.37%	
Net asset attributable to equity holders of the listed company	400.03	417.86	-1.08%	

Table 2.11-1 Major financial performance indicators of Limin Group, million USD

Note: All changes above are based on RMB.

Source: Limin Group's financial reports

## Table 2.11-2 Segment revenue of Limin Group, H1 2023 vs H1 2022

ltom	H1 2023		H1 20	22	VeV shares based on DMD
item	Item Revenue, USD Proportion Revenue,	Revenue, USD	Proportion	YoY change based on RMB	
Fungicides	157,517,105	47.27%	163,464,947	37.46%	3.59%
Insecticides	99,520,383	29.86%	167,060,255	38.29%	-35.96%
Herbicides	41,557,000	12.47%	66,377,547	15.21%	-32.70%
Others	34,640,139	10.40%	39,432,900	9.04%	-5.56%
Total	333,234,627	100.00%	436,335,648	100.00%	-17.90%

Source: Limin Group's semi-annual report of 2023

## 2.12 ADAMA Ltd.

In H1 2023, ADAMA Ltd. (ADAMA, Stock Code: 000553) reaped a revenue down 8.21% YoY to USD2.49 billion (RMB17.25 billion), with its net profit attributable to equity holders of the listed company in the red to - USD34.99 million (-RMB242.16 million) from USD113.73 million (RMB732.10 million) in H1 2022.

According to operating scope, ADAMA is segmented into two sub-divisions—one for crop protection products and the other for fine chemicals. In H1 2023, the crop protection income made up 91.90% of the total from 89.61% in H1 2022, totalling USD2.29 billion (RMB15.86 billion), down by 5.86% YoY. By category, the sales of fungicides (=20.15% of the total) grabbed USD502.27 million (RMB3.48 million), up 8.85% YoY, while those of herbicides (=44.22% of the total) and insecticides (=27.53% of the total) marked yearly decreases by 13.58% and 1.47% respectively, amounting to USD1.10 billion (RMB7.63 million) and USD686.32 million (RMB4.75 million), separately.

Factors leading to a year-on-year decrease in overall and product sales in H1 2023:

• After excessive hoarding since 2022, the market was in channel destocking under predominance of the commonplace lifting of interest rate and wait-and-see attitudes;

• Reduced costs of pesticide technical and raw materials had influenced the quotation of crop protection products;

• Adverse weather conditions in some regions also contributed to sales fall.

Table 2.12-1 Major financial performance indicators of ADAMA, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	2,493.27	5,581.72	-8.21%	20.44%
Net profit attributable to equity holders of the listed company	-34.99	90.99	-133.08%	287.17%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	8,656.47	8,657.42	3.31	
Net asset attributable to equity holders of the listed company	3,416.89	3,452.88		2.25%

Note: All changes above are based on RMB.

Source: ADAMA's financial reports

#### Table 2.12-2 Segment revenue of ADAMA, H1 2023 vs H1 2022

	H1 20	H1 2023		22	YoY change based on
Item	Revenue, USD	Proportion	Revenue, USD	Proportion	RMB
Herbicides	1,102,645,269	44.22%	1,371,694,423	46.98%	-13.58%
Insecticides	686,322,346	27.53%	748,796,178	25.64%	-1.47%
Fungicides	502,274,310	20.15%	496,041,479	16.99%	8.85%
Ingredients and Intermediates (Formerly referred to as Non-Agro)	202,031,243	8.10%	303,434,985	10.39%	-28.42%
Total	2,493,273,169	100.00%	2,919,967,065	100.00%	-8.21%

Source: ADAMA's semi-annual report of 2023

## 2.13 Lianhe Chemical Technology Co., Ltd.

According to the semi-annual report for 2023 of Lianhe Chemical Technology Co., Ltd. (Lianhetech, Stock Code: 002250), the company's revenue edged down 1.01% YoY to USD529.67 million (RMB3.67 billion), while the operating cost increased 4.90% YoY instead, reaching USD413.40 million (RMB2.86 billion); the net profit attributable to equity holders of the listed company plummeted 87.97% YoY to USD3.55 million (RMB24.59 million).

Due to overstock, the company underperformed in overall business, especially in crop protection section. In H1 2023, the crop protection business raked in USD357.76 million (RMB2.48 billion, =67.54% of the total), nudging up by 0.71% YoY, yet the gross margin of crop protection products came in at 16.93%, slipping by 6.34 or 7.98 percentage points compared with that in H1 2022 (=23.27%) and 2022 (=24.91%), seperately,

As of 30 June, 2023, Lianhetech, in all business sectors, had obtained 87 national invention patents and 1 European one as well as 55 utility models.

Item	H1 2023	H1 2023 2022 Yo		YoY change of 2022
Total revenue	529.67	1,174.44	-1.01%	19.41%
Net profit attributable to equity holders of the listed company	3.55	104.05	-87.97%	120.93%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	2,120.03	2,241.04	-2.259	
Net asset attributable to equity holders of the listed company	1,001.83	1,037.94	-0.27%	

Table 2.13-1 Major financial performance indicators of Lianhetech, million USD

Note: All changes above are based on RMB. Source: Lianhetech's financial reports

## Table 2.13-2 Segment revenue of Lianhetech, H1 2023 vs H1 2022

literee	H1 20	23	H1 20	22	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
ltem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Crop protection	357,758,020	67.54%	381,878,059	66.39%	0.71%
Pharmaceuticals	117,282,113	22.14%	119,056,691	20.70%	5.90%
Functional chemicals	12,405,764	2.34%	52,404,346	9.11%	-74.55%
Others	42,229,032	7.97%	21,886,975	3.80%	107.42%
Total	529,674,929	100.00%	575,226,070	100.00%	-1.01%

Source: Lianhetech's semi-annual report of 2023

## 2.14 Shenzhen Noposion Crop Science Co., Ltd.

In H1 2023, Shenzhen Noposion Crop Science Co., Ltd. (Shenzhen Noposion, Stock Code: 002215)'s operating income ticked down 2.98% YoY to USD368.03 million (RMB2.55 billion), as affected by environmental protection supervision and periodical change in chemical industry, plus the sharp fluctuation in raw material prices. Nevertheless, the company's profitability saw some growths, with the net profit up 5.29% YoY to USD48.81 million (RMB338.79 million), and the gross profit margin hitting 31.62%, 2.98 and 4.51 percentage points higher than that in H1 2022 (28.64%) and 2022 (27.11%) respectively.

