

Insecticides China News

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Contents

Headline	3
Editor's Note	5
Company Dynamics	6
Hunan Haili: YoY drop of 9.96% in 2015 pesticide revenue	6
Jiangsu FlagChem: sales to Bayer CropScience and Dow AgroSciences take up 33.49% of total revenue in 2015	8
Jiangsu Changlong expected to usher in new development through ownership change	11
Jiangsu Yangnong: YoY rise in 2015 insecticide revenue	13
Market Dynamics	15
China's methomyl market not going well in 2016	15
China's pesticide market recovers as spring ploughing period comes	17
Import and export	18
China's export volume of imidacloprid technical up 0.75% year on year in 2015	18
China's imports and exports of pesticides unsatisfactory in 2015	20
Registrations	23
Acaricide etoxazole arouses general interest among Chinese pesticide companies	23
China approves 15 new insecticide technical registrations in Feb. 2016	24
Policy	25
China's policies and drafts for comment closely related to pesticide formulations in 2015	25
News in Brief	27
Jiangsu Province: insecticide output decreases by 12.4% year on year in 2015	27
Mesa gains temporary registration for 30% tolfenpyrad SC in China	27
Demand for pesticides expected to reduce by 500 tonnes year on year in Jiangsu Province in 2016	28
Jiangsu Changqing has fine performance in 2015	28
Hubei Sanonda to relocate, upgrade and transform insecticide projects	29
Dinotefuran ZF registered in China for first time	29
Beijing Yoloo reaches strategic cooperation with DuPont on chlorantraniliprole	29
MOA: qualified rate of biopesticides remains low	30
Hubei Sanonda to disclose information about asset restructuring in May	30
DuPont: product traceability to be realized in 2016	30
Sanonda Holdings Limited gains capital increment from China Agricultural Development Fund	31
Import volume of insecticide doubles in Jan. 2016	31
Dezhou Luba obtains production license on chlorpyrifos TC project	32
Price Update	32
Ex-works prices of major insecticides in China, March 2016	32
Shanghai port prices of major insecticides, March 2016	33
FOB Shanghai prices of major insecticides, March 2016	34

Headline

On 1 March, 2016, Hunan Haili released its 2015 financial report, showing that its revenue from pesticides and fine chemicals accounted for 95.06% of the total revenue. In detail, revenue from above two main businesses both recorded YoY drops while gross profit margins recorded YoY rises.

According to the full-year 2015 financial report released by FlagChem, its total revenue in this year were up by 6.42% over 2014. And herbicide and insecticide are its two major businesses. In year 2015, Bayer CropScience and Dow AgroSciences were the top two big clients of FlagChem as the sales to these two multinationals accounted for 33.49% of the company's total revenue.

Nantong Jiangshan plans to acquire most of equities in Jiangsu Changlong and Changlong Agrochemicals. The ownership change will inject fresh strength into these two companies especially in environmental protection and management segments. What's more, that Nantong Jiangshan acquires them at low price can fully utilize their advantages to help itself develop further.

Jiangsu Yangnong released, on 15 March, 2016, its 2015 financial report, which showed that it recorded a YoY rise of 10.41% in total revenue. Thereinto, the increasing revenue of its major product insecticide was one the major reasons for the improving total revenue.

According to CCM research, China's price of methomyl TC in March 2016 still remains at a low level. Even though the busy season of 2016 to use insecticides is coming day by day, there haven't been any favorable factors seen to revitalize the depressed market. It is estimated that the methomyl market is not going well in later period.

In mid-March 2016, the ICAMA announced that with the launch of spring ploughing, China's pesticide market began to recover in Feb. 2016.

In 2015, China's export volume of imidacloprid technical increased slightly year on year while the export value fell significantly.

On 8 March, 2016, the ICAMA reported China's imports and exports of pesticides in 2015. The report showed that China's imports and exports of pesticides in 2015 were very unsatisfactory with drops in both volumes and values for the first time in the last five years.

According to data from the ICAMA, since Aug. 2015, China has approved 8 etoxazole registrations, accounting for 73% of etoxazole's total registration approvals in China. In addition, as of mid-March 2016, China's approvals for field testing applications of etoxazole pesticides have added up to 160. These show that registration of etoxazole has aroused general interest among Chinese companies.

In Feb. 2016, China approved 15 new insecticide technical registrations (excluding renewal registrations), covering 12 active ingredients, according to data from the ICAMA.

2015 was a year of opportunities as well as challenges to the pesticide industry. The constant improvement of relevant policies, laws and regulations has an significant influence on the industry: guiding the industry to achieve normative, sound and sustainable development. Hereby CCM has gathered excerpts of the policies and drafts for comment closely related to pesticide formulations in 2015 for your reference.





Editor's Note

On 9-11 March, the CAC 2016 was held in Shanghai. Besides the traditional product display and business discussion, related issues about the 2016 CAC Conference Week (one of the important segments) showed up during the exhibition. On the forums concerning agriculture, the non-agricultural pesticides and seed treatments were one of focuses for industry insiders.

Expert pointed out that the expansion of non-agricultural pesticide field becomes the new profit growth point of the pesticide industry. The non-agricultural pesticides are of stable development, wide application and environmentally friendly and are involving many domains. What's more, developing non-agricultural pesticides can effectively avoid the homogenized competition and help increase pesticide enterprises' added value.

It is introduced that there are 3,776 registered non-agricultural pesticides now, 60.9% of which are applied in families and environmental hygiene. Also, many of them are registered for forestry, uncultivated land and storage & preservation. The major registrants are Nantong Gongcheng Fine Chemical Co., Ltd., Chengdu Rainbow Electric Appliance Co., Ltd. and so on (main formulations: AE and MC).

Regarding the seed treatments, industry insiders considered that its development helped explore new area of the pesticide market, avoiding homogeneous competition. In recent years, the application of seed treatments is gradually expanded to vegetables, coarse cereals, minor crops and lawn.

Insecticides China News will pay close attention to the information of non-agricultural pesticides and seed treatments especially the dynamics about insecticide active ingredient being used for non-agricultural pesticides and the use of seed treatments.

The USD/RMB exchange rate in this report is USD1.00=RMB6.5385 on 1 March, 2016, sourced from the People's Bank of China. All the prices mentioned in this report will include the VAT, unless otherwise specified.



Company Dynamics

Hunan Haili: YoY drop of 9.96% in 2015 pesticide revenue

Summary: On 1 March, 2016, Hunan Haili released its 2015 financial report, showing that its revenue from pesticides and fine chemicals accounted for 95.06% of the total revenue. In detail, revenue from above two main businesses both recorded YoY drops while gross profit margins recorded YoY rises.

Hunan Haili Chemical Industry Co., Ltd. (Hunan Haili), on 1 March, 2016, released its 2015 financial report. The report shows that Hunan Haili made revenue of USD161.68 million (RMB1.06 billion) in year 2015, a YoY fall of 6.97% and achieved net profit of USD2.10 million (RMB14 million), up 23.22% year on year. It should be noted that the company's revenue from pesticides and fine chemicals took up 95.06% of the total revenue in this year. What's more, pesticide revenue and fine chemical revenue both recorded YoY drops while their gross profit margins reported YoY rises.

Table 1: Financial figures of Hunan Haili, 2013-2015, million USD

Item	2015	2014	YoY change (%)	2013
Revenue	161.68	173.80	-6.97	176.29
Net profit	2.10	1.71	23.22	2.65
Item	End of 2015	End of 2014	YoY change (%)	End of 2013
Total assets	283.71	256.22	10.73	282.97
Net asset	114.85	112.71	1.9	132.65

Source: Hunan Haili

Hunan Haili's main business, according to the financial report, encountered many challenges in year 2015 including shortage of external demand, excessive homogenized capacity, huge environmental pressure and hindered transportation. Meantime, the market demand for its leading products including carbofuran and methomyl was weakened as high-toxicity pesticides are banned or limited in more and more countries/regions. In addition, affected by the "8.12" Tianjin blast, Hunan Haili's transportation of agrochemical products suffered from difficulties, thus some orders were temporarily canceled. As a result, the sales volume of these products in Aug. and Sept. 2015 hit record lows of recent years.

To cope with challenges, Hunan Haili vigorously expanded the emerging business, explored the scope and depth of business cooperation of VIP clients, and actively confirmed all kinds of orders. In recent years, its sales volumes of new products reported YoY rises. Particularly, the YoY rises in the sales volumes of carbaryl, propoxur, low-toxicity carbosulfan and benfuracarb relieve the negatives brought by the falling sales of related products of carbofuran and methomyl.

Detailed performance of Hunan Haili's pesticide business and fine chemical business in year 2015:

- Output

- Pesticides: 22,437 tonnes
- Fine chemicals: 9,408 tonnes

- Sales volume

- Pesticides: 22,004 tonnes
- Fine chemicals: 9,312 tonnes

- Revenue

- Pesticides: USD125.97 million (RMB823.68 million), a YoY fall of 9.96%, accounting for 77.91% of the total
- Fine chemicals: USD27.73 million (RMB181.30 million), a YoY fall of 7.10%, accounting for 17.15% of the total

- Gross profit margin

- Pesticides: 24.24%, 4.76 percentage points higher than 2014
- Fine chemicals: 24.80%, 5.92 percentage points higher than 2014

Notably, Hunan Haili also improved its exports. At present, about 1/2 of its products are sold to international markets. The company ranked 31st in China's top-100 pesticide enterprises by sales volume in year 2015 (selection unit: the China Crop Protection Industry Association) and was listed in China's top-50 pesticide exporters in year 2015 (selection unit: China Association of Pesticide Development & Application).

Table 2: Financial performance of Hunan Haili, 2015, million USD

Item	Revenue	Cost of sales	Gross profit margin (%)	YoY change of revenue (%)	YoY change of cost of sales (%)	YoY change of gross profit margin (percentage point)
Bybusiness						
Agriculture and pesticide	153.70	116.29	24.34	-9.46	-15.04	+4.97
Construction and installation	2.48	2.19	11.62	1,070.49	1,049.69	+1.60
Technical service	5.19	3.97	23.56	45.5	41.47	+2.02
Byproduct						
Pesticide	125.97	95.44	24.24	-9.96	-15.28	+4.76
Fine chemical	27.73	20.85	24.8	-7.1	-13.89	+5.92
Construction and installation	2.48	2.19	11.62	1,070.49	1,049.69	+1.60
Technical service	5.19	3.97	23.56	45.5	41.47	+2.02
Byregion						
Hunan	67.20	48.27	28.16	7.14	0.95	+4.40
Jiangxi	18.23	14.50	20.44	-23.7	-23.06	-0.66
Hebei	15.07	9.02	40.1	21.26	1.9	+11.38
Overseas	60.89	50.66	16.8	-18.29	-21.27	+3.15

Source: Hunan Haili

Table 3: Production and sales of Hunan Haili's main products, 2015, tonne

Product	Output	Sales volume	Inventory	YoY change of output (%)	YoY change of sales volume (%)	YoY change of inventory (%)
Pesticide	22,437	22,004	6,961	-6	-19	7
Fine chemical	9,408	9,312	1,255	-9	-15	8

Source: Hunan Haili

Additionally, Hunan Haili actively promoted the transformation of scientific research and platform construction as well as speeded up the the adjustment of industry layout in year 2015. It invested R&D funds to set up 32 R&D or technical service programs, supporting the industrial project development for thiodicarb, CCMT and 2-hydroxy-benzonitril and providing technical support for existing products. Furthermore, it strengthened the promotion and application of new processes on old equipment, advanced the production technique transformation and yield improvement of thiophanate-methyl and dimethoate.

