

# Insecticides China Monthly Report 202404

Issue 4 April 29 2024





## Contents

Headline .....	1
Editor's note .....	3
Market analysis .....	4
Abamectin TC price recovers in April amid low market inventory .....	4
Prices of chlorpyrifos & emamectin benzoate go up, mixed price trends shown in April .....	5
Most of major raw materials of insecticides see declining price in April .....	6
Company and supply .....	8
Yongnong BioSciences to build 2,500 t/a chlorfenapyr TC capacity .....	8
In April, operating rate of some insecticides TC drops, abamectin & emamectin benzoate in tight supply .....	8
Policy .....	11
MEM: "Ten Haves & Two Prohibitions", the focus of chemical park safety improvement in 2024 .....	11
Registration .....	12
109 Insecticide products to be approved of registration in April .....	12
Pest .....	22
NATESC: aphids to occur relatively heavily in most wheat growing regions in China in 2024 .....	22
Heilongjiang to focus on safeguarding bumper harvest .....	23
Trade analysis .....	24
Q1 2024 witnesses YoY growth in insecticide formulation exports .....	24
Brief news .....	26
Less maize but more soybean planting area in China and the US in 2024 .....	26
Hunan Haili reports negative revenue growth for 2023 .....	26
MARA: no registration approval granted to new pesticides based on adjuvants/food additives .....	26
Pests on vegetables occur moderately in Guangdong in April .....	26
Revised Measures for Pollutant Discharge Permitting Administration to take effect on 1 July .....	27
CCPIA approves of 14 association standards, including 4 insecticide-related standards .....	27
Inner Mongolia Chengding plans 8,000 t/a methomyl-oxime project .....	28
India-based Dhanuka Agritech launched new insecticide formulation (bifenthrin-fluxametamide) .....	28
NATESC: overall moderate occurrence of locusts (migratory ones included) in China in 2024 .....	28
Price of pyrethroid intermediate lambda-cyhalothric acid goes up in late April .....	29
Price update .....	30
Ex-works prices of major insecticides in China, 8 April, 2024 .....	30
Shanghai Port prices of major insecticides in China, 8 April, 2024 .....	31
FOB Shanghai prices of major insecticides in China, 8 April, 2024 .....	33





## Headline

Abamectin price recovered by 6.27% MoM in April, as the TC producers operated at a low level and inventories were gradually consumed.

In April, major insecticides TC had mixed price trends in China. For these products, MoM price changes averaged at a positive 0.17%, while average YoY price changes was a negative 13.43%. Specifically, the price of emamectin benzoate TC and abamectin TC increased due to relatively tight supply.

In April, prices of the majority of the major raw materials of insecticides TC went down in China; the MoM price changes averaged at a negative 2.51%. The main cause of the price fall was sluggish downstream demand. Besides, some raw materials were in sufficient supply as equipment gradually resumed operation.

On 1 April, Yongnong BioSciences announced that the construction of main works and supporting environmental protection facilities of its high-efficacy pesticides TC technological upgrading smart manufacturing project (involving 3,000 t/a metamitron, 1,000 t/a etoxazole and 1,200 t/a bifenthrin) had been finished. Later, on 7 April, the company revealed the EI report (draft for record filing) of high-efficacy crop protection product technological upgrading project (involving 2,500 t/a chlorfenapyr).

In April, the majority of Chinese insecticide TC producers maintained normal operation, but operating rates were kept at a low level, mainly due to dull downstream demand. Some products were in tight supply because of low-level operation as well as small inventories in the market.

In April, MEM has launched chemical park safety improvement expert guidance service for the year 2024, in accordance with the Three-Year Action Plan for the Uphill Battle to Secure Work Safety in the Production of Chemicals and Hazardous Chemicals (2024–2026). So far, working groups of expert guidance service have been dispatched to provinces including Hebei, Shanxi, Liaoning, Jilin, Zhejiang and Hubei. This year, the guidance service is centred on the "Ten Haves & Two Prohibitions" requirements.