By business segments, pesticide formulations (i.e. insecticide, fungicide and herbicide) brought in USD223.63 million (RMB1.55 billion, =60.76% of the total) from USD275.61 million (RMB1.77 billion, =67.58% of the total) in H1 2022, which went down by 12.77% YoY. By region, East China was the company's largest sales destination, amounting to USD123.94 million (RMB857.68 million) which equated to 33.68% of the total.

Shenzhen Noposion is a public company integrating the R&D, production and sale of environment-friendly green pesticide formulations, plant nutrients and the like, meanwhile engaging in the operation of modern specialty fresh consumption business.

ltem	H1 2023	2022	YoY change of H1 2023	YoY change of 2022	
Total revenue	368.03	636.86	-2.98%	-5.23%	
Net profit attributable to equity holders of the listed company	48.81	49.04	5.29%	7.57%	
ltem	End of 30 June, 2023	End of 2022	Change		
Total assets	1,621.57	1,463.49	14.499		
			5.30		

Table 2.14-1 Major financial indicators of Shenzhen Noposion, million USD

Note: All changes above are based on RMB.

Source: Shenzhen Noposion's financial reports

## Table 2.14-2 Segment revenue of Shenzhen Noposion, H1 2023 vs H1 2022

li e une	H1 2023		H1 20	22	
Item	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Insecticides	98,868,906	26.86%	126,833,044	31.10%	-16.20%
Fungicides	75,546,456	20.53%	84,572,215	20.74%	-3.97%
Plant nutrients	62,051,372	16.86%	74,125,847	18.18%	-10.01%
Herbicides	49,210,142	13.37%	64,204,515	15.74%	-17.60%
Others	82,355,509	22.38%	58,067,766	14.24%	52.47%
Total	368,032,386	100.00%	407,803,386	100.00%	-2.98%

Source: Shenzhen Noposion's semi-annual report of 2023

## 2.15 Hailir Pesticides and Chemicals Group Co., Ltd.

According to the 2023 semi-annual report of Hailir Pesticides and Chemicals Group Co., Ltd. (Hailir Group, Stock Code: 603639), the H1 revenue went down 5.24% YoY at USD384.45 million (RMB2.66 billion); the net profit attributable to shareholders of the listed company nudged up 0.47% YoY to USD47.80 million (RMB330.78 million); the company achieved a gross margin of 31.55%, which grew by 4.34 and 5.10 percentage points compared with 27.21% in H1 2022 and 26.45% in 2022, respectively. The decreased revenue was mainly attributed to the sharp decline in pesticide prices, while the hike of profit margin was resulted from the high profitability and increased sales proportion of prothioconazole technical and exchange gains.

At the end of the reporting period, Hailir Group, together with five wholly-owned subsidiaries, has obtained 634 pesticide registrations for technicals and formulations covering insecticide, fungicide and herbicide, and 18 registrations for fertilisers. On 27 April, 2023, one of the wholly-owned subsidiaries, Qingdao Hengning Biotechnology Co., Ltd., adjusted the construction content of its Phase II project, including expanding the designed capacities for pesticide TCs like pymetrozine, chlorantraniliprole, prothioconazole (up to 10,000 t/a), trifloxystrobin and intermediates, and adding production lines for tolfenpyrad, fluchlordiniliprole, 2,3-dichloropyridine TCs, 4-(4-methylphenoxy)benzylamine, etc.

### Table 2.15-1 Major financial performance indicators of Hailir Group, million USD

Item	H1 2023 2022		YoY change of H1 2023	YoY change of 2022
Total revenue	384.85	677.15	-5.24%	22.60%
Net profit attributable to equity holders of the listed company	47.80	68.69	0.47%	2.28%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	864.62	871.65		2.49%

Note: All changes above are based on RMB.

Source: Hailir Group's financial reports

#### Table 2.15-2 Segment revenue of Hailir Group, H1 2023 vs H1 2022

ltem	H1 2023		H1 2022		VeV shanga based on DMD	
item	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMI	
Pesticides and fertilisers	380,891,473	98.97%	435,566,538	99.76%	-5.99%	
Others	3,957,816	1.03%	1,051,571	0.24%	304.61%	
Total	384,849,289	100.00%	436,618,110	100.00%	-5.24%	

Source: Hailir Group's semi-annual report of 2023

## 2.16 Jiangsu Yangnong Chemical Co., Ltd.

In H1 2023, Jiangsu Yangnong Chemical Co., Ltd. (Jiangsu Yangnong, Stock Code: 600486)'s semi-annual report presented results as follows:

• Overall abating performance: the revenue arrived at USD1.02 billion (RMB7.07 billion), down by 26.12% YoY; the net profit attributable to equity holders of the listed company was USD162.40 million (RMB1.12 billion), down by 25.80% YoY;

• Dropping cost: the H1 operating cost fell to USD747.10 million (RMB5.17 billion) from USD1.07 billion (RMB6.90 billion) in H1 2022, down by 25.12% YoY;

• Increased assets: as of 30 June, 2023, the total assets recorded USD2.22 billion (RMB15.39 billion) and the net assets attributable to equity holders of the listed company amounted to USD1.34 billion (RMB9.27 billion), up by 4.04% and 8.59% respectively compared with that in the end of 2022;

• Generally intensified profitability: the profit margin reached 26.84%, though down by 0.98 percentage point from H1 2022 (=27.82%), up by 1.16 and 3.78 percentage points compared with that in 2022 (=25.68%) and 2021 (=23.06%).