Hunan Haili disclosed that it would focus on following work to improve its revenue in year 2016:

- To reduce the inventory



- To integrate industrial chain and optimize product structure based on the market
- To accelerate the optimization and upgrading of industrial structure, to vary the industry layout, to speed up the R&D of substitutes for high toxic pesticides, to prioritize the development of new environmentally friendly pesticides, to develop emerging industries
- To deepen the strategic cooperation with partners - take advantage of platforms of transnational corporations to expand the market and extend the value chain of self-owned products
- To strengthen the construction of the public service platform, to advance the construction of GLP laboratory and to organize the third-party testing platform company
- To control the costs and increase profit

According to CCM research, Hunan Haili made efforts to cope with the predicament. On one hand, it actively expand the capacity - 4,000 t/a low-toxicity thiodicarb was newly added in year 2014; 800 t/a thiamethoxam, 1,200 t/a clothianidin, 2,000 t/a CCMT and 1,000 t/a 4-Hydroxybenzotrile were constructed in year 2015 and will be gradually put into operation in year 2016. On the other hand, it has included the Hunan Chemical Industry Research Institute in its platform and expected to make it the special research institute of Hunan Haili. It means that the institute will only provide service to Hunan Haili. At present, the institute is studying a dozen pesticides including super-efficient microbial insecticides. Hopefully Hunan Haili will set sail smoothly based on newly-built capacity and updated product lines in year 2016.

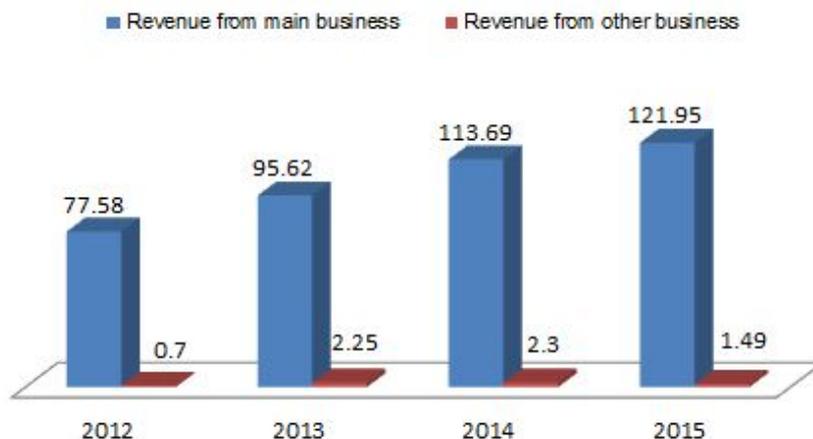
Jiangsu FlagChem: sales to Bayer CropScience and Dow AgroSciences take up 33.49% of total revenue in 2015

Summary: According to the full-year 2015 financial report released by Jiangsu FlagChem, its total revenue in this year were up by 6.42% over 2014. And herbicide and insecticide are its two major businesses. In year 2015, Bayer CropScience and Dow AgroSciences were the top two big clients of Jiangsu FlagChem as the sales to these two multinationals accounted for 33.49% of the company's total revenue.

In Feb. 2016, Jiangsu Flag Chemical Industry Co., Ltd. (Jiangsu FlagChem) released full-year 2015 financial report, showing that the revenue of the company totaled USD123.45 million (RMB807.15 million), up 6.42% over 2014. Herbicide and insecticide are the two major businesses of the company. Looking into Jiangsu FlagChem's businesses, the international market is still the main force backing up the company's revenue and the stable sales to the major clients is also a guarantee of the company's revenue. Of this, Bayer CropScience AG (Bayer CropScience) and Dow AgroSciences LLC (Dow AgroSciences) are the two top contributors to the business revenue of Jiangsu FlagChem and the sales revenue from these two pesticide multinationals together take up 33.49% of the total of the company.



Figure 1: Jiangsu Flagchem's revenue, 2012-2015, million USD



Source: Jiangsu Flagchem

Table 4: Jiangsu FlagChem's major businesses by product in 2015, million USD

Item		2015	2014	YoY change
Self-produced product	Herbicide	63.76	50.47	26.33%
	Insecticide	22.80	28.79	-20.79%
	Others	3.63	2.74	32.63%
Agrochemical products for trade		31.76	31.70	0.20%

Source: Jiangsu FlagChem

To be specific, Bayer CropScience is the biggest client of Jiangsu FlagChem in year 2015, from whom Jiangsu FlagChem got USD25.71 million (RMB168.12 million) and this occupied 20.83% of the total. And Dow AgroSciences, the second largest client, contributed USD15.63 million (RMB102.21 million) to Jiangsu Flagchem's revenue, which took up 16.33% of the total. Based on Jiangsu FlagChem's sales to Bayer CropScience and to Dow AgroSciences in 2013 and 2014, the sales proportions from the former in the company's total revenue were 16.79% and 17.45% respectively and the ones from the latter were 17.89% and 17.45% separately.

It should be noted that in addition to Bayer CropScience and Dow AgroSciences, Jiangsu FlagChem also has three major domestic clients in year 2015. They are Shanghai Freeman Chemicals Co.,Ltd., Anhui Fengle Agrochemical Co., Ltd. and Jiangsu High Hope International Group Corporation. In 2015, the revenue of Jiangsu FlagChem from these top five clients totaled USD62.18 million (RMB406.54 million), accounting for 50.37% of the total.

Although the revenue from these top five clients have taken up a great proportion in Jiangsu FlagChem's total revenue for a long time, which can be told from the boosting sales to Bayer CropScience and Dow AgroSciences in recent years, the high client concentration will be one of the risks that affects the company's future performance. Jiangsu FlagChem revealed that as a strategic supplier, it will continue to keep and strengthen the cooperation with major clients through constantly working together on other new products. For instance, the company expands its cooperation with Dow AgroSciences from intermediates to technical, formulations and even to other new varieties. Nevertheless, if Jiangsu FlagChem's sales to its major clients see substantial declines in the future, the company's performance will be badly affected. Now the company is striving to expand its market and foster cooperation with more important clients to reduce the risk.



Table 5: Jiangsu FlagChem's top 5 clients by sales, 2015

Client	Sales value, million USD	Share (%)
Bayer CropScience AG	25.71	20.83
Dow AgroSciences LLC	15.63	12.66
Shanghai Freeman Chemicals Co.,Ltd.	8.25	6.68
Anhui Fengle Agrochemical Co., Ltd.	6.41	5.19
Jiangsu High Hope International Group Corporation	6.18	5.01
Total	62.18	50.37%

Source: Jiangsu FlagChem

Table 6: Jiangsu FlagChem's top 5 clients (sales by proportion), 2012-2014

No.	2014		2013		2012	
	Client	Sales by proportion (%)	Client	Sales by proportion (%)	Client	Sales by proportion (%)
1	Bayer CropScience AG	17.45	Dow AgroSciences LLC	17.89	Dow AgroSciences LLC	18.46
2	Dow AgroSciences LLC	16.02	Bayer CropScience AG	16.79	Sapec Agro Macau, Lda.	11.04
3	Sapec Agro Macau, Lda.	6.41	Sapec Agro Macau, Lda.	8.03	Jiangsu Changqing Agrochemical Co., Ltd.	10.87
4	Anhui Fengle Agrochemical Co., Ltd.	4.87	Anhui Fengle Agrochemical Co., Ltd.	5.15	Parijat Industries (India) Pvt. Ltd.	7.46
5	Exportos S.A (PTY) Ltd.	4.74	Parijat Industries (India) Pvt. Ltd.	5.12	Cheminova AIS	5.11
Total		49.49		52.98		52.94

Source: Jiangsu FlagChem

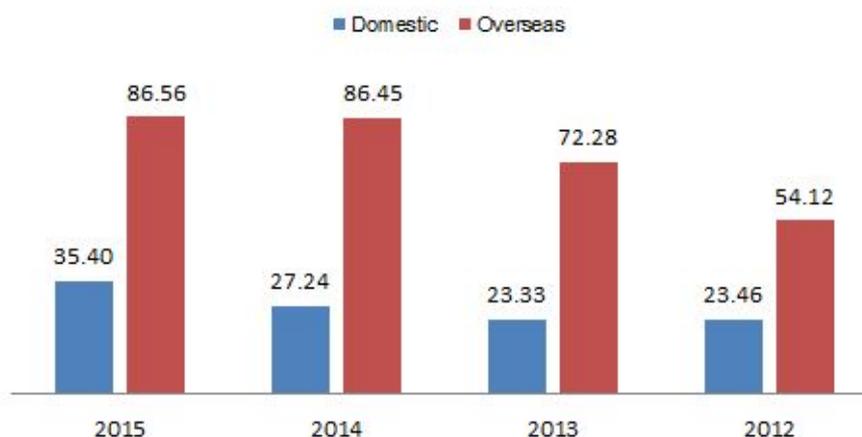
Also, Jiangsu FlagChem disclosed that besides Dow AgroSciences and Bayer CropScience, BASF SE and Syngenta AG are also its major cooperative partners. Thanks to the cooperation with multinationals and the stable sales scale in the overseas market, Jiangsu FlagChem's revenue from the overseas markets in 2015 took up a big proportion as more than two thirds of the company's revenue came from the export business. According to Jiangsu FlagChem's 2015 financial report, the company realized an export revenue of USD86.55 million (RMB565.96 million), accounting for 70.98% of the revenue from the main businesses.

As Jiangsu FlagChem is fairly dependent on the international market, this dependence is also one of the risks affecting the company's future performance. Jiangsu FlagChem believed that if some disadvantageous changes take place on China's pesticide export policies, on importers' pesticide import policies and on the macro-economic situation in the international market, the company will be affected in exporting its products. What's more, the export business of the company is mainly quoted and settled in dollars and the exchange rate is of some uncertainties. Even though Jiangsu FlagChem thinks about the fluctuation of the exchange rate when signing contract with foreign clients and sign contracts of forward settlement and sales exchange with the bank in part of businesses, the export sales will still be affected if the exchange rate encounters big fluctuations.

In face with the potential risks in the international market, Jiangsu FlagChem issued some countermeasures. The company will continue to maintain long-term and stable cooperation with the current overseas clients. In the same time, it will vigorously expand the domestic market and particularly deepen the cooperation with other well-known agrochemical enterprises in the domestic market to complement each other's advantages and help its technical products embrace more shares in the domestic market so that the company will be less dependent on the international market. Currently, Jiangsu FlagChem is mainly engaged in the R&D, production and sales of pesticides and intermediates. Its product varieties mainly include insecticides & herbicide technical, formulations and intermediates, of which insecticides involve clothianidin, lufenuron and diafenthiuron.



Figure 2: Domestic & overseas value of Jiangsu FlagChem's major products in recent years, million USD



Source: Jiangsu FlagChem

Jiangsu Changlong expected to usher in new development through ownership change

Summary: Nantong Jiangshan plans to acquire most of equities in Jiangsu Changlong and Changlong Agrochemicals. The ownership change will inject fresh strength into these two companies especially in environmental protection and management segments. What's more, that Nantong Jiangshan acquires them at low price can fully utilize their advantages to help itself develop further.

Nantong Jiangshan Agrochemical & Chemical Co., Ltd. (Nantong Jiangshan) announced, in mid-March 2016, to acquire most of equities of Jiangsu Changlong Chemicals Co., Ltd. (Jiangsu Changlong) and Jiangsu Changlong Agrochemicals Co., Ltd. (Changlong Agrochemicals), which will help inject fresh strength into the latter two companies especially regarding the environmental protection and the management. Also, this will also be an opportunity for Nantong Jiangshan to develop further based on both sides' advantages.

On 12 March, 2016, Nantong Jiangshan released an announcement to continue suspending the stock trading for major asset restructuring. According to the announcement, Nantong Jiangshan plans to acquire most of equities in Jiangsu Changlong and Changlong Agrochemicals. The counterparties are the shareholders of these two companies including Shenzhen Rongxin Southern Investment Co., Ltd., Tibet Linzhi Changlong Investment Co., Ltd. and so on. Nantong Jiangshan disclosed that it is now negotiating with these shareholders and the details and specific scheme of this transaction have not been determined.

On 15 March, 2016, Nantong Jiangshan released an announcement on this asset restructuring again, saying that it is actively advancing related restructuring work with related parties. After preliminary discussions, it decides to acquire Jiangsu Changlong and Changlong Agrochemicals through share issuing and plans to raise supporting funds by non-public offering to no more than 10 specific investors. The transaction scheme has been formed but the details need to be further confirmed.

