

Insecticides China Monthly Report 202203

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Headline

On 26 Feb., Hunan Haili released three announcements about optimising its product structure. The company plans to build new capacity for pirimiphos-methyl, carbaryl, thiophanate-methyl and some other products, and expand the production capacity of carbosulfan.

Inner Mongolia Benxing has arranged and planned construction tasks of several pesticide intermediates and pesticides technical projects in the chemical park it settles. So far, the company's 10,000 t/a sodium 3,5,6-trichloropyridin-2-olate lines have been put into production; its lines of 5,000 t/a 2-chloro-5-chloromethylthiazole and 15,000 t/a chlorpyrifos technical (water phase process) have been put into trial production.

Hebei Brilliant has acquired 51% equity of Liaoning Hongfeng, becoming the controlling shareholder of the latter. Hebei Brilliant might gain larger say in nicotinoid insecticide market with the help of Liaoning Hongfeng's 6,000 t/a CCMP and 3,000 t/a acetamiprid TC project (currently under construction) and 2,000 t/a imidacloprid TC relocation project (in the pipeline).

In early March 2022, ex-works prices of most insecticide TC products in China were set lower. Some organophosphorus insecticides TC experienced slight MoM price fluctuation. Most pyrethroid insecticides TC saw lowered prices; the manufacturers have operated at a relatively low rate, hoping to sell the inventory first. Prices of some nicotinoid insecticides TC dropped as price of the intermediate CCMP fell.

In early and mid-March, the ex-work price of chlorfenapyr TC slipped to USD50,068/t (RMB315,500/t) due to weak demand, but it was still higher than the average price in Q3 2021. Sharp rises in prices of a few raw materials have raised production cost of chlorfenapyr, plus impact on logistics by re-emerging COVID-19 cases in China, so it is expected that the ex-work price of chlorfenapyr TC in China will increase.

The Russia-Ukraine tensions triggered a series of sanctions on Russia imposed by the US and European countries as well as countermeasures taken by Russia. These sanctions and measures impacted not only Russia's domestic economy, but also international oil and natural gas prices. Upward trend in price of chemical raw materials based on natural gas and oil is expected, which will push up some downstream pesticide products. Higher oil price also drives up freight rate. Plus a sliding ruble and bigger exchange rate fluctuation brought about by the sanctions. Chinese enterprises may cut exports to Russia. In the short term, insecticide exports from China to Russia may slow down.

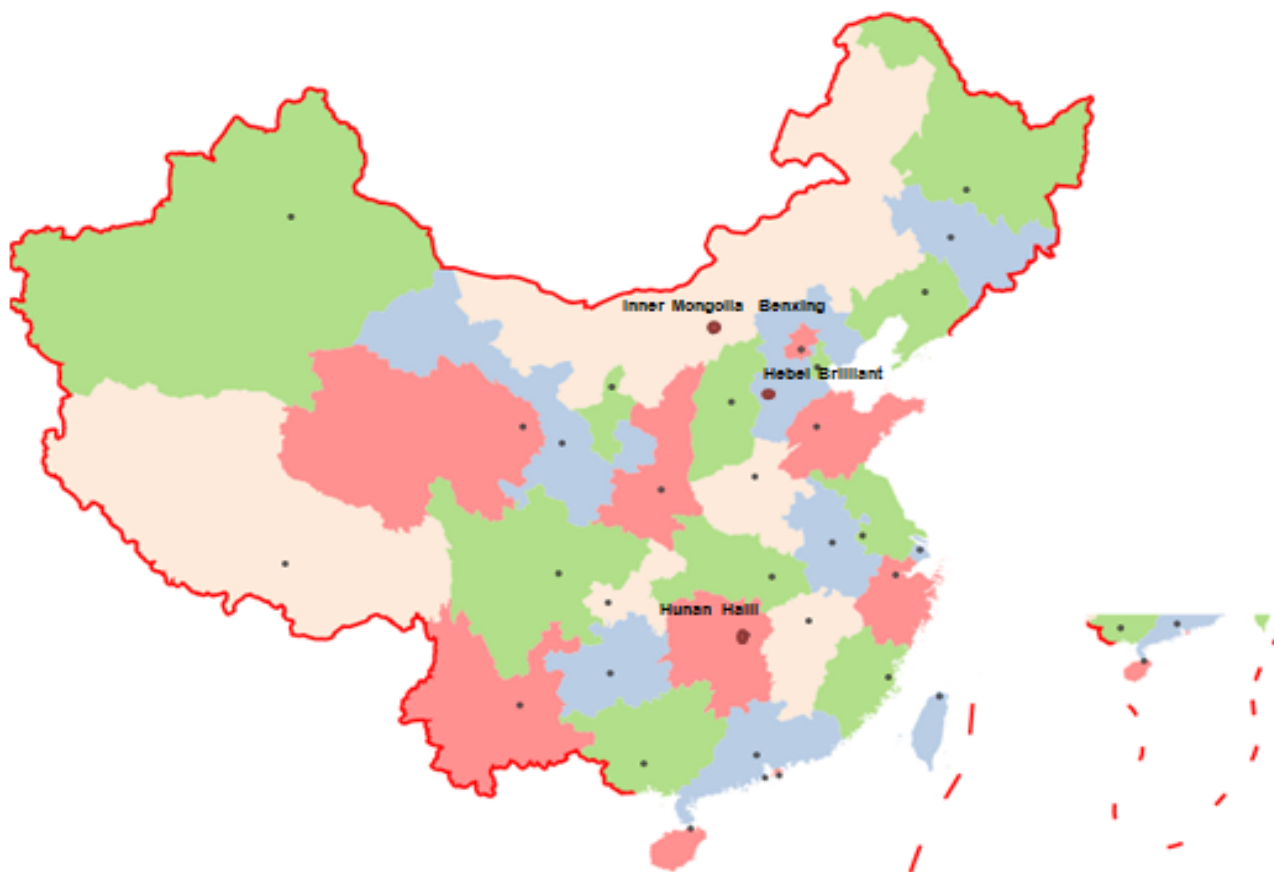
In spring, pests, especially wheat aphids and mites, begin to damage wheat fields in major planting areas as temperature goes up and crop seedlings grow stronger. As of 7 March, major diseases and pests had occurred on 3.98 million ha in major wheat planting areas in total this year, according to NATESC. The figure is the fifth lowest in the same period since 2011, and is deemed relatively light in general.

On 16 March, 2022, Department of Ecology and Environment of Jiangsu Province released the Work Plan for Promoting Carbon Dioxide Peaking and Carbon Neutrality in 2022. The Plan focuses on reducing pollution and carbon dioxide emission, and promotes carbon dioxide peaking and carbon neutrality in the province.

On 16 March, MARA announced the final decision on phasing out four high-toxic pesticides—phorate, isofenphos-methyl, isocarbophos and ethoprophos. All these four are organophosphorus insecticides. As of 21 March, 2022, there were 136 registrations containing the four active ingredients in China.

According to the import and export data from Tranalysis, in Q3 2021, imidacloprid products from China were mainly exported to 19 destinations, including the US, India, Pakistan, Argentina, Paraguay, etc. These major countries/regions imported a total of 1,282.54 tonnes (actual volume), or 957.13 tonnes (100% AI volume) of imidacloprid products from China.







Editor's Note

As for company dynamics, on 26 Feb., Hunan Haili released three announcements about optimising its product structure; it plans to build new capacity for pirimiphos-methyl, carbaryl, thiophanate-methyl and some other products, and expand the production capacity of carbosulfan. And so far Inner Mongolia Benxing has arranged and planned construction tasks of several pesticide intermediates and pesticides technical projects in the chemical park it settles; its 10,000 t/a sodium 3,5,6-trichloropyridin-2-olate lines have been put into production and the lines of 5,000 t/a 2-chloro-5-chloromethylthiazole and 15,000 t/a chlorpyrifos technical (water phase process) put into trial production.

