

 **Herbicides China News**

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Headline

People from all walks of life are concerned about whether Zhejiang Wynca, a listed company, will be able to turn loss into gain in 2016 net profit, with the help of the gradually rising glyphosate price since H2 2016. However, under the influence of multiple factors, the annual net profit of Zhejiang Wynca in 2016 is still full of variables.

In recent years, Shandong Vicome Greenland has suffered serious losses. This significantly dragged down the financial performance of its parent company, Shandong Shengli. On the last day of 2016, Shandong Shengli announced that it will sell Shandong Vicome Greenland.

Thanks to the promising sales in Q4, Lier Chemical predicted a YoY rise of 55% in 2016 net profit, a rise of 15-25 percentage points over the previous forecast.

2016 witnessed opportunities and challenges in Chinese pesticide industry. CCM selected 10 major keywords to summarize the industry development in 2016.

2016 witnessed opportunities and challenges in Chinese pesticide industry. CCM selected the 10 major keywords to summarize the industry development in 2016. In this article, the remaining 5 keywords will be introduced.

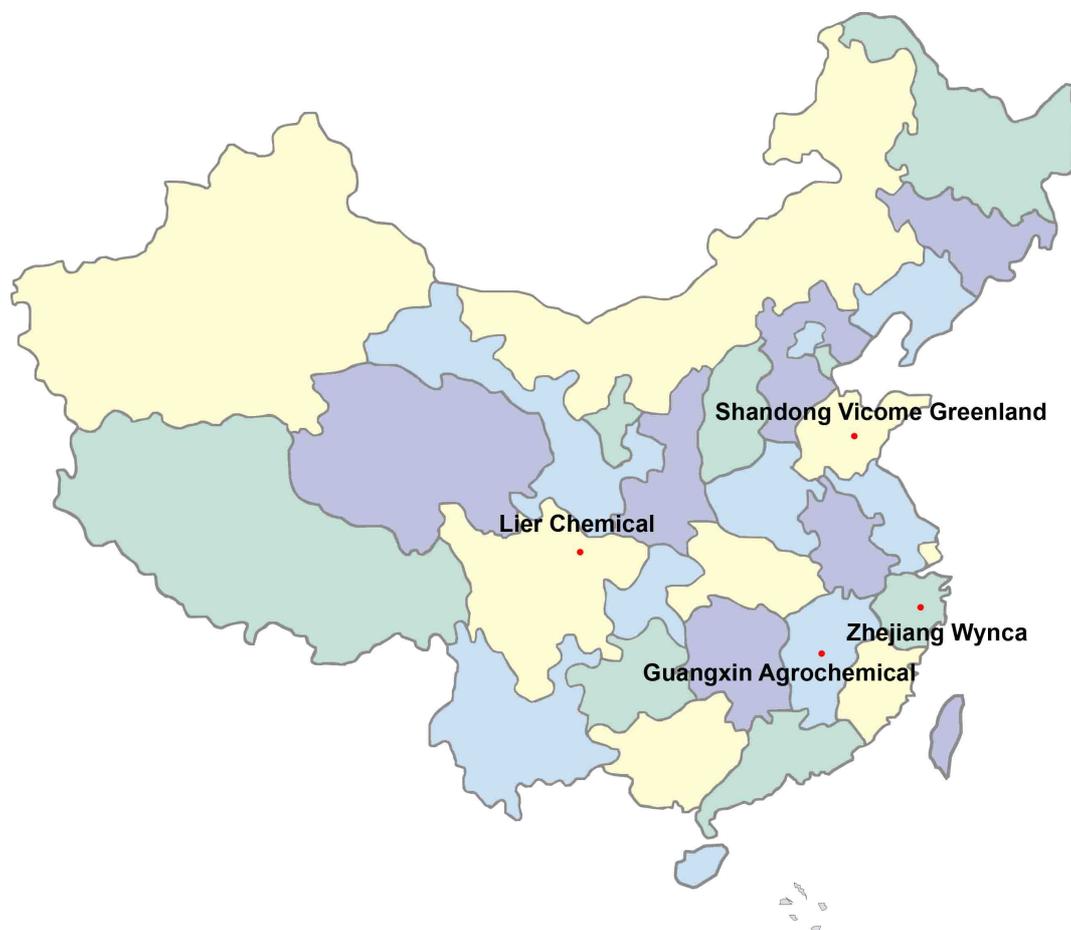
Since Sept. 2016, China's oxyfluorfen price has been rising, and industry insiders predicted that the uptrend will continue in the short term.

In Jan.-Nov. 2016, China's export volume of glufosinate-ammonium experienced two-digit growth, but the export price slumped.

In Jan.-Oct. 2016, China's export volume of diaquat TK recorded a large YoY rise. Although the entire herbicide market remained depressed in 2016, export price of diquat TK did not drop significantly.

In Dec. 2016, 6 new herbicide TC were formally registered by 4 companies in China, involving 6 herbicide active ingredients.

In 2016, 126 herbicide TC were newly registered in China, involving 64 active ingredients. Of this, 6 active ingredients were registered in China for the first time, by 6 companies.





Editor's Note

Compared to the end of 2016, China's herbicide market cools down in early 2017. Although price rises of some herbicides have been narrowed down, some even started to fall, the market still presented an uptrend. As of Jan., most of herbicides were in tight supply, especially spot products. Affected by serious smog, herbicide producers in main producing areas, such as Shandong and Hebei provinces, maintained low operating rate, some even suspended production. It is predicted that production resumption will be after the Spring Festival Holiday.

Glyphosate TC also suffered tense supply. Most producers said that there were many orders stockpiled. Purchasers held wait-and-see attitudes, but producers still quoted a high price.

Quotations for glufosinate-ammonium TC also kept high. Some trade sources predicted that as the peak season for formulations production came, demand for glufosinate-ammonium TC may far exceed supply.

Oxyfluorfen TC, affected by tight supply and rising prices of intermediates, recorded rises in quotations.

In 2017, China will keep strengthening inspection efforts on pesticide residues, or may promote the environmental inspections nationwide. At the same time, the country plans to issue the *Emission Standard of Water Pollutant of the Pesticide Industry* this year.

The USD/RMB exchange rate in this newsletter is USD1.00=RMB6.9498 on 3 Jan., 2017, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.



Company Dynamics

Zhejiang Wynca: variables in 2016 net profit

Summary: People from all walks of life are concerned about whether Zhejiang Wynca, a listed company, will be able to turn loss into gain in 2016 net profit, with the help of the gradually rising glyphosate price since H2 2016. However, under the influence of multiple factors, the annual net profit of Zhejiang Wynca in 2016 is still full of variables.

Zhejiang Wynca Chemical Group Co., Ltd. (Zhejiang Wynca) is a major domestic listed glyphosate manufacturer in China, but in recent years, its financial performance has shown a declining trend due to the continued sluggish market and the continuous decline of glyphosate price. People from all walks of life are concerned about whether Zhejiang Wynca will be able to turn loss into gain in 2016, with the help of the gradually rising glyphosate price since H2 2016. However, under the influence of multiple factors, the annual net profit of Zhejiang Wynca in 2016 is still full of variables.

Environmental litigation may reduce 2016 net profit of Zhejiang Wynca

On 7 Jan., 2016, Zhejiang Wynca issued the follow-up announcement on environmental litigation, which said that the company had recently received the paper of civil judgment issued by the Intermediate People's Court of Dongying City, Shandong Province in terms of the environmental litigation in which two persons and 3 units were involved. The 3 units included Zhejiang Wynca and its affiliated factory, No. 2 Jiande Chemical Factory.

The main contents of the civil judgment were as follows:

1. Zhejiang Wynca, No. 2 Jiande Chemical Factory and Jiande Hong'an Transportation Co., Ltd. (Jiande Hong'an), Li Qiang, and Li Zhaofu shall immediately stop illegally transporting mixed phosphate liquor overseas for disposal, and they shall pay the cost of environmental pollution control, at USD3.27 million (RMB22.74 million - 11,370 tonnes were transported overseas, unit price at USD287.78/t - RMB2,000/t). In addition, they shall together bear the attorney fee of USD1,726.67 (RMB12,000), and the court acceptance fee of USD2,237.43 (RMB15,550).
2. Zhejiang Wynca, No. 2 Jiande Chemical Factory and Jiande Hong'an, Li Qiang, and Li Zhaofu shall be jointly and severally liable for the above-mentioned liabilities.

Zhejiang Wynca said the above matters might have a certain negative impact on the company. For the case, Zhejiang Wynca had already withdrawn about USD275,556.13 (RMB4 million) at the end of 2014. If the judgment becomes effective, the annual profits of Zhejiang Wynca in 2016 would be decreased. Zhejiang Wynca would make predictions of its 2016 financial performance before the end of Jan. 2017 as soon as possible.

Zhejiang Wynca received USD3.02 million (RMB21 million) of relocation compensation at the end of 2016

On 30 Dec., 2016, Zhejiang Wynca issued an announcement on the company's receipt of compensation for relocation. The announcement said that on 29 Dec., 2016, the company received USD3.02 million (RMB21 million) relocation compensation. After preliminary accounting, the compensation would be included in the non-operating income of Zhejiang Wynca in 2016. CCM believes that the timely arrival of the compensation payments will effectively help Zhejiang Wynca get out of the red in 2016.



Event review: On 8 Dec., 2015, Zhejiang Wynca and Jiande City Construction and Development Investment Co., Ltd. signed the *Overall Relocation Compensation Agreement on the Bainanshan Block*, in which the total amount of compensation for the overall relocation was decided to be USD65.64 million (RMB456.1846 million).

Zhejiang Wynca gained rich income by selling equities of subsidiary

On 13 Dec., 2016, Zhejiang Wynca announced that it planned to sell 5% of equities in Zhejiang Hanghua New Material Technology Co., Ltd. (Zhejiang Hanghua) for USD3.01 million (RMB20.7522 million), which was regarded as an approach to turn loss into gain and to realize its operation targets. For more details, please refer to the *Glyphosate China Monthly Report 1612: Zhejiang Wynca intends to sell subsidiary's equity to gain profit*.

The rising price of glyphosate indicated good news for Zhejiang Wynca's annual profit

"Our operational benefits have been improved due to the improved market of glyphosate and organic silicon. We are able to basically get out of the red in 2016 even if excluding the income from equity transfer," said Zhejiang Wynca.

The price rebound of glyphosate helped Zhejiang Wynca get out of the business difficulties. The sales of glyphosate increased, which may largely boost Zhejiang Wynca's annual profit. Chinese glyphosate market had begun to witness a price rebound since Sept. 2016, and as of the end of Dec. 2016, the price of glyphosate was still increasing. For details, please refer to *Glyphosate China Monthly Report 1611: Zhejiang Wynca may turn loss into gain in 2016*.