On 26 Dec., 2015, Nantong Jiangshan announced to suspend the stock trading from 28 Dec., 2015 for major issue planning. And the company released the progress situation about the major issue on every 5 days after.

It is known that Jiangsu Changlong is the parent company of Changlong Agrochemicals, holding 65% of equities in the latter. Jiangsu Changlong is mainly engaged in the production of chemical intermediates and Changlong Agrochemicals is a pesticide



enterprise owning phosgene resources.

Jiangsu Changlong and Changlong Agrochemicals mainly produce amide pesticides, carbamate pesticides, nicotine pesticides and pyrethroid pesticides. Of these, the capacity of amide pesticides is about 50,000 t/a and the capacity of phosgenated products is about 20,000 t/a. But in recent years, both of them are troubled by the environmental problems. In 2014, Changlong Agrochemicals was charged for dumping by-product hydrochloric acid into the river and was fined USD24.47 million (RMB160 million) with other six enterprises. And Changlong Agrochemicals was the only pesticide enterprises, which was of the largest amount of pollutant and penalty among them. It is disclosed that Changlong Agrochemicals paid USD12.65 million (RMB82.70 million) for the environmental modification.

What's more, Changlong Agrochemicals was real-name reported by its old employees that it has buried hazardous wastes in the ground before relocation. Related person from the Environmental Protection Bureau of Taixing City, Jiangsu Province even disclosed that Changlong Agrochemicals has been the key regulatory object after relocation and it was supervised by the environmental departments for many times due to over-discharged three wastes - waste water, waste gas and waste residues.

In recent years, Jiangsu Changlong and Changlong Agrochemicals fail to perform well. In 2012, 2013, 2014 and H1 2015, Changlong Agrochemicals achieved revenue of USD229 million (RMB1.5 billion), USD260 million (RMB1.7 billion), USD198.82 million (RMB1.3 billion) and USD100.94 million (RMB660 million) and net profit of USD11.31 million (RMB73.95 million), USD6.38 million (RMB41.73 million), USD14.37 million (RMB93.97 million) and USD3.29 million (RMB21.54 million) respectively. In the same periods, Jiangsu Changlong made revenue of USD214.12 million (RMB1.4 billion), USD321.17 million (RMB2.1 billion), USD260 million (RMB1.7 billion) and USD111.65 million (RMB730 million) and net profit of USD10.74 million (RMB70.20 million), -USD7.92 million (-RMB51.79 million), -USD13.77 million (-RMB90.01 million) and USD844,230 (RMB5.52 million) respectively. As the environmental policy tends to be stricter, Jiangsu Changlong and Changlong Agrochemicals will inevitably increase the environmental inputs.

The environmental problems of Jiangsu Changlong and Changlong Agrochemicals also dragged down the performance of Shenzhen Noposion Agrochemicals Co., Ltd. (Shenzhen Noposion). In Feb. 2015, Shenzhen Noposion's private offering application was rejected mainly affected by the environmental problem of Changlong Agrochemicals. According to the information released by China Securities Regulatory Commission, Shenzhen Noposion planned to issue no more than 110 million shares to no more than 10 specific investors at USD1.06/share (RMB6.92/share). And the raised capital (= < USD112.11 million - RMB733 million) will be used for constructing O2O platform for agricultural means of production, development and evaluation and new product registration of pesticide chemicals as well as the working capital supplement. However, the application was finally rejected. What's worse, the plan that Shenzhen Noposion will acquire the remaining equity of Changlong Agrochemicals to control Jiangsu Changlong has not been implemented yet.

Shenzhen Noposion acquired 35% of holdings in Changlong Agrochemicals from Jiangsu Changlong at USD16.82 million (RMB110 million) at the end of 2010. Then it signed equity transfer agreement with Shenzhen Rongxin Southern Investment Co., Ltd. (Shenzhen Rongxin) acquired 20% of holdings in Jiangsu Changlong from Shenzhen Rongxin at USD33.64 million (RMB220 million) and then increased the holdings to 35%. As of now, Jiangsu Changlong's shareholders are Shenzhen Noposion (35%), Shenzhen Rongxin (43.6%) and Changlong Investment (21.4%). Changlong Agrochemicals's shareholders are Changlong Chemicals (65%) and Shenzhen Noposion (35%). Notably, Shenzhen Rongxin is not only the largest shareholder of Jiangsu



Changlong but also is the company controlled by Lu Boqiang, actual controller of Shenzhen Noposion, as well as the second largest shareholder of Shenzhen Noposion.

Industry insider considered that Shenzhen Noposion aimed at expanding the upstream industrial chain, entering the technical area to meet the downstream demand by acquiring Jiangsu Changlong. Also, it can receive advantages in product supply, cost saving and profit guaranteeing to improve its core competitiveness and position in the pesticide industry. However, due to company property and wide difference of culture, Shenzhen Noposion failed to achieve the original goal.

Nevertheless, industry insiders generally hold positive attitude towards Nantong Jiangshan's acquisition this time. They believed that this is the only way for Nantong Jiangshan to grow rapidly, especially when its performance is unsatisfactory.

An insider revealed that it is a good choice for Nantong Jiangshan to acquire Jiangsu Changlong and its subsidiary at low prices. Jiangsu Changlong is a medium- and large-scale technical enterprise mastering mature production technology in China, ranking the top 10 among Chinese pesticide enterprises. It has complete product varieties and enjoys resource advantage. Changlong Agrochemicals has rich product lines, phosgene resources and registrations but is lack of environmental protection and management. On the contrary, Nantong Jiangshan is environmentally friendly and has excellent management but with single product structure.

Some industry insiders considered that Nantong Jiangshan can achieve synergies after acquiring Jiangsu Changlong and Changlong Agrochemicals.

Firstly, all these three companies are state-owned enterprises before and then being relocated. Nantong Jiangshan can quickly copy its management mode and environmental measures to create profits.

Secondly, Nantong Jiangshan can expand the capacity of corresponding products, becoming an agrochemical enterprise with richest product varieties and most obvious scale advantage. Especially, it can dominate the amide herbicide market, improving its bargaining ability and pricing ability of upstream raw material. Now the price of amide herbicide is rising stably. After the acquisition, the price of acetochlor is very likely to reach USD2,905.87/t (RMB19,000/t).

Thirdly, Nantong Jiangshan has rarely alike clients with Jiangsu Changlong and Changlong Agrochemicals. That is to say Nantong Jiangshan's clients will be greatly increased after the acquisition.

Jiangsu Yangnong: YoY rise in 2015 insecticide revenue

Summary: Jiangsu Yangnong released, on 15 March, 2016, its 2015 financial report, which showed that it recorded a YoY rise of 10.41% in total revenue. Thereinto, the increasing revenue of its major product insecticide was one the major reasons for the improving total revenue.

On 15 March, 2016, Jiangsu Yangnong Chemical Co., Ltd. (Jiangsu Yangnong) released its 2015 financial report. According to the report, Jiangsu Yangnong achieved total revenue of USD476.28 million (RMB3.11 billion), up 10.41% year on year; its net profit increased by 0.09% slightly, being USD69.60 million (RMB455 million). Of this, the YoY rise in the revenue from its major product insecticide became one the major reasons for this good performance.

Table 7: Financial figures of Jiangsu Yangnong in 2015, million USD

Item	2015	2014	YoY change (%)
Total revenue	476.28	431.37	10.41
Net profit	69.60	69.54	0.09
Item	End of 2015	End of 2014	YoY change (%)
Total assets	712.30	658.83	8.12
Net assets	479.71	415.67	15.41

Source: Jiangsu Yangnong

Pesticide is Jiangsu Yangnong's major business absolutely. In 2015, the company's revenue from pesticides was USD466.46 million (RMB3.05 billion), a YoY rise of 9.43%, accounting for 98% of the company's total. Jiangsu Yangnong disclosed that it's stable development under the increasing economic downward pressure and constant market downturn was mainly thanks to its well-managed pesticide business both at home and abroad.

In 2015, the domestic family hygiene industry was impacted by many negative factors like shortened busy season for sales, product infringement and anabolic market competition. Jiangsu Yangnong adopted differentiated marketing mode, carried out marketing model of taking all business account, strengthened managing the patented varieties and improving the promotion of new formulations, realizing a YoY rise of 13.1% in the sales of hygienic insecticides.

In 2015, the domestic pesticide market suffered from fierce competition due to alleviative insect pests and weeds, reduced pesticide consumption, weakened pesticide demand and sliding product price. Jiangsu Yangnong integrated the business to participate in the competition. It took the advantages of increased product varieties and improved brand effect to achieve great YoY rises in sales of many pesticides through perfecting the marketing channels, participating in the government procurement auction, strengthening the technical application service and making good use of the E-commerce platform. In this year, its revenue from the domestic pesticide business increased by 95.3% year on year.

In 2015, the demand was weak and prices were low in the international pesticide market affected by the sliding global economy, extreme weather in South America and the de-stocking of transnational corporations. To cope with this, Jiangsu Yangnong actively sought cooperation with more transnational corporations to expand its sales of major products. It maintained stable growth in the international sales volume in year 2015. But its export value of self-developed products reported a YoY fall of 0.02% mainly due to the declining glyphosate price.

In addition, Jiangsu Yangnong revealed that although the slumping glyphosate price posed huge pressure on its performance in 2015, the expected profit gained by the smooth production its subsidiary Jiangsu Youjia Plant Protection Co., Ltd.'s first-phase project help Jiangsu Yangnong to offset some negative impact brought by the dropping glyphosate price.

Table 8: Main businesses of Jiangsu Yangnong in 2015, million USD

By industry						
Item	Revenue	Cost of sales	Gross profit margin (%)	YoY change in revenue (%)	YoY change in cost of sales (%)	YoY change in gross profit margin (percentage point)
Pesticide	466.46	340.15	27.08	9.43	8.72	0.48
By region						
Item	Revenue	Cost of sales	Gross profit margin (%)	YoY change in revenue (%)	YoY change in cost of sales (%)	YoY change in gross profit margin (percentage point)
Domestic	165.18	116.79	29.29	32.23	39.98	-3.91
Overseas	301.28	223.35	25.86	-0.02	-2.65	2.00

Source: Jiangsu Yangnong



In 2015, Jiangsu Yangnong's sales volume, revenue, and gross profit margin of insecticides amounted to 10,198.90 tonnes, USD242.23 million (RMB1.58 billion), and 29.75%, up 24.28%, 9.29% and 2.69 percentage points year on year respectively. The rising sales from insecticide became one of the major reasons for Jiangsu Yangnong's good performance.

The revenue and gross profit margin from its another major pesticide herbicide were USD185.49 million (RMB1.21 billion) and 25.45%, YoY changes of 0.60% and -0.77 percentage point respectively.

Other pesticides reported a YoY rise of 114.41% and a YoY fall of 6.63 percentage points in revenue and gross profit margin, being USD38.73 million (RMB253.26 million) and 18.15% respectively.

Table 9: Main business of Jiangsu Yangnong by product in 2015, million USD

Item	Revenue	Cost of sales	Gross profit margin (%)	YoY change in revenue (%)	YoY change in cost of sales (%)	YoY change in gross profit margin (percentage point)
Insecticide	242.23	170.17	29.75	9.29	5.26	2.69
Herbicide	185.49	138.28	25.45	-0.6	0.44	-0.77
Others	38.73	31.70	18.15	115.41	134.39	-6.63

Source: Jiangsu Yangnong

Table 10: Production and sales of Jiangsu Yangnong in 2015, tonne

Item	Output	Sales volume	Inventory	YoY change in output (%)	YoY change in sales volume (%)	YoY change in inventory (%)
Insecticide	10,464.76	10,198.90	493.85	27.51	24.28	116.61
Herbicide	35,392.97	35,310.63	154.27	-1.31	-1.59	114.46

Note: Output, sales volume and inventory are converted into 100% AI.