As for market analysis, in early March 2022, ex-works prices of most insecticide TC products in China were set lower. Some organophosphorus insecticides TC experienced slight MoM price fluctuation. Most pyrethroid insecticides TC saw lowered prices; the manufacturers have operated at a relatively low rate. Prices of some nicotinoid insecticides TC dropped as price of the intermediate CCMP fell. In early and mid-March, the ex-work price of chlorfenapyr TC slipped to USD50,068/t (RMB315,500/t) due to weak demand, but it was still higher than the average price in Q3 2021.

As to latest policy, on 16 March, 2022, Department of Ecology and Environment of Jiangsu Province released the Work Plan for Promoting Carbon Dioxide Peaking and Carbon Neutrality in 2022. The Plan focuses on reducing pollution and carbon dioxide emission, and promotes carbon dioxide peaking and carbon neutrality in the province.

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The USD/CNY exchange rate in this newsletter is USD1.00=CNY6.3014 on 1 March 2022, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.





Company dynamics

Hunan Haili to build capacity for carbosulfan, pirimiphos-methyl and carbaryl

Summary: On 26 Feb., Hunan Haili released three announcements about optimising its product structure. The company plans to build new capacity for pirimiphos-methyl, carbaryl, thiophanate-methyl and some other products, and expand the production capacity of carbosulfan.

On 26 Feb., Hunan Haili Chemical Industry Co., Ltd. (Hunan Haili) released three announcements on optimising product structure. Following its strategic planning, the company will advance product structure optimisation to strengthen businesses with advantages so as to boost its competitiveness. It plans to construct new capacity for pirimiphos-methyl, carbaryl, thiophanate-methyl and some other products, and proposes a technical upgrading & expansion project for carbosulfan. Such moves, upgrading production technology, enriching fine chemical product portfolio, consolidating and extending to lower reach of the industrial chain, will benefit the company in maintaining and strengthening its core strengths, as well as generating better economic benefits.

- Haili Guixi

Hunan Haili plans a 3,000 t/a pirimiphos-methyl project in the new factory of its subsidiary Haili Guixi Chemical Pesticide Co., Ltd. (Haili Guixi) in Jiangxi Province. This project will adopt Hunan Haili's improved production technology. Pirimiphos-methyl is an organophosphorus insecticide with high efficacy, low toxicity and less residue, which has quick-acting effects on pests and can keep effective for a long period.

Overview of the 3,000 t/a pirimiphos-methyl project

- Location: Haili Guixi's new factory in Sulphur & Phosphorus Chemical Industry Base, Guixi City, Jiangxi Province)
- Content: production devices for pirimiphos-methyl and supporting facilities
- Total investment: USD27.45 million (RMB172.98 million)
- Construction period: 18 months

Another project—carbosulfan capacity expansion is also proposed in Haili Guixi. Carbosulfan, a derivative of carbofuran with lower toxicity, has enjoyed a rapid growth as more restrictions were put to the use of carbofuran in China. Currently, Haili Guixi already owns 3,000 t/a capacity for the product, but it cannot timely satisfy the demand from its customers. So Hunan Haili decides to double the carbosulfan capacity in the Guixi base, which means some adjustments to its original plan for the new factory.



**TABLE 1:** Adjustment made to Haili Guixi's project in the new factory

Item	Before adjustment	After adjustment
Construction content	Production lines for 3,000 t/a carbosulfan (already built and put into use), 3,500 t/a 2-sec-butylphenol, 1,500 t/a 2-isopropyl phenol, 1,000 t/a 4-TBC (4-tert-butylcatechol), and other supporting utilities such as warehouses, "three wastes" disposal facilities, etc.	Production lines for 6,000 t/a carbosulfan (the added 3,000 t/a is expected to finish by the end of H1 2022), and other supporting utilities such as warehouses, "three wastes" disposal system, etc.
Total Investment	USD76.86 million (RMB484.32 million)	USD75.28 million (RMB474.40 million)

Source: Hunan Haili Chemical Industry Co., Ltd.

- Ningxia Haili

Ningxia Haili Technology Co., Ltd. (Ningxia Haili), a wholly-owned subsidiary of Hunan Haili, will invest and launch a project covering carbaryl, thiophanate-methyl and some other products, plus supporting production capacity for 30,000 t/a phosgene. This investment is a strategic production capacity transfer for Hunan Haili's strong products, as well as a signal to go deeper in phosgene downstream sectors.

Overview of the carbaryl, thiophanate-methyl and other products project

- Location: Qingtongxia Industrial Zone, Ningxia Hui Autonomous Region
- Total land area: 40.42 ha
- Total investment: USD164.48 million (RMB1,036.46 million), which will be raised by Ningxia Haili.
- Product and designed capacity:
 - 4,000 t/a Carbaryl
 - 5,000 t/a Thiophanate-methyl

Inner Mongolia Benxing's 15kt/a chlorpyrifos TC lines come into trial production

Summary: Inner Mongolia Benxing has arranged and planned construction tasks of several pesticide intermediates and pesticides technical projects in the chemical park it settles. So far, the company's 10,000 t/a sodium 3,5,6-trichloropyridin-2-olate lines have been put into production; its lines of 5,000 t/a 2-chloro-5-chloromethylthiazole and 15,000 t/a chlorpyrifos technical (water phase process) have been put into trial production.

By early March, Inner Mongolia Benxing Chemical Co., Ltd. (Inner Mongolia Benxing) has had put its 5,000 t/a 2-chloro-5-chloromethylthiazole and 15,000 t/a chlorpyrifos technical (water phase process) production lines into trial production. Its 10,000 t/a sodium 3,5,6-trichloropyridin-2-olate lines have gone into operation, too. Inner Mongolia Benxing has planned multiple pesticide intermediates and pesticides TC projects in Bayinaobao Industrial Park, Alxa Economic Development Zone, Inner Mongolia Autonomous Region.

The 10,000 t/a sodium 3,5,6-trichloropyridin-2-olate is the Phase I part of Inner Mongolia Benxing's 21,000 t/a pesticide technical & intermediates project. Construction of Phase II and Phase III is yet to start. Construction content of the next two phases is as follows:





- Phase II: 2,000 t/a triclopyr technical, 2,000 t/a triclopyr-butotyl technical, 1,000 t/a penoxsulam technical and supporting facilities
- Phase III: 3,000 t/a nicosulfuron technical, 3,000 t/a quizalofop-P-ethyl technical and supporting facilities

The 5,000 t/a 2-chloro-5-chloromethylthiazole is an independent project. And the 15,000 t/a chlorpyrifos technical (water phase process) production lines are a part of the "15,000 t/a chlorpyrifos technical (water phase process), 5,000 t/a tebuconazole technical and 10,000 t/a epoxides (intermediates of tebuconazole technical)" project. Production devices for epoxides have been set into trial run along with chlorpyrifos lines, but the tebuconazole lines and supporting facilities are under construction at present.

Besides these projects, Inner Mongolia Benxing has also proposed several other pesticide intermediates and pesticides technical projects, including a 10,000 t/a thiamethoxam technical project.

Inner Mongolia Benxing, specialised in pesticide production and sales, is a wholly-owned subsidiary of Hubei Benxing Agrochemical Co., Ltd. (Hubei Benxing). It epitomised the overarching "into central and western China" trend in domestic pesticide industry under the pressures of harsher environmental protection and work safety policies in recent years. A large number of pesticide enterprises go in this direction in pursuit of broader development space, also having their eyes on rich resources there. The Bayinaobao Industrial Park, where Inner Mongolia Benxing sits, has so far attracted many pesticide manufacturers with its advantageous conditions.