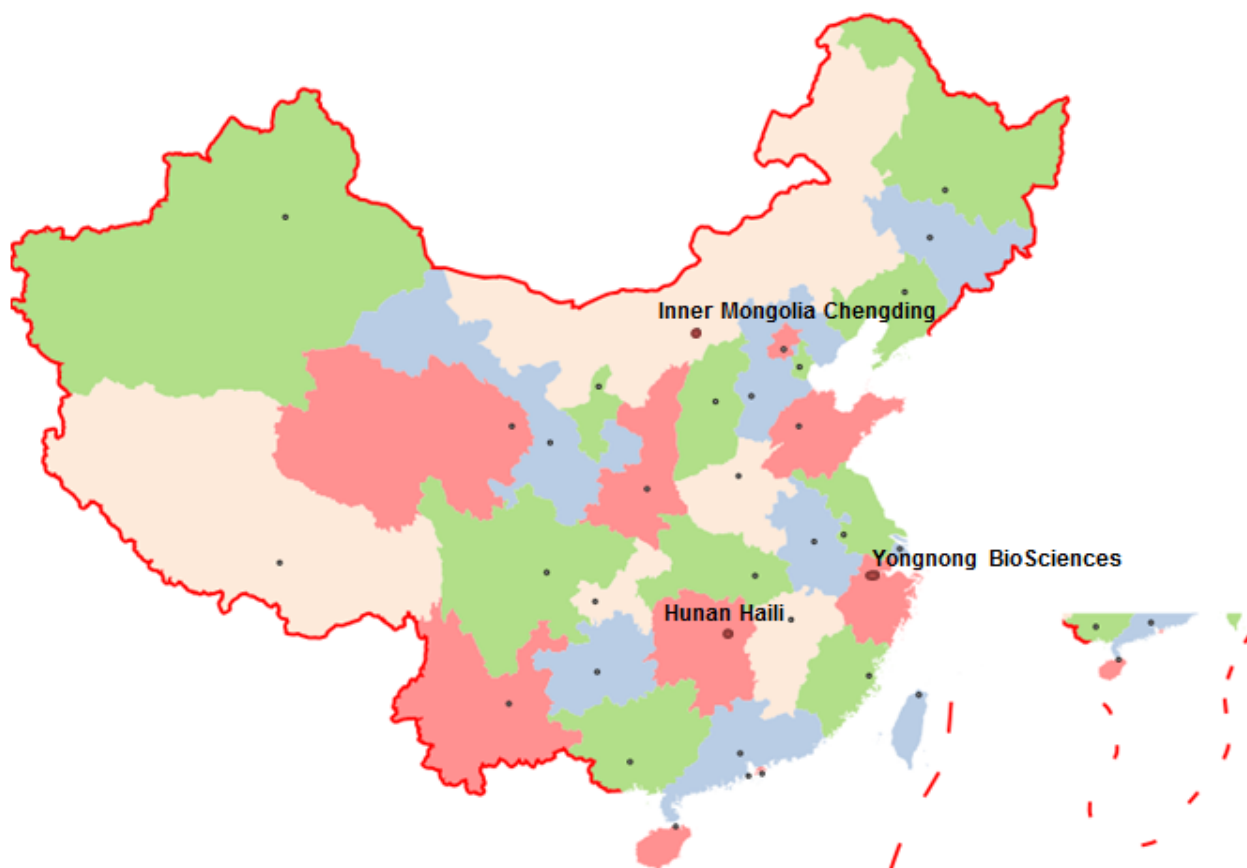
On 29 March, MARA released information of pesticide products that it had planned to approve of registration (3rd-batch this year), which include 109 insecticide products. The majority of the to-be-approved insecticide products are of low toxicity. The most popular form is SC and chlorantraniliprole is the most popular active ingredient in TC products.

According to the Pest Forecasting Division of NATESC, an overall relatively heavy occurrence of major wheat diseases and pests is expected in China in 2024, with occurrence area totalling 59.33 million ha. Aphids will occur relatively heavily in general with total occurrence area reaching 13.33 million ha; certain areas in wheat growing regions in North China may suffer heavy occurrence. Wheat mites will occur moderately and other pests occur mildly in general.

Heilongjiang Province will start to focus its agricultural work on pest & disease control, thus safeguarding a bumper harvest. On 8 April, the provincial department of agriculture and rural affairs rolled out the Action Plan of Heilongjiang Province for Winning the Battle against Pests and Better Safeguarding a Bumper Harvest. Previously in late March, local government projected an overall relatively heavy occurrence of rats in farmlands in 2024.

In Q1 2024, export volume and value of insecticide formulations from China grew by some 30% and 13% YoY, respectively. However, the average export price slipped by nearly 13% YoY.







### Editor's note

In Q1 2024, China's overall economy was on the upswing. According to National Bureau of Statistics of China, for the first three months this year, the value-added of industry (above designated size) increased by 6.1% YoY, the value-added of manufacturing sector grew by 6.7% YoY, and the value-added of production and distribution of electricity, heating power, gas and water rose by 6.9% YoY. In March alone, the manufacturing purchasing managers' index recovered to 50.8%, up 1.7 percentage points MoM, and the expected production and business activities index stood at 55.6%, up 1.4 percentage points MoM.

For the past few months, China's insecticide market remained weak, but signs of improvement were witnessed. In April, ex-works prices of some insecticides TC went up. For instance, the price of chlorpyrifos TC grew by 0.5% MoM; that of acephate TC, up 1.9% MoM; that of emamectin benzoate TC, up 4.8% MoM; and that of abamectin, up 6.3% MoM. Meanwhile, the prices of some other insecticides TC turned stable. As regards insecticide formulation exports, March saw MoM increases and Q1 2024 saw the export volume jump by some 30% YoY.

It is expected that the dull insecticide market may continue in the short term, as the traditional peak season is yet to come and thus orders are limited. Future market trend is not clear at present.