Source: Jiangsu Yangnong

Market Dynamics

China's methomyl market not going well in 2016

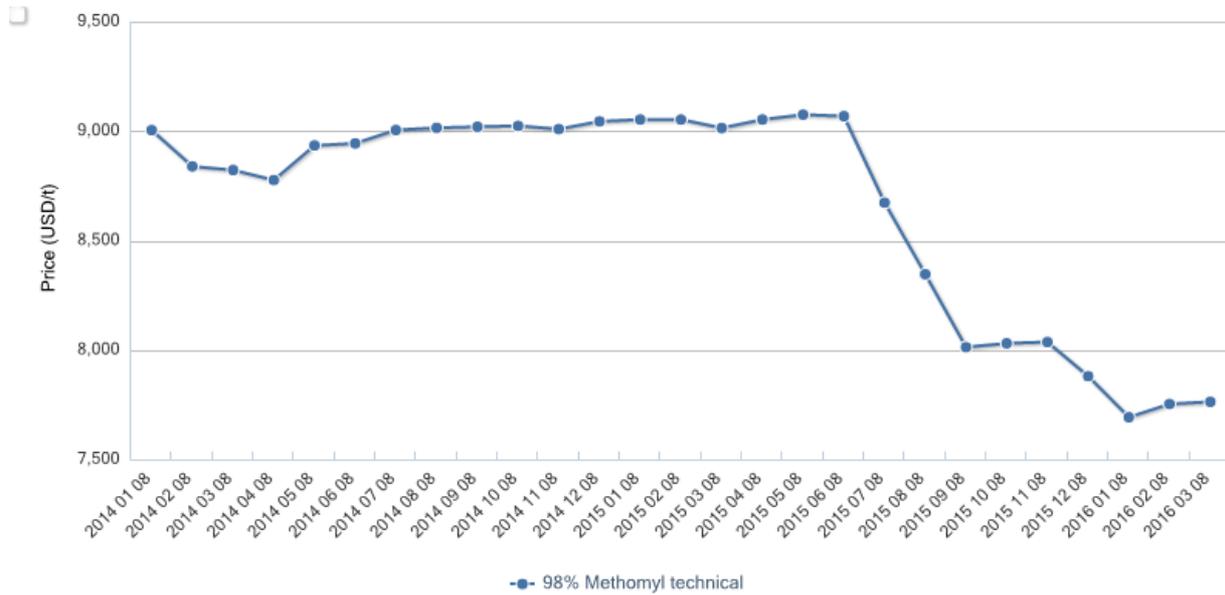
Summary: According to CCM research, China's price of methomyl TC in March 2016 still remains at a low level. Even though the busy season of 2016 to use insecticides is coming day by day, there haven't been any favorable factors seen to revitalize the depressed market. It is estimated that the methomyl market is not going well in later period.

According to analyst CCM, China's price of methomyl technical in March 2016 is still stuck at a low level. Experienced industry insiders disclosed that the high stocking and the weak demand are now the two major blocks keeping the price of methomyl down. Although the busy season of 2016 to use insecticides is approaching, none of favorable factors have showed yet to boost the gloomy market. Facing the technical market with high inventory and the stagnant sales at home and abroad, there is possibility and space for China's methomyl TC price to go down. Therefore, the methomyl market in later period is not promising.

Traditionally, the insecticide market would usher into its busy season in March. The depressed market throughout winter would gradually recover in spring and the prices of pesticide products, lingering on a low level, would meet different degrees of increases. However, reviewing China's methomyl market in the recent two years, the price of methomyl TC has developed abnormally and even declined steadily instead of rising significantly in the busy season. It is the high stocking and the weak demand that keep the price from growing. And it is the overcapacity and the limited and slow consumption in the downstream sector that should be responsible for the problem of high inventory.



Figure 3: Ex-works prices of 98% methomyl TC in China, Jan. 2014-March 2016



Source: CCM

It is learned from the data released by China Crop Protection Industry Association (CCPIA) that now the production capacity of major domestic methomyl producers' devices totals around 20,000 t/a. Some enterprises are equipped with big production capacity. They are Hunan Haili Chemical Industry Co., Ltd. (Hunan Haili - 5,000 t/a), Hubei Sanonda Co., Ltd. (Hubei Sanonda - 4,000 t/a), Shandong Huayang Technology Co., Ltd. (Shandong Huayang - 3,000 t/a), Jiangsu Changlong Chemicals Co., Ltd. (Jiangsu Changlong - 2,000 t/a) and NanLong (Lianyungang) Chemicals Co., Ltd. (Nanlong Chemicals - 2,000 t/a). Actually, the annual outputs of these enterprises have greatly exceeded the actual downstream demand.

According to market surveys, now Hunan Haili, NanLong Chemical, Shandong Huayang, Jiangsu Changlong are generally bearing the inventory pressure.

Shandong Huayang said that it stopped and overhauled the devices of producing methomyl TC, consumed the stocks, and could take new orders as usual.

Shandong Libang Chemical Co., Ltd. also said it stopped the devices of producing methomyl TC for overhaule, consumed the stocks, and could take new orders as usual.

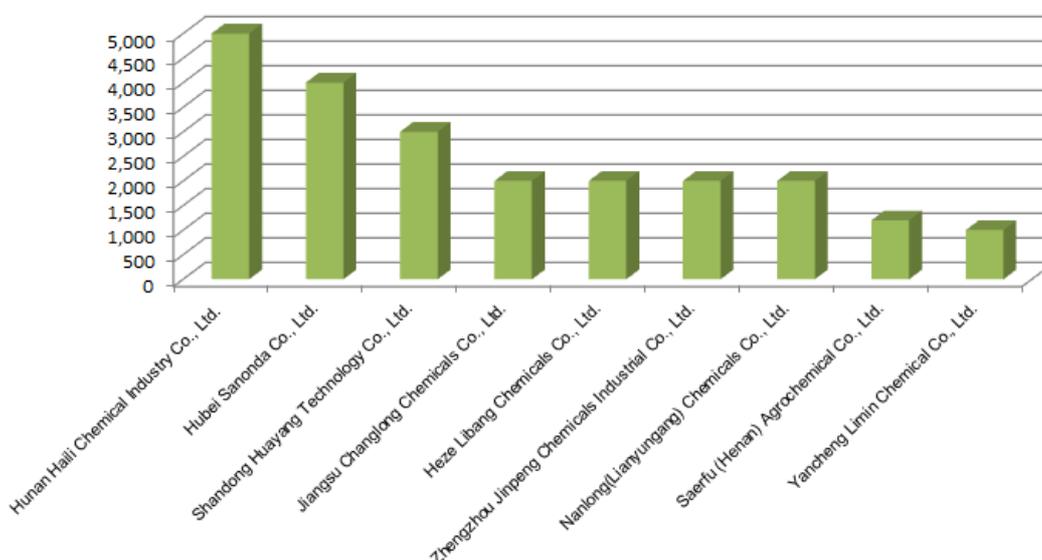
Jiangsu Jialong Chemical Co., Ltd. said it stopped the devices of producing methomyl TC for overhaule. As the company has no inventory now, it will not quote for the moment.

Hunan Haili said that its devices run smoothly, and the company has inventory and can take new orders.

Nanlong Chemical also said that its devices run regularly, and the company has inventory and can take orders as usual.

Kaifeng Luyu Biotechnology Co., Ltd. said that it stopped the devices of producing methomyl TC for overhaule. As the company has no inventory for the moment and it cannot quote.

Figure 4: Production capacities of some major producers for methomyl TC in China, 2015



Source: CCPIA

In regard to the downstream consumption market, methomyl, a kind of broad-spectrum carbamate insecticide, is of great volatility and high inhalation toxicity. In fact, the Chinese government has banned methomyl from applying on tea trees, fruit trees and vegetables since June 2011. Now domestic methomyl products are mainly used for controlling the pests in cotton and other commercial crops and in forest trees. Besides, affected by the gloomy economic environment all over the world and developed countries' restriction to methomyl, the export volume of methomyl in recent years also recorded a significant decline. According to China Customs and CCM, China's export volume of methomyl was 8,592.01 tonnes in 2015, substantially down by 27.10% from 2014.

China's pesticide market recovers as spring ploughing period comes

Summary: In mid-March 2016, the ICAMA announced that with the launch of spring ploughing, China's pesticide market began to recover in Feb. 2016.

In mid-March 2016, the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA) announced that with the launch of spring ploughing, China's pesticide market began to recover in Feb. 2016 according to its monitoring. Sales volume in both wholesale and retail increased, supply was sufficient and market prices were quite stable.

- Wholesale

In Feb. 2016, the total sales volume of pesticide increased by 27.1% month on month. Specifically, that of herbicides soared by 70.8%, that of fungicides increased slight while that of insecticides reduced by 23.7% month on month.

As for wholesale prices, insecticides and herbicides prices up slightly while fungicide prices dropped a little month on month and the fluctuation ranges were within 0.1%. In particular, wholesale prices of pymetrozine, mancozeb, glyphosate and paraquat presented downward trends while those of abamectin, triazophos, chlorothalonil, thiophanate-methyl and quinalofop-P-ethyl climbed up.



- Inventory

Inventory of insecticides was sufficient, increasing by 34.6%, that of fungicides reduced by 9.8% and that of herbicides increased by 6.1% month on month in Feb. 2016.

- Retail

In Feb. 2016, sales volume of pesticides increased by 12.1% month on month. Out of these, sales volume of insecticides grew significantly by 25.4% and that of fungicides and herbicides increased by 4.9% and 6.1% respectively.

Regarding the retail prices, that of insecticides dropped by about 0.5% and that of fungicides and herbicides both increased slightly by about 0.1% month on month. To be more specific, prices of insecticide products such as abamectin, imidacloprid and bifenthrin fell while prices of fungicides like difenoconazole and chlorothalonil and herbicides like clethodim increased.

Import and export

China's export volume of imidacloprid technical up 0.75% year on year in 2015

Summary: In 2015, China's export volume of imidacloprid technical increased slightly year on year while the export value fell significantly.

In 2015, China's pesticide market was depressed and prices of many kinds of pesticides kept falling under the influence of the depressed market conditions.

Imidacloprid, as one of the leading insecticides in China, has always been playing an important role in China's exports of pesticides. Then, under such depressed market conditions, how imidacloprid technical performed in 2015?

According to data from General Administration of Customs of the People's Republic of China (China Customs) and CCM's analysis on imports and exports data, China exported 10,219.52 tonnes of imidacloprid technical, basically the same as that in 2014, only increased slightly by 0.75% year on year. Out of them, export volume of 97% imidacloprid technical reached 6,301.87 tonnes, up by 0.23% year on year and accounting for 61.67% of the total export volume of imidacloprid technical; export volume of 95% imidacloprid technical hit 3,634.35 tonnes, increasing significantly by 66.39% year on year and accounting for 35.56% of the total. Yet, export volume of 96% imidacloprid technical dropped dramatically by 83.06% year on year to only 283.30 tonnes, making China's total export volume of imidacloprid technical essentially the same as that in 2014.

However, China's export value of imidacloprid technical collapsed in spite of the export volume remained quite stable. Nevertheless, it is the dropping export price that boosted the export volume. After all, low price can attract purchasers to purchase or stockpile more goods.

According to data from China Customs, China's average export price of imidacloprid technical in 2015 was USD15.98/t, declining by 25.48% year on year. Specifically, the average export price of 97% imidacloprid technical that China exported the most was USD16.91/kg, dropping by 24.74% year on year; that of 95% imidacloprid technical was USD14.48/t, down by 25.48% year on year and that for 96% imidacloprid technical dropped most significantly by 33.24% year on year to USD14.50/kg.