Subsidiary's applying to be listed on NEEQ may increased profitability of Zhejiang Wynca

On 10 Jan., 2017, Zhejiang Wynca announced that its subsidiary, Shandong Xinfeng Seed Co., Ltd. (Shandong Xinfeng) would apply to be listed on the National Equities Exchange and Quotations (NEEQ). It was revealed that Zhejiang Wynca is the largest shareholder of Shandong Xinfeng, with 44.01% of equities.

Shandong Xinfeng is mainly engaged in R&D, production and sales of corn seed and wheat seed. As of 30 June, 2016, Shandong Xinfeng's total assets and net assets amounted to USD23.68 million (RMB164.59 million) and USD16.20 million (RMB112.62 million) respectively. In the first six months of 2016, the sales of Shandong Xinfeng hit USD3.48 million (RMB24.17 million), and its net profit was -USD0.21 million (-RMB1.44 million).

Shandong Shengli sells Shandong Vicome Greenland to avoid losses

Summary: In recent years, Shandong Vicome Greenland has suffered serious losses. This significantly dragged down the financial performance of its parent company, Shandong Shengli. On the last day of 2016, Shandong Shengli announced that it will sell Shandong Vicome Greenland.

On 31 Dec., 2016, Shandong Shengli Co., Ltd. (Shandong Shengli) announced that it sold all of its equity (96.25%) in Shandong Vicome Greenland Chem Co., Ltd. (Shandong Vicome Greenland) to Jiangxi Dagang Automobile Group Co., Ltd. (Jiangxi Dagang). The sale means that Shandong Vicome Greenland's financial figures are no longer included in Shandong Shengli's consolidated financial statements. Shandong Shengli predicted that the deal will help increase the company's 2017 net profit by about USD1.73 million (RMB12 million).





In recent years, Shandong Vicome Greenland has suffered losses.

China reduced corn planting areas to adjust agricultural production during these years. At the same time, the state decreased subsidies for corn planting. For these reasons, Shandong Vicome Greenland's sales of corn field herbicides, its leading product, slumped.

In addition, weak market demand, little product differentiation, and the suspension of production at some factories due to environmental issues, all pulled down the company's agricultural produce sales.

All of these factors dramatically dragged down Shandong Shengli's financial performance. In fact, Shandong Shengli has sought out cooperative partners in recent years, in order to accelerate its strategy adjustment and business upgrading, vigorously expand its natural gas business, and offset the negative impact from Shandong Vicome Greenland. However, very few cooperation agreements were reached, due to Shandong Shengli's poor performance.

To ensure a fair valuation on the sale, Shandong Shengli and Jiangxi Dagang authorized WUYIGE Certified Public Accountants LLP to audit Shandong Vicome Greenland's financial data:

As of 31 Oct., 2016,

- Net assets attributable to parent company: -USD30.64 million (-RMB212.94 million)
- Revenue: USD52.04 million (RMB361.70 million)
- Net profit: -USD62.13 million (-RMB431.81 million)

As of 31 Dec., 2015,

- Net assets attributable to parent company: USD24.89 million (RMB172.97 million)
- Revenue: USD98.31 million (RMB683.22 million)
- Net profit: -USD9.07 million (-RMB63.00 million)

Table 1: Shandong Vicome Greenland's assets and liabilities, 2015 & 2016

Item	As of 31 Dec., 2015, million USD	As of 31 Oct., 2016, million USD
Total assets	110.70	46.19
- Receivables	26.15	8.48
Total liabilities	84.69	82.27
Net assets attributable to parent company (Shandong Shengli)	24.89	-30.64

Source: Shandong Shengli Co., Ltd.



Table 2: Shandong Vicome Greenland's financial figures, 2015 & 2016 (Jan.-Oct.)

Item	2015, million USD	Jan.-Oct. 2016, million USD
Revenue	+98.31	+52.04
Operating profit	-10.88	-56.97
Net profit	-9.07	-62.13
Net cash flows generated from operating activities	+4.49	-3.37
Other amounts involved	0	+2.27

Source: Shandong Shengli Co., Ltd.

Shandong Vicome Greenland's equity value was evaluated to be -USD31.08 million (-RMB216 million). Shandong Shengli and Jiangxi Dagang agreed to set the price at USD0.14 (RMB1), a positive value after a premium of USD31.08 million (RMB216 million). They also agreed to exempt the USD31.08 million (RMB216 million) that Shandong Vicome Greenland owed to Shandong Shengli. After this exemption, Shandong Vicome Greenland owes Shandong Shengli USD24.65 million (RMB171.33 million), vs. USD55.69 million (RMB387 million) before. Jiangxi Dagang and Shandong Vicome Greenland will now be jointly responsible for the debts.

"Selling Shandong Vicome Greenland is an important step to gradually abandon traditional business and realize strategic transformation. By doing so, we can optimize our asset structure, increase working capital, improve our profitability and core competitiveness. Besides, we can concentrate on developing our natural gas business as well," said Shandong Shengli.

Lier Chemical predicts +55% YoY in 2016 net profit thanks to strict environmental requirements

Summary: Thanks to the promising sales in Q4, Lier Chemical predicted a YoY rise of 55% in 2016 net profit, a rise of 15-25 percentage points over the previous forecast.

On 4 Jan., 2017, Lier Chemical Co., Ltd. (Lier Chemical) released a correction for its 2016 performance forecast. As the sales of some products in Q4 exceeded expectations, the YoY (year on year) rise in 2016 net profit was predicted to be 35%-55%, a range of USD26.89 million-USD30.88 million (RMB186.91 million-RMB214.60 million), vs. 10%-40%, a range of USD21.91 million-USD27.89 million (RMB152.30 million-RMB193.84 million) in the previous forecast.

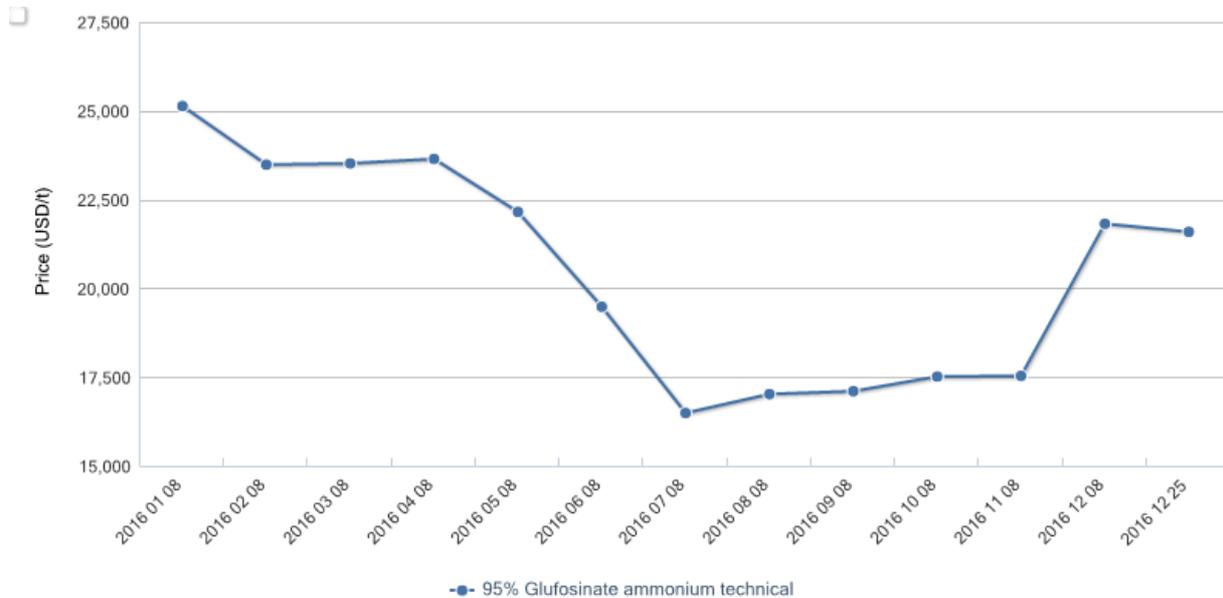
The rising sales of some pesticide TC, especially glufosinate-ammonium TC, were the main reason for Lier Chemical's growing net profit. In recent years, China's production capacity of glufosinate-ammonium kept mounting, and the product became the company's important income source. Since Q4 2016, environmental inspections have been increasing stricter in the country. Particularly, smog control actions in Beijing-Tianjin-Hebei region and its surrounding areas urged pesticide producers to cut or suspend production. Supply of glufosinate-ammonium kept tight and the price largely rose. Currently, there are only 3-4 glufosinate-ammonium producers run smoothly, but they don't take big orders due to supply shortage. In this context, Lier Chemical's market shares increased sharply and profitability improved thanks to the price rise.

According to CCM's price monitoring, the glufosinate-ammonium TC price has rebounded since H2 2016 and surged in Q4. In Dec., the price of glufosinate-ammonium 95% TC was about USD21,824/t, up 32.30% over the year's lowest of USD16,496/t in

July.

Lier Chemical is mainly engaged in R&D, production and sales of highly efficient, safe, and low residual pesticide TC and formulations of chloropyridines. It produced herbicides, fungicides, insecticides, and intermediates of pesticides/ pharmaceuticals, with products being clopyralid, picloram, and fluroxypyr-mepthyl.

Figure 1: Ex-works price of glufosinate ammonium 95% TC in China, 2016



Source: CCM

Besides, the improved performance of Jiangsu Kuaida Agrochemical Co., Ltd. (Jiangsu Kuaida), a subsidiary of Lier Chemical, also help boost the latter's performance. On 4 Jan., 2017, Lier Chemical announced that Jiangsu Kuaida was approved to enter the New Third Board (=NEEQ, National Equities Exchange and Quotations) by equity-transfer agreements.

Lier Chemical holds 51% of equity in Jiangsu Kuaida. Jiangu Kuaida is mainly engaged in production, sales and R&D of pesticide TC and formulations and intermediates (raw material: phosgene). Jiangsu Kuaida's financial figures:

Jan.-May 2016

- Revenue: USD35.40 million (RMB246 million)
- Net profit: USD1.88 million (RMB13.09 million)

2015

- Revenue: USD94.54 million (RMB657 million)
- Net profit: USD2.34 million (RMB16.29 million)

2014

- Revenue: USD84.46 million (RMB587 million)
- Net profit: USD1 million (RMB6.95 million)

Market Analysis

Ten major keywords in Chinese pesticide industry in 2016 (I)

Summary: 2016 witnessed opportunities and challenges in Chinese pesticide industry. CCM selected 10 major keywords to summarize the industry development in 2016.