*The USD/CNY exchange rate in this newsletter is USD1.00 = CNY 7.0938 on 1 April, 2024, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.*





## Market analysis

## Abamectin TC price recovers in April amid low market inventory

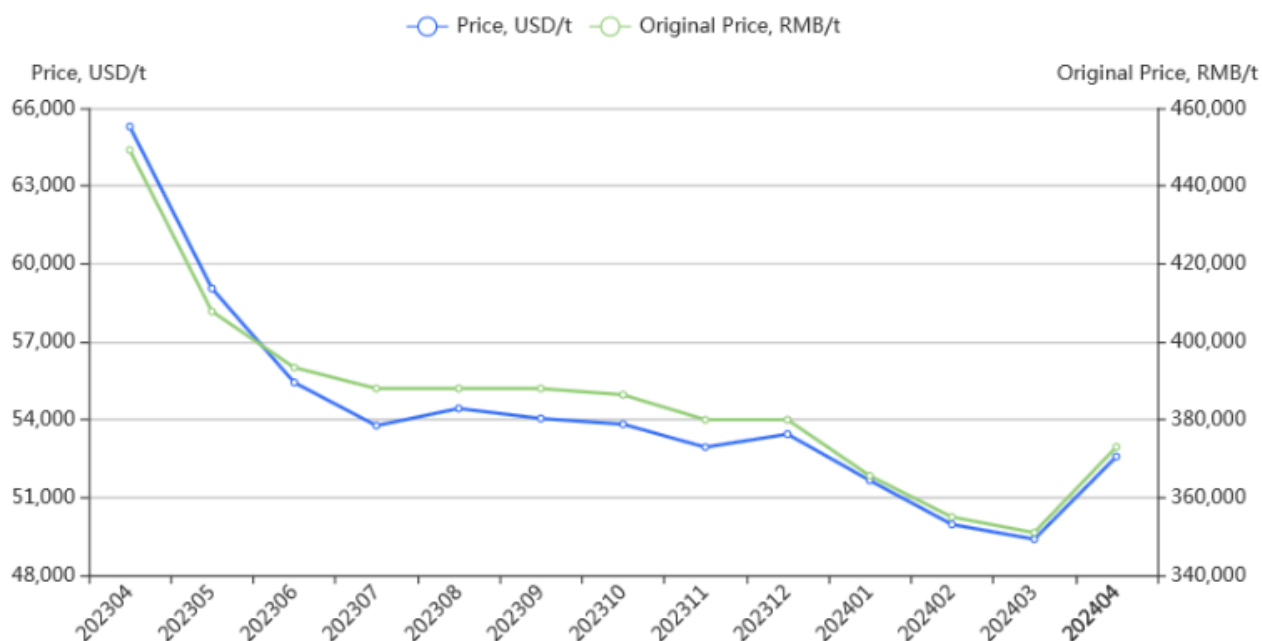
Summary: Abamectin price recovered by 6.27% MoM in April, as the TC producers operated at a low level and inventories were gradually consumed.

In April, the price of abamectin TC in China reversed the previous downtrend and went up 6.27% MoM, as the producers restricted their operation and the market inventory was gradually consumed. Main abamectin TC producers Daqing Jefene Bio-Chemical Co., Ltd. and Ningxia Taiyicin Biotech Co., Ltd. kept normal operation.

In the past 12 months, abamectin TC price trend in China could be roughly divided into four stages:

- From April to July 2023: The price fell quickly mainly due to dull demand and quite large inventory in the market;
- From Aug. to Dec. 2023: The price basically stabilised as operating rate was lowered. Although sluggish demand continued, the supply and demand worked pretty good balance;
- From Jan. to March 2024: The continuous weak demand dragged the price down;
- In April 2024: Lowered operating rate led to tighter supply, plus low-level market inventory, and thus the price recovered.

FIGURE 1: Monthly ex-works prices of 95% abamectin technical in China, April 2023–April 2024



Source:CCM

It should be noted that abamectin has been listed as one of the pesticides should have restrained development of production equipment in the *Guidance Catalogue for Industrial Structure Adjustment (2024 Version)*, which came into effect on 1 Feb., 2024, since it is deemed as a high-toxicity high-residue pesticide technical product that has great impact on the environment or the quality of agricultural products. Although building new abamectin capacity is now banned in China, pesticide enterprises are allowed to upgrade their production lines without expanding existing capacity limits. It is obvious that for manufacturers of such restrained pesticides, to survive in the market, they must take active efforts to transform, upgrade and improve competitiveness.





In recent years, demand for abamectin has been on the rise. For one thing, its application has been broadened along with the development of biotechnology. For another thing, mixed formulation products based on its downstream product emamectin benzoate has gained popularity, with the number of mixture varieties growing. Abamectin is a key material for emamectin benzoate; both are insecticides, but emamectin benzoate scores better in insecticidal activity while inheriting the good traits of abamectin.

### Prices of chlorpyrifos & emamectin benzoate go up, mixed price trends shown in April

Summary: In April, major insecticides TC had mixed price trends in China. For these products, MoM price changes averaged at a positive 0.17%, while average YoY price changes was a negative 13.43%. Specifically, the price of emamectin benzoate TC and abamectin TC increased due to relatively tight supply.

In April, major insecticides TC had mixed price trends in China. On average, MoM price changes of these products was a positive 0.17%, yet on a yearly basis the price changes averaged at a negative 13.43%. Some products had the price increased as the supply turned tighter, which was caused by restricted operation in producers.

**Nicotinoid insecticides:** On average, the ex-works price of nicotinoids decreased by 1.13% MoM in April. In terms of main intermediates for insecticides under this category, the price of N-nitroiminoimidazolidine dropped, but the price of 2-chloro-5-chloromethylpyridine (CCMP) kept stable. In general, nicotinoid insecticides were in sufficient supply, and the price trend was mainly decided by demand. The April price of acetamiprid TC and imidacloprid TC decreased by 1.32% and 0.95% MoM, respectively, because of dull downstream demand.