In 2015, among the top five imidacloprid technical manufacturers (by export volume), only one had falling export volume. However,

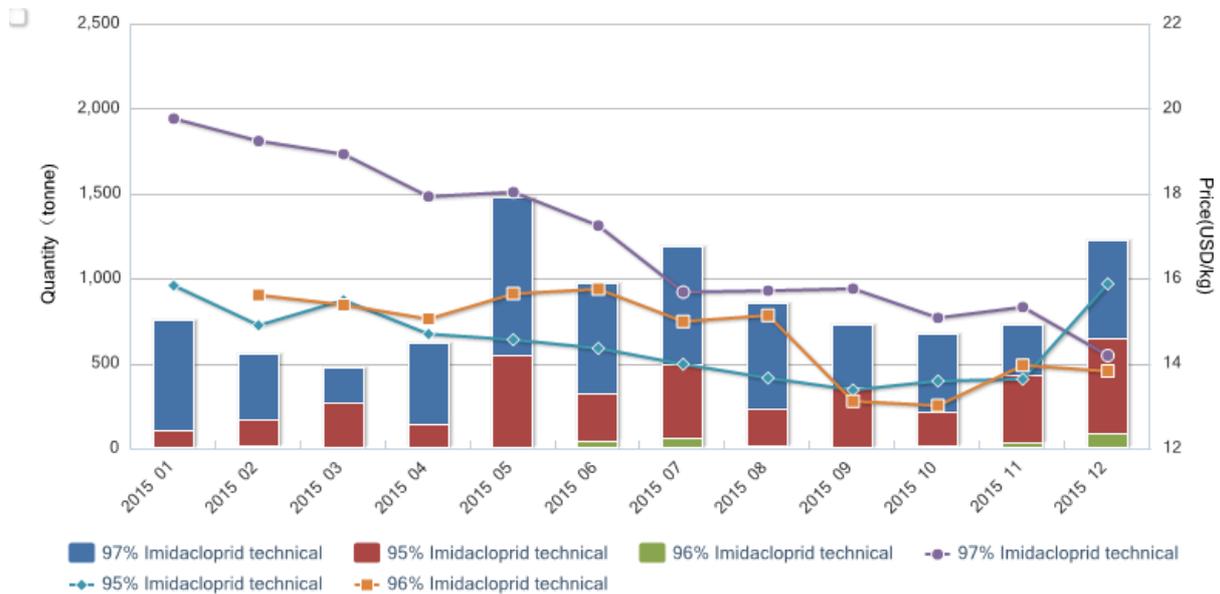


the average export prices of imidacloprid technical of these top five manufacturers all dropped significantly with YoY decrease rates all surpassed 20%.

As for export destinations, China's exported imidacloprid technical to 56 countries and regions in 2015, with Brazil (up by 12.56% year on year), India (up by 58.92% year on year) and the US (up by 35.04% year on year) as the top three.

As a whole, export destinations of imidacloprid technical were quite concentrated. Export volume to these top three destinations reached 5,158.97 tonnes, accounting for 50.48% of the total.

Figure 5: China's exports of imidacloprid technical, 2015



Source: CCM & China Customs

Table 11: China's top five imidacloprid technical exporters by export volume, 2015

Exporter	Export volume, tonne	YoY change	Average export price, USD/kg	YoY change
Jiangsu Yangnong Chemical Group Co., Ltd.	2,031.48	11.55%	17.46	-24.61%
Jiangsu Changqing Agrochemical Co., Ltd.	1,709.28	30.93%	17.22	-22.57%
Hebei Yetian Agrochemicals Co., Ltd.	1,043.13	18.53%	14.22	-29.22%
Jiangsu Kwin Group Co., Ltd.	816.06	-32.30%	15.27	-28.56%
Shandong Qilin Agrochemical Co., Ltd.	650.23	222.45%	15.44	-28.78%

Source: CCM & China Customs

Table 12: China's top 10 imidacloprid technical export destinations, 2015

No.	Export destination	Export volume, tonne	YoY change	Average export price, USD/kg	YoY change
1	Brazil	2,103.2	12.56%	15.29	-29.86%
2	India	1,594.8	58.93%	13.78	-36.82%
3	The US	1,460.97	35.04%	17.21	-22.06%
4	Germany	781.2	5.39%	19.55	-18.13%
5	Argentina	356	-8.88%	15.75	-24.17%
6	Paraguay	284.45	-23.72%	15.14	-31.74%
7	Colombia	264.63	-35.56%	19.27	-12.17%
8	Turkey	260.04	-14.66%	14.2	-22.36%
9	Russia	254.3	39.93%	18.5	-14.15
10	Pakistan	251.85	-31.97%	16.25	-21.57%

Source: CCM & China Customs

China's imports and exports of pesticides unsatisfactory in 2015

Summary: On 8 March, 2016, the ICAMA reported China's imports and exports of pesticides in 2015. The report showed that China's imports and exports of pesticides in 2015 were very unsatisfactory with drops in both volumes and values for the first time in the last five years.

**Note: Data in the article come from the PPT of Zhang Wenjun, chief of the Division of International Exchange and Service of the Institute for the Control of Agrochemicals, Ministry of Agriculture.*

On 8 March, 2016, the 10th China International Forum on Development of Pesticide Industry was held in Shanghai. In the meeting, Zhang Wenjun, chief of the Division of International Exchange and Service of the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA), analyzed China's imports and exports of pesticides in 2015 in detail.

According to Division Chief Zhang, China's imports and exports of pesticides in 2015 were very unsatisfactory with drops in both volumes and values for the first time in the last five years. To be more specific, export volume and value dropped by 8.06% and 16.87% year on year to 1.51 million tonnes and USD7.28 billion respectively while import volume and value fell by 14.21% and 8.88% year on year to 57,600 tonnes and USD678 million respectively. In addition to this, the proportion of exports of formulations to China's total exports grew gradually and that of technical fell year by year, indicating that formulations have become already dominated the export market in China.

China's export volume of the top 30 pesticides by export value in 2015 amounted to 1.07 million tonnes, accounting for 70.7% of the China's total export and the export value reached USD4.25 billion, accounting for 58.3% of the total export value.

Out of these 30 pesticides, the top 20 were: glyphosate (glyphosate-isopropylammonium included), paraquat, imidacloprid, clethodim, chlorpyrifos, atrazine, dicamba, abamectin, sulfentrazone, chlorothalonil, methomyl, acephate, tebuconazole, chlorantraniliprole, 2,4-D, carbendazim, glufosinate-ammonium, mancozeb and bifenthrin. About half of these 20 pesticides recorded drops in both export volume and export value. It is worth noting that the decrease rates of export values of glyphosate, imidacloprid and atrazine even surpassed twice of those of their export volumes and export value of paraquat dropped surprisingly even though its export volume increased.

Table 13: China's exports of pesticide technical, 2011-2015

Year	Export volume, tonne	YoY change	Proportion (to total export volume)	Export value, billion USD	YoY change	Proportion (to total export value)
2011	654,000	-	46.42%	3.92	-	63.22%
2012	742,600	13.55%	46.43%	5.12	30.66%	65.12%
2013	629,300	-15.26%	38.80%	5.08	-0.75%	59.63%
2014	616,800	-1.98%	37.57%	5.03	-1.06%	57.40%
2015	545,600	-11.54%	36.16%	4.26	-15.27%	58.50%

Source: ICAMA & China Customs

Table 14: China's exports of pesticide formulations, 2011-2015

Year	Export volume, tonne	YoY change	Proportion (to total export volume)	Export value, billion USD	YoY change	Proportion (to total export value)
2011	754,800	-	53.58%	2.28	-	36.78%
2012	856,800	13.52%	53.57%	2.74	20.30%	34.88%
2013	992,700	15.86%	61.20%	3.44	25.47%	40.37%
2014	1,024,900	3.25%	62.43%	3.73	8.46%	42.60%
2015	963,800	-5.96%	63.85%	3.02	-19.02%	41.50%

Source: ICAMA & China Customs

Table 15: Top 10 pesticides that China exported by export value, 2015

No.	Pesticide	Export volume, tonne	YoY change	Proportion (to total export volume)	Export value, million USD	YoY change	Proportion (to total export value)
1	Glyphosate	526,400	-14.53%	34.87%	1,273	-39.24%	17.48%
2	Paraquat	181,400	22.75%	12.02%	443	-15.79%	6.09%
3	Imidacloprid	21,700	-7.86%	1.43%	224	-29.34%	3.08%
4	Clethodim	16,800	52.42%	1.11%	144	47.07%	1.98%
5	Chlorpyrifos	27,200	-24.71%	1.80%	133	-27.47%	1.83%
6	Atrazine	40,800	-14.95%	2.70%	120	-30.49%	1.65%
7	Dicamba	7,500	16.51%	0.49%	117	5.55%	1.60%
8	Abamectin	10,400	8.18%	0.69%	109	49.15%	1.50%
9	Sulfentrazone	4,000	11.98%	0.27%	106	9.46%	1.46%
10	Chlorothalonil	24,600	13.45%	1.63%	100	19.38%	1.37%

Source: ICAMA & China Customs

Table 16: Top 10 pesticides that China exported by growth rate of export value, 2015

No.	Pesticide	Export value, million USD	YoY change	Proportion (to total export value)
1	Emamectin benzoate	21.95	276.50%	0.30%
2	Hexazinone	25.24	60.25%	0.35%
3	Chlorfenapyr	16.70	53.21%	0.23%
4	Glufosinate-ammonium	78.88	50.33%	1.08%
5	Abamectin	108.97	49.15%	1.50%
6	Clethodim	144.13	47.07%	1.98%
7	Imazapyr	15.61	32.63%	0.21%
8	Trifluralin	39.63	31.70%	0.54%
9	Pendimethalin	37.35	29.42%	0.51%
10	Haloxypop-R-methyl	50.81	25.77%	0.70%

Source: ICAMA & China Customs

Table 17: Top 10 pesticides that China exported by decrease rate of export value, 2015

No.	Pesticide	Export value, million USD	YoY change	Proportion (to total export value)
1	Rich-d-transallethrin	14.92	-55.15%	0.20%
2	acephate	94.60	-54.38%	1.30%
3	Metamitron	18.66	-51.93%	0.26%
4	Clopyralid	21.29	-51.12%	0.29%
5	Metribuzin	43.38	-43.09%	0.60%
6	Carbofuran	28.30	-41.52%	0.39%
7	Glyphosate	1,272.56	-39.24%	17.48%
8	Pretilachlor	18.55	-37.56%	0.25%
9	Dichlorvos	20.46	-36.22%	0.28%
10	Methomyl	97.28	-33.15%	1.34%

Source: ICAMA & China Customs

Regarding export destinations, China exported pesticides to over 180 countries and regions round the world in 2015. The top 22 export destinations in order by export value were the US, Brazil, Australia, Argentina, Vietnam, Thailand, Indonesia, Pakistan, Israel, Russia, Nigeria, Columbia, South Africa, Japan, France, Turkey, Belgium, Singapore, Mexico, Uruguay and Paraguay. Export values to these countries and regions were all surpassed USD100 million.

The total export volume to these countries and regions reached 1.01 million tonnes with a total export value of USD5.18 billion,



accounting for 67.0% and 71.1% of China's total respectively. In particular, export volume and value to the US and Brazil hit 236,000 tonnes and USD1.60 billion respectively, accounting for 15.9% and 21.9% of China's total respectively.

Table 18: China's top 10 pesticide export destinations, 2015

No.	Destination	Export value, million USD	YoY change	Proportion (to total export value)	Continent	Ranking in 2014
1	The US	977.64	-1.56%	13.42%	North America	1
2	Brazil	617.56	-26.57%	8.48%	South America	2
3	Australia	394.72	1.89%	5.42%	Oceania	5
4	Argentina	308.58	-35.20%	4.24%	South America	3
5	Vietnam	298.62	-14.86%	4.10%	Asia	7
6	Thailand	258.97	-17.04%	3.56%	Asia	6
7	India	247.46	-19.88%	3.40%	Asia	4
8	Indonesia	242.28	-29.36%	3.33%	Asia	8
9	Pakistan	186.69	-12.73%	2.56%	Asia	11
10	Nigeria	163.96	-43.49%	2.25%	Asia	9

Source: ICAMA & China Customs

Table 19: China's top 10 export destinations by growth rate of export value, 2015

No.	Destination	YoY change of export volume	Proportion (to total export volume)	YoY change of export value	Proportion (to total export value)
1	Iraq	108.89%	0.10%	146.73%	0.10%
2	Croatia	192.18%	0.13%	121.58%	0.12%
3	Republic of Latvia	209.65%	0.20%	101.29%	0.19%
4	Greece	136.21%	0.08%	68.79%	0.07%
5	Crnagora	71.59%	0.13%	64.59%	0.11%
6	The Republic of Kazakhstan	104.32%	0.55%	48.48%	0.42%
7	The Republic of Uzbekistan	78.20%	0.05%	46.50%	0.07%
8	The UK	42.80%	0.39%	38.48%	0.65%
9	Switzerland	-51.23%	0.11%	29.86%	0.50%
10	Cambodia	15.60%	0.27%	25.39%	0.17%

Source: ICAMA & China Customs

In addition, in recent years, China's import volume and value of pesticides both increased gradually. The growth rates began to slow down in 2013 and negative growths appeared in 2015.