Slipping prices are to blame for the off-performance, yet most technical products kept an uptick in sales volumes except for a few varieties.

By category, pesticide technical raked in USD652.49 million (RMB4.52 billion, =63.89% of the total) in H1, down by 20.33% YoY, and formulations made USD193.19 million (RMB1.34 billion, =18.92% of the total) of sales, down by 1.08% YoY.

In H1 2023, Jiangsu Yangnong's wholly-owned subsidiary Liaoning Youchuang Plant Protection Co., Ltd. kicked off the 15,650 t/a pesticide technical and 7,000 t/a pesticide intermediate project construction across-the-board, intending to build 9 main production process workshops and 11 production lines for 1,500 t/a imazethapyr, 200 t/a imazamox, 100 t/a imazapic, 5,000 t/a clethodim, 250 t/a sethoxydim, 500 t/a anilofos, 100 t/a pyrisoxazole, 500 t/a diflufenican, 500 t/a paclobutrazol, 3,000 t/a cyhalothrin, 2,500 t/a pydiflumetofen, 1,500 t/a diamide insecticides (1,300 t/a chlorantraniliprole and 200 t/a tetrachlorantraniliprole), 2,000 t/a chloropyridines, 2,000 t/a cyclohexanediones and 3,000 t/a triazoles.

Table 2.16-1 Major financial performance indicators of Jiangsu Yangnong, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	1,021.19	2,360.80	-26.12%	33.52%
Net profit attributable to equity holders of the listed company	162.40	267.90	-25.80%	46.82%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	2,224.24	2,208.90		4.04%
	2,227.27	2,200.90		4.0478

Note: All changes above are based on RMB.

Source: Jiangsu Yangnong's financial reports

## Table 2.16-2 Segment revenue of Jiangsu Yangnong, H1 2023 vs H1 2022

ltem	H1 2023		H1 2022		YeV shanna haaad an DMD
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Pesticide technical	652,491,086	63.89%	880,405,673	59.25%	-20.33%
Pesticide formulations	193,190,352	18.92%	209,950,346	14.13%	-1.08%
Trade	157,999,287	15.47%	371,628,967	25.01%	-54.30%
Others	17,513,889	1.72%	23,999,764	1.62%	-21.55%
Total	1,021,194,614	100.00%	1,485,984,750	100.00%	-26.12%

Source: Jiangsu Yangnong's semi-annual report of 2023

## 2.17 Anhui Guangxin Agrochemical Co., Ltd.

In H1 2023, dragged by downturn of bulk commodity prices and sluggish market demand, Anhui Guangxin Agrochemical Co., Ltd. (Anhui Guangxin, Stock Code: 603599) brought in a revenue down 16.23% YoY to USD545.09 million (RMB3.77 billion), and a net profit attributable to equity holders of the listed company down 17.73% YoY to USD147.82 million (RMB1.02 billion).

One thing worth noting is that the Q1 net cash flow generated from operating activities slumped 78.41% YoY owing to increased material payment and other expenditures. As a result, this net cash flow in H1 totalled to USD155.79 million (RMB1.08 billion), down by 26.34% YoY from USD227.38 million (RMB1.46 billion) in H1 2022. Meanwhile, the gross profit margin dropped to 37.48%, down by 4.51, 3.51 and 5.28 percentage points compared with that in H1 2022 (=41.99%), 2022 (=40.99%) and 2021 (=42.76%), individually.

Anhui Guangxin is a large pesticide technical and fine chemical intermediate producer using phosgene as raw material in China. On 16 Feb., 2023, the company announced that its wholly-owned subsidiary Anhui Dongzhi Guangxin Agrochemical Co., Ltd. had put the production lines for 300,000 t/a ionic membrane caustic soda into production, after which it will realise self-efficiency of main raw materials including liquid caustic, liquid chlorine and hydrogen.

Table 0.17.1 Major financial	norformonoo indicatoro of Anbui Cuanavia m	
Table 2.17-1 Major financia	performance indicators of Anhui Guangxin, m	1111100 USD

ltem	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	545.09	1,353.16	-16.23%	63.29%
Net profit attributable to equity holders of the listed company	147.82	345.77	-17.73% 56	
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	2,080.04	2,068.25		3.91%
Net asset attributable to equity holders of the listed company	1,309.71	1,295.80		4.43%

Note: All changes above are based on RMB.

Source: Anhui Guangxin's financial reports

## Table 2.17-2 Segment revenue of Anhui Guangxin, H1 2023 vs H1 2022

ltem	H1 2023		H1 2022		VoV obenge based on BMP	
Rem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RM	
Pesticides	533,280,208	97.83%	698,420,094	99.85%	-17.92%	
Fine chemicals and others	11,813,094	2.17%	1,056,254	0.15%	1102.30%	
Total	545,093,302	100.00%	699,476,348	100.00%	-16.23%	

Source: Anhui Guangxin's semi-annual report of 2023

#### 2.18 Lier Chemical Co., Ltd.

In H1 2023, Lier Chemical Co., Ltd. (Lier Chemical, Stock Code: 002258), a leading producer of glufosinateammonium in China, saw its revenue decrease 11.99% YoY to USD645.85 million (RMB4.47 billion) and net profit attributable to equity holders of the listed company plunge 54.21% to USD69.32 million (RMB479.69 million), mainly as results of slumping price of glufosinate-ammonium amid double-down competition; net cash flow generated from operating activities in H1 2023 was USD45.82 million (RMB317.10 million), down by 75.54% YoY. Moreover, the gross profit margin marked 26.58% in the period, down 7.10, 5.40 and 5.42 percentage points compared with that in H1 2022 (=33.68%), 2022 (=31.98%) and 2021 (=32.00%), individually.