In 2016, most Chinese pesticide companies and distributors suffered losses, due to low prices of pesticides, overcapacity and stricter environmental requirements. Of course, some found out breakthroughs to improve their financial performance. CCM selected the 10 major keywords to describe the opportunities and challenges which Chinese pesticide industry met in 2016.

The five out of the ten keywords are as follows:

1. Supply-side structural reform

The pesticide industry is closely related to the agriculture, thus the former also needs reform in supply, following the state's supply-side reform for agriculture. In recent years, the pesticide market was depressed – abundant supply of pesticides that should not be produced while insufficient supply of pesticides for agricultural production. Fortunately, there still remains rigid demand for pesticides from agriculture and grain markets, so the demand and supply relation maintained stable.

2. Slumped financial performance of most pesticide companies

Most of pesticide companies including listed ones, all failed to perform well in 2016, due to the dramatically fluctuated prices of bulk commodities, continuously falling grain price, overcapacity, surging pesticide output and slowly growing demand. They blindly expanded production capacity of popular products, resulting in price war, which hindered the profit growth.

Of course, some enterprise still achieved good performance. Lier Chemical Co., Ltd. predicted large YoY (year on year) rises in both revenue and net profit in 2016, of which the rise in net profit may even up to 35%-55%. Qingdao Hailir Pesticides & Chemicals Co., Ltd. also got listed at the end of 2016, and was expected to make a good performance in 2016.

3. Ban on paraquat AS

Since 1 July, 2016, paraquat AS has been banned in China. Then, whether paraquat should be re-classified as a highly toxic substance was discussed and the answer was "No" in the end, due to many Chinese paraquat producers' opposition. However, the Ministry of Agriculture of the People's Republic of China later announced that all registrations related to paraquat cannot be renewed, except for export-oriented ones, which means that paraquat was going to exit Chinese market entirely.

Glyphosate, glufosinate-ammonium, diquat and Nanjing Red Sun Co., Ltd.'s paraquat GW are regarded as good substitutes for paraquat AS, among which glufosinate-ammonium is the best. Nevertheless, the glufosinate-ammonium price experienced declines in H1 2016 as so many enterprises entered the market. Though the price rebounded in H2, it still kept low.

4. Large rise and fall in prices of most pesticide TC

The domestic pesticide prices slumped to the bottom in H1 and then skyrocketed in H2. "In Dec., a large amount of orders were canceled. Then recovered orders further tightened the market supply and pushed up the pesticide TC prices," said a trade source.



However, since the price surge was mainly thanks to the rising raw material price, producers did not make huge profit actually.

"If overseas orders also rise, the domestic market will be benefited; if not, the pesticide TC-buying boom won't last for long. After all, there are still a couple of months before the peak season (spring ploughing period) for pesticide use in China," disclosed an industry insider.

5. Environmental inspections

Since July 2016, the Central Environmental Inspection Teams have been stationed in all provinces/ regions in succession. The Central Government kept putting pressure on enterprises, in order to break interest ties between local economic development and pollution control difficulties.

In this context, chemical manufacturers whose environmental equipment does not meet standard or which have no environmental equipment were urged to suspend production, resulting in sharply reduced production capacity. Prices of pesticide raw materials and pesticide TC all increased dramatically. Particularly, the price of glyphosate TC, which used to be very low, started to surge. Now, the quotation hits near USD3,741.11/t (RMB26,000/t). If the environmental inspection continues, the figure is expected to exceed USD4,316.67/t (RMB30,000/t).

Ten major keywords in Chinese pesticide industry in 2016 (II)

Summary: 2016 witnessed opportunities and challenges in Chinese pesticide industry. CCM selected the 10 major keywords to summarize the industry development in 2016. In this article, the remaining 5 keywords will be introduced.

In 2016, most Chinese pesticide companies and distributors suffered loss, due to the sluggish market, low prices of agricultural produce, overcapacity and stricter environmental requirements. Of course, some found out breakthroughs to improve their financial performance. CCM selected the 10 major keywords to describe the opportunities and challenges which Chinese pesticide industry met in 2016.

The remaining five keywords are as follows:

6. Mergers & acquisitions (M&As)

To cope with the depressed pesticide market, companies made M&As to enhance their strength. In 2016, M&As between pesticide giants were booming.

- Dec.: Nanjing Red Sun Co., Ltd. acquired 70% of equities in Shandong Kexin Bio-Chemistry Co., Ltd. for USD10.48 million (RMB72.80 million)
- Sept.: Hubei Sanonda Co., Ltd. announced to acquire 100% of ADAMA; Bayer CropScience AG announced to acquire Monsanto Company for near USD66 billion, at USD128/share, which was the biggest overseas acquisition in German history and the biggest in the world in 2016
- May: Zhejiang Shenghua Biok Biology Co., Ltd. announced to acquire 100% of equities in Blaze. Loong Group for USD230.22 million (RMB1.60 billion). In this way, the former successfully transformed into an online gaming developer from a novel pesticide producer, which once sparked a debate
- Feb.: China National Chemical Corporation (ChemChina) stated to acquire Syngenta AG for USD465/share, which was the



biggest overseas acquisition among domestic companies. However, ChemChina delayed the acquisition in succession. According to the latest announcement, the acquisition was delayed to 2 March, 2017

7. Pesticide formulations innovation

Innovation of pesticide formulations refers to innovation in the processing of pesticides, including optimization of formula, auxiliaries selection, and production process. In this way, highly efficient, safe and stable pesticides can be produced. However, China has weak ability in R&D of chemicals. In order to compete against foreign products, domestic pesticide enterprises have no choice but innovate formulations.

In 2016, Huizhou Yinnong Technology Co., Ltd. developed a famous brand "Nongzhouxing" ("农舟行" in Chinese, active ingredient: abamectin) to prevent and control thrips on mango flowers, which is comparable with similar products made by foreign companies. Beijing Mindleader Agrosience Co., Ltd. which is titled as "the dark horse in the pesticide industry", also marketed a fungicide named "Mingrunfeng" ("明润丰" in Chinese, active ingredient: pyraclostrobin), which hit a sale record of USD4.32 million (RMB30 million). "Nongzhouxing" and "Mingrunfeng" are representatives of novel formulations. Notably, the two's active ingredients all went off patent.

8. Agriaviation

Pesticide spraying by unmanned aerial vehicles (UAVs) has been an irresistible trend, along with the accelerating urbanization, reducing rural labor force, and rising labor cost. Agriaviation integrates advanced crop protection devices and agricultural socialized services, which is a mean to improve utilization of agricultural means of production and production efficiency of rural labor force. Agriaviation enjoys a vast development space in the future.

In 2016, prices of agricultural UAVs dropped, which attracted many customers. The price of multi-propeller agricultural UAV fell to USD5,755.56-USD10,072.23/piece (RMB40,000-70,000/piece). In the meantime, intelligent and maneuverable UAVs become the R&D focus. What farmers need is a machine that can fly, spray pesticides, and difficult to damage.

In Aug. 2016, corn armyworm broke out in 20,000 ha (300,000 mu) of lands in Weinan City, Shaanxi Province. Various kinds of agricultural UAVs showed their capabilities and advantages, quickness, high efficiency and safety, in preventing and controlling pests and diseases, which were considered to be promising by industry insiders.

9. Agricultural service

There were more and more organizations and groups providing agricultural service in 2016, along with growing number of large farms. Thereinto, Shenzhen Noposition Agrochemicals Co., Ltd.'s "Tiantianquan" ("田田圈" in Chinese), an agricultural comprehensive service platform, is the most well-known one. Distributors and retailers who want to join in "Tiantianquan" should have specialized technical service groups.

Guangxi Tianyuan Biochemistry Co., Ltd. also established a specialized team to provide pesticide spraying service.

Jiangsu Kesheng Group Co., Ltd. established Dragonfly Agri, an E-commerce platform to provide intelligent agricultural machinery service, agricultural Internet of thing service, soil remediation, agricultural planning for family farms and farmer cooperatives.



Zhejiang Wynca Chemical Industry Group Co., Ltd. and Anyang Quanfeng Feifang Crop Protection Technology Co., Ltd. jointly established Nongfeike Agricultural Technology Co., Ltd. to provide agricultural UAV service.

UAV enterprises, such as Wuxi Hanhe Aviation Technology Co., Ltd. and Guangzhou Jifei Technology Co., Ltd. all established agricultural UAV service groups.

In addition, there were many newly-established companies that provide agricultural services, such as crop solutions.

10. Internet + Agricultural + Finance

The year 2016 was called "the year of Internet + Agriculture + Finance" by industry insiders.

- Nongfadai.com

The first Chinese agricultural Internet financial platform in China, which belongs to Shenzhen Nongjinqian Finance Service Co., Ltd. Nongfadai.com helps investors earn dividends from the development of modern agriculture by providing Internet solutions and connecting social capital with agricultural production.

- Ntjchina.com

Ntjchina.com, an Internet financial platform of Shenzhen Nong Tai Financial Service Co., Ltd., established by Shenzhen Noposion Agrochemicals Co., Ltd. (Shenzhen Noposion), a leading listed pesticide formulation company. Shenzhen Noposion is specialized in "Agriculture + Finance" and providing financial support for agriculture, rural areas and farmers.

- Nongfenqi.com

Nongfenqi.com is owned by Nanjing Nongfenqi E-commerce Co., Ltd., which provides "Internet + Agriculture + Finance" service. The company is also the first Internet innovative company that enters agricultural area by "agricultural machinery + finance" business.

China's oxyfluorfen TC price may keep rising in short term

Summary: Since Sept. 2016, China's oxyfluorfen price has been rising, and industry insiders predicted that the uptrend will continue in the short term.

In 2016, China's oxyfluorfen TC price dropped to the lowest in early Sept. and started to rise in late Sept. The uptrend continued to Jan. 2017, and industry insiders predicted that the price will go on increasing in the short term.

In fact, the price remained relatively stable from Jan. to Sept. 2016, with stable market supply. According to CCM's price monitoring, in early Sept. 2016, the ex-works price of oxyfluorfen 97% TC declined to USD18,463/t, the lowest in 2016, USD429/t lower than the USD18,892/t in Jan. 2016.

In late Sept. 2016 when the traditional peak season for procurement came into foreign markets, foreign purchasers started to place orders. As a result, overseas orders gradually increased in the Chinese market. However, this did not push up the operating rate because many oxyfluorfen TC manufacturers in Jiangsu, Zhejiang provinces and surrounding areas cut or suspended production due to the G20 Summit held in Hangzhou City, Zhejiang in Sept. The low operating rate led to price rise. At that time, the oxyfluorfen



TC price rose to USD18,878/t, up by USD415/t over early Sept.