**Pyrethroid insecticides:** On average, the ex-works price of pyrethroids slipped by 0.36% MoM in April. The price of cypermethrin TC and deltamethrin TC was stable though. In terms of raw materials, price downtrend of the intermediate 3-phenoxy-benzaldehyde continued, which could not effectively support the price of its downstream pyrethroids TC. For beta-cypermethrin TC and lambda-cyhalothrin TC, their price still moved downwards as downstream demand stayed weak and mainly the market inventory was consumed.

**Organophosphorus insecticides:** The ex-works price of organophosphorus insecticides TC edged up slightly, as acephate TC and chlorpyrifos TC had MoM price increases. For chlorpyrifos TC, the producers operated normally and thus the supply was steady, but domestic demand was on the rise. Besides, the price of upstream materials for chlorpyrifos TC was stable. The price of acephate TC climbed up since spot supply was relatively tight.

For acaricides, carbamates, and other insecticides, there were mixed price trends, but most of the products saw their price hover at a low level. The price of propargite TC and carbofuran TC remained stable. The price of spiroticlofen TC, methomyl TC and buprofezin TC declined due to dull downstream demand. The price of abamectin TC went up under tighter supply as the producers restricted their operation. The price of emamectin benzoate TC also went up, supported by the increasing price of upstream material; in addition, the producers maintained their operating rates at a low level, so the supply was limited.





TABLE 1: Ex-works prices of major insecticide TC products in China in April 2024

Product name	Original price, RMB/t	Price, USD/t	MOM, %	YOY, %
Abamectin technical	373,000	52,581.13	6.27	-16.97
Acephate technical	42,800	6,033.44	1.9	-12.21
Acetamiprid technical	70,500	9,938.26	-1.32	-20.7
Beta-Cypermethrin technical	121,800	17,169.92	-0.16	-10.77
Buprofezin technical	62,000	8,740.03	-0.64	-15.07
Carbofuran technical	100,000	14,096.82	0.00	-4.76
Chlorpyrifos technical	37,020	5,218.64	0.49	-5.92
Cypermethrin technical	55,000	7,753.25	0.00	-21.99
Deltamethrin technical	385,000	54,272.75	0.00	-17.2
Emamectin benzoate technical	360,400	50,804.93	4.83	-8.42
Imidacloprid technical	81,500	11,488.91	-0.95	-17.43
Lambda-cyhalothrin technical	107,000	15,083.59	-1.29	-29.37
Methomyl technical	66,000	9,303.9	-4.9	-13.73
Phoxim technical	33,000	4,651.95	0.00	-19.51
Propargite technical	60,000	8,458.09	0.00	0.00
Spirodiclofen technical	132,780	18,717.75	-1.35	-14.34
Triazophos technical	69,000	9,726.8	0.00	0.00

Source:CCM

### Most of major raw materials of insecticides see declining price in April

Summary: In April, prices of the majority of the major raw materials of insecticides TC went down in China; the MoM price changes averaged at a negative 2.51%. The main cause of the price fall was sluggish downstream demand. Besides, some raw materials were in sufficient supply as equipment gradually resumed operation.

In April, MoM changes of ex-works prices of major raw materials of insecticides TC registered an average decrease of 2.51% in China, with the majority of the raw materials experiencing a price fall. The prices of 3,5,6-trichloropyridin-2-ol sodium, O,O-diethylthiophosphoryl







chloride and 2-chloro-5-chloromethylpyridine (CCMP) were stable. However, the price of methanol increased; the supply became tight as the producers limited production or stopped their equipment for maintenance, while downstream purchase turned more active in this period.

This month, the prices of ethylenediamine, N-nitroiminoimidazolidine, liquid ammonia and sodium hydroxide dropped by some 6% to 8% MoM. Specifically, the price of N-nitroiminoimidazolidine fell due to slack downstream demand as well as weak support from cost side since its raw material ethylenediamine experienced a price drop. Sluggish demand was also the main cause of the decrease in liquid ammonia price. For sodium hydroxide, the supply has become quite sufficient as production equipment gradually resumed operation.

The prices of 3-phenoxy-benzaldehyde, bromine and phenol also declined on a monthly basis, with less than 3% MoM changes. Bromine producers operated normally; the output steadily increased and the market supply was ample. Phenol market remained weak; trade was dull since downstream buyers were basically inactive, and spot phenol supply was in good condition. Weak downstream demand forced the price of 3-phenoxy-benzaldehyde to move downwards.

**TABLE 2:** Ex-works prices of major raw materials of insecticides in China, April 2024

Product	Price, RMB/t	Price, USD/t	MOM, %
Phenol	7,608	1,072.49	-0.09
Methanol	2,623	369.76	5.34
Liquid ammonia	2,743	386.68	-7.02
Sodium hydroxide	760	107.14	-6.52
Bromine	18,500	2,607.91	-2.63
2-Chloro-5-chloromethylpyridine	65,000	9,162.93	0.00
3,5,6-Trichloropyridin-2-ol sodium	31,400	4,426.4	0.00
Ethylenediamine	13,500	1,903.07	-7.53
O,O-Diethylthiophosphoryl chloride	17,200	2,424.65	0.00
3-Phenoxy-benzaldehyde	66,000	9,303.9	-2.94
N-Nitroiminoimidazolidine	30,000	4,229.05	-6.25

Source: CCM





## Company and supply

### Yongnong BioSciences to build 2,500 t/a chlorfenapyr TC capacity

Summary: On 1 April, Yongnong BioSciences announced that the construction of main works and supporting environmental protection facilities of its high-efficacy pesticides TC technological upgrading smart manufacturing project (involving 3,000 t/a metamitron, 1,000 t/a etoxazole and 1,200 t/a bifentazate) had been finished. Later, on 7 April, the company revealed the EI report (draft for record filing) of high-efficacy crop protection product technological upgrading project (involving 2,500 t/a chlorfenapyr).