Hebei Brilliant acquires 51% stake in Liaoning Hongfeng

Summary: Hebei Brilliant has acquired 51% equity of Liaoning Hongfeng, becoming the controlling shareholder of the latter. Hebei Brilliant might gain larger say in nicotinoid insecticide market with the help of Liaoning Hongfeng's 6,000 t/a CCMP and 3,000 t/a acetamiprid TC project (currently under construction) and 2,000 t/a imidacloprid TC relocation project (in the pipeline).

In early March, news from Hebei Brilliant Chemical Co., Ltd. (Hebei Brilliant) said that it had acquired 51% equity of Liaoning Hongfeng Technology Co., Ltd. (Liaoning Hongfeng), becoming the controlling shareholder of the latter. Before this acquisition, Liaoning Hongfeng had already started construction of the project 6,000 t/a 2-chloro-5-(chloromethyl)pyridine (CCMP) and 3,000 t/a acetamiprid TC, and planned a 2,000 t/a imidacloprid TC relocation project. If the two projects progress smoothly and go into production as expected, it will help Hebei Brilliant to obtain larger say in nicotinoid insecticide market.

Hebei Brilliant has production capacity of 1,000 t/a thiamethoxam TC, 300 t/a spirodiclofen TC in its plant in Gaocheng Economic Development Zone, Shijiazhuang City, Hebei Province. In recent years, Hebei Brilliant has made several investments to develop its pesticide business. For instance, before acquiring Liaoning Hongfeng, Hebei Brilliant established in March 2018 a subsidiary—Inner Mongolia Brilliant Biotechnology Co., Ltd. (Inner Mongolia Brilliant) in the Low-carbon Industrial Park, Wuhai Economic Development Zone, Wuhai City, Inner Mongolia Autonomous Region. Inner Mongolia Brilliant has so far planned a 10,000 t/a thiamethoxam TC, 20,000 t/a 2-chloro-5-chloromethylthiazole and 3,000 t/a clothianidin TC project and a 50,000 t/a fertiliser-pesticide combination project.

As of late Feb., 2022, Inner Mongolia Brilliant's 33,000 t/a pesticides TC and intermediate project had been under construction, while the 50,000 t/a pesticide fertiliser project had not finished the formalities for construction; Liaoning Hongfeng's CCMP and acetamiprid TC





project had been under construction while the imidacloprid TC project was still in preparation.

Through the acquisition of Liaoning Hongfeng, Hebei Brilliant will further develop its distribution channel, and enrich its pools of pesticide product and registration certificate. In addition, it is expected that Hebei Brilliant will integrate its resources to help Liaoning Hongfeng to obtain registration certificates of imidacloprid TC and acetamiprid TC.

TABLE 2: Pesticide registrations of Liaoning Hongfeng, as of 10 March, 2022

No.	Active ingredient	Category	Formulation	Total content	Expiry date
1	Pyriproxyfen	Hygienic insecticide	EC	10%	2025/8/28
2	Propiconazole	Fungicide	TC	95%	2025/11/3
3	Hydramethylnon	Hygienic insecticide	TC	95%	2025/1/14
4	Fluroxypyr-meptyl	Herbicide	TC	95%	2024/5/18
5	Pyriproxyfen	Hygienic insecticide	TC	95%	2023/12/11
6	Mesosulfuron-methyl	Herbicide	TC	95%	2022/9/18

Source: *The Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA)*





TABLE 3: Insecticide registrations of Hebei Brilliant, as of 10 March, 2022

No.	Active ingredient	Formulation	Total content	Expiry date
1	Thiamethoxam	WS	70%	2026/7/27
2	Thiamethoxam·lambda-cyhalothrin	ZC	22%	2026/4/26
3	Spirodiclofen	SC	240g/L	2025/8/28
4	Thiamethoxam	GR	0.50%	2025/6/8
5	Bifenthrin·thiamethoxam	SC	32%	2025/5/21
6	Thiamethoxam	WG	25%	2024/6/9
7	Spirodiclofen	TC	97%	2024/4/21
8	Thiamethoxam	TC	98%	2023/4/22
9	Clothianidin	TC	98%	2023/3/15
10	Imidacloprid	TC	98%	2022/7/20
11	Acetamiprid	TC	99%	2022/5/17

Source:ICAMA





Market analysis

Most insecticides TC see price drop in early March in China

Summary: In early March 2022, ex-works prices of most insecticide TC products in China were set lower. Some organophosphorus insecticides TC experienced slight MoM price fluctuation. Most pyrethroid insecticides TC saw lowered prices; the manufacturers have operated at a relatively low rate, hoping to sell the inventory first. Prices of some nicotinoid insecticides TC dropped as price of the intermediate CCMP fell.

In early March 2022, ex-works prices of most insecticide TC products in China were set lower. Some organophosphorus insecticides TC experienced slight MoM price fluctuation, and their prices tended to stabilise in general. Most pyrethroid insecticides TC saw lowered prices; the manufacturers have operated at a relatively low rate, hoping to sell the inventory first. Prices of some nicotinoid insecticides TC dropped as price of the intermediate CCMP fell.

Organophosphorus insecticides: Despite slight price fluctuations, ex-works prices of organophosphorus insecticides TC have stabilised in general. The price of chlorpyrifos TC decreased, mainly because of lacklustre downstream demand. Prices of phoxim TC and profenofos TC were basically flat. As raw material cost tended to go upward for organophosphorus insecticides, increase in prices of this type of insecticides is expected in the short term.

Pyrethroid insecticides: Ex-works prices of pyrethroid insecticides TC generally showed a downward trend. Although low operating rates in the manufacturers were seen, there have been sufficient inventories. Selling the stock has been the manufacturers' priority. However, as the price of a key intermediate lambda-cyhalothric acid increased, prices of pyrethroid insecticide TC are expected to go up.

Nicotinoid insecticides: Nicotinoid insecticides TC have larger MoM declines; imidacloprid TC and acetamiprid TC slipped by over 10%. Reasons for such a big price fall of imidacloprid TC are: for one thing, sluggish demand dragged down the price of a major raw material 2-chloro-5-(chloromethyl)pyridine (CCMP); for another, a similar low demand for imidacloprid TC played a bigger role in bringing the price down. Nevertheless, prices of other important intermediates rose, such as 3-methyl-4-nitroiminoperhydro-1,3,5-oxadiazine, 2-nitroaminoimidazoline, ethyl N-cyanoethanimideate, which will still put pressures on the producers in the short term. Considering weak demand in the market, ex-works prices of nicotinoid insecticides TC may go down further.



TABLE 4: Ex-works prices of major insecticide TC products in China in early and mid-March

Category	Product	Ex-works price (RMB/t)	Ex-works price (USD/t)	MoM change
Organophosphorus insecticide	95% Chlorpyrifos technical	43,800	6,951	Down
	90% Phoxim technical	45,000	7,141	Basically flat
	90% Profenofos technical	87,000	13,806	Basically flat
	90% Malathion technical	38,000	6,030	Basically flat
Pyrethroid insecticide	94% Cypermethrin technical	88,000	13,965	Down
	97% Bifenthrin technical	320,000	50,782	Down
Nicotinoid insecticide	97% Imidacloprid technical	175,000	27,772	Down
	95% Acetamiprid technical	172,500	27,375	Down
Antibiotic insecticide	95% Abamectin technical	670,000	106,326	Down
	70% Emamectin benzoate technical	672,300	106,691	Down

Source: CCM

Chlorfenapyr TC price in China expected to increase

Summary: In early and mid-March, the ex-work price of chlorfenapyr TC slipped to USD50,068/t (RMB315,500/t) due to weak demand, but it was still higher than the average price in Q3 2021. Sharp rises in prices of a few raw materials have raised production cost of chlorfenapyr, plus impact on logistics by re-emerging COVID-19 cases in China, so it is expected that the ex-work price of chlorfenapyr TC in China will increase.