Meanwhile, the company's asset expansion slackened off. As of 30 June, 2023, Lier Chemical's total assets recorded USD1.96 billion (RMB13.59 billion), up by 5.63% from that in the end of 2022, compared with the 14.35% growth from 2021–H1 2022.

Lier Chemical's product range covered herbicides, fungicides and insecticides and chemical intermediates like 2-picoline, holding 40+ pesticide technical and 100+ formulation products. Sales income of pesticide technical went down 11.90% YoY to USD401.10 million (RMB2.78 billion, =62.10% of the total) and that of formulations decreased 18.84% YoY to USD149.78 million (1.04 billion, =23.19% of the total).

### Table 2.18-1 Major financial performance indicators of Lier Chemical, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	645.85	1,513.49	-11.99%	56.08%
Net profit attributable to equity holders of the listed company	69.32	270.63	-54.21%	69.01%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	1,964.02	1,921.15		5.63%
Net asset attributable to equity holders of the listed company	1,062.93	1,085.48		1.18%

Note: All changes above are based on RMB

Source: Lier Chemical's financial reports

#### Table 2.18-2 Segment revenue of Lier Chemical, H1 2023 vs H1 2022

Item	H1 2023		H1 2022		YoY change based on RMB
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	Tor change based on Kind
Pesticide technical	401,101,934	62.10%	489,444,966	62.04%	-11.90%
Pesticide formulations	149,776,768	23.19%	198,386,237	25.15%	-18.84%
Chemical materials	44,793,964	6.94%	67,649,259	8.58%	-28.82%
Others	50,173,587	7.77%	33,413,898	4.24%	61.42%
Total	645,846,253	100.00%	788,894,359	100.00%	-11.99%

Source: Lier Chemical's semi-annual report of 2023

## 2.19 Jiangsu Changqing Agrochemical Co., Ltd.

In H1 2023, according to Jiangsu Changqing Agrochemical Co., Ltd. (Jiangsu Changqing, Stock Code: 002391)'s semi-annual report, the overall depressed demand in pesticide industry and blocked export sent the prices down and brought about challenges to the company's operation and production, leading to a 5.9% YoY decrease in revenue to USD289.56 million (RMB2.00 billion) and a 14.48% YoY diminish in net profit attributable to equity holders of the listed company to USD24.93 million (RMB172.53 million).

Jiangsu Changqing's product scope spans herbicides, insecticides and fungicides, totalling 30+ pesticide technicals and 130+ formulations featuring high efficiency, low toxicity and low residue. In H1 2023, the sales revenue of main business in chemical pesticides (=97.42% of the total) hit USD282.08 million (RMB1.95 billion); by region, domestic sales amounted to USD154.54 million (RMB1.07 billion), accounting for 53.37% of the total from 40.13% in H1 2022 (=USD132.74 million), up by 25.15% YoY.

With regards to project construction, Jiangsu Changqing's riverside plant vacating and relocating project had completed building four workshops and entered device installation, and projects of the wholly-owned Changqing (Hubei) Biotechnology Co., Ltd. were undergoing production and commissioning. In particular,

- 10,000 t/a S-metolachlor technical project had entered production;
- 1,000 t/a bifenthrin technical project and 2,000 t/a fomesafen technical project were put into trial run;

• 3,500 t/a glufosinate-ammonium technical project had broken ground in Q4 2022, with construction duration of one year.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	289.56	633.64	-5.90%	12.72%
Net profit attributable to equity holders of the listed company	24.93	39.17	-14.48%	5.56%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	1,127.70	1,115.99		4.41%
Net asset attributable to equity holders of the listed company	676.41	692.41		0.94%

#### Table 2.19-1 Major financial performance indicators of Jiangsu Changqing, million USD

Note: All changes above are based on RMB. Source: Jiangsu Changging's financial reports

Table 2.19-2 Segment revenue of Jiangsu Changqing, H1 2023 vs H1 2022

ltem	H1 2023		H1 20	22	YoY change based on RMB
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	TOT change based on RMB
Herbicides	135,763,275	46.89%	152,659,012	46.15%	-4.40%
Insecticides	117,691,647	40.64%	137,237,047	41.49%	-7.81%
Fungicides	28,628,774	9.89%	32,975,027	9.97%	-6.67%
Others	7,477,151	2.58%	7,923,430	2.40%	1.45%
Total	289,560,847	100.00%	330,794,516	100.00%	-5.90%

Source: Jiangsu Changqing's semi-annual report of 2023

## 2.20 Sichuan Hebang Bio-technology Co., Ltd.

Amidst the influence of macro economy and supply-demand changes, Sichuan Hebang Biotechnology Co., Ltd. (Sichuan Hebang, Stock Code: 603077)'s main products suffered varied decreases in prices and sales volumes in H1 2023, resulting in year-on-year slumps of 45.31% in revenue to USD591.14 million (RMB4.09 billion) and 76.60% in net profit attributable to equity holders of the listed company to USD89.10 million (RMB616.53 million). Moreover, the gross margin in H1 2023 was 23.61%, registering plunges of 24.75, 19.25 and 17.77 percentage points compared with that in H1 2022 (=48.36%), 2022 (=42.85%) and 2021 (=41.38%), respectively.

Sichuan Hebang's main products include agrochemicals (like PMIDA, glyphosate and methionine) and chemicals (like sodium carbonate), as well as glass and photovoltaic products. It is worth mentioning that the sales slide had led to increasing stocks, which amounted to USD494.31 million (RMB3.42 billion) as of 30 June, 2023, up 64.76% from USD309.99 million (RMB2.08 billion) in the end of 2022.