In Nov.-Dec. 2016, the second batch of central environmental inspection teams was stationed in Shandong Province. In face with the mounting environmental pressure, pesticide producers reduced operating rate, and some even suspend production, tightening the market supply of oxyfluorfen TC and pushing up the price. In Dec., the ex-works price was up to USD20,078/t, up 8.75% over the lowest in Sept. Besides, enterprises continued raising quotations to offset cost pressure from rising raw material price and to improve profitability. "Shandong Qiaochang Chemical Co., Ltd. announced that its oxyfluorfen TC price has risen to USD21,296/t-USD21,583/t (RMB148,000t/t-RMB150,000/t)," disclosed a trade source.

In Jan. 2017, a majority of factories suspended production as the Spring Festival was coming, which further intensified the market supply. Therefore, oxyfluorfen TC price continued to rise. According to CCM's price monitoring, in early Jan. 2017, the ex-works price of oxyfluorfen 97% TC hit USD21,368/t, up 13.11% YoY (year on year), and up 6.42% (USD1,290/t higher) than Dec. 2016. Industrial insiders predicted that only when factories resume production after the Spring Festival Holiday, will the tight supply relieve.

Figure 2: Ex-works price of oxyfluorfen 97% TC in China, Jan. 2016-Jan. 2017



Source: CCM

Paraquat and Pyridine

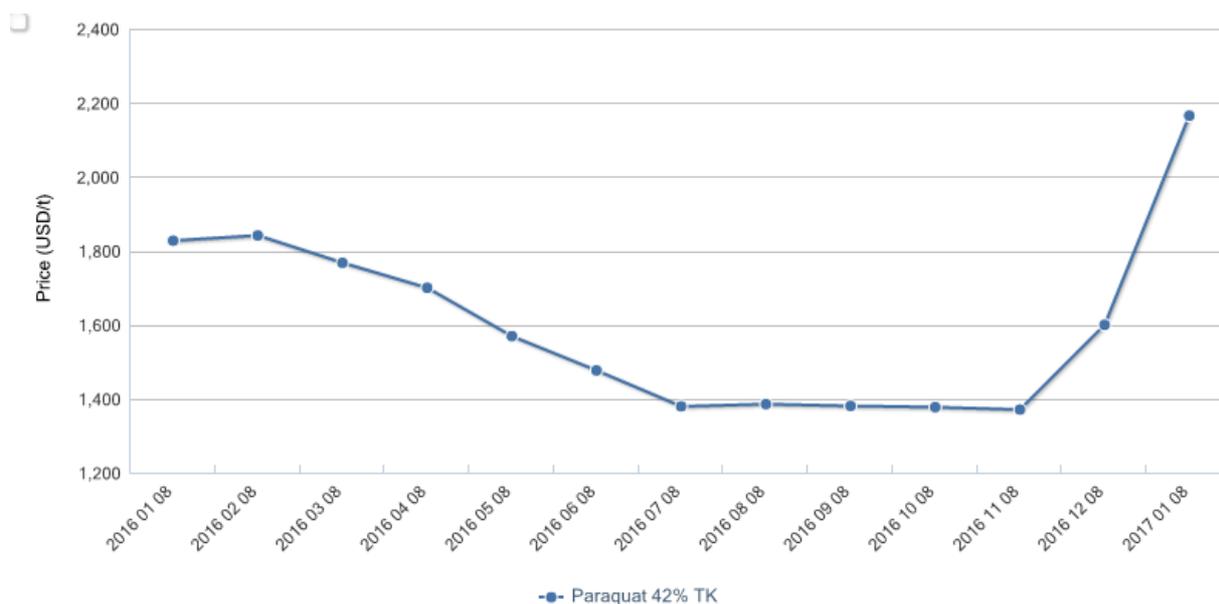
Ex-works price of paraquat 42% TK up 35.38% MoM in Jan. 2017

China's paraquat TK price started to rebound in Dec. 2016, and ushered in a strong rise in Jan. 2017. According to CCM's price monitoring, in early Jan., the ex-works price of paraquat 42% TK averaged USD2,166/t, up 35.38% MoM (month on month). "Although currently the market price of paraquat is surging, there are a few transactions," disclosed a trade source.

There are three main factors boosting the paraquat price:

1. Market supply was tight in Hubei and Shandong provinces, due to environmental pressure, serious air pollution, and the Spring Festival Holiday.
2. At the end of 2016, China's pyridine price started to rise, which pushed up the production cost of paraquat to some extent.
3. Due to low operating rate, paraquat producers had order backlog, so they were unwilling to take new orders. This also pushed up the product price.

Figure 3: Ex-works price of paraquat 42% TK in China, Jan. 2016-Jan. 2017

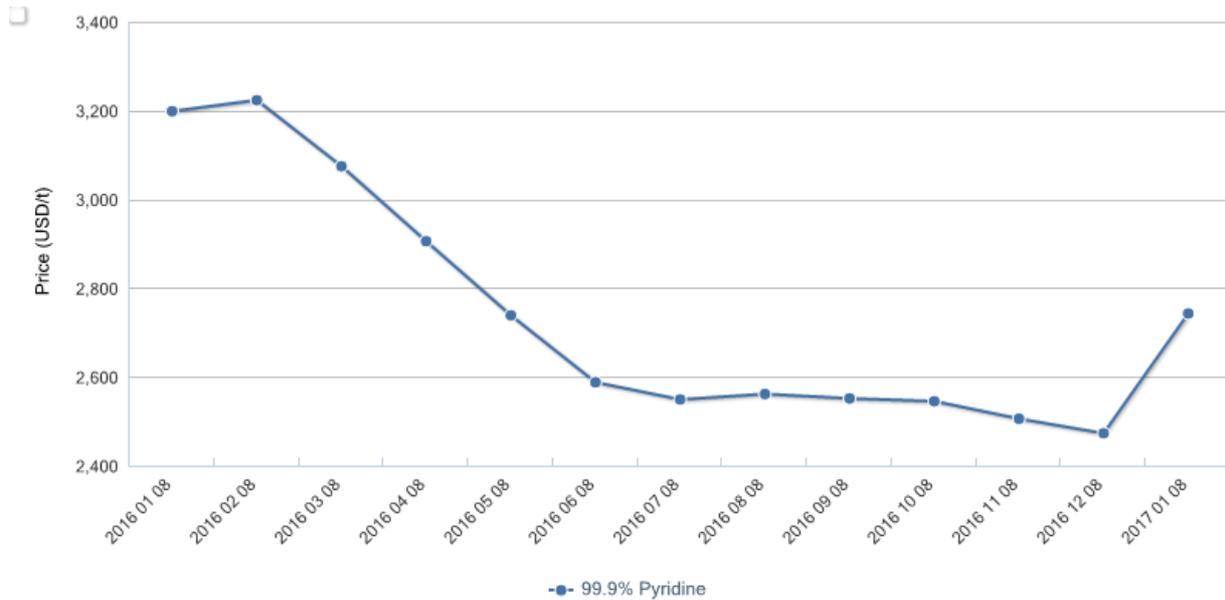


Source: CCM

Pyridine price rises in early Jan. 2017

Affected by rising raw material price and downstream product prices, China's price of pyridine rebounded in late Dec. 2016. According to CCM's price monitoring, in early Jan. 2017, the ex-works price of 99.9% pyridine averaged USD2,743/t, up 10.92% MoM (month on month). As of late Jan. 2017, some pyridine producers considered that they would keep increasing the price and accepting new orders.

Figure 4: Ex-works price of 99.9% pyridine in China, Jan. 2016-Jan. 2017



Source: CCM

Import and Export Analysis

Glufosinate-ammonium exports: up in volume while down in price in Jan.-Nov. 2016

Summary: In Jan.-Nov. 2016, China's export volume of glufosinate-ammonium experienced two-digit growth, but the export price slumped.

Glufosinate-ammonium got popular in recent years in Chinese market. Jan.-Nov. 2016 saw up in export volume but down in export price of glufosinate-ammonium in China. For sure, the 2016 export business may suffer declines.

Export volume

According to China Customs, in Jan.-Nov., the country exported 5,792.19 tonnes of glufosinate-ammonium (including TC and formulations, similarly hereinafter), up 15.87% YoY (year on year).

Export volume of glufosinate-ammonium TC increased by 32.65% YoY to 2,639.23 tonnes, 45.57% of the total export volume. Notably, glufosinate-ammonium TC mainly included glufosinate-ammonium 95% TC and glufosinate-ammonium 50% TK. In detail, export volume of glufosinate-ammonium 95% TC hit 1,771.32 tonnes, 67.12% of the total export volume of glufosinate-ammonium TC.

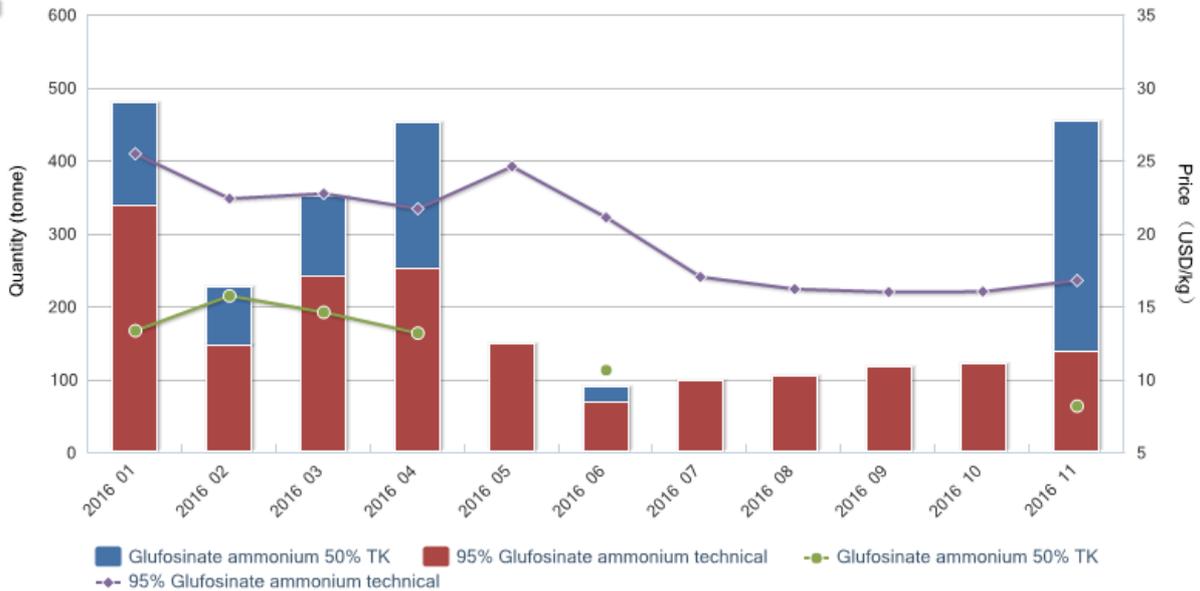
Export volume of glufosinate-ammonium formulations was up by 4.77% YoY to 3,152.96 tonnes, 54.43% of the total. Data here mainly included lufosinate-ammonium 100 g/L AS, glufosinate-ammonium 180 g/L AS, glufosinate-ammonium 200 g/L AS and glufosinate-ammonium 280 g/L SL. Thereinto, glufosinate-ammonium 200 g/L AS ranked first by 1,934.69 tonnes, 61.36% of the total export volume of glufosinate-ammonium formulations.