On 1 April, Yongnong BioSciences Co., Ltd. (Yongnong BioSciences) announced that the construction of main works and supporting environmental protection facilities of its high-efficacy pesticides TC technological upgrading smart manufacturing project had been finished. With planned investment of USD28.19 million (RMB200 million), the project made improvements to production technologies for the built-up 1,000 t/a etoxazole and 1,200 t/a bifentazate lines and then still under-construction 3,000 t/a metamitron line located in the Hangzhou Bay Shangyu Economic and Technological Development Zone, Shaoxing City, Zhejiang Province. No change has been brought to design capacity for these products, but the production processes and some raw and auxiliary materials have been improved and upgraded to cut down material use, reduce pollutants generated and production risks involved, as well as to increase product quality.

Besides, on 7 April, Yongnong BioSciences revealed the EI report (draft for record filing) of high-efficacy crop protection product technological upgrading project. It has planned to invest USD21.15 million (RMB150 million) to build 2,500 t/a chlorfenapyr TC production capacity in the plant in the Hangzhou Bay Shangyu Economic and Technological Development Zone. The capacity was originally planned in the company's 8,000 t/a high-efficacy pesticides TC technological upgrading and new construction project, yet the line has not been built. This time, to improve production safety, product yield and purity, upgrades of production technologies and equipment will be introduced. Completion is expected in Dec. 2025.

For the 8,000 t/a high-efficacy pesticides TC technological upgrading and new construction project, apart from the chlorfenapyr line, production lines of 3,000 t/a glufosinate-P TC, 500 t/a prochloraz-manganese chloride complex TC, 1,200 t/a bifentazate TC, 200 t/a pyraclostrobin TC, 200 t/a epoxiconazole TC, 200 t/a thiamethoxam TC and 100 t/a azoxystrobin TC have been built up and passed company-organised environmental protection acceptance check, while the 100 t/a dicamba TC line is still under construction.

### In April, operating rate of some insecticides TC drops, abamectin & emamectin benzoate in tight supply

Summary: In April, the majority of Chinese insecticide TC producers maintained normal operation, but operating rates were kept at a low level, mainly due to dull downstream demand. Some products were in tight supply because of low-level operation as well as small inventories in the market.

In April, the majority of Chinese insecticide TC producers maintained normal operation; operating rates were still at a relatively low level, with an average rate dipping to about 48%. In general, dull downstream demand continued. However, some products were in tight supply because of low-level operation and small inventories in the market.





**Organophosphorus insecticides:** On a monthly basis, overall operating rate of organophosphorus insecticide TC producers edged up in April. Chlorpyrifos TC producers raised their operating rates, and they mainly fulfilled previous orders and had no need to worry about sales. It is reported that temporary production suspension in major producers like Inner Mongolia Miraculous Crop Science Co., Ltd. and Chongqing Huage Biochemical Co., Ltd. continued, while Shandong Luba Chemical Co., Ltd. (Shandong Luba) and Hubei Benxing Agrochemical Co., Ltd. had normal operation. Regarding malathion TC, the major producer Shandong Luba maintained normal production; the company's products were mainly for exports.

**Nicotinoid insecticides:** Overall operating rate in April dipped to around 45%. Main imidacloprid TC producers such as Shandong Sino-Agri United Biotechnology Co., Ltd. (Sino-Agri Union), Shandong Hailir Chemicals Co., Ltd., Wuzhong Linghang Biological & Pharmaceutical Co., Ltd. and Hebei Yetian Agrochemicals Co., Ltd. kept quite steady operation, and there was ample inventory of imidacloprid TC in the market this month. Acetamiprid TC trade was slow; the inventory was consumed at a slow pace as new orders were still small despite growth witnessed. As to thiamethoxam TC and clothianidin TC, the supply was tight and market inventory was low; the producers were careful to arrange production schedule to fulfill orders. Nevertheless, operating rate of clothianidin TC remained low; the producer Sino-Agri Union kept normal operation.

**Pyrethroid insecticides:** Overall operating rate was stable in April. The majority of pyrethroid insecticide TC producers kept their production lines running on the support of a small number of orders. Main producers of cyhalothrin TC and bifenthrin TC, such as Jiangsu Yangnong Chemical Co., Ltd., Guangdong Liwei Chemical Industry Co., Ltd. and Jiangsu Chunjiang Runtian Agrochemical Co., Ltd., kept normal operation, though the rates in these companies were at a low level.

Moreover, producers of abamectin TC and emamectin benzoate TC lowered their operating rate. As the supply of emamectin benzoate shrank, enquiries grew, and the producers were ready to prop up the price. The supply of abamectin TC was tight due to reduced output.