Specifically, import value of fungicides reached USD296 million, accounting for 43.33% of the total in 2015; that of insecticides and herbicides ranked second and third with import value of USD207 million and USD156 million, accounting for 30.60% and 22.93% of China's total respectively in 2015.

Table 20: China's imports of pesticides, 2011-2015

Year	Import volume, tonne	YoY change	Import value, million USD	YoY change
2011	43,900	-	521	-
2012	53,500	21.80%	564	8.20%
2013	62,200	16.30%	698	23.80%
2014	67,200	7.90%	745	6.70%
2015	57,600	-14.20%	678	-8.90%

Source: ICAMA & China Customs

Table 21: China's imports of different kinds of pesticides, 2015

Pesticide	Import volume, tonne	Proportion (to total import volume)	Import value, million USD	Proportion (to total import value)
Herbicide	19,300	33.50%	156	22.93%
Insecticide	14,900	25.90%	207	30.60%
Fungicide	22,900	39.80%	296	43.33%
Rodenticide	100	0.10%	0.26	0.04%
Plant growth regulator	400	0.70%	20	3.10%

Source: ICAMA & China Customs



Registrations

Acaricide etoxazole arouses general interest among Chinese pesticide companies

Summary: According to data from the ICAMA, since Aug. 2015, China has approved 8 etoxazole registrations, accounting for 73% of etoxazole's total registration approvals in China. In addition, as of mid-March 2016, China's approvals for field testing applications of etoxazole pesticides have added up to 160. These show that registration of etoxazole has aroused general interest among Chinese companies.

According to data from the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA), as of mid-March 2016, China has approved 11 registrations of etoxazole pesticides in total and 8 were approved after July 2015. A majority of the registrations were approved within half a year, indicating that registration of etoxazole has aroused general interest among Chinese companies.

Etoxazole is a kind of acaricide with special structure developed by Sumitomo Chemical Co., Ltd. (Sumitomo Chemical). It has great effect on killing mite eggs as well as larva and nymph mites. In addition, the pesticide has durable effect and has no cross resistance with conventional acaricides.

Etoxazole is mainly used to prevent and control red spiders in apple and citrus trees and it also has outstanding effects on preventing and controlling mites in cotton, flowers, vegetables and other crops. Targets of the etoxazole formulations registered in China so far are all red spiders in citrus and apple trees.

Few Chinese farmers used etoxazole before but in recent years, etoxazole has been used as substitute for acaricides like spirodiclofen, bifenazate, so demand for etoxazole in China's market has been increasing.

According to the ICAMA, before Aug. 2015, only Sumitomo Chemical had official registrations of etoxazole in China: one for 93% etoxazole technical and one for 110 g/L etoxazole SC. Guangdong Jinnongda Bio-technology Co., Ltd. had the registration of the sub packaged 110 g/L etoxazole SC from Sumitomo Chemical.

Since Aug. 2015, Chinese companies began to register etoxazole pesticides (subpackage excluded). As of mid-March 2016, altogether 6 companies gained 8 etoxazole registrations in total, including 1 for technical and 7 for formulations.

Furthermore, on the *First Batch of Temporary Pesticide Registrations to be Approved in 2016* that released by the ICAMA, there were 3 mixed etoxazole formulation registrations applied by domestic companies, indicating that there may be 3 more etoxazole registrations in China soon.

With Chinese pesticide companies showing more and more interest in etoxazole in the recent two years, the quantity of etoxazole's field testing application also has added up to 160 as of mid-March 2016.

Yet, it is worth noting that, according to Zhang Ybin, senior engineer from Shanghai Pesticide Research Institute, etoxazole can control and prevent mite eggs, larva mites and nymph mites, but it has no effect on adult mites. Besides, mites' resistance to etoxazole cannot be ignored with the consumption volume of etoxazole growing year by year in China.

Table 22: Registrations of etoxazole in China before Aug. 2015

Registration No.	Active ingredient	Specification	Manufacturer
PD20120215F090135	Etoxazole	110 g/L SC	Guangdong Jinnongda Bio-technology Co., Ltd.
PD20120215	Etoxazole	110 g/L SC	Sumitomo Chemical Co., Ltd.
PD20120251	Etoxazole	93% TC	Sumitomo Chemical Co., Ltd.

Source: ICAMA

Table 23: Registrations of etoxazole in China, Aug. 2015-March 2016

Registration No.	Active ingredient	Specification	Manufacturer
LS20150336	Abamectin-etoxazole	15%SC	Fujian Xinong Dazheng Biological Engineering Co., Ltd.
LS20150359	Azocyclotin-etoxazole	30%SC	Shenzhen Noposion Agrochemicals Co., Ltd.
LS20160005	Etoxazole	30%SC	Shaanxi Thompson Biological Technology Co., Ltd.
LS20160030	Bifenazate-etoxazole	45%SC	Guangdong Dongguan Ruidefeng Biotechnology Co., Ltd.
LS20160033	Abamectin-etoxazole	20%SC	Shanghai Yuelian Chemical Ltd.
LS20160038	Abamectin-etoxazole	25%SC	Guangdong Dongguan Ruidefeng Biotechnology Co., Ltd.
PD20151683	Etoxazole	20%SC	CAC Nantong Chemical Co., Ltd.
PD20151956	Etoxazole	96%TC	CAC Nantong Chemical Co., Ltd.

Source: ICAMA

China approves 15 new insecticide technical registrations in Feb. 2016

Summary: In Feb. 2016, China approved 15 new insecticide technical registrations (excluding renewal registrations), covering 12 active ingredients, according to data from the ICAMA.

In Feb. 2016, China approved 15 new insecticide technical registrations (including five hygienic insecticide registrations and excluding renewal registrations), covering 12 active ingredients, according to data from the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA).

To be more specific, among the 12 active ingredients, acrinathrin, methoxyfenozide and spiroticlofen gained 2 registrations each and the rest 9 active ingredients all gained 1 registration each. As of the end of Feb. 2016, accumulated registrations of acrinathrin, methoxyfenozide and spiroticlofen technical have amounted to 3, 13 and 21 respectively.

It is worth noting that 98.5% metoxadiazone TC from Youth Chemical Co., Ltd. and 95% tolfenpyrad TC from Mesa Tech International Inc. were registered in China for the first time in Feb. 2016.

The 15 new insecticide technical registrations were gained by 13 pesticide companies, 2 of which gained 2 new registrations and 3 of which were foreign companies. These foreign companies were Mesa Tech International Inc., Dow AgroSciences LLC and Mitsui Chemicals Agro, Inc.

From the prospective of toxicity, among the 15 newly registered insecticide technical, 8 were low toxic, 3 were micro toxic and 4 were moderate toxic.

Table 24: New insecticide technical registrations, China, Feb. 2016

No.	Active ingredient	Specification	Manufacturer	Accumulated registrations
1	Pyriproxyfen	95% TC	Zhejiang Tianfeng Biological Sciences Co., Ltd.	15
2	Profenofos	94% TC	Shandong Weifang Rainbow Chemical Co., Ltd.	18
3	P-dichlorobenzene	99.8% TC	Jiangsu Ruixiang Chemical Co., Ltd.	4
4	Metoxadiazone	98.5% TC	Youth Chemical Co., Ltd.	1
5	Dinotefuran	99.1% TC	Mitsui Chemicals Agro, Inc.	8
6	Acrinathrin	95% TC	Youth Chemical Co., Ltd.	3
7		96% TC	Jiangsu Hui Feng Agrochemical Co., Ltd.	
8	Sulfoxaflor	95.9% TC	Dow AgroSciences LLC	2
9	Emamectin benzoate	95% TC	Hubei Anlu Huaxin Chemical Co., Ltd.	27
10	Methoxyfenozide	98% TC	Jiangsu Good Harvest-Weien Agrochemical Co., Ltd.	13
11		98% TC	Jiangsu Yangnong Chemical Co., Ltd.	
12	Spirodiclofen	97% TC	Zhengzhou Labor Agrochemicals Co., Ltd.	21
13		98% TC	Jiangsu Good Harvest-Weien Agrochemical Co., Ltd.	
14	Triflumuron	99% TC	Jiangsu Rotam Agrochemical Co., Ltd.	5
15	Tolfenpyrad	95% TC	Mesa Tech International Inc.	1

Source: ICAMA

Policy

China's policies and drafts for comment closely related to pesticide formulations in 2015

Summary: 2015 was a year of opportunities as well as challenges to the pesticide industry. The constant improvement of relevant policies, laws and regulations has an significant influence on the industry: guiding the industry to achieve normative, sound and sustainable development. Hereby CCM has gathered excerpts of the policies and drafts for comment closely related to pesticide formulations in 2015 for your reference.

2015 was a year of opportunities as well as challenges to the pesticide industry. The constant improvement of relevant policies, laws and regulations has a significant influence on the industry — guiding the industry to achieve normative, sound and sustainable development. Which policies are closely related to pesticide formulations? Here are some of them collected by CCM for your reference.

Zero growth in chemical pesticide consumption by 2020

On 16 Jan., 2015, a notice from the Ministry of Agriculture (MOA) concerning the issuance of the *Key Tasks of Planting Industry in 2015* was released. This notice listed key tasks to be fulfilled if the planting industry was to carry out the action plan for zero growth in chemical pesticide consumption by 2020. These included replacing high toxicity, high residue pesticides with those which are high efficiency, low toxicity and low residue, to replace small, inefficient pesticide machinery with high efficiency medium and large ones, and expand the low-toxicity biological pesticides demonstration subsidy pilot program.

As attaining zero growth means land transfer, the concentration of rural land and the increase of large-scale single-crop plantations, reducing pesticide application and saving labor will become primary tasks. The processing of pesticide formulations is to meet higher standards — focusing more on application effect during the design, R&D, and application of pesticide formulations so as to make better use of active ingredients. For instance, the spraying technology of unmanned aerial vehicles is mature, which has put the development and application of low-volume and ultra-low volume spray on the agenda.

Moreover, it's note worthy that conducting the action plan for zero growth in pesticide consumption remains a key task in 2016, according to the *Key Tasks of Planting Industry in 2016* released by the General Office of the MOA on 27 Jan., 2016.



Names and English Abbreviations of Pesticide Formulations (Draft for Comments)

On 24 March, 2015, the Institute for the Control of Agrochemicals of the MOA released a notice, inviting comments on the *Names and English Abbreviations of Pesticide Formulations (Draft for Comments)*, and has since undertaken the task of amending the *Names and English Abbreviations of Pesticide Formulations (GB/T19378-2003)* according to the arrangement in the *Notice of the National Standards Commission Concerning the Formulations and Amendment Plan of the 2nd Batch of National Standards in 2014 (GBWZH [2014] No.89)*. The *Names and English Abbreviations of Pesticide Formulations (Draft for Comments)* is drafted based on the international rules for pesticide formulations and the practices of pesticide registration in China.

The standards have optimized, integrated and refined formulations by eliminating formulations without clear functions or methods of application and out-dated and out-of-circulation formulations, and have updated formulations that have been adjusted and amended abroad. The standards provide more requirements and normative instructions on the development of pesticide formulations, ensuring that China's pesticide formulation industry becomes more standardized and rivals that of developed countries, and that Chinese pesticide formulations ultimately go onto the international market.