Export price

In Jan.-Nov., average export price of glufosinate-ammonium reduced sharply by 45.20% YoY, according to China Customs.

- Glufosinate-ammonium TC: USD17.38/kg, down by 47.07% YoY
- Glufosinate-ammonium formulations: USD5.77/kg, down by 38.65% YoY

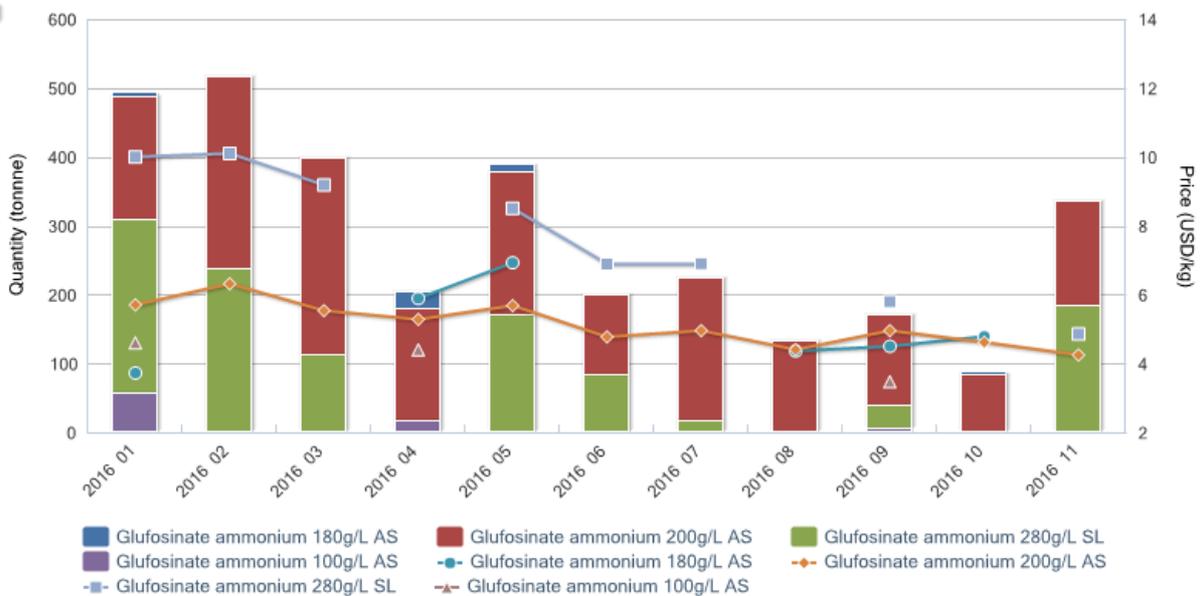
Figure 5: Export volume and price of glufosinate-ammonium technical in China, Jan.-Nov. 2016



Note: There is no glufosinate-ammonium 50% TK export in May, July-Oct. 2016.

Source: China Customs and CCM

Figure 6: Export volume and price of glufosinate-ammonium formulations in China, Jan.-Nov. 2016



Note: There is no glufosinate ammonium 100g/L AS export in Feb., March, May-Aug., Oct. and Nov.; no glufosinate ammonium 180g/L AS export in Jan.-March, June, July and Nov.; no glufosinate ammonium 280g/L SL export in April, Aug., Oct. 2016.

Source: China Customs and CCM

Export destinations

China's glufosinate-ammonium was mainly exported to the US, South Korea and Australia.

The top 3 export destinations by export volume of glufosinate-ammonium TC were the US, South Korea and Australia, with a total of 1,833.19 tonnes, 69.46% of China's total.

The top 3 by export volume of glufosinate-ammonium formulations were the US, Indonesia and the Philippines, with a total of 1,651.81 tonnes, 52.39% of China's total.

Table 3: China's top 10 glufosinate-ammonium formulations export destinations by volume, Jan.-Nov. 2016

No.	Export destination	Export volume, tonne	Export price, USD/kg
1	The US	1091.53	8.43
2	Indonesia	327.51	4.75
3	The Philippines	232.77	4.71
4	Thailand	193.31	4.45
5	Malaysia	147.40	3.81
6	Cuba	139.19	6.88
7	Canada	123.67	5.13
8	The Dominican Republic	107.53	5.99
9	Colombia	107.28	5.17
10	Australia	77.35	4.88

Source: China Customs & CCM

Table 4: China's top 10 glufosinate-ammonium TC export destinations by volume, Jan.-Nov. 2016

No.	Export destination	Export volume, tonne	Export price, USD/kg
1	The US	901.67	16.57
2	South Korea	514.87	16.45
3	Australia	416.65	14.76
4	Malaysia	194.70	13.94
5	Taiwan	168.50	26.96
6	India	108.00	21.51
7	Vietnam	102.15	19.45
8	Israel	83.00	19.78
9	Colombia	27.30	20.01
10	Mexico	18.01	19.95

Source: China Customs & CCM

Exporter by manufacturer

In Jan.-Nov. 2016, Lier Chemical Co., Ltd. (Lier Chemical), YongNong BioSciences Co., Ltd. (YONON) and Hebei Veyong Bio-Chemical Co., Ltd. (Hebei Veyong) were major suppliers of glufosinate-ammonium exports (including direct and indirect export, similarly hereinafter). According to China Customs and analyst CCM, Lier Chemical exported 1,079.11 tonnes of glufosinate-ammonium TC, 40.89% of China's total, ranking first. The second was YONON, with a total of 900.64 tonnes, 34.13% of the total.

YONON was the top one exporter by export volume of glufosinate-ammonium formulations, being 1,790.17 tonnes, 56.78% of the total. Lier Chemical and Hebei Veyong ranked the second and third, with 228.75 tonnes and 224.05 tonnes, 7.25% and 7.11% of China's total respectively.

Table 5: Main glufosinate-ammonium (TC and formulations) exporters by manufacturer by volume in China, Jan.-Nov. 2016

No.	Exporter	Export volume, tonne
1	Lier Chemical Co., Ltd.	1,307.86
2	Yongnong BioSciences Co., Ltd.	2,690.81
3	Hebei Veyong Bio-chemical Co., Ltd.	397.71
4	Shijiazhuang Richem Co., Ltd.	169.54
5	Jiangsu Huifeng Agrochemical Co., Ltd.	24.00

Source: China Customs & CCM

Diquat TK export volume up 61.34% YoY in Jan.-Oct. 2016

Summary: In Jan.-Oct. 2016, China's export volume of diquat TK recorded a large YoY rise. Although the entire herbicide market remained depressed in 2016, export price of diquat TK did not drop significantly.

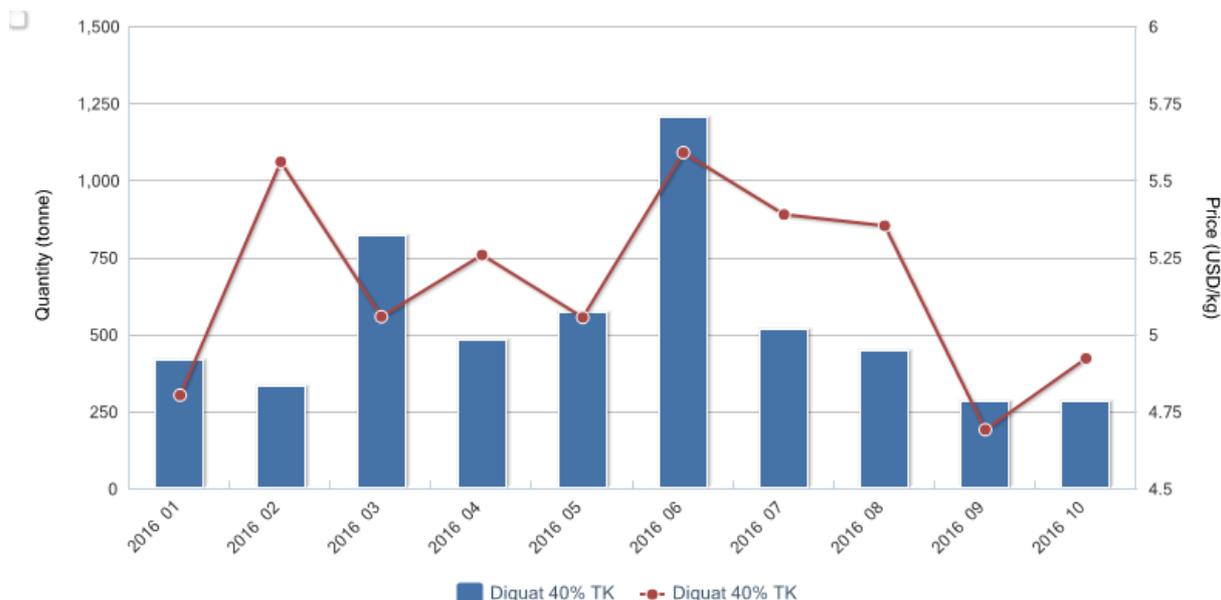
Export volume

Export volume of diquat TK rose largely in China in Jan.-Oct. 2016, mainly because the demand from overseas was increasingly strong, and domestic producers maintain high operating rate. According to China Customs, export volume of diquat TK (mainly diquat 40% TK) reached 5,336.92 tonnes, up 61.34% YoY (year on year).