In H1 2023, major projects in progress in terms of agriculture business are as below:

• The 1 million t/a phosphate ore mining project in Yanfeng Town of Mabian Yi Autonomous County of Sichuan Hebang Phosphate Co., Ltd. (wholly-owned by Sichuan Hebang) was under construction;

• The 500,000 t/a PMIDA project of Guang'an Bimeida Biotechnology Co., Ltd., a wholly-owned subsidiary of Leshan Hebang Agriculture Technology Co., Ltd. (wholly-owned by Sichuan Hebang) was under construction;

• On 28 Aug., Sichuan Hebang signed an agreement to invest USD800 million on a chemical production base in Indonesia for producing sodium carbonate, ammonium chloride, glyphosate, etc.

ltem	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	591.14	1,946.93	-45.31%	30.55%
Net profit attributable to equity holders of the listed company	89.10	568.42	-76.60%	26.12%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	3,426.99	3,598.91		-1.61%
Net asset attributable to equity holders of the listed company	2,802.52	2,854.68		1.44%

Table 2.20-1 Major financial performance indicators of Sichuan Hebang, million USD

Note: All changes above are based on RMB. Source: Sichuan Hebang's financial reports

#### Table 2.20-2 Segment revenue of Sichuan Hebang, H1 2023 vs H1 2022

Item	H1 2023		H1 2022		YoY change based on RME	
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	Tor change based on Rivib	
Pesticides	582,536,770	98.55%	1,153,344,773	99.27%	-45.70%	
Others	8,600,863	1.45%	8,536,522	0.73%	8.31%	
Total	591,137,633	100.00%	1,161,881,295	100.00%	-45.31%	

Source: Sichuan Hebang's semi-annual report of 2023

## 2.21 Shandong Cynda Chemical Co., Ltd.

As shown in the semi-annual report for 2023, Shandong Cynda Chemical Co., Ltd. (Shandong Cynda, Stock Code: 603086) achieved a revenue down 21.59% YoY to USD188.53 million (RMB1.31 billion) in H1, and a net profit attributable to equity holders of the listed company slumping 73.94% to USD7.45 million (RMB51.55 million); the company's gross profit margin was 19.18%, down 6.13 or 8.02 percentage points, compared with 25.31% in H1 2022 and 27.20% in the whole 2022, respectively. The sharp declines in business performance are resulted from the gloomy pesticide market in the first half of 2023, with the company's major product clethodim dropping in price and sales volume; other products also saw varied decreases in gross margin, and part were influenced by shrinking or delayed exports orders.

During the reporting period, progresses of Shandong Cynda's major projects are as below:

• In H1 2023, the 1,500 t/a pesticide technical and 3,500 t/a pesticide intermediate project (Phase III) of Liaoning Cynda Chemical Co., Ltd. (Liaoning Cynda), a wholly-owned subsidiary of Shandong Cynda, had reached target output;

• On 7 June, Liaoning Cynda's 1,000 t/a imazapyr and 3,000 t/a pesticide intermediate project (Phase V) had passed acceptance and entered trial production;

• On 25 April, Shandong Cynda proposed to build a 5,000 t/a clethodim technical and mother liquid project.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	188.53	466.75	-21.59%	41.92%
Net profit attributable to equity holders of the listed company	7.45	56.92	-73.94%	114.90%
ltem	End of 30 June,	End of	Change	
nem	2023	2022	Chan	Je
Total assets	<b>2023</b> 509.66	<b>2022</b> 500.63	Chan	5.19%

Table 2.21-1 Major financial performance indicators of Shandong Cynda, million USD

Note: All changes above are based on RMB.

Source: Shangdong Cynda's financial reports

#### Table 2.21-2 Segment revenue of Shangdong Cynda, H1 2023 vs H1 2022

ltem	H1 2023		H1 2022		YoY change based on RMB
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	TOT change based on RMB
Pesticides	185,850,644	98.58%	257,104,618	99.47%	-22.29%
Others	2,680,726	1.42%	1,363,213	0.53%	111.40%
Total	188,531,370	100.00%	258,467,831	100.00%	-21.59%

Source: Shangdong Cynda's semi-annual report of 2023

## 2.22 Jiangsu Flag Chemical Industry Co., Ltd.

In H1 2023, Jiangsu Flag Chemical Industry Co., Ltd. (Flagchem, Stock Code: 300575) raked in USD205.89 million (RMB1.43 billion), a revenue up by 6.14% YoY, yet the net profit attributable to equity holders of the listed company went to USD24.88 million (RMB172.14 million), down by 3.94% YoY. According to the semiannual report, the operating cost in H1 2023 hit USD153.34 million (RMB1.06 billion, accounting for 74.48% of the total revenue), up by 3.75% YoY; and the gross margin (=25.52%) saw a 0.03 percentage point decrease compared to 25.55% in the year of 2022, which was mainly resulted from dropping pesticide prices, volatile prices of raw materials and costs on backlogged warehouse.

Segmented by products, the company's revenue of pesticide technical saw a 26.82% YoY growth to USD142.27 million (RMB984.49 million), taking up a share of 69.10% to the total, up from 57.83% in H1 2022. By region, the export trades of the company's products accounted for 78.41% of the total revenue in H1 2023, amounting to USD161.45 million (RMB 1.12 billion) with an annual increase of 14.44%, and the high share is predicted to carry on in the future.

As of Aug. 2023, Flagchem and its subsidiaries had been granted 183 pesticide registrations and 103 production licences or permissions in China.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	205.89	443.41	6.14%	35.42%
Net profit attributable to equity holders of the listed company	24.88	62.72	-3.94%	96.63%
Item	End of 30 June, 2023	End of 2022	Change	
Tatal and the	609.77	000.07		4.070/
Total assets	608.77	603.27		4.27%

## Table 2.22-1 Major financial performance indicators of Flagchem, million USD

Note: All changes above are based on RMB.