Production licenses for EC pesticides

On 1 Aug., 2009, the Ministry of Industry and Information Technology of the People's Republic of China (MIIT) stopped issuing certificates for Emulsifiableconcen-Trate (EC) products. Following this, the gate to the EC pesticide products certificate issuing office had been closed for 5 years until 17 April, 2015, when the MIIT released production licenses for 4th pesticide formulation products. 5 more EC products including 75% fosthiazate EC of Hebei Sanlen Agrochemical Co., Ltd. and 5% pyribenzoxim EC of East Hanhong Chemical Co., Ltd. obtained production licenses. In total, 8 EC products got production licenses, including three previously licensed products such as 10% cyhalofop-butyl EC of Anhui Meiland Agricultural Development Co., Ltd.

So far, general concerns regarding pesticide production licenses in the industry have been addressed. The gate to the certificate issuing office has been reopened, but the selection and application of solvents must abide by the standards in the *Limits of Injurious Solvents in Pesticide EC*.

Blacklist of Pesticide Additives (Draft for Comments)

On 13 July, 2015, the Institute for the Control of Agrochemicals of the MOA, based on a great deal of research, drafted the *Blacklist of Pesticide Additives to Pesticides (Draft for Comments)* for public comment so as to enhance the management of pesticide additives and guarantee the quality safety of agricultural products. The *Blacklist* includes 9 banned additives and 75 limited additives.

During the past decades, China has been lacking management in standards on inert substances such as pesticide additives and organic solvents, according to insiders. As a result, there is a huge gap between the safety performance of Chinese pesticides and that of pesticides on the international market. This *Blacklist* could be the prelude to the management of additive safety in China. Pesticide enterprises should be clear about the application of the 84 additives so as to choose the proper additive substitutes in the long run and avoid the additives on the *Blacklist* in practical production.

Besides this, the Draft for Comment will bring changes to pesticide formulations, influence the future development of traditional



formulation EC, and promote the development of water-based and environmental-friendly pesticide formulations. This is also an effect of the new policies. For instance, formulations with organic solvents will decrease and instead, water-based and granulated formulations such as SC and WG will prevail; banning or limiting conventional solvents (methylbenzene, dimethylbenzene and cyclohexanone etc.) will make impossible many high-content EC, EW, ME and SL.

News in Brief

Jiangsu Province: insecticide output decreases by 12.4% year on year in 2015

According to data released by the Jiangsu Provincial Pesticide Association, in 2015, the major 28 pesticide manufacturers in Jiangsu Province produced 451,812 tonnes of chemical pesticides in total, down slightly by 0.7% compared with 454,815 tonnes in 2014.

Among these pesticides, 81,263 tonnes were insecticides, decreasing by 12.4% compared with 92,761 tonnes in 2014. To be more specific, chlorpyrifos accounted for 18,796 tonnes, down by 9.7% compared with 20,810 tonnes in 2014; imidacloprid accounted for 9,873 tonnes, declining by 12.1% compared with 11,230 tonnes in 2014 and cypermethrin accounted for 1,118 tonnes, decreasing by 2.8% compared with 1,150 tonnes in 2014.

It is worth noting that except for insecticides, other pesticides all recorded YoY increases at different degrees in output in Jiangsu Province in 2015.

Mesa gains temporary registration for 30% tolfenpyrad SC in China

On 25 Feb., 2016, Mesa Tech International Inc. (Mesa) gained a temporary registration for its Mesa Meirui™ insecticide (active ingredient: 30% tolfenpyrad SC) which belongs to pyrazoles heterocyclic pesticides and is for control and prevention of *Empoasca pirusuga Matumura*.

As the exclusive registrant of tolfenpyrad in China, Mesa enjoys great advantages in China's market and its 30% tolfenpyrad SC has great potential to develop into an outstanding insecticide for control and prevention of *Empoasca pirusuga Matumura* in tea leaf production areas around China.

Meanwhile, it is worth noting that Mesa also gained a temporary registration for its 95% tolfenpyrad technical in China.

Demand for pesticides expected to reduce by 500 tonnes year on year in Jiangsu Province in 2016

On 25 Feb., 2016, on the 19th Pesticide & Equipment Information Technology Exchange that was held in Nanjing City, Jiangsu Province, overall pesticide consumption in 2015, pesticide demand in 2016 and forecast of pests and diseases were disclosed.

According to Zhang Shaoming, chief of the Pesticide and Equipment Section of the Jiangsu Provincial Crop Protection and Quarantine Station, Jiangsu Province consumed about 78,500 tonnes of pesticides (commodity volume) in 2015, reducing by 1,031 tonnes, or 1.3%, year on year. Specifically, consumption volume of insecticides was reduced; that of fungicides increased slightly and that of herbicides basically remained stable and showed a small upward trend. Chief Zhang also predicted that Jiangsu Province may need approximately 78,000 tonnes of pesticides in 2016, decreasing by 500 tonnes compared with that in 2015 and the lands using high-efficiency, low-toxicity and low-residue pesticides are expected to account for over 75% of the total, increasing by 3 percentage points year on year.

In the meeting, Zhu Xianmin, chief of the Crop Protection Section of the Jiangsu Provincial Crop Protection and Quarantine Station, made a forecast about the occurrence of major pests and diseases in the province in 2016. Based on influential factors such as over wintering cardinal number, variety and distribution of pests and diseases, plant cultivation methods and meteorological changes, Chief Zhu predicted that major pests and diseases will strike crops a little more severely than in 2015 in Jiangsu Province. In particular, wheat head blight, wheat powdery mildew, rice sheath blight, rice blast, rice plant hopper and rice leaf roller will strike severely while wheat sheath blight, rape sclerotium disease, rice stem borer, corn borer, cotton mirid, vegetable *Bemisia tabaci*, armyworm, etc. will strike severely partially in the province.

Jiangsu Changqing has fine performance in 2015

On 27 Feb., 2016, Jiangsu Changqing Agrochemical Co., Ltd. (Jiangsu Changqing) released a news bulletin about its performance in 2015. According to the bulletin, Jiangsu Changqing operated quite stably and had a fine performance in 2015. Specifically:

- Revenue: USD278.66 million (RMB1.82 billion), up by 0.72% YoY
- Operating profit: USD41.81 million (RMB273.38 million), up slightly by 0.20% YoY
- Total profit: USD40.52 million (RMB264.93 million), down by 2.70% YoY
- Net profit: USD36.34 million (RMB237.62 million), up by 1.48% YoY

Pesticide companies struggled in 2015 influenced by factors like economic downturn, decreasing grain prices, insufficient market demand, increasing production costs, falling pesticide prices, shrinking export markets and heavy pressure from safety and environmental protection. Under such circumstances, Jiangsu Changqing's performance in 2015 was quite satisfactory.

Performance disclosed in the bulletin was only preliminary evaluation and specific financial figures are subject to the official 2015 performance report.

Table 25: Main financial figures of Jiangsu Changqing in 2015, million USD

Item	2015	2014	YoY change
Revenue	278.66	276.67	0.72%
Operating revenue	41.81	41.73	0.20%
Total profit	40.52	41.65	-2.70%
Net profit	36.34	35.81	1.48%
/	As of end of 2015	As of end of 2014	YoY change
Total assets	534.69	475.61	12.42%
Total shareholders' equity attributable to listed company	439.46	340.19	29.18%

Source: Jiangsu Changqing

Hubei Sanonda to relocate, upgrade and transform insecticide projects

At the end of Feb. 2016, the Environmental Protection Bureau of Jingzhou City, Hubei Province released the second publicity announcement of environmental impact assessment on Hubei Sanonda Co., Ltd. (Hubei Sanonda)'s projects concerning the relocation, upgrading and transformation of its insecticides. According to the announcement, Hubei Sanonda would invest USD23,085.11 (RMB150,942) in total in this project.

After being put into operation, Hubei Sanonda will own production capacity of phosphorus trichloride (75,000 t/a), spermine (10,900 t/a), acephate TC (14,000 t/a), 75% acephate DP (7,600 t/a), 30% acephate EC (2,500 t/a), 20% triazophos EC (5,000 t/a), 40% triazophos EC (1,875 t/a), 76% triazophos TC (328.95 t/a), 91% trichlorfon TC (9,000 t/a), 97% trichlorphon (330 t/a), 98% trichlorphon TC (2,000 t/a), 95% DDV TC (200 t/a), and 77.5% DDV EC (149,000 t/a).

Dinotefuran ZF registered in China for first time

At the end of Feb. 2016, Anhui Fengle Agrochemical Co., Ltd. (Fengle Agrochemical) obtained the temporary registration on 60% dinotefuran ZF which is used to control and prevent rice plant hopper and thrip. This is also the first dinotefuran for seed treatment being registered in China.

Before that, 6 dinotefuran formulations including SG, WG, WP, SC, OF and RJ were registered in China.

Beijing Yooloo reaches strategic cooperation with DuPont on chlorantraniliprole

Beijing Yooloo Bio-Technology Corp., Ltd. (Beijing Yooloo) disclosed that it has reached a consensus on strategic product cooperation and market operation with DuPont and they finally built up strategic partnership. Beijing Yooloo will promote chlorantraniliprole in year 2016. On 26 Feb., 2016, Huang Tianqiang, business director of DuPont in China and Farra Siregar, marketing director of DuPont in Asian-Pacific region visited Beijing Yooloo's headquarters in Beijing. Beijing Yooloo and DuPont made in-depth communication on the market strategy, future market changes, follow-up cooperation and so on regarding the chlorantraniliprole.

MOA: qualified rate of biopesticides remains low

The Ministry of Agriculture of the People's Republic of China (MOA) issued the random inspection results of the third-batch pesticides in year 2015, showing that only two out of total 52 biopesticides are qualified, a qualified rate of merely 3.8%. Thereinto, carbofuran, chlorantraniliprole, gamma cyhalothrin and some chemical pesticides are illegally added in most of biopesticides.

In fact, the qualified rates were also relatively low in the previous random inspections of the first- and second-batch pesticides in year 2015.

- First batch: 29 biopesticides were inspected, a qualified rate of 48.3%; fast-acting pesticides like chlorantraniliprole, broad-spectrum pesticides like chlorfenapyr and chlorothalonil were found added in the unqualified biopesticides illegally; labeled pesticide ingredients were undetected in some biopesticides.
- Second batch: 16 biopesticides were inspected, a qualified rate of 31.3%; methomyl, chlorantraniliprole and chlorothalonil were found added in the unqualified biopesticides illegally; labeled pesticide ingredients were undetected in some biopesticides.

Hubei Sanonda to disclose information about asset restructuring in May

On 3 March, 2016, Hubei Sanonda Co., Ltd. (Hubei Sanonda) released the announcement about major asset restructuring process, saying that it would disclose related information on 4 May, 2016. It is known that the underlying asset involved in the asset restructuring is ADAMA Agricultural Solutions Ltd. (ADAMA Agricultural), subsidiary of Hubei Sanonda's actual controller, which is engaged in crop protection, strongly complementary for Hubei Sanonda's business. Also, the counterparties are ChemChina Agrochemical Corporation and Koor Industries Ltd., another shareholder of ADAMA Agricultural. Hubei Sanonda has suspended the stock trading since 5 Aug., 2015.

DuPont: product traceability to be realized in 2016

On 14 March, 2016, Huang Tianqiang, president of DuPont Crop Protection (China) disclosed that DuPont would add unique identification number for the crop protection products which are sold in China since March 2016. Consumers can quickly query the product authenticity through scanning by mobile phones and dialing the hotlines.

Sanonda Holdings Limited gains capital increment from China Agricultural Development Fund

On 15 March, 2016, Hubei Sanonda Co., Ltd. released an announcement, claiming that its holding company Jingzhou Sanonda Holdings Limited (Sanonda Holdings Limited, former Sanonda Group) signed a capital adding agreement with China Agricultural Development Key Construction Fund Co., Ltd. (China Agricultural Development Fund).