Export price

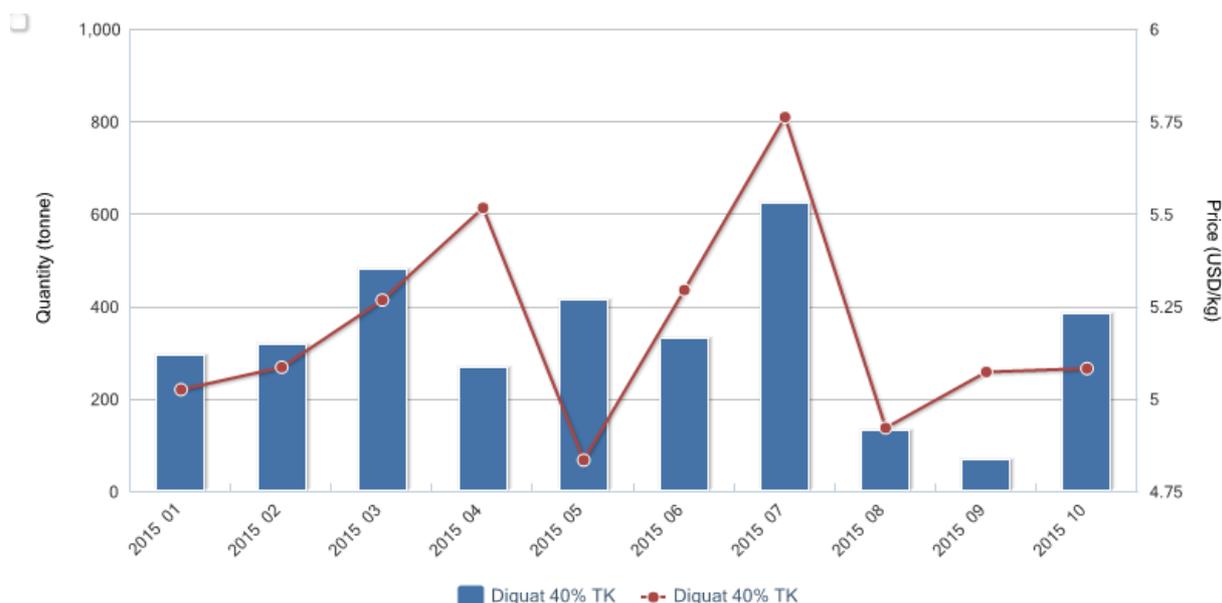
Despite the depressed herbicide market, export price only declined by 0.37% YoY to USD5.17/kg. Of course, this was mainly because: 1. China has less diquat producers; 2. Market supply remained tight; 3. Raw material prices increased.

Figure 7: Export volume and price of diquat 40% TK in China, Jan.-Oct. 2016



Source: China Customs and CCM

Figure 8: Export volume and price of diquat 40% TK in China, Jan.-Oct. 2015



Source: China Customs and CCM

Export destination

According to China Customs and CCM's research, China's diquat TK was mainly exported to 24 countries/ regions in Jan.-Oct. 2016. The top 10 imported 5,098.74 tonnes, 95.54% of China's total export volume. The top 3 imported 3,249.63 tonnes, 60.89% of the total. Of these, Belgium ranked the first, with import volume of 1,751.10 tonnes, 32.81% of China's total.

Table 6: China's top 10 diquat TK export destinations by volume, Jan.-Oct. 2016

No.	Export destination	Export volume, tonne	Export price, USD/kg
1	Belgium	1,751.10	4.47
2	Canada	762.44	5.97
3	Russia	736.08	5.83
4	The US	665.59	5.29
5	Australia	392.80	5.55
6	Ukraine	347.76	5.33
7	The Netherlands	160.00	5.56
8	Latvia	113.60	4.86
9	Guatemala	93.84	5.83
10	Greece	75.52	4.49

Source: China Customs & CCM

Exporter by manufacturer



As of now, Nanjing Red Sun Co., Ltd. (Nanjing Red Sun), Shandong Luba Chemical Co., Ltd. (Shandong Luba) and Zhejiang Funong Biotechnology Co., Ltd. (Zhejiang Funong) were main producers of diquat TK in China. In Jan.-Oct., Shandong Luba, Zhejiang Funong and Nanjing Red Sun respectively exported 2,648.76 tonnes, 1,597.23 tonnes and 1,086.79 tonnes of diquat TK, 49.63%, 29.93% and 20.36% of China's total. Notably, all data included both direct and indirect export.

Registration

Six herbicide TC newly registered in China in Dec. 2016

Summary: In Dec. 2016, 6 new herbicide TC were formally registered by 4 companies in China, involving 6 herbicide active ingredients.

According to the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA), 6 herbicide TC (3 were low toxic and 3 were micro toxic) were formally registered by 4 companies in China in Dec. 2016, all valid for 5 years. The 6 registrations involved 6 herbicide active ingredients.

Dicamba, mesotrione and flumioxazin were popular among registrants in recent two years.

Dicamba

Along with the development of genetically modified (GM) crops, dicamba increasingly draws attention of pesticide companies. Henan HDF Chemical Co., Ltd. (Henan HDF) who takes glyphosate series as its main product also registered dicamba 98% TC in Dec. As of 31 Dec., there were 35 valid dicamba TC registrations in China, of which 8 and 7 was newly increased in 2016 and 2015 respectively.

Mesotrione

As of 31 Dec., China had 25 valid mesotrione TC registrations, 52% of the total TC registrations. Thereinto, 7 and 6 was registered in 2016 and 2015 respectively.

Flumioxazin

As of 31 Dec., there were 8 valid flumioxazin TC registrations in China, 56% of the total. Of these, 5 were newly registered in 2016.

Ningxia Gerui Fine Chemical Co., Ltd. and Jiangsu Reprint Pesticide Factory Co., Ltd. separately obtained two herbicide TC registrations that month. Specifically, the former registered imazethapyr 98% TC and flumioxazin 99.20% TC, all were low toxic; the latter registered mesosulfuron-methyl 95% TC and flucarbazone-Na 95% TC, all were micro toxic. Besides, Henan HDF and Jiangsu Yangnong Chemical Group Co., Ltd. separately obtained one herbicide TC registration.



Table 7: New herbicide TC registrations in China, Dec. 2016

No.	Active ingredient	Spec.	Registrant	Valid registration, as of 31 Dec., 2016	New registration in 2016	New registration in 2015	New registration in 2014
1	Dicamba	98% TC	Henan HDF Chemical Co., Ltd.	35	8	7	3
2	Mesotrione	95% TC	Jiangsu Yangnong Chemical Group Co., Ltd.	25	7	6	1
3	Imazethapyr	98% TC	Ningxia Gerui Fine Chemical Co., Ltd.	14	1	1	2
4	Flumioxazin	99.20% TC		9	5	1	1
5	Mesosulfuron-methyl	95% TC	Jiangsu Reponit Pesticide Factory Co., Ltd.	9	2	2	4
6	Flucarbazone-Na	95% TC		8	2	4	1

Note: All new registrations include herbicide TC and TK.

Source: ICAMA

New herbicide TC registrations in China in 2016

Summary: In 2016, 126 herbicide TC were newly registered in China, involving 64 active ingredients. Of this, 6 active ingredients were registered in China for the first time, by 6 companies.

According to the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA), 126 herbicide TC (122 TC and 4 TK) were newly registered in China, including 118 formal registrations and 8 temporary registrations. All new registrations did not include old ones and renewed ones. Besides, 104 were low toxic, 20 were micro toxic and 20 were medium toxic.

In 2016, there were 64 active ingredients of herbicides being registered, among which 13 were registered for ≥ 3 times. Notably, 2,4-D, glufosinate-ammonium, dicamba, and mesotrione was respectively registered for 10, 8, 8 and 7 times.

Specifically, halauxifen-methyl, triflusulfuron-methyl, pyraclonil, benzobicyclon, pentoxazone and thienencarbazone-methyl were registered for the first time in China, by Dow AgroSciences LLC (Dow AgroSciences), Jiangsu Agrochem Laboratory, Hubei Sowa Fine Chemical Co., Ltd., SDS Biotech K.K. (SDS Biotech), Kaken Pharmaceutical Co., Ltd. (Kaken) and Bayer CropScience AG (Bayer CropScience) respectively.

There were 69 companies that registered herbicide TC in China that year. In detail, 13 companies obtained ≥ 3 registrations. The top 4 were Jiangsu LionChem Co., Ltd., Ningxia Gerui Fine Chemical Co., Ltd., Huaian Guorui Chemical Co., Ltd., and Jiangxi Zhonghe Chemical Co., Ltd., with 7, 6, 5, 5 registrations separately. It should be mentioned that 5 foreign companies got registrations in China. They were Bayer CropScience (2), Dow AgroSciences (2), Arysta Lifescience (North America) Co., Ltd. (1), Kaken (1) and SDS Biotech (1).

Table 8: Active ingredients being registered on ≥3 technical registrations in China, 2016

No.	Active ingredient	Herbicide TC registration
1	2,4-D	10
2	Glufosinate-ammonium	8
3	Dicamba	8
4	Mesotrione	7
5	Flumioxazin	5
6	Glyphosate (including glyphosate ammonium, glyphosate dimethylamine salt, glyphosate potassium salt and glyphosate-isopropylammonium)	5
7	Florasulam	4
8	Amicarbazone	3
9	Quizalofop-P-ethyl	3
10	Metribuzin	3
11	Cyhalofop-butyl	3
12	Clethodim	3
13	Carfentrazone-ethyl	3

Source: ICAMA

Table 9: Herbicide active ingredients being registered in China for the first time, 2016

No.	Active ingredient	Spec.	Registrant	Valid registration, as of 31 Dec., 2016	New registration in 2016	New registration in 2015	New registration in 2014
1	Halauxifen-methyl	91.40% TC, 93% TC	Dow AgroSciences LLC	1	1	0	0
2	Triflusaluron-methyl	95% TC	Jiangsu Agrochem Laboratory	1	1	0	0
3	Pyraclonil	97% TC	Hubei Sowa Fine Chemical Co., Ltd.	1	1	0	0
4	Benzobicyclon	98% TC	SDS Biotech K.K.	1	1	0	0
5	Pentoxazone	97% TC	Kaken Pharmaceutical Co., Ltd.	1	1	0	0
6	Thiencarbazone-methyl	98% TC	Bayer CropScience AG	1	1	0	0

Source: ICAMA

Table 10: Pesticide companies have ≥3 herbicide TC registrations in China, 2016

No.	Registrant	Herbicide TC registration
1	Jiangsu LionChem Co., Ltd.	7
2	Ningxia Gerui Fine Chemical Co., Ltd.	6
3	Huaian Guorui Chemical Co., Ltd.	5
4	Jiangxi Zhonghe Chemical Co., Ltd.	5
5	Jiangsu Agrochem Laboratory	4
6	Jiangxi Tianyu Chemical Co., Ltd.	4
7	Sichuan Fuhua Tongda Agro-chemical Technology Co., Ltd.	4
8	Zhejiang Heben Pesticide & Chemicals Co., Ltd.	4
9	Hebei Shanli Chemical Co., Ltd.	3
10	Jiangsu Good Harvest-Weien Agrochemical Co., Ltd.	3
11	Jiangsu Repont Pesticide Factory Co., Ltd.	3
12	MAX (Rudong) Chemicals Co., Ltd.	3
13	Shandong Weifang Rainbow Chemical Co., Ltd.	3

Source: ICAMA

Nine companies obtain flucarbazone-Na TC registration in China, as of 15 Jan., 2017

As of 15 Jan., 2017, there were 9 companies obtaining registration of flucarbazone-Na TC. Of these, Arysta Lifescience (North America) Co., Ltd. was the first company to get this registration in China. And Shijiazhuang Xingbai Bio-engineering Co., Ltd. was the first Chinese company to register this product.