In early and mid-March, the ex-work price of chlorfenapyr TC dropped to USD50,068/t (RMB315,500/t) due to weak demand, but it was still higher than the average price in Q3 2021. The price is expected to increase since sharp price rise of a few raw materials has raised the production cost of chlorfenapyr. Besides, China sees a rebound in COVID-19 cases, which brings greater uncertainty to logistics. It is worth noting that China is the world's largest chlorfenapyr market, and more mixture products of chlorfenapyr with chlorantraniliprole will be manufactured after the latter go off-patent in China.

In the future, the supply of chlorfenapyr in China may be affected by the following factors:

- **Rising upstream raw material price**

Trifluoroacetic acid, a raw material commonly used by Chinese manufacturers in the synthesis of chlorfenapyr, saw a soaring price recently. As it is also used to produce drugs against COVID-19, its market supply is extremely tight, which poses a key influence on chlorfenapyr production at present. And tralopyril, an important intermediate of chlorfenapyr, is produced with a key material bromine.

Weifang City of Shandong Province contributes to some 70% of China's total bromine output. Affected by current COVID-19 wave,

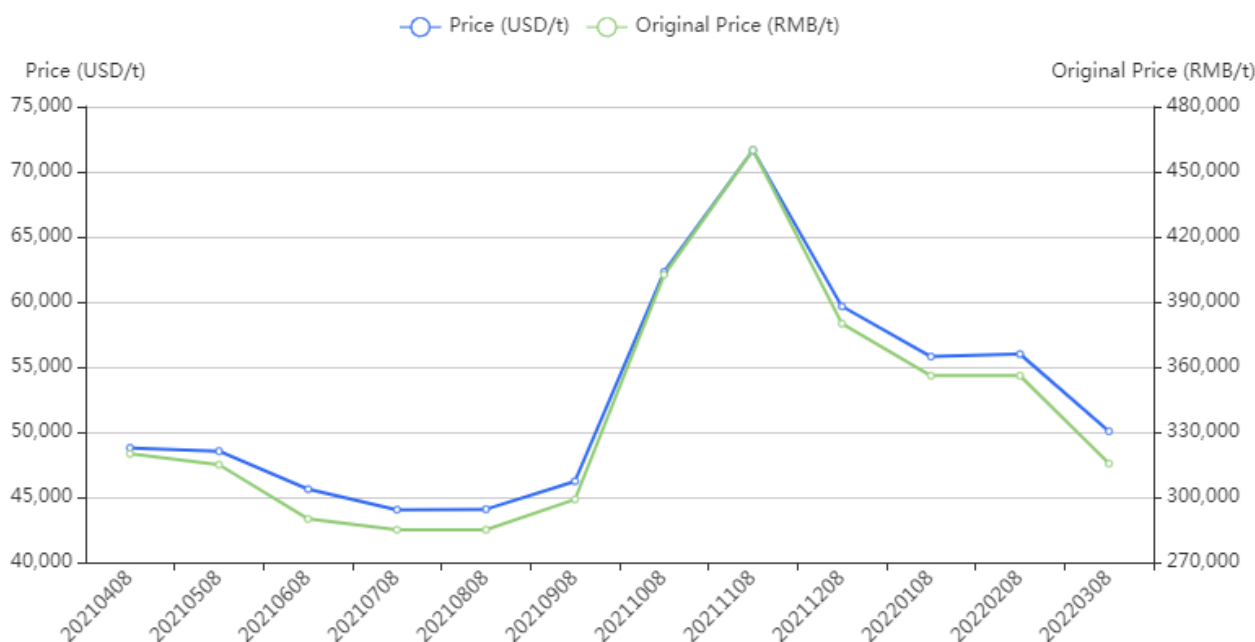


logistics has been hindered as many highways in this region have been closed. The price of tralopyril has been at a high level. What's more, the price of N,N-dimethylformamide (DMF) has seen a big jump since 2021.

• **Obstructed domestic logistics**

This round of wider COVID-19 recurrence in China has worried some major chlorfenapyr manufacturers and upstream material producers. So far, many provinces and cities, such as Shandong, Jiangsu, Jilin provinces and Dalian and Jiaying cities, have introduced highway closure or inspection at highway entrance to contain the outbreak. Obstructed logistics may put the market under strain.

FIGURE 1: Ex-works price of chlorfenapyr TC in China, April 2021–March 2022



Source:CCM

Russia-Ukraine tensions may impact pesticide production & slow down China's pesticide exports to Russia

Summary: The Russia-Ukraine tensions triggered a series of sanctions on Russia imposed by the US and European countries as well as countermeasures taken by Russia. These sanctions and measures impacted not only Russia's domestic economy, but also international oil and natural gas prices. Upward trend in price of chemical raw materials based on natural gas and oil is expected, which will push up some downstream pesticide products. Higher oil price also drives up freight rate. Plus a sliding ruble and bigger exchange rate fluctuation brought about by the sanctions. Chinese enterprises may cut exports to Russia. In the short term, insecticide exports from China to Russia may slow down.

The Russia-Ukraine tensions triggered a series of sanctions on Russia imposed by the US and European countries as well as countermeasures taken by Russia. These sanctions and measures impacted not only Russia's domestic economy, but also international oil and natural gas prices. Besides, international oil price continued to rise in mid-March as crude oil inventories fell in the US and supply risks increased along with a halt of oil delivery through Caspian Pipeline Consortium (CPC). Upward trend in price of chemical raw materials based on natural gas and oil is expected. Price of toluene, for instance, fluctuated upward after mid-Feb., mainly affected by oil price. A series of toluene-derived intermediates are widely used in production of dyes, pharmaceuticals and pesticides, such as benzoyl





chloride, an intermediate for insecticides benzoximate and RH-5849. Accordingly, price of oil-based downstream pesticide products is likely to increase in the future.

Russia is one of the world's major crude oil exporters and the largest natural gas exporter. It is also a major export destination of China's pesticide products. According to the import and export data from Tranalysis, from Jan. 2019 to Sept. 2021, among pesticides exported from China to Russia, 17 pesticides saw the export volume to Russia make up more than 10% of China's total exports, including insecticides like thiamethoxam and dimethoate. Considering higher freight rate and a sliding ruble and bigger exchange rate fluctuation, Chinese enterprises may slow down pesticide exports to Russia in the short term.

TABLE 5: List of pesticide products exported to Russia with over 10% share to the total (based on 100% AI volume), Jan. 2019–Sept. 2021

No.	Active ingredient
1	Florasulam
2	Fenoxaprop-P-ethyl
3	Cloquintocet-mexyl
4	Imazamox
5	Quizalofop-p-ethyl
6	Bentazone
7	Propiconazole
8	Cyproconazole
9	Dimethoate
10	Clopyralid
11	Prometryn
12	Clodinafop-propargyl
13	Epoxiconazole
14	Thiamethoxam
15	Fludioxonil
16	Tebuconazole
17	Diquat





Note: The data, sourced from Tranalysis, were updated to 18 March, 2022.

Source: Tranalysis





Pest

Major pests start to attack main wheat planting areas

Summary: In spring, pests, especially wheat aphids and mites, begin to damage wheat fields in major planting areas as temperature goes up and crop seedlings grow stronger. As of 7 March, major diseases and pests had occurred on 3.98 million ha in major wheat planting areas in total this year, according to NATESC. The figure is the fifth lowest in the same period since 2011, and is deemed relatively light in general.