According to the agreement, China Agricultural Development Fund would add capital in Sanonda Holdings Limited with USD30.59 million (RMB200 million) based on the price of Sanonda Holdings Limited's net assets per share on 31 July, 2015.

After the completion of the capital increment, Sanonda Holdings Limited's registered capital will increase from USD36.81 million (RMB240.66 million) to USD41.93 million (RMB274.14 million) and China Agricultural Development Fund will hold 12.21% of shares in Sanonda Holdings Limited.

In addition, after the completion of the capital increment, the shares that China National Chemical Corporation (ChemChina) indirectly held in Sanonda Holdings Limited will be reduced from 100% to 87.79%. However, its equity ratio in Sanonda Holdings Limited will remain the same as 20.15% as China Agricultural Development Fund will not appoint directors, supervisors or senior executives in Sanonda Holdings Limited and not take part in or intervene in Sanonda Holdings Limited's daily operation according to the agreement.

Import volume of insecticide doubles in Jan. 2016

According to China Customs, in Jan. 2016, China's total value of import and export of insecticides was USD379 million, down by 17.1% year on year. The trade surplus was USD254 million, down by 10.7% year on year.

In this month, China imported 9,000 tonnes of pesticides, a YoY fall of 4.1% and import value was USD63 million, a YoY fall of 27.7%. Of this, the import volume of insecticides was 2,000 tonnes, soaring by 101.8% year on year, valued at USD14 million, up 9.0% year on year. The import volume of fungicides was 3,000 tonnes, up 21.9% year on year, valued at USD23 million, down by 34.6% year on year. The import volume of herbicides was 2,000 tonnes, down by 37.3% year on year, valued at USD16 million, down by 39.4% year on year.

In this month, China exported 110,000 tonnes of pesticides, down 2.0% year on year; the export value was USD317 million, down by 14.7% year on year. Thereinto, the export value and export volume of fungicides remained stable, with YoY rises of 18.7% and 0.5% respectively. The export volume and export value of insecticides were 20,000 tonnes and USD73 million, YoY rise of 6.9% and YoY fall of 3.8% respectively. The export volume and value of herbicides were 79,000 tonnes and USD193 million, a YoY rise of 5.7% and a YoY fall of 21.3% respectively.

Table 26: Total import-export value and trade surplus of pesticide industry in China, Jan. 2016

Item	Total import-export value		Trade surplus	
	Jan. 2016 (million USD)	YoY change (%)	Jan. 2016 (million USD)	YoY change (%)
Pesticide	379.39	-17.1	254.19	-10.7
Insecticide	87.18	-1.9	58.53	-6.5
Fungicide	65.56	-15.4	19.68	169
Herbicide	208.77	-23.1	176.55	-19.1

Source: China Customs

Table 27: Imports of pesticides in China, Jan. 2016

Item	Volume (tonne)	YoY change (%)	Value (million USD)	YoY change (%)
Pesticide	9,000	-4.1	62.60	-27.7
Insecticide	2,000	101.8	14.32	9.0
Fungicide	3,000	21.9	22.94	-34.6
Herbicide	2,000	-37.3	16.11	-39.4

Source: China Customs

Table 28: Exports of pesticides in China, Jan. 2016

Item	Volume (tonne)	YoY change	Value (million USD)	YoY change
Pesticide	112,000	-2.0	316.79	-14.7
Insecticide	20,000	6.9	72.85	-3.8
Fungicide	9,000	18.7	42.62	0.5
Herbicide	7,900	-5.7	192.66	-21.3

Source: China Customs

Dezhou Luba obtains production license on chlorpyrifos TC project

Dezhou Luba Fine Chemical Co., Ltd. (Dezhou Luba) announced, on 12 March, 2016, that it obtained the license on the chlorpyrifos TC project from the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China. It is known that this project was based on tetrachloropyridine as raw material, which is suitable for the mass production as the chlorpyrifos TC will be of high purity, high yield and low discharge amount of three wastes (waste gas, waste water and waste residues). As Dezhou Luba realizes the production of chlorpyrifos by the route of tetrachloropyridine, its pyridine product varieties will be enriched and the overcapacity of pyridine will be solved. As a result, the pyridine industrial chain will develop healthily.

Price Update

Ex-works prices of major insecticides in China, March 2016

Table 29: Monthly ex-works prices of major insecticides in China, March 2016

No.	Product	20160208		20160308	
		RMB/t	USD/t	RMB/t	USD/t
1	95% Abamectin technical	530,000	81,376	530,000	81,487
2	97% Acephate technical	31,000	4,760	31,000	4,766
3	95% Acetamiprid technical	88,500	13,588	87,500	13,453
4	95% Azocyclotin technical	130,000	19,960	130,000	19,987
5	95% Beta-Cypermethrin technical	108,000	16,582	108,000	16,605
6	97% Bifenthrin technical	172,000	26,409	172,000	26,445
7	95% Buprofezin technical	35,500	5,451	35,500	5,458
8	98% Carbofuran technical	70,000	10,748	70,000	10,762
9	98% Chlorfenapyr technical	180,000	27,637	180,000	27,675
10	95% Chlorfluazuron technical	370,000	56,809	370,000	56,887
11	95% chlorpyrifos technical	28,000	4,299	27,700	4,259
12	94% Cypermethrin technical	65,800	10,103	65,800	10,117
13	99% Cyromazine technical	114,000	17,503	114,000	17,527
14	98% Deltamethrin technical	410,000	62,951	410,000	63,037
15	95% Diafenthiuron technical	119,000	18,271	119,000	18,296
16	98% Dimethoate technical	25,000	3,838	25,000	3,844
17	70% Emamectin benzoate	504,000	77,384	504,000	77,490
18	92% Fenvalerate technical	72,000	11,055	73,600	11,316
19	95% Fipronil technical	340,000	52,203	340,000	52,275
20	98% Hexaflumuron technical	222,000	34,086	224,000	34,440
21	97% Imidacloprid technical	93,500	14,356	93,500	14,376
22	98% Isoprocarb technical	21,000	3,224	20,500	3,152
23	95% Lambda-cyhalothrin technical	140,000	21,495	139,000	21,371
24	90% Malathion technical	15,800	2,426	15,800	2,429
25	95% Methidathion technical	62,000	9,519	62,000	9,532
26	Methomyl 90% SP	50,500	7,754	50,500	7,764
27	98% Methomyl technical	50,500	7,754	50,500	7,764
28	75% Omethoate technical	21,300	3,270	21,900	3,367
29	90% Phoxim	22,900	3,516	23,400	3,598
30	90% Profenofos technical	40,800	6,264	40,500	6,227
31	90% Propargite technical	39,000	5,988	39,000	5,996
32	95% Pymetrozine technical	123,000	18,885	123,000	18,911
33	95% Pyridaben technical	72,500	11,132	72,500	11,147
34	97% Spirodiclofen technical	141,000	21,649	150,000	23,062
35	85% Triazophos technical	30,000	4,606	30,000	4,612

Note: Ex-works price includes VAT.

Source: CCM

Shanghai port prices of major insecticides, March 2016

Table 30: Shanghai port prices of major insecticides in China, March 2016

No.	Product	20160208		20160308	
		RMB/t	USD/t	RMB/t	USD/t
1	95% Abamectin technical	530,480	81,449	530,480	81,561
2	97% Acephate technical	31,480	4,833	31,480	4,840
3	95% Acetamiprid technical	88,980	13,662	87,980	13,527
4	95% Azocyclotin technical	130,480	20,034	130,480	20,061
5	95% Beta-Cypermethrin technical	108,480	16,656	108,480	16,679
6	97% Bifenthrin technical	172,480	26,482	172,480	26,519
7	95% Buprofezin technical	35,980	5,524	35,980	5,532
8	98% Carbofuran technical	70,480	10,821	70,480	10,836
9	98% Chlorfenapyr technical	180,480	27,711	180,480	27,749
10	95% Chlorfluazuron technical	370,480	56,883	370,480	56,961
11	95% chlorpyrifos technical	28,480	4,373	28,180	4,333
12	94% Cypermethrin technical	66,280	10,177	66,280	10,190
13	99% Cyromazine technical	114,480	17,577	114,480	17,601
14	98% Deltamethrin technical	410,480	63,025	410,480	63,111
15	95% Diafenthiuron technical	119,480	18,345	119,480	18,370
16	98% Dimethoate technical	25,480	3,912	25,480	3,918
17	70% Emamectin benzoate	504,480	77,457	504,480	77,563
18	92% Fenvalerate technical	72,480	11,129	74,080	11,390
19	95% Fipronil technical	340,480	52,277	340,480	52,349
20	98% Hexaflumuron technical	222,480	34,159	224,480	34,514
21	97% Imidacloprid technical	93,980	14,430	93,980	14,449
22	98% Isoprocarb technical	21,480	3,298	20,980	3,226
23	95% Lambda-cyhalothrin technical	140,480	21,569	139,480	21,445
24	90% Malathion technical	16,280	2,500	16,280	2,503
25	95% Methidathion technical	62,480	9,593	62,480	9,606
26	Methomyl 90% SP	50,980	7,827	50,980	7,838
27	98% Methomyl technical	50,980	7,827	50,980	7,838
28	75% Omethoate technical	21,780	3,344	22,380	3,441
29	90% Phoxim	23,380	3,590	23,880	3,672
30	90% Profenofos technical	41,280	6,338	40,980	6,301
31	90% Propargite technical	39,480	6,062	39,480	6,070
32	95% Pymetrozine technical	123,480	18,959	123,480	18,985
33	95% Pyridaben technical	72,980	11,205	72,980	11,221
34	97% Spirodiclofen technical	141,480	21,723	150,480	23,136
35	85% Triazophos technical	30,480	4,680	30,480	4,686

Note: Shanghai port price = ex-works price + transportation fee from warehouse to Shanghai port, and the ex-works price includes VAT.

Source: CCM

FOB Shanghai prices of major insecticides, March 2016

Table 31: FOB Shanghai prices of major insecticides in China, March 2016

No.	Product	20160208 Price (USD/t)	20160308 Price (USD/t)
1	95% Abamectin technical	79,548	79,656
2	97% Acephate technical	4,803	4,810
3	95% Acetamiprid technical	12,906	12,779
4	95% Azocyclotin technical	19,632	19,659
5	95% Beta-Cypermethrin technical	16,337	16,359
6	97% Bifenthrin technical	25,923	25,959
7	95% Buprofezin technical	5,272	5,280
8	98% Carbofuran technical	10,286	10,300
9	98% Chlorfenapyr technical	26,085	26,120
10	95% Chlorfluazuron technical	53,450	53,523
11	95% chlorpyrifos technical	4,192	4,155
12	94% Cypermethrin technical	10,016	10,029
13	99% Cyromazine technical	17,235	17,259
14	98% Deltamethrin technical	61,573	61,657
15	95% Diafenthiuron technical	17,984	18,009
16	98% Dimethoate technical	3,904	3,910
17	70% Emamectin benzoate	75,653	75,757
18	92% Fenvalerate technical	10,944	11,199
19	95% Fipronil technical	49,129	49,196
20	98% Hexaflumuron technical	32,134	32,466
21	97% Imidacloprid technical	13,626	13,645
22	98% Isoprocarb technical	3,305	3,235
23	95% Lambda-cyhalothrin technical	21,130	21,009
24	90% Malathion technical	2,526	2,530
25	95% Methidathion technical	9,089	9,102
26	Methomyl 90% SP	8,015	8,026
27	98% Methomyl technical	8,378	8,390
28	75% Omethoate technical	3,350	3,445
29	90% Phoxim	3,590	3,670
30	90% Profenofos technical	6,271	6,234
31	90% Propargite technical	6,001	6,009
32	95% Pymetrozine technical	18,584	18,609
33	95% Pyridaben technical	10,602	10,616
34	97% Spirodiclofen technical	21,280	22,659
35	85% Triazophos technical	4,480	4,486

Note: FOB Shanghai price considers factors of Shanghai port price, port sur-charges, loading charges, traders' profits and export rebates. And the shipment cost shall be paid by the buyer.

Source: CCM

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