Source: Flagchem's financial reports

## Table 2.22-2 Segment revenue of Flagchem, H1 2023 vs H1 2022

ltem	H1 2023		H1 20	22	YoY change based on RMB
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	To r change based on Rivib
Pesticide technical	142,270,001	69.10%	120,601,286	57.83%	26.82%
Pesticide intermediates	33,055,988	16.05%	41,866,775	20.08%	-15.12%
Pesticide formulations	13,893,281	6.75%	17,449,801	8.37%	-14.41%
Others	16,673,817	8.10%	28,615,740	13.72%	-37.36%
Total	205,893,087	100.00%	208,533,602	100.00%	6.14%

Source: Flagchem's semi-annual report of 2023

## 2.23 Shandong Weifang Rainbow Chemical Co., Ltd.

According to the semi-annual report of Shandong Weifang Rainbow Chemical Co., Ltd. (Weifang Rainbow, Stock code: 301035), the company's revenue in H1 2023 amounted to USD728.84 million (RMB5.04 billion), down 35.16% YoY; the net profit attributable to equity holders of the listed company was USD61.33 million

(RMB424.39 million), down 52.19% YoY. The underperforming sales were resulted from:

• Slack demand in home and overseas markets, especially the company's major markets, the US and Brazil, which were of high channel inventory, thus undergoing extensive destocking;

• The market end remained wait-and-see attitudes; even those under low level of inventory were delaying procurement to ward off risks of price dropping;

• The former two reasons had fuelled the phased oversupply, leading to overall downturn of pesticide prices.

Notably, the H1 operating cost slumped 34.90% YoY to USD577.18 million (RMB3.99 billion) from USD953.11 million (RMB6.14 billion) in H1 2022, which made for an overall stable gross profit margin to 20.81%, down 0.98 percentage points from 21.13% in H1 2022, yet up 0.57 and 1.84 percentage points compared with that in the years of 2022 (=20.24%) and 2021 (=18.97%), respectively.

Weifang Rainbow mainly engages in sale of pesticide formulations, with the herbicide business (=80.42% of the total) collecting USD586.13 million (RMB4.06 billion) in H1 2023, down by 40.00% YoY.

Table 2.23-1 Major financial performance indicators of Weifang Rainbow, million U
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Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	728.84	2,159.14	-35.16%	47.60%
Net profit attributable to equity holders of the listed company	61.33	61.33 211.02		76.72%
ltem	End of 30 June, 2023	End of 2022	Change	
Total assets	1,668.40	1,731.90		-0.46%

Note: All changes above are based on RMB.

Source: Weifang Rainbow's financial reports

#### Table 2.23-2 Segment revenue of Weifang Rainbow, H1 2023 vs H1 2022

Item	H1 2023		H1 2022		YoY shange based on BMP
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Herbicides	586,130,010	80.42%	1,050,105,967	86.90%	-40.00%
Others	142,710,393	19.58%	158,310,223	13.10%	-3.09%
Total	728,840,403	100.00%	1,208,416,190	100.00%	-35.16%

Source: Weifang Rainbow's semi-annual report of 2023

## 2.24 Nutrichem Company Limited

According to the semi-annual report for 2023 of Nutrichem Company Limited (Nutrichem, Stock code: 833819), the company's operating income diminished 30.93% YoY to USD427.00 million (RMB2.95 billion), and the net profit attributable to equity holders of the listed company plummeted 78.46% YoY to USD21.70 million (RMB150.13 million). Reasons for the significant changes include:

- Sluggish demand for pesticide formulations on high-level inventory in the market
- Dropping sales and profitability due to continuous price slide of pesticide technical
- Slumping investment benefits because of underperformance of associate companies

In addition, the company's net cash flow generated from operating activities registered -USD41.82 million (-RMB289.42 million), down 163.20% YoY from USD71.14 million (RMB457.93 million), as a result of decreasing sales and payment returns. As of the end of the reporting period, Nutrichem boasted 1,247 overseas registrations, 195 of which are independent registrations, and 422 domestic registrations, including 159 for technical products, topping in the industry in terms of the amount of registrations.

As for construction-in-progress, related investment hit USD130.04 million (RMB899.86 million, =7.05% of the total assets) in the end of H1 2023, increasing 40.56% from USD95.59 million (RMB640.21 million, =5.10% of the total assets) as of 31 Dec., 2022, mainly allocated to subsidiaries. Details of the construction projects are as below:

• On 13 June, 2023, the environmental impact (EI) report of the wholly-owned Hebei Wanquan Hongyu Chemicals Co., Ltd.'s process optimisation and technological transformation project was approved, which was aimed at transforming the obsolete production equipment and expanding production capacities for metamitron (from 1,700 t/a to 4,000 t/a), by-products ammonium sulphate (from 800 t/a to 1,900 t/a) and gypsum (from 1,700 t/a to 4,000 t/a);

• On 30 March, 2023, the 5,800 t/a pesticide technical core intermediate supporting project of the whollyowned Shangyu Nutrichem Co., Ltd. was approved for record filing by the Ecology and Environment Bureau of Shaoxing City, which included forming capacities for 500 t/a quizalofop-P-tefuryl, 1,000 t/a lufenuron, 3,500 t/a 2-nitro-4-methylsulfonylbenzoic acid, 800 t/a benoxacor and 1,300 t/a potassium chloride;

• On 27 Feb., 2023, the EI report of 15,200 t/a pesticide technical and intermediate relocation and upgrading project of Jiangxi Heyi Chemical Co., Ltd. (wholly-owned by Nutrichem) was approved, which aimed to relocate the existing production lines for 2,000 t/a clethdim, 500 t/a cyromazine, 800 t/a procymidone, 1,000 t/a iprodione, 500 t/a dimetachlone, 500 t/a copper oxychloride, 1,000 t/a sulfentrazone and etc.;

• The subsidiary Jiangsu Changlong Agrochemical Co., Ltd.'s new plant area project was constructing since Dec., 2022 upon the environmental approval in November.