TABLE 3: Supply of main insecticides TC in China in April 2024

Category	Product	Average operating rate in April	Supply situation in April
Organophosphorus	Chlorpyrifos TC	50%	Normal supply
Organophosphorus	Malathion TC	50%	Normal supply
Nicotinoid	Imidacloprid TC	40%	Ample supply
Nicotinoid	Acetamiprid TC	40%	Ample supply
Nicotinoid	Thiamethoxam TC	45%	Tight supply
Nicotinoid	Clothianidin TC	40%	Tight supply
Nicotinoid	Thiacloprid TC	60%	Ample supply
Pyrethroid	Cyhalothrin TC	45%	Normal supply
Pyrethroid	Bifenthrin TC	50%	Ample supply
Others	Abamectin TC	40%	Tight supply
Others	Emamectin benzoate TC	50%	Tight supply
Others	Propargite TC	60%	Normal supply
Others	Chlorfenapyr TC	50%	Normal supply

Note:1. The operating rates are the average of the rates in major producers, and the statistics are incomplete.

2. Combined with information on downstream orders, the supply situation is here classified into: tight supply, normal supply and ample supply.

Source:CCM





## Policy

### MEM: "Ten Haves & Two Prohibitions", the focus of chemical park safety improvement in 2024

Summary: In April, MEM has launched chemical park safety improvement expert guidance service for the year 2024, in accordance with the *Three-Year Action Plan for the Uphill Battle to Secure Work Safety in the Production of Chemicals and Hazardous Chemicals (2024–2026)*. So far, working groups of expert guidance service have been dispatched to provinces including Hebei, Shanxi, Liaoning, Jilin, Zhejiang and Hubei. This year, the guidance service is centred on the "Ten Haves & Two Prohibitions" requirements.

In April, the Ministry of Emergency Management of the People's Republic of China (MEM) has launched chemical park safety improvement expert guidance service for the year 2024, in accordance with the *Three-Year Action Plan for the Uphill Battle to Secure Work Safety in the Production of Chemicals and Hazardous Chemicals (2024–2026)*. So far, working groups of expert guidance service have been dispatched to provinces including Hebei, Shanxi, Liaoning, Jilin, Zhejiang and Hubei. It was reported that in 2023 MEM delivered expert guidance service to 120 chemical parks in 29 provincial-level administrative regions; the efforts lifted chemical parks' safety management and safety guarantee capabilities to a new level and provided strong support for the overall stable production safety in chemical and hazardous chemical enterprises in China.

For the year 2024, focus of the guidance service will still be put on the "Ten Haves & Two Prohibitions" requirements. Methods teaching and leading by examples will remain main ways of guidance, supplemented with multiple other ways including trainings themed on certain special subjects, on-site guidance, exchanges and seminars, and mutual learning; and key regions, key parks and key tasks will be highlighted. Through these efforts, rectification and improvement work with one policy for one park style could be further promoted. Expert working groups should devote more to key and demanding tasks in chemical parks, such as project access threshold setting, closed-off management, and intelligent control platform construction; with lessons gained on key points, level of intrinsic safety in such parks could be enhanced, and it will facilitate the attainment of level-D (signifying lower level of safety risks) rating.

#### Ten Haves & Two Prohibitions

- Ten Haves: A chemical park should have a scientific and reasonable overall planning and industrial planning, and forms a planning system with regional master planning and professional planning; have a comprehensive safety management system, a smooth safety supervision system, and competent supervision forces to meet safety supervision requirements; have clearly declared four boundaries (to east, west, north, south sides); have a clear safety control line of surrounding land-use planning; have safety public works, water, electricity, gas and other supporting facilities to meet current and future-development needs of the park; have closed-off management implemented; have an information platform set up; have qualified special parking lots for hazardous chemical vehicles built up to serve actual needs; have a training base that meets the relevant requirements and satisfies the needs of talents in the park; have well-equipped fire-fighting facilities (or a special mission fire station).
- Two Prohibitions: A chemical park should formulate its own catalogue of prohibited, restricted and development-controlled products/techniques that is consistent with national industrial policies and the park's industrial development direction; a chemical park shall prohibit residents from living in the park and keep labour-intensive enterprises at bay.





## Registration

### 109 Insecticide products to be approved of registration in April

Summary: On 29 March, MARA released information of pesticide products that it had planned to approve of registration (3rd-batch this year), which include 109 insecticide products. The majority of the to-be-approved insecticide products are of low toxicity. The most popular form is SC and chlorantraniliprole is the most popular active ingredient in TC products.

On 29 March, the Department of Agrochemical Management of Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) released the list of pesticide products that it had planned to approve of registration (3rd-batch this year), which include 109 insecticide products.

The majority of these to-be-approved insecticide products are of low toxicity, accounting for 71.6% of the total. The most popular form is SC, products in this form making up 57.8% of the total. There are four insecticide TC products in this batch and three are chlorantraniliprole TC products, plus an etoxazole TC. Companies with at least three insecticide products to be approved of registration are Shandong Zhongxin Kenong Bio-Technology Co., Ltd., Guangxi Bindeli Biotechnology Co., Ltd., Hunan Xinchangshan Agricultural Development Co., Ltd. and Shanghai Yuelian Biological Technology Co., Ltd.