Into spring, the wheat resumes growth successively in Huang-Huai region, North China and southeast part of Northwest China while the wheat comes to stem elongation stage in the Jiang-Huai region, the middle and lower reaches of Yangtze River and Southwest China and the wheat in Yunnan Province, in particular, enters booting-filling stage. As temperature goes up and crop seedlings grow stronger, pests begin to pose greater risks to wheat planting regions. Attacks from wheat aphids and mites are in the beginning period. As of 7 March, major diseases and pests had occurred on 3.98 million ha (59.67 million mu) in major wheat planting areas in total this year, according to the National Agro-Tech Extension and Service Centre (NATESC). The figure is the fifth lowest in the same period since 2011, and is deemed relatively light in general.

Wheat aphids

This spring, wheat aphids have occurred on 0.47 million ha (7 million mu), widely spread in the majority of wheat growing areas. It is also the fifth lowest in the same period since 2011, and the total population in field is smaller than that in the same period in 2021.

- Southwest China is at the initial stage of high pest population period. On average, per hundred plants, 110 to 278 is recorded in Yunnan, Guizhou and Sichuan provinces and 42.4 in Chongqing Municipality. In Yuxi City of Yunnan Province, the maximum reaches 7,560, which is much lower than the 14,500 recorded in the same period in 2021.
- In central and eastern parts of China, where insect-attack is in the beginning period, Hubei Province has 24.7 aphids per hundred plants on average, much lower than the 65.0 in 2021 for the same period, and Henan, Jiangsu and Shaanxi provinces record a number of 5 to 10, slightly less from the 8 to 10 last year. But there still exist high-density fields. For example, the maximum in Jingshan City of Hubei Province reaches 2,000, and that in southern Henan Province reaches 1,000.

Wheat mites

Wheat mites have occurred on 1.21 million ha (18.12 million mu) so far this spring, the fifth-highest in the same period since 2011. Total population in field is slightly smaller than that in the same period in 2021.

- The average single-line population per chi (about 33cm) is 23.8–33.5 in Hubei, Shandong and Henan provinces, and 7.2–8.8 in Shaanxi, Jiangsu, Anhui and Shanxi provinces, both lower than 10.2–37.8 and 3.8–14.8 respectively in the same period last year.
- Population is higher in some wheat planting areas in Jiang-Huai region and Northern Huaihe Area. The highest single-line population per chi is 1,153 in southern Henan Province and 2,500 in Northern Huaihe Area.

It is expected that central and eastern parts of China will encounter the initial stage of high population period of wheat aphids and mites soon, so it is necessary to cut down population density and prevent spread of diseases before the stem elongation stage coming.





Policy

Jiangsu issues the Work Plan for Promoting Carbon Dioxide Peaking and Carbon Neutrality in 2022

Summary: On 16 March, 2022, Department of Ecology and Environment of Jiangsu Province released the Work Plan for Promoting Carbon Dioxide Peaking and Carbon Neutrality in 2022. The Plan focuses on reducing pollution and carbon dioxide emission, and promotes carbon dioxide peaking and carbon neutrality in the province.

On 16 March, 2022, Department of Ecology and Environment of Jiangsu Province released the Work Plan for Promoting Carbon Dioxide Peaking and Carbon Neutrality in 2022. The Plan focuses on reducing pollution and carbon dioxide emission, and promotes carbon dioxide peaking and carbon neutrality in the province. It suggests efforts should be made to facilitate synergy in reducing pollution and carbon emission, promote carbon emissions trading, improve carbon emission statistical & monitoring system and etc.

Facilitating synergy in reducing pollution and carbon emission

- **Strengthening regulations on methane emission:** The department will work out an implementation plan for regulating methane emission, which would be based on an upcoming national action plan for methane emission control. It will work with Department of Agriculture and Rural Affairs of Jiangsu Province to support the development of biogas by using animal faeces, and recycling of biogas residue and biogas slurry to satisfy production needs of planting industry, so as to reduce methane and nitrous oxide emissions from livestock and poultry farming. It will also cooperate to control methane emission from coal mining and oil & natural gas industries, with Department of Emergency Management and Energy Administration Bureau of Jiangsu Province.
- **Formulating implementation plan for coordinated pollution & carbon emission reduction:** The department will formulate an implementation plan of Jiangsu Province for coordinated pollution & carbon emission reduction. Coordinated efforts should be taken in the work to bring down pollution and carbon dioxide emission, and improve the eco-environment. Carbon emission reduction, pollution reduction, green space expansion and economy growth should go hand in hand.

Promoting carbon emissions trading

- **Carrying out carbon emission inspection in key emitters:** To provide basic data for the second year transaction in national carbon market, the department will organise reporting and data verification of greenhouse gas emission for the year 2021 in more than 500 key emitters in the province from different industries, including petrochemical, chemical, building materials, iron and steel, nonferrous metal, paper making, power, aviation, etc., under the guidance of the *Measures the Administration of Carbon Emissions Trading (for Trial Implementation)* and following calculating schemes, reporting and verification guidelines of greenhouse gas emission from enterprises.
- **Standardising management of carbon emission reporting:** The department will guide enterprises with annual comprehensive energy consumption of more than 10,000 tonnes of standard coal or with emission of more than 26,000 tonnes of carbon dioxide equivalence to formulate a scheme for quality control of carbon emission data and urge them follow the scheme strictly. The reported data should be given in a standardised form, and the records should be complete, reliable and traceable. Specialised law enforcement actions will be carried out to crack down on fabrication of greenhouse gas emission data.



Registration

Registration of 4 to-be-banned organophosphorus insecticides in China

Summary: On 16 March, MARA announced the final decision on phasing out four high-toxic pesticides—phorate, isofenphos-methyl, isocarbophos and ethoprophos. All these four are organophosphorus insecticides. As of 21 March, 2022, there were 136 registrations containing the four active ingredients in China.

On 16 March, the Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) announced the final decision on phasing out four high-toxic pesticides—phorate, isofenphos-methyl, isocarbophos and ethoprophos. All these four are organophosphorus insecticides. Starting from 1 Sept., 2022, pesticide registration and production of technical and formulation products containing the four ingredients will be revoked and prohibited. As of 21 March, 2022, there were 136 registrations containing the four ingredients in China, of which seven were for technical products, including five highly toxic products, one hypertoxic product and one moderately toxic product.

It is worth noting that, based on the five-tier toxicity standard (hypertoxic, highly toxic, moderately toxic, lowly toxic and mildly toxic) applied in pesticide product registration in China, not all technical and formulation products of these four organophosphorus insecticides are of hyper or high toxicity. For instance, three isofenphos-methyl FSC products were registered as low toxicity, held by Shandong Huayang Technology Co., Ltd., Kaifeng Bianliang Seed Co., Ltd. and Jilin Bada Pesticide Co., Ltd.

Since organophosphorus insecticides have relatively high toxicity but lower efficacy, demand for this type decreased amid gradual phase-out of highly toxic pesticides. Currently, major organophosphorus insecticides with registration and wide application in China are chlorpyrifos, acephate, dimethoate, phoxim and profenofos.