Item	H1 2023 2022		YoY change of H1 2023	YoY change of 2022
Total revenue	427.00	1,218.56	-30.93%	9.90%
Net profit attributable to equity holders of the listed company	21.70	157.81	-78.46%	121.93%
ltem	End of 30 June,	End of	Change	
nem	2023	2022	Chan	ige
Total assets	<b>2023</b> 1,845.40		Chan	1.78%

Table 2.24-1 Major financial performance indicators of Nutrichem, million USD

Note: All changes above are based on RMB.

Source: Nutrichem's financial reports

## Table 2.24-2 Segment revenue of Nutrichem, H1 2023 vs H1 2022, USD

	H1 2023		H1 20	22	YoY change based on
Item	Revenue, USD	Proportion	Revenue, USD	Proportion	RMB
Pesticides and plant protection machinery	353,640,688	82.82%	530,379,205	79.80%	-28.32%
Others	73,363,920	17.18%	134,232,933	20.20%	-41.25%
Total	427,004,608	100.00%	664,612,138	100.00%	-30.93%

Source: Nutrichem's semi-annual report of 2023

## 2.25 ABA Chemicals Corporation

According to ABA Chemicals Corporation (ABA CHEM, Stock Code: 300261)'s 2023 semi-annual report, the net profit attributable to equity holders of the listed company in H1 2023 was USD13.98 million (RMB96.74 million), down by 26.04% YoY; the total revenue amounted to USD123.19 million (RMB852.44 million), down by 22.32% YoY. Notably, the operating cost decreased 27.50% YoY to USD81.86 million (RMB566.43 million), and the net cash flow generated from operating activities increased 317.63% YoY from -USD7.51 million (-RMB48.33 million) to USD15.2 million (RMB105.19 million), as a result of reduced cash payment for procurement and labour. During the reporting period, the gross margin increased by 4.75 percentage points YoY to 33.55%, with little change in profit composition or sources.

On 24 March, 2023, the environmental impact report of the environmental protection and safety renovation upgrading and transformation project of ABA CHEM's wholly-owned subsidiary Jiangsu Jiannong Plant Protection Co., Ltd. (Jiannong Plant Protection) was publicised. Designed in the existing plant without changing product portfolio and capacity, the project is to conduct safety and environmental-protection adaptive transformation on the production lines for 300 t/a flusilazole technical, 300 t/a triadimefon technical, 100 t/a diniconazole technical, 200 t/a paclobutrazol technical, 50 t/a novaluron technical, 5,000 t/a 3-chloropivaloyl chloride, 100 t/a trifloxystrobin technical, 500 t/a lufenuron technical, 200 t/a isoxadifen-ethyl.

### Table 2.25-1 Major financial performance indicators of ABA CHEM, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	123.19	298.78	-22.32%	-3.42%
Net profit attributable to equity holders of the listed company	13.98	30.30	-26.04%	11.60%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	606.24	598.52		4.66%

Note: All changes above are based on RMB.

Source: ABA CHEM's financial reports

#### Table 2.25-2 Segment revenue of ABA CHEM, H1 2023 vs H1 2022

ltem	H1 2023		H1 20	22	VeV ebenge based en DMP
item	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Pesticide intermediates	83,071,999	67.44%	105,530,133	61.90%	-15.38%
Pharmaceutical intermediates	19,976,541	16.22%	46,222,573	27.11%	-53.54%
Environmental protection services	10,587,647	8.59%	11,381,882	6.68%	0.00%
Specialty chemicals	3,340,112	2.71%	5,407,435	3.17%	-33.60%
Others	6,209,896	5.04%	1,931,085	1.13%	245.70%
Total	123,186,195	100.00%	170,473,108	100.00%	-22.32%

Source: ABA CHEM's semi-annual report of 2023

## 2.26 Shandong Sino-Agri United Biotechnology Co., Ltd.

According to the semi-annual report for 2023 of Shandong Sino-Agri United Biotechnology Co., Ltd. (Sino-Agri United, Stock code: 003042), the company's revenue declined 11.28% YoY to USD129.69 million (RMB897.42 million); the net loss attributable to equity holders of the listed company was USD1.71 million (RMB11.84 million), down by 128.52% YoY. The loss was mainly driven by sharp decreases in prices of the main products including imidacloprid, acetamiprid, nitenpyram, pyridaben, pymetrozine, pymetrozine, chlorfenapyr, dicamba and prosulfocarb, as well as delayed export orders of part products.

The H1 gross margin plunged to 14.74%, marking 7.14, 6.37 and 10.47 percentage points lower than that in H1 2022 (=21.88%), 2022 (=21.10%) and 2021 (=25.20%), respectively. As of 30 June, 2023, the company's total assets shrank by 3.09% to USD495.30 million (RMB3.43 billion) from USD528.10 million (RMB3.54 billion) in the end of 2022, while investments on construction-in-progress increased 30.75% to USD39.21 million (RMB271.36 million) from USD30.99 million (RMB207.54 million), with a proportion to the total assets up 2.05 percentage points from 5.87% to 7.92%.