**TABLE 4:** Insecticide products to be approved of registration, April 2024

No.	Company	Product name	Active ingredient and content	Form	Toxicity
1	Anhui Jintudi Biotechnology Co., Ltd.	Abamectin·hexaflumuron	Abamectin 5%·hexaflumuron 3%	EC	Low (TC: highly toxic)
2	Anhui Lantian Agricultural Development Co., Ltd.	Dinotefuran·pymetrozine	Dinotefuran 20%·pymetrozine 50%	WG	Mild
3	Anhui Lantian Agricultural Development Co., Ltd.	Chlorfenapyr·clothianidin	Chlorfenapyr 8%·clothianidin 20%	SC	Low
4	Anhui Yinong Chemical Co., Ltd.	Emamectin benzoate	Abamectin-aminomethyl 5%	WG	Low
5	Anhui Yuanjing Crop Protection Co., Ltd.	Diafenthiuron·indoxacarb	Diafenthiuron 35%·indoxacarb 7%	SC	Low
6	Anhui Yuanjing Crop Protection Co., Ltd.	Triazophos	Triazophos 20%	CS	Low
7	Anyang Ruipu Agrochemical Co., Ltd.	Chlorfenapyr·lufenuron	Chlorfenapyr 9.50%·lufenuron 2.50%	SC	Mild
8	Nufarm Limited	Chlorantraniliprole	Chlorantraniliprole 625g/L	FS	Low
9	Chifeng Nuohua Biotechnology Co., Ltd.	Insecticide bait	Dinotefuran 0.50%	RB	Mild
10	Chifeng Nuohua Biotechnology Co., Ltd.	Beta-cyfluthrin·imidacloprid	Beta-cyfluthrin 10%·imidacloprid 21%	SC	Low
11	DE SANGOSSE	Petroleum oil	Petroleum oil 94%	EC	Low
12	Guangdong Liwei Chemical Industry Co., Ltd.	Bifenthrin·pymetrozine	Bifenthrin 10%·pymetrozine 20%	SC	Low
13	Guangdong Liwei Chemical Industry Co., Ltd.	Thiamethoxam	Thiamethoxam 25%	SC	Low



14	Zhuhai Huaxia Biological Formulation Co., Ltd.	Abamectin-aminomethyl-chlorantraniliprole	Abamectin-aminomethyl 1.30%·chlorantraniliprole 4.50%	SC	Low
15	Guangxi Bindeli Biotechnology Co., Ltd.	Diflubenzuron·chlorantraniliprole	Diflubenzuron 10%·chlorantraniliprole 2%	SC	Low
16	Guangxi Bindeli Biotechnology Co., Ltd.	Clothianidin·chlorantraniliprole	Clothianidin 15%·chlorantraniliprole 5%	SC	Low
17	Guangxi Bindeli Biotechnology Co., Ltd.	Ant bait	Indoxacarb 0.10%	RB	Low
18	Guangxi Defengfu Chemical Co., Ltd.	Thiamethoxam·chlorantraniliprole	Thiamethoxam 0.12%·chlorantraniliprole 0.04%	GR	Low
19	Guangxi Jinsiniao Agrochemical Co., Ltd.	Beta-cypermethrin·chlorantraniliprole	Beta-cypermethrin 4.50%·chlorantraniliprole 0.50%	SC	Low
20	Guangxi Jinyanzi Pesticide Co., Ltd.	Matrine extract	Matrine 0.30%	SL	Mild
21	Guangxi Nongxi Crop Science Co., Ltd.	Chlorfenapyr·chlorantraniliprole	Chlorfenapyr 15%·chlorantraniliprole 5%	SC	Low
22	Guangxi Tianyuan Biochemistry Co., Ltd.	Beta-cypermethrin·pyriproxyfen	Beta-cypermethrin 5%·pyriproxyfen 5%	ME	Low
23	Hefei Henong Pesticide Co., Ltd.	Abamectin·methoxyfenozide	Abamectin 5%·methoxyfenozide 15%	SC	Low (TC: highly toxic)
24	Hefei Henong Pesticide Co., Ltd.	Bifenthrin·clothianidin	Bifenthrin 5%·clothianidin 5%	SC	Low
25	Hefei Xingyu Chemical Co., Ltd.	Fludioxonil·thifluzamide·clothianidin	Fludioxonil 1%·thifluzamide 3%·clothianidin 10%	FS	Low
26	Hebei Geleite Biotechnology Co., Ltd.	Bifenthrin·clothianidin	Bifenthrin 10%·clothianidin 10%	SC	Low
27	Hebei Rongwei Biological	Chlorfenapyr·clothianidin	Chlorfenapyr 8%·clothianidin 20%	SC	Low