TABLE 6: Registration of the four to-be-banned organophosphorus insecticides in China, as of 21 March, 2022

Active ingredient	Number of registration	Number of registration for formulation product			
		Highly toxic	Moderately toxic	Lowly toxic	Sub-total
Ethoprophos	18	3	8	4	15
Phorate	62	44	17	0	61
Isocarbophos	29	15	12	0	27
Isofenphos-methyl	27	19	4	3	26

Source: The Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA)

TABLE 7: Registration of TC products of the four to-be-banned organophosphorus insecticides in China, as of 21 March, 2022

Product	Registrant	Toxicity	Total content	Expiry date
Phorate TC	Hebei Haoyang Chemical Industry Co., Ltd.	Hypertoxic	95%	2025/4/12
Isofenphos-methyl TC	Hubei Xianlong Chemical Industry Co., Ltd.	Highly toxic	95%, 90%, 85%	2026/12/7
Isocarbophos TC	Hebei Veyong Bio-Chemical Co., Ltd.	Highly toxic	95%	2025/10/18
Isocarbophos TC	Hubei Xianlong Chemical Industry Co., Ltd.	Highly toxic	95%	2025/3/26
Ethoprophos TC	Zhejiang Funong Biotechnology Co., Ltd.	Highly toxic	95%	2023/12/18
Ethoprophos TC	Zibo Zhoucun Suifeng Pesticide Chemical Co., Ltd.	Moderately toxic	95%	2023/12/12
Ethoprophos TC	Jiangsu Fengshan Group Co., Ltd.	Highly toxic	95%	2023/10/21

Source: ICAMA



Import and export

China's imidacloprid exports to major destinations in Q3 2021

Summary: According to the import and export data from Tranalysis, in Q3 2021, imidacloprid products from China were mainly exported to 19 destinations, including the US, India, Pakistan, Argentina, Paraguay, etc. These major countries/regions imported a total of 1,282.54 tonnes (actual volume), or 957.13 tonnes (100% AI volume) of imidacloprid products from China.

According to the import and export data from Tranalysis, in Q3 2021, Chinese mainly exported imidacloprid products to 19 destinations, with a total volume of 1,282.54 tonnes (actual volume) or 957.13 tonnes (100% AI volume). The data was updated on 9 March, 2022.

Here's the information of China's imidacloprid exports in Q3 2021.

Imidacloprid formulations

- Main products for export: Imidacloprid 25% WP, imidacloprid 200g/L SL, and imidacloprid 10% WP
- Major export destinations: In Q3 2021, altogether 419.89 tonnes (actual volume) of imidacloprid formulation products were exported to major destinations at an average price of USD6.64/kg. The biggest importer was Pakistan, which imported 109 tonnes (actual volume) of imidacloprid formulations from China, accounting for 25.96% of China's total exports of imidacloprid formulations in this period.
- Major exporters: The top 3 exporters of imidacloprid formulations were Shandong United Pesticide Industry Co., Ltd., Ningbo Generic Chemical Co., Ltd. and Youjia Crop Protection Co., Ltd. They exported 123.56 tonnes (actual volume) of imidacloprid formulations in total in Q3 2021, making up 29.43% of China's total imidacloprid formulation exports in the period.

Imidacloprid TC

- Main products for export: 98% Imidacloprid TC and 97% imidacloprid TC
- Major export destinations: In Q3, 2021, altogether 862.65 tonnes (actual volume) of imidacloprid TC were exported from China at an average price of USD19.64/kg. The biggest importer was the US, which imported 368.60 tonnes (actual volume) of imidacloprid TC from China, accounting for 42.73% of China's total imidacloprid TC exports in the period.
- Major exporters: The top 3 imidacloprid TC exporters were Suzhou Bianjing Agro-Biochemical Co., Ltd., Adama Makhteshim Ltd. and UPL (Shanghai) Limited. They exported 332.66 tonnes (actual volume) of imidacloprid TC in Q3 2021, which accounts for 38.56% of China's total imidacloprid TC exports in the period.



**TABLE 8:** Export volume and average export price of China's imidacloprid formulations to major destinations, Q3 2021

No.	Specification	Volume, kg	Average price, USD/kg
1	Imidacloprid 25% WP	144,708	4.79
2	Imidacloprid 200g/L SL	107,901	6.37
3	Imidacloprid 10% WP	64,600	2.24
4	Imidacloprid 350g/L SC	39,072	8.30
5	Imidacloprid 70% WDG	38,316	17.18
6	Imidacloprid 70% WP	9,752	11.29
7	Imidacloprid 600g/L FS	8,580	8.85
8	Imidacloprid 600g/L SC	4,960	13.79
9	Imidacloprid 70% WS	2,000	13.35
Total		419,890	6.64

Note: The data, sourced from Tranalysis, were updated to 9 March, 2022.

Source: Tranalysis

TABLE 9: Export volume and average export price of China's imidacloprid TC to major destinations, Q3 2021

No.	Specification	Volume, kg	Average price, USD/kg
1	98% Imidacloprid TC	663,846	19.61
2	97% Imidacloprid TC	119,500	19.97
3	95% Imidacloprid TC	61,300	19.06
4	96% Imidacloprid TC	18,000	20.83
Total		862,646	19.64

Note: The data, sourced from Tranalysis, were updated to 9 March, 2022.

Source: Tranalysis





TABLE 10: Major export destinations of imidacloprid formulations from China, Q3 2021

No.	Destination	Volume, kg
1	Pakistan	109,000
2	Bangladesh	72,765
3	Indonesia	64,386
4	Vietnam	48,000
5	Peru	47,905
6	Ghana	20,516
7	Australia	13,016
8	Saudi Arabia	9,428
9	Russia	8,580
10	Argentina	6,210
11	Kenya	5,804
12	The Netherlands	5,500
13	Paraguay	4,960
14	Uzbekistan	2,540
15	South Korea	1,280
Total		419,890

Note: The data, sourced from Tranalysis, were updated to 9 March, 2022.

Source: Tranalysis





TABLE 11: Major export destinations of imidacloprid TC from China, Q3 2021

No.	Destination	Volume, kg
1	The US	368,596
2	India	251,500
3	Argentina	85,690
4	Paraguay	77,100
5	Mexico	30,000
6	Vietnam	15,852
7	Peru	15,550
8	Russia	8,000
9	Australia	7,058
10	Costa Rica	3,000
11	Indonesia	300
Total		862,646

Note: The data, sourced from Tranalysis, were updated to 9, March 2022

Source: Tranalysis



TABLE 12: China's imidacloprid formulation exporters to major destinations, Q3 2021

No.	Exporter	Volume, kg
1	Shandong United Pesticide Industry Co., Ltd.	57,000
2	Ningbo Generic Chemical Co., Ltd.	34,560
3	Youjia Crop Protection Co., Ltd.	32,000
4	Jiangyin Jianglian Industry Trade Co., Ltd.	30,000
5	Hangzhou Jinghang Biotechnology Co., Ltd.	20,516
6	Shanghai E-tong Chemical Co., Ltd.	18,060
7	Jiangsu Hongze Chemical and Industry Co., Ltd.	17,680
8	Jiangxi Zhengbang Crop Protection Co., Ltd.	16,000
9	Shandong Aosaur Agritech Co., Ltd.	16,000
10	Zhejiang Chemicals Import and Export Corp.	14,726
	Others	163,348
	Total	419,890

Note: The data, sourced from Tranalysis, were updated to 9 March, 2022

Source: Tranalysis

TABLE 13: China's imidacloprid TC exporters to major destinations, Q3 2021

No.	Exporter	Volume, kg
1	Suzhou Bianjing Agro-Biochemical Co., Ltd.	119,000
2	Adama Makhteshim Ltd.	110,660
3	UPL (Shanghai) Limited	103,000
4	Nufarm Chemical (Shanghai) Co., Ltd.	90,900
5	Nanjing Bioagriland Crop Care Co., Ltd.	48,850
6	Adama Anpon (Jiangsu) Ltd.	37,744
7	At Agro Co., Ltd.	24,000
8	Nutrichem Co., Ltd.	22,000
9	Shandong United Pesticide Industry Co., Ltd.	18,000
10	Rudong Huasheng Chemical Co., Ltd.	16,500
	Others	271,992
	Total	862,646

Note: The data, sourced from Tranalysis, were updated to 9 March, 2022.