Progresses of construction projects of Sino-agri United:

• In Aug., 2023, the Ecology and Environment Bureau of Tai'an City publicised the response to the environmental impact (EI) reassessment of the 10,000 t/a 2-chloro-5-chloromethylpyridine and 5,000 t/a acetamiprid technical constructing project of Sino-agri United, in which the technical workshop had entered the ending stage of device installation and the intermediate workshop had basically completed main structure construction;

• On 3 Nov., 2022, the EI report of 300 t/a dimethenamid-P technical and 200 t/a pyrasulfotole technical project of the wholly-owned Weifang Sino-agri Union Chemical Co., Ltd. (Weifang Union) was approved;

• Weifang Union's project for 1,200 t/a propyzamide technical and 5,000 t/a metam-sodium 35% AS was under smooth trial run.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	129.69	288.69	-11.28%	18.97%
Net profit attributable to equity holders of the listed company	-1.71	10.92	-128.52%	-25.82%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	495.30	528.10		-3.09%
Net asset attributable to equity holders of the listed company	238.89	250.73		-1.55%

Table 2.26-1 Major financial performance indicators of Sino-Agri United, million USD

Note: All changes above are based on RMB. Source: Sino-Agri United's financial reports

## Table 2.26-2 Segment revenue of Sino-Agri United, H1 2023 vs H1 2022, USD

ltem	H1 2023		H1 20	22	VoV obongo bocod on PMP
nem	Revenue, USD	Proportion	Revenue, USD	Proportion	YoY change based on RMB
Pesticide technical	72,354,986	55.79%	88,481,032	56.31%	-12.09%
Pesticide formulations	48,744,337	37.59%	58,532,371	37.25%	-10.47%
Others	8,587,277	6.62%	10,123,737	6.44%	-8.81%
Total	129,686,601	100.00%	157,137,139	100.00%	-11.28%

Source: Sino-Agri United's semi-annual report of 2023

## 2.27 Sino-Agri Leading Biosciences Co., Ltd.

In H1 2023, Sino-Agri Leading Biosciences Co., Ltd. (Sino-Agri Leading, Stock Code: 603970) sustained uptrends of operating results, achieving revenue of USD908.29 million (RMB6.29 billion) and a net profit attributable to equity holders of the listed company of USD22.01 million (RMB152.28 million). However, the yearly growths for both indicators in revenue and net profit (3.15% and 9.56%, separately) had slowed down significantly, compared with those in H1 2022 (24.94% and 24.28%, respectively) and 2022 (32.61% and 23.50%, respectively). That is mainly owing to sharp decrease in pesticide technical prices and bleak market demand at home and abroad.

On 8 Aug., 2023, Sino-Agri Leading signed a Strategic Framework Agreement with Nanjing Red Sun Biochemical Co., Ltd; the latter pledged to supply at least 1,000 tonnes of chlorantraniliprole technical to the company, which will be conducive to the company's performance.

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	908.29	1,746.82	3.15%	32.61%
Net profit attributable to equity holders of the listed company	22.01	31.41	9.56%	23.50%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	829.80	932.67		-8.07%
Net asset attributable to equity holders of the listed company	199.15	196.82		4.55%

#### Table 2.27-1 Major financial performance indicators of Sino-Agri Leading, million USD

Note: All changes above are based on RMB.

Source: Sino-Agri Leading's financial reports

#### Table 2.27-2 Segment revenue of Sino-Agri Leading, H1 2023 vs H1 2022

	H1 2023		H1 2022		YoY change based on
Item	Revenue, USD	Proportion	Revenue, USD	Proportion	RMB
Pesticides and plant protection machinery	908,293,760	100.00%	946,655,518	100.00%	3.15%
Total	908,293,760	100.00%	147,064,707	100.00%	3.15%

Source: Sino-Agri Leading's semi-annual report of 2023

## 2.28 Zhejiang Qianjiang Biochemical Co., Ltd.

In H1 2023, Zhejiang Qianjiang Biochemical Co., Ltd. (Qianjiang Biochemical, Stock Code: 600796) saw its operating income edge down by 1.36% YoY to USD125.35 million (RMB867.39 million), and the net profit attributable to equity holders of the listed company ticked up by 6.85%, reaching USD12.21 million (USD84.47 million). Thereinto, the Q2 revenue was USD73.64 million (RMB509.57 million), up by 3.65% YoY or 42.41% QoQ, and the net profit hit USD7.82 million (RMB54.13 million), up by 24.44% YoY or 78.41% QoQ.

Qianjiang Biochemical's business scope covers environmental engineering, waste removal and disposal, cogeneration, biological products, wastewater treatment and recycling, water treatment and supply. Notably, sales in biologics came in at USD23.80 million (RMB164.70 million, =18.99% of the total) in H1 2023, up by 4.58% from USD24.47 million (RMB157.49 million) in the same period of 2022, boosted by rising pesticide selling prices.

As of 30 June, 2023, the company boasted over 50 technical and new formulation products, enjoying expanding product application fields and a sales network pervading most of the provinces in domestic and tens of overseas markets.

Table 2.28-1 Major financial performance ir	ndicators of Qianjian	ng Biochen	nical, million USD

Item	H1 2023	2022	YoY change of H1 2023	YoY change of 2022
Total revenue	125.35	299.96	-1.36%	-1.09%
Net profit attributable to equity holders of the listed company	12.21	30.77	6.85%	39.28%
Item	End of 30 June, 2023	End of 2022	Change	
Total assets	937.45	999.96		-3.13%
Net asset attributable to equity holders of the listed company	435.21	450.13		-0.10%

Note: All changes above are based on RMB.

Source: Qianjiang Biochemical's financial reports

## Table 2.28-2 Segment revenue of Qianjiang Biochemical, H1 2023 vs H1 2022

ltem	H1 2023		H1 2022		YoY change based on
	Revenue, USD	Proportion	Revenue, USD	Proportion	RMB
Waste Water Treatment and Recycling	31,794,694	25.37%	31,705,950	23.21%	7.80%
Environmental Engineering	28,780,806	22.96%	36,292,838	26.57%	-14.75%
Biological Products	23,800,503	18.99%	24,466,273	17.91%	4.58%
Waste Removal and Disposal	20,067,183	16.01%	24,685,133	18.07%	-12.61%
Cogeneration	12,030,073	9.60%	13,016,778	9.53%	-0.65%
Water Treatment and Supply	6,354,153	5.07%	5,392,963	3.95%	26.66%
Others	2,519,686	2.01%	1,052,904	0.77%	157.26%
Total	125,347,096	100.00%	136,612,839	100.00%	-1.36%

Source: Qianjiang Biochemical's semi-annual report of 2023

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