Table 11: China's valid registrations of flucarbazone-Na TC, as of 15 Jan., 2017

No.	Registration No.	Product	Expiry date	Manufacturer
1	PD20081110	Flucarbazone-Na 95% TC	2018/8/19	Arysta Lifescience (North America) Co., Ltd.
2	PD20142341	Flucarbazone-Na 96% TC	2019/11/3	Shijiazhuang Xingbai Bio-engineering Co., Ltd.
3	PD20150502	Flucarbazone-Na 95% TC	2020/3/23	Jiangsu Agrochem Laboratory
4	PD20150770	Flucarbazone-Na 95% TC	2020/5/13	Dezhou Luba Fine Chemid Co., Ltd.
5	PD20150871	Flucarbazone-Na 98% TC	2020/5/18	Shandong Binnong Technology Co., Ltd.
6	PD20151145	Flucarbazone-Na 95% TC	2020/6/26	Anhui Suzhou Chemical Factory
7	PD20160013	Flucarbazone-Na 96% TC	2021/1/26	Jiangsu Jiangnan Agrochemical Co., Ltd.
8	PD20161566	Flucarbazone-Na 95% TC	2021/12/16	Jiangsu Repons Pesticide Factory Co., Ltd.
9	PD20170042	Flucarbazone-Na 95% TC	2022/1/7	Jiangsu Flag Chemical Industry Co., Ltd.

Source: Institute for the Control of Agrochemicals, Ministry of Agriculture

Policy

Pesticide residue may become key item of inspection in 2017

On 4 Jan., 2017, the China Food and Drug Administration (CFDA) issued the *Plan and Requirements of Food Safety Sampling Inspection in 2017*, which indicated that pesticide residue will become key items of inspection this year. In recent years, China was strengthening the inspection on pesticide residue, as it is the top issue for ordinary people.

Provincial level food and drug supervision departments should organize sampling inspection on canteens of middle and primary schools and kindergartens, as well as their surrounding areas and urban-rural fringe areas; city- and county-level food and drug supervision departments should randomly inspect pesticide residues in vegetables and fruits, and veterinary drug residues in livestock and poultry meat as well as aquatic products sold in local markets, and strengthen inspection on small restaurants, small workshops and street vendors. The inspection plan also covers 33 categories of food, 132 varieties, and 203 sub-categories. A total of 1.27 million of batches will be inspected, of which 31,400 batches will be inspected by the CFDA, including 27,000 batches for planned inspection, and 4,400 batches for special inspection. Large-scale chain supermarkets, large-scale shopping malls, large wholesale markets will be main targets and large-scale online food selling platforms will be main targets.



China plans to issue Emission Standard of Water Pollutant of the Pesticide Industry in 2017

On 10 Jan., 2017, the Water Environment Management Department of the Ministry of Environmental Protection of the People's Republic of China (MEP) held the expert panel on the *Emission Standard of Water Pollutant of the Pesticide Industry (Exposure Draft)*. Experts all agreed that the drafting group made lots of researches and the standard enjoys scientificity, innovativeness, applicability and operability.

It is disclosed that the drafting group will amend the standard based on experts' opinion. Related departments will ask for public opinions online. The standard is expected to be issued within 2017.

The Chinese Research Academy of Environmental Sciences, the Nanjing Institute of Environmental Sciences, MEP, the Shenyang Research Institute of Chemical Industry, the China Crop Protection Industry Association and the China Chemical Industry Environmental Protection Association all participated in the drafting of the standard.

MOA to accelerate 'Internet + agricultural government affairs service'

On 11 Jan., 2017, the Ministry of Agriculture of the People's Republic of China released the notice about the issuance of the *Scheme of Accelerating the "Internet + agricultural government affairs service"*. Accelerating the "Internet + agricultural government affairs service" is the urgent requirement of switching government functions and working method as well as improving governance ability, is the key link of deepening "streamlining administration and delegating power to the lower levels, delegating power and strengthening regulation and service optimization", is the inevitable choice for government affairs service to cope with challenges of network era, is an important measure to solve the problem of "the masses find it hard to handle affairs" and to stimulate vigor of society and increase new kinetic energy for development, and is an innovative upgrading of government affairs service.

By the end of 2017, the MOA should:

- Finish the government affairs service catalogue and publicize it online
- Basically establish an integrated online government affairs service platform, entirely realize "doing administrative examination and approval matters online", build an "Internet + agricultural government affairs service" system to largely enhance the intelligent level of agricultural government affairs service, and to help enterprises and the masses to do things much convenient, quicker and efficient





Jiangsu to launch special action of 'four 'a batch' on chemical companies

On 7 Jan., 2017, the Jiangsu Government announced to launch the "four 'a batch'" special action on chemical enterprises. The "four 'a batch'" refers to "shut down a batch of chemical enterprises", "remove a batch of chemical enterprises", "upgrade a batch of chemical enterprises" and "reorganize a batch of chemical enterprises". Three kinds of enterprises are included in the action. 1. All chemical companies, designated by economic and information technology departments; 2. Companies that sell or store hazardous chemicals, designated by safety inspection departments, and transportation departments; 3. Companies and docks that store hazardous chemical within the programming range of ports, designated by transportation department and safety inspection departments. The followings are the enterprises meet the requirements of the action.

"Shut down a batch of chemical enterprises"

1. Enterprises with outmoded production equipment and outmoded products (unless otherwise specified);
2. Small dye, arsenic metallurgy, oil refining and pesticide enterprises within the protected area of Taihu Basin;
3. Chemical enterprises that are located within the grade 1 protected area of Taihu Basin, protected area along the Yangtse River, within 1 km of both sides of the Beijing-Hangzhou Grand Canal and Tongyu River water-dilution channel and cannot remove within the required time;
4. Illegal enterprises without filing, production permission, environmental impact assessment, safety assessment and land permission;
5. Enterprises do not have safe production conditions;
6. Enterprises with substandard environmental production, outstanding risks and cannot effectively control the risks.

"Remove a batch of chemical enterprises"

Chemical enterprises that have promising market prospect, good production processes, less environmental pressure or can implement production process upgrading and transformation.

"Upgrade a batch of chemical enterprises"

Enterprises in line with the 6 situations mentioned in the announcement.

"Reorganize a batch of chemical enterprises" (related department and governments at all levels issued specific policies/ measures to encourage these companies to make merger and reorganization)

Enterprises in line with the 6 situations mentioned in the announcement.



News in Brief

Shandong Ji'nan: 4 pesticide companies ordered to make emergency emission reduction

On 13 Jan., 2017, Ji'nan City, Shandong Province published 73 companies that should cut emission due to heavy air pollution, which involved pesticide producers Shandong Luba Chemical Co., Ltd., Shandong Ji'nan Kesai Agrochem Co., Ltd., Shandong Lvbang Crop Science Co., Ltd. and Shandong Vicome Greenland Chem Co., Ltd.

It is known that air quality in Ji'nan has worsened since the evening of 15 Jan. As of 14 Jan., besides Ji'nan, Dezhou, Liaocheng, Zibo, Taian, Jining, Zaozhuang and Heze cities all issued the orange alert for smog; Weifang City released the yellow alert for smog. The entire province was prepared against smog.

As the Spring Festival comes and actions to control smog continue, more and more companies will cut or suspend production. This will to some extent intensify the supply of some pesticides.

Lier Chemical: large rises in both revenue and net profit in 2016

On 17 Jan., 2017, Lier Chemical Co., Ltd. (Lier Chemical) released a preliminary earnings estimate, which showed that its revenue, operating profit and net profit recorded a YoY (year on year) rise of 33.33%, 57.80% and 50.49% in 2016 respectively, mainly thanks to rising sales volume of some pesticide TC in 2016. Additionally, as the company finished the A-share rights issuance, profit distribution (bonus issuance) and share capital increase from accumulation fund, its total equity increased by 159.02% YoY in 2016.

Besides, Lier Chemical revealed that specific data will be released in its 2016 financial report at the end of Feb. 2017.

Table 12: Lier Chemical's major financial figures, 2016, million USD

Item	2016	YoY change (%)	2015
Revenue	285.66	33.33	214.26
Operating profit	35.25	57.8	22.34
Total profit	37.28	54.01	24.20
Net profit	29.98	50.49	19.92
Item	As the end of 2016	YoY change (%)	As the end of 2015
Total assets	448.50	21.92	367.88
Owners' equity	292.49	56.47	186.94

Note: YoY refers to year on year.

Source: Lier Chemical Co., Ltd.



Jingbo Agrochemicals plans to raise USD78.51 million for 5 projects by IPO

On 27 Dec., 2016, the China Securities Regulatory Commission disclosed that Jingbo Agrochemicals Technology Co., Ltd. (Jingbo Agrochemicals) publicized the initial public offering (IPO) prospectus for the first time. The company planned to issue no more than 40.10 million of shares on the Shenzhen Stock Exchange to raise USD78.51 million (RMB545.66 million) for 5 projects.

Specifically,

- USD22.40 million (RMB155.65 million) for a pesticide formulations marketing and technical service network construction project
- USD12.71 million (RMB88.35 million) for a 500 t/a environmentally friendly and highly efficient insecticide TC project
- USD15.63 million (RMB108.66 million) for a 10,000 t/a environmentally friendly pesticide formulations project
- USD14.10 million (RMB98 million) for a technology center construction project
- USD13.67 million (RMB95 million) for working capital supplement project

Jingbo Agrochemicals enjoys competitive advantages in producing quizalofop-P-ethyl, nicosulfuron and pyraclostrobin. It has established long-term stable cooperative relations with many international well-known pesticide manufacturers including ADAMA and DuPont. Besides, it successfully marketed its quizalofop-P-ethyl TC and pyraclostrobin TC into the pesticide markets in South America, Southeast Asia and Africa based on the products' good quality and cost advantages.

Guangxin Agrochemical: Dongzhi Guangxin to enjoy tax preference for 3 consecutive years

On 30 Dec., 2017, Anhui Guangxin Agrochemical Co., Ltd. (Guangxin Agrochemical) announced that its wholly-owned subsidiary Anhui Dongzhi Guangxin Agrochemical Co., Ltd. (Dongzhi Guangxin) was certificated as a high-tech company and received the High-tech Company Certificate jointly issued by the Science and Technology Department, the Finance Department, the State Administration of Taxation and the local taxation administration in Anhui Province (certificate No.: GR201634000588, validity: 3 years).

After that, Dongzhi Guangxin will enjoy tax preference for 3 consecutive years from 1 Jan., 2016 (2016-2018). In China, company income tax rate for high-tech companies is 15%, vs. 25% for non-high-tech companies. This will directly contribute to Dongzhi Guangxin's net profit.