Source: Tranalysis



News in Brief

ADAMA's Huai'an base still produces pymetrozine and buprofezin TC

On 2 March, 2022, ADAMA Ltd. (ADAMA) replied to questions on an interactive platform of investors, revealing that its production base in Huai'an City, Jiangsu Province, was still in normal operation, producing ethephon TC, pymetrozine TC, buprofezin TC and etc. Meanwhile, its new factory in a specialised industrial park in Huai'an City has put supporting production capacity into use for upstream fine chemical products and intermediates. Construction of production lines for some pesticide products involved in a removal project has kick off.

Guangxi Tianyuan to land an agrochemical and chemical intermediate production base in Liucheng City

On 5 March, 2022, Guangxi Tianyuan Biochemistry Co., Ltd. (Guangxi Tianyuan) signed an investment agreement with local government of Liucheng City on the USD159 million (RMB1 billion)-worth "green agricultural agrochemicals and supporting fine chemical intermediates production base" project. The planned production base, covering some 20 ha, will be located in Liucheng Liutang Chemical Industrial Park, Liucheng City, Guangxi Province. The park is a provincial-level chemical industrial park, mainly serving to fine chemical industries such as chlor-alkali and its downstream deep-processed products, pharmaceutical intermediates, pesticide intermediates and dye intermediates.

Guangxi Tianyuan is a leading high-tech agricultural enterprise specialised in R&D, production and promotion of integrated & green crop yield-boosting solutions. In 2007, it set foot in commercial production of pesticide TC. The company holds independent intellectual property right of the antiviral pesticide dufulin and registration certificates of products containing the ingredient.

Eight enterprises in Shandong to acquire pesticide production licence

Early March, the Expert Committee on Pesticide Management and Appraisal of Shandong Province released the first review result for the year 2022, which will grant eight enterprises pesticide production licence for the first time. Among them, three will be permitted to produce technical products—Qingdao Hengning Biotechnology Co., Ltd. will be allowed to produce diafenthiuron TC, Weifang Benzo Chemical Co., Ltd. diethyltoluamide TC, and Chengwu Taihe Chemical Co., Ltd. tebuthiuron TC and amicarbazone TC. The other five are pesticide formulation enterprises: Shandong Qiaoxin Biotechnology Co., Ltd., Qingdao Huizhi Biotechnology Co., Ltd., Shandong Runqi Biotechnology Co., Ltd., Yuncheng Chengyou Biotechnology Co., Ltd. and Guopeng Luhua Group Co., Ltd. As of 14 March, all the eight companies have not obtained any pesticide registration certificate.

Jiangsu Yangnong sees 50% YoY increase in revenue in Jan.–Feb. 2022

On 10 March 2022, Jiangsu Yangnong Chemical Co., Ltd. (Jiangsu Yangnong) disclosed its overall performance for the first two months of 2022—its total revenue stood at about USD555 million (RMB3.50 billion), marking a YoY increase of about 50%; the net profit attributable to equity holders of the listed company reached USD88.87 million (RMB560 million), marking a YoY increase of some 100%. Reasons for such big jumps are: for one thing, Phase III project and stage one of Phase IV project of its subsidiary Jiangsu Youjia Crop Protection Co., Ltd. have been either operated at full steam or thrown into production recently, so the output increased compared with the same period of last year; for another, prices of major pesticide products rose from the figures seen in the same period last year.





Hubei Changqing starts to mass produce cyhalothrin TC

On 11 March, Jiangsu Changqing Agrochemical Co., Ltd. (Jiangsu Changqing) expressed in an interaction platform for investors that all its new projects carried out by its subsidiary Changqing (Hubei) Bio-tech Co., Ltd. (Hubei Changqing) were progressing well.

Progress of Hubei Changqing's projects:

- The lines in 2,000 t/a 2,6-diisopropylaniline and 2,000 t/a cyhalothrin TC workshops have been put into mass production.
- The lines in 600 t/a fipronil TC workshop have come into trial production.
- Devices are being installed in 3,000 t/a thiamethoxam TC workshop.

MARA announces phase-out of 4 high-toxic pesticides

On 16 March, Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) announced the final decision on phasing out four high-toxic pesticides—phorate, isofenphos-methyl, isocarbophos and ethoprophos, following guidelines of the *Opinions of the CPC Central Committee and the State Council on Deepening Reform and Strengthening Food Safety* and the *Regulations on Pesticide Management*.

Starting from 1 Sept., 2022, pesticide registration and production of technical and formulation products containing the four pesticide active ingredients will be revoked and prohibited. Products that are legally produced before the set date can be sold and applied within the warranty period, but sales and application will be banned from 1 Sept., 2024.

Lier Chemical beefs up R&D efforts on chlorantraniliprole

On 16 March, Lier Chemical Co., Ltd. (Lier Chemical) held an online 2021 annual performance briefing. During the meeting, the company revealed that it would further strengthen R&D efforts in 2022 on new products such as L-glufosinate and chlorantraniliprole, constantly improving production processes and product quality.

Currently, chlorantraniliprole is mainly registered for controlling rice pests. As of 18 March, altogether 36 enterprises in China have obtained registration certificates of chlorantraniliprole-related pesticides.

Domestically developed neonicotinoid insecticide cycloxaprid put into mass production

On 18 March, 2022, a ceremony marking first-time mass production of patented product cycloxaprid (brand "Wenlong") was held in Shanghai Shengnong Pesticide Co., Ltd. (Shanghai Shengnong)'s Dongjing factory. Cycloxaprid, a neonicotinoid insecticide jointly developed by East China University of Science and Technology and Shanghai Shengnong, is a milestone in the company's history. It provides a new alternative for the control of major agricultural pests, mainly applied against rice planthoppers and etc. It was first registered in China in 2018.

Zhongnong Ruihua starts construction on its pesticides and intermediates project

On 22 March, groundbreaking ceremony for the project "pesticide & pharmaceutical intermediates, technical and formulations production lines" of Zhongnong Ruihua (Gansu) Pharmaceutical Co., Ltd. (Zhongnong Ruihua) was held in Yumendong Building Materials &





Chemical Industrial Park, Yumen City, Gansu Province.

Project overview

- Total investment: USD42.53 million (RMB268 million)
- Area: 15.2 ha
- Product & designed capacity, including:
 - 3,000 t/a 2-chloro-5-(chloromethyl)pyridine (CCMP), an intermediate for imidacloprid TC and acetamiprid TC
 - 3,000 t/a (3-trans-Chloroallyl)oxyamine
 - 10,000 t/a formulation products containing active ingredients like azoxystrobin, ethoxysulfuron and clethodim

Sixth batch of second-round environmental inspection starts in five provinces

On 22 March, the Ministry of Ecology and Environment of the People's Republic of China organised five central inspection teams for month-long environmental inspections in Hebei and Jiangsu provinces, and Inner Mongolia, Tibet, and Xinjiang Uygur autonomous regions. For this round of environmental inspection, attentions will be paid to the progress of phasing out outdated production capacity, the implementation of restrictions on two-high projects (high energy consumption & high carbon emission), the identification and handling of major damages, pollution and risks to ecology & environment, the observance of ecological and environmental protection requirements in pursuing major national strategies, such as ecological protection & high-quality development of the Yellow River basin, and etc.



Price Update

Ex-works prices of major insecticides in China on 8 March 2022

TABLE 14: Ex-works prices of major insecticides in China, 8 March 2022

Product	20220208		20220308	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	710,000	111,670.34	670,000	106,325.58
98% Isoprocarb technical	43,500	6,841.77	43,500	6,903.23
95% Pymetrozine technical	160,000	25,165.15	155,000	24,597.71
90% Profenofos technical	87,000	13,683.55	87,000	13,806.46
98% Chlorfenapyr technical	356,000	55,992.45	315,500	50,068.24
95% Pyridaben technical	110,000	17,301.04	105,000	16,662.96
95% Diafenthiuron technical	153,000	24,064.17	153,000	24,280.32
95% Acetamiprid technical	192,500	30,276.82	172,500	27,374.87
95% Chlorpyrifos technical	47,500	7,470.9	43,800	6,950.84
95% Fipronil technical	620,000	97,514.94	620,000	98,390.83
95% Chlorfluazuron technical	570,000	89,650.83	560,000	88,869.14
98% Hexaflumuron technical	545,000	85,718.78	550,000	87,282.19
95% Lambda-cyhalothrin technical	235,000	36,961.31	230,000	36,499.83
95% Beta-Cypermethrin technical	185,000	29,097.2	180,000	28,565.08
70% Emamectin benzoate technical	737,000	115,916.96	672,300	106,690.58
98% Carbofuran technical	115,000	18,087.45	115,000	18,249.91
98% Dimethoate technical	49,000	7,706.83	49,000	7,776.05
97% Bifenthrin technical	340,000	53,475.94	320,000	50,782.37
97% Spirodiclofen technical	185,000	29,097.2	175,000	27,771.61
94% Cypermethrin technical	89,000	13,998.11	88,000	13,965.15



90% Malathion technical	38,000	5,976.72	38,000	6,030.41
98% Methomyl technical	86,000	13,526.27	85,000	13,489.07
Methomyl 90% SP	74,000	11,638.88	74,000	11,743.42
99% Cyromazine technical	160,000	25,165.15	160,000	25,391.18
92% Fenvalerate technical	137,000	21,547.66	140,000	22,217.29
90% Propargite technical	58,000	9,122.37	56,000	8,886.91
95% Buprofezin technical	75,200	11,827.62	75,200	11,933.86
85% Triazophos technical	58,500	9,201.01	58,500	9,283.65
95% Azocyclotin technical	220,000	34,602.08	225,000	35,706.35
95% Methidathion technical	90,000	14,155.39	90,000	14,282.54
90% Phoxim technical	45,000	7,077.7	45,000	7,141.27
98% Deltamethrin technical	590,000	92,796.48	590,000	93,629.99
75% Omethoate technical	53,500	8,414.6	52,800	8,379.09
97% Acephate technical	60,000	9,436.93	62,000	9,839.08
97% Imidacloprid technical	195,000	30,670.02	175,000	27,771.61

Note: Ex-works price includes VAT.

Source: CCM

Shanghai Port prices of major insecticides in China, 8 March 2022



TABLE 15: Shanghai Port prices of major insecticides in China, 8 March 2022

Product	20220208		20220308	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	710,500	111,748.98	670,500	106,404.93
97% Imidacloprid technical	195,500	30,748.66	175,500	27,850.95
95% Pymetrozine technical	160,500	25,243.79	155,500	24,677.06
90% Profenofos technical	87,500	13,762.19	87,500	13,885.8
98% Chlorfenapyr technical	356,500	56,071.09	316,000	50,147.59
95% Pyridaben technical	110,500	17,379.68	105,500	16,742.31
95% Diafenthiuron technical	153,500	24,142.81	153,500	24,359.67
95% Acetamiprid technical	193,000	30,355.46	173,000	27,454.22
95% Chlorpyrifos technical	48,000	7,549.54	44,300	7,030.18
95% Fipronil technical	620,500	97,593.58	620,500	98,470.18
95% Chlorfluazuron technical	570,500	89,729.47	560,500	88,948.49
98% Hexaflumuron technical	545,500	85,797.42	550,500	87,361.54
95% Lambda-cyhalothrin technical	235,500	37,039.95	230,500	36,579.17
95% Beta-Cypermethrin technical	185,500	29,175.84	180,500	28,644.43
70% Emamectin benzoate technical	737,500	115,995.6	672,800	106,769.92
98% Carbofuran technical	115,500	18,166.09	115,500	18,329.26
98% Dimethoate technical	49,500	7,785.47	49,500	7,855.4
97% Bifenthrin technical	340,500	53,554.58	320,500	50,861.71
97% Spirodiclofen technical	185,500	29,175.84	175,500	27,850.95
94% Cypermethrin technical	89,500	14,076.75	88,500	14,044.5
90% Malathion technical	38,500	6,055.36	38,500	6,109.75
98% Methomyl technical	86,500	13,604.91	85,500	13,568.41



Methomyl 90% SP	74,500	11,717.52	74,500	11,822.77
99% Cyromazine technical	160,500	25,243.79	160,500	25,470.53
92% Fenvalerate technical	137,500	21,626.3	140,500	22,296.63
90% Propargite technical	58,500	9,201.01	56,500	8,966.26
95% Buprofezin technical	75,700	11,906.26	75,700	12,013.2
85% Triazophos technical	59,000	9,279.65	59,000	9,363
95% Azocyclotin technical	220,500	34,680.72	225,500	35,785.7
95% Methidathion technical	90,500	14,234.04	90,500	14,361.89
90% Phoxim technical	45,500	7,156.34	45,500	7,220.62
98% Deltamethrin technical	590,500	92,875.12	590,500	93,709.33
75% Omethoate technical	54,000	8,493.24	53,300	8,458.44
97% Acephate technical	60,500	9,515.57	62,500	9,918.43
98% Isoprocarb technical	44,000	6,920.42	44,000	6,982.58

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 in China, 8 March 2022





TABLE 16: FOB Shanghai prices of major insecticides in China, 8 March 2022, USD/t

Product	20220208	20220308
95% Abamectin technical	108,763.56	103,567.4
97% Imidacloprid technical	29,992.61	27,175.47
95% Pymetrozine technical	23,772.96	23,242.17
90% Profenofos technical	13,002.61	13,119.41
98% Chlorfenapyr technical	54,618.09	48,858.43
95% Pyridaben technical	16,991.58	16,372.57
95% Diafenthiuron technical	22,740.19	22,944.44
95% Acetamiprid technical	29,610.23	26,789.65
95% Chlorpyrifos technical	7,432	6,927.75
95% Fipronil technical	94,997.76	95,851.05
95% Chlorfluazuron technical	87,350.1	86,591.42
98% Hexaflumuron technical	83,526.27	85,048.15
95% Lambda-cyhalothrin technical	34,838.39	34,406.99
95% Beta-Cypermethrin technical	27,461.44	26,963.78
70% Emamectin benzoate technical	112,893.3	103,922.36
98% Carbofuran technical	17,756.35	17,915.84
98% Dimethoate technical	7,396.13	7,462.56
97% Bifenthrin technical	50,329.99	47,804.77
97% Spirodiclofen technical	27,461.44	26,219.46
94% Cypermethrin technical	13,297.69	13,268.27
90% Malathion technical	5,773.2	5,825.06
98% Methomyl technical	14,504.56	14,466.63
Methomyl 90% SP	11,485.26	11,588.43





99% Cyromazine technical	23,772.96	23,986.49
92% Fenvalerate technical	20,379.57	21,009.21
90% Propargite technical	9,038.01	8,810.54
95% Buprofezin technical	11,668.81	11,773.62
85% Triazophos technical	9,114.49	9,196.35
95% Azocyclotin technical	33,816.44	34,891.82
95% Methidathion technical	13,932.52	14,057.66
90% Phoxim technical	7,005.15	7,068.07
98% Deltamethrin technical	87,214.74	87,998.12
75% Omethoate technical	8,060.06	8,028.25
97% Acephate technical	9,019.06	9,397.8
98% Isoprocarb technical	6,584.67	6,643.81

Note: FOB Shanghai price considers factors of Shanghai port price, port sur-charges, loading charges, traders' profits and export tax refund. And the shipment cost shall be paid by the buyer. This FOB price is the average of quotations offered by enterprises and it may be lower than the one reported in customs data which is the actual purchase price.

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