It is known that Guangxin Agrochemical invested in several projects in Dongzhi Guangxin's Circular Economy Park, including a 15,000 t/a o-phenylenediamine project, a 20,000 t/a phosgene and phosgenated products project, a 200,000 t/a para-nitrochlorobenzene project, a para-nitrochlorobenzene augmented products project, a 20,000 t/a glyphosate project, a 300,000 t/a ionic membrane caustic soda project and supporting projects of heating, electricity and water supply.



Sinochem and CGRC sign strategic cooperation agreement

On 10 Jan., 2017, Sinochem Group (Sinochem) signed a strategic cooperation agreement with China Grain Reserves Corporation (CGRC) in Beijing. The two built a long-term stable strategic partnership to cooperate in policy-oriented reserve, storing grains for rotation, and modern agriculture.

According to the agreement, Sinochem will provide services concerning order-oriented planting, whole-process trusteeship and technical trusteeship for CGRC's policy-oriented reserves, grain storing and state-owned farms transfer via Sinochem Modern Agriculture Co., Ltd. (Sinochem Agriculture), Sinochem's subsidiary. At the same time, the two will cooperate in storage facilities, grain and oil sales and talent cultivation, aiming to contribute to the state's grain safety and transformation of modern agriculture.

Sinochem is mainly engaged in 5 major fields, namely energy, agriculture, chemical, real estate and finance.

Sinochem Agriculture is a unified platform of Sinochem, which is specialized in providing modern agriculture solutions including planting technical service, agricultural finance and agricultural produce sale.

CGRC is authorized by the State Council for grain reserves management, and regulate and control the procurement and sales of grain and oil under the order of the central government.

FMC: herbicide 'Daoqingqing' enters Jiangsu market

On 17 Jan., 2017, FMC Corporation (FMC) held a product launch for its new product "Daoqingqing" (Metamifop-cyhalofop-butyl 10% EC – 5% metamifop + 5% cyhalofop-butyl) in Xuzhou City, Jiangsu Province, which means that the product will soon enter the Jiangsu market. It is disclosed that "Daoqingqing" can prevent and control many kinds of gramineae weeds and can prevent and control barnyardgrass, common crabgrass, *Eleusine indica* (L.) Gaertn., Chinese sprangletop and knotgrass once and for all. Besides, it is easy to use and safe for rice and

It is known that "Daoqingqing" got registered in 2016 and will be marketed in 2017. FMC has great confidence in market prospect of "Daoqingqing". After the Spring Festival, FMC will conduct marketing activities, and the company predicted that the sales in Chinese market will surpass USD14.39 million (RMB100 million).

Price Monitoring

Ex-works prices of key herbicide raw materials in China, Jan. 2017

Table 13: Ex-works prices of key herbicide raw materials in China, Jan. 2017

No.	Raw materials	20161208		20170108	
		RMB/t	USD/t	RMB/t	USD/t
1	98% Glycine	12,800	1,862.33	12,350	1,783.08
2	92% Iminodiacetonitrile	9,150	1,331.28	11,000	1,588.17
3	99% Isopropylamine	8,950	1,302.18	10,050	1,451.01
4	98% N-(Phosphonmethyl) Iminodiacetic acid	12,400	1,804.13	14,000	2,021.31
5	99% Phosphorus trichloride	4,450	647.45	4,225	610
6	99.9% Pyridine	17,000	2,473.41	19,000	2,743.21

Note: Ex-works price includes VAT.

Source: CCM

Ex-works prices of main herbicides in China, Jan. 2017

Table 14: Ex-works prices of main herbicides in China, Jan. 2017

No.	Product	20161208		20170108	
		RMB/t	USD/t	RMB/t	USD/t
1	Acetochlor 92% technical	17,700	2,575.26	18,000	2,598.83
2	97% Atrazine technical	17,000	2,473.41	17,800	2,569.95
3	96% Bensulfuron-methyl technical	127,000	18,477.83	130,000	18,769.31
4	92% Butachlor technical	17,500	2,546.16	17,500	2,526.64
5	95% Clomazone technical	108,000	15,713.43	108,000	15,592.97
6	95% Cyhalofop-butyl technical	187,000	27,207.52	184,000	26,565.79
7	97% Diuron technical	26,500	3,855.61	27,500	3,970.43
8	98% Fendlorim technical	125,000	18,186.84	128,000	18,480.55
9	95% Fenoxaprop-P-ethyl technical	180,000	26,189.06	180,000	25,988.28
10	96% Fluroxypyr technical	100,000	14,549.48	99,000	14,293.55
11	95% Fomesafen technical	89,000	12,949.03	91,200	13,167.39
12	95% Glyphosate technical	24,000	3,491.87	26,500	3,826.05
13	95% Haloxyfop-P-methyl technical	182,000	26,480.05	183,000	26,421.41
14	Metolachlor 97% technical	23,800	3,462.78	23,800	3,436.23
15	95% Metsulfuron-methyl technical	105,000	15,276.95	105,000	15,159.83
16	95% Nicosulfuron technical	164,000	23,861.14	170,000	24,544.48
17	97% Oxyfluorfen technical	138,000	20,078.28	148,000	21,368.14
18	Paraquat 42% TK	11,000	1,600.44	15,000	2,166
19	95% Pendimethalin technical	47,500	6,911	50,000	7,218.97
20	95% Pretilachlor technical	34,000	4,946.82	34,000	4,908.9
21	97% Pyrazosulfuron-ethyl technical	180,000	26,189.06	180,000	25,988.28
22	80% Quinclorac technical	88,000	12,803.54	88,000	12,705.38
23	95% Quizalofop-P-ethyl technical	128,000	18,623.33	128,000	18,480.55
24	95% Tribenuron-methyl technical	105,000	15,276.95	105,000	15,159.83
25	95% Trifluralin technical	31,000	4,510.34	31,000	4,475.76

Note: Ex-works price includes VAT.

Source: CCM

Shanghai Port prices of main herbicides in China, Jan. 2017

Table 15: Shanghai Port prices of main herbicides in China, Jan. 2017

No.	Product	20161208		20170108	
		RMB/t	USD/t	RMB/t	USD/t
1	Acetochlor 92% technical	18,180	2,645.09	18,480	2,668.13
2	97% Atrazine technical	17,480	2,543.25	18,280	2,639.25
3	96% Bensulfuron-methyl technical	127,480	18,547.67	130,480	18,838.61
4	92% Butachlor technical	17,980	2,616	17,980	2,595.94
5	95% Clomazone technical	108,480	15,783.27	108,480	15,662.27
6	95% Cyhalofop-butyl technical	187,480	27,277.36	184,480	26,635.1
7	97% Diuron technical	26,980	3,925.45	27,980	4,039.73
8	98% Fenclorim technical	125,480	18,256.68	128,480	18,549.85
9	95% Fenoxaprop-P-ethyl technical	180,480	26,258.89	180,480	26,057.58
10	96% Fluroxypyr technical	100,480	14,619.31	99,480	14,362.85
11	95% Fomesafen technical	89,480	13,018.87	91,680	13,236.7
12	95% Glyphosate technical	24,480	3,561.71	26,980	3,895.35
13	95% Haloxyfop-P-methyl technical	182,480	26,549.88	183,480	26,490.72
14	Metolachlor 97% technical	24,280	3,532.61	24,280	3,505.53
15	95% Metsulfuron-methyl technical	105,480	15,346.79	105,480	15,229.13
16	95% Nicosulfuron technical	164,480	23,930.98	170,480	24,613.79
17	97% Oxyfluorfen technical	138,480	20,148.11	148,480	21,437.44
18	Paraquat 42% TK	11,480	1,670.28	15,480	2,235
19	95% Pendimethalin technical	47,980	6,980.84	50,480	7,288.27
20	95% Pretilachlor technical	34,480	5,016.66	34,480	4,978.2
21	97% Pyrazosulfuron-ethyl technical	180,480	26,258.89	180,480	26,057.58
22	80% Quindorac technical	88,480	12,873.38	88,480	12,774.68
23	95% Quizalofop-P-ethyl technical	128,480	18,693.17	128,480	18,549.85
24	95% Tribenuron-methyl technical	105,480	15,346.79	105,480	15,229.13
25	95% Trifluralin technical	31,480	4,580.17	31,480	4,545.06

Note: Port price equals the ex-factory price plus the transport fee from the factory to the port, and the ex-factory price includes VAT.

Source: CCM

FOB Shanghai prices of main herbicides in China, Jan. 2017

Table 16: FOB Shanghai prices of main herbicides in China, Jan. 2017

No.	Product	20161208 USD/t	20170108 USD/t
1	Acetochlor 92% technical	2,566.87	2,587.82
2	97% Atrazine technical	2,564.14	2,657.16
3	96% Bensulfuron-methyl technical	18,177.66	18,460.86
4	92% Butachlor technical	2,539.57	2,520.1
5	95% Clomazone technical	14,891.17	14,777.01
6	95% Cyhalofop-butyl technical	26,694.12	26,066.91
7	97% Diuron technical	3,767.91	3,874.46
8	98% Fendlorim technical	17,893.77	18,179.15
9	95% Fenoxaprop-P-ethyl technical	24,717.86	24,528.36
10	96% Fluroxypyr technical	13,799.32	13,558.09
11	95% Fomesafen technical	12,783.9	12,995.76
12	95% Glyphosate technical	3,852.53	4,205.6
13	95% Haloxypop-P-methyl technical	24,990.83	24,934.67
14	Metolachlor 97% technical	3,399.41	3,373.35
15	95% Metsulfuron-methyl technical	15,054.95	14,939.53
16	95% Nicosulfuron technical	23,429.48	24,094.97
17	97% Oxyfluorfen technical	19,739.01	20,996.21
18	Paraquat 42% TK	1,772.54	2,344
19	95% Pendimethalin technical	6,634.03	6,921.75
20	95% Pretilachlor technical	4,791.52	4,754.79
21	97% Pyrazosulfuron-ethyl technical	25,700.53	25,503.5
22	80% Quindorac technical	12,641.95	12,545.03
23	95% Quizalofop-P-ethyl technical	17,620.81	17,485.72
24	95% Tribenuron-methyl technical	15,054.95	14,939.53
25	95% Trifluralin technical	4,551.31	4,516.42

Note: Shanghai FOB price = port price + handling and THC + trading companies' profit - VAT rebate.

Source: CCM

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Chief Editor: Shuanglin He
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17th Floor, Huihua Commercial & Trade Building, No.80 XianlieZhong Road Guangzhou, 510070, P.R.China

Tel: +86-20-37616606

Fax: +86-20-37616768

E-mail: econtact@cnchemicals.com

Website: www.cnchemicals.com