	Pharmaceutical Co., Ltd.				
28	Henan Changjian Biotechnology Co., Ltd.	Clothianidin	Clothianidin 18%	FS	Low
29	Star of Jinxiu Henan Crops Protection Co., Ltd.	Fludioxonil·thifluzamide·clothianidin	Fludioxonil 0.70%·thifluzamide 1.30%·clothianidin 20%	FS	Low
30	Zhoukou Zhongke Chemical Co., Ltd.	Abamectin-aminomethyl·chlorantraniliprole	Abamectin-aminomethyl 1.30%·chlorantraniliprole 4.50%	SC	Low
31	Henan Tianfeng Shangpin Biological Technology Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 200g/L	SC	Low
32	Henan Loong Boy Biotechnology Co., Ltd.	Abamectin-aminomethyl·monosultap	Abamectin-aminomethyl 1.70%·monosultap 78%	WP	Moderate
33	Henan Zhongzhou Seed Technology Development Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 20%	FS	Mild
34	Hubei Beisite Agricultural Chemicals Co., Ltd.	Buprofezin·spirotetramat	Buprofezin 22%·spirotetramat 11%	SC	Low
35	Hunan Xinchangshan Agricultural Development Co., Ltd.	Clothianidin·chlorantraniliprole	Clothianidin 0.09%·chlorantraniliprole 0.02%	GR	Low
36	Hunan Xinchangshan Agricultural Development Co., Ltd.	Thiamethoxam·chlorantraniliprole	Thiamethoxam 0.09%·chlorantraniliprole 0.02%	GR	Low
37	Hunan Xinchangshan Agricultural Development Co., Ltd.	Clothianidin·chlorantraniliprole	Clothianidin 0.80%·chlorantraniliprole 0.20%	GR	Low
38	Hunan Zefeng	Bifenthrin·thiacloprid	Bifenthrin 5%·thiacloprid 5%	ME	Low





	Agricultural Chemical Co., Ltd.				
39	Hunan Changqing Runkangbao Agrochemical Co., Ltd.	Thiamethoxam·lambda-cyhalothrin	Thiamethoxam 12.60%·lambda-cyhalothrin 9.40%	SC	Moderate
40	Hunan Changqing Runkangbao Agrochemical Co., Ltd.	Bifenthrin·lufenuron	Bifenthrin 5%·lufenuron 10%	SC	Low
41	Jinan Tianyu Baihe Crop Nutrition Technology Co., Ltd.	Bacillus firmus	Bacillus firmus 0.5 billion spores/g	GR	Low
42	Jiangmen Daguangming Agrochemical Xinhui Co., Ltd.	Bifenthrin	Bifenthrin 10%	SC	Low
43	Jiangsu Aijin Crop Science and Technology Co., Ltd.	Difenoconazole·fludioxonil·thiamethoxam	Difenoconazole 2.20%·fludioxonil 2.20%·thiamethoxam 22.60%	FS	Low
44	Jiangsu Southeast Plant Protection Co., Ltd.	Abamectin·aminomethyl·lufenuron	Abamectin·aminomethyl 2.60%·lufenuron 5%	SC	Low
45	Jiangsu Fengshan Biochemical Technology Co., Ltd.	Dinotefuran·tolfenpyrad	Dinotefuran 10%·tolfenpyrad 15%	SC	Low
46	Jiangsu LionChem Co., Ltd.	Chlorfenapyr·chlorantraniliprole	Chlorfenapyr 15%·chlorantraniliprole 5%	SC	Moderate
47	Xuzhou Fengwei Chemical Factory	Chlorfenapyr·chlorantraniliprole	Chlorfenapyr 20%·chlorantraniliprole 10%	SC	Mild
48	Jiangsu Yunfan Chemical Co., Ltd.	Spirotetramat·thiamethoxam	Spirotetramat 10%·thiamethoxam 10%	SC	Mild
49	Jiangxi Bafeite Chemical Co., Ltd.	Bifenazate·etoxazole	Bifenazate 30%·etoxazole 15%	SC	Low





50	Jiangxi Jinnong Crop Protection Co., Ltd.	Abamectin	Abamectin 5%	EC	Low (TC: highly toxic)
51	Jiangxi Weilite Biological Technology Co., Ltd.	Bifenazate·etoxazole	Bifenazate 30%·etoxazole 15%	SC	Low
52	Jiangxi Zhengbang Crop Protection Co., Ltd.	Dinotefuran·chlorantraniliprole	Dinotefuran 21%·chlorantraniliprole 9%	SC	Mild
53	Jiangxi Zhongxun Agro-Chemical Co., Ltd.	Thiamethoxam·lufenuron	Thiamethoxam 10%·lufenuron 10%	SC	Mild
54	Jiangxi Zhonghe Chemical Co., Ltd.	Diflubenzuron·abamectin·aminomethyl	Diflubenzuron 19%·abamectin·aminomethyl 0.90%	SC	Low
55	Jingdianzhilu Agrotechnology Co., Ltd.	Clothianidin·chlorantraniliprole	Clothianidin 0.12%·chlorantraniliprole 0.04%	GR	Low
56	Kaifeng Bianliang Seed Coating Co., Ltd.	Fludioxonil·metalaxyl-m·clothianidin	Fludioxonil 0.50%·metalaxyl-m 1%·clothianidin 7.50%	FS	Low
57	Kaiping Dahao Daily Chemicals Technology Co., Ltd.	Cockroach bait	Dinotefuran 0.50%	RB	Mild
58	Liaocheng Jiaojie Automation Technology Co., Ltd.	Insecticide bait	Dinotefuran 0.50%	RB	Mild
59	Liuzhou Huinong Chemical Co., Ltd.	Spirotetramat·thiamethoxam	Spirotetramat 10%·thiamethoxam 10%	SC	Low
60	Inner Mongolia Zhongnong Biochemical Technology Co., Ltd.	Abamectin·aminomethyl·imidacloprid	Abamectin·aminomethyl 2%·imidacloprid 8%	ZC	Low
61	Qingdao Haina Biotechnology Co., Ltd.	Abamectin·aminomethyl·chlorantraniliprole	Abamectin·aminomethyl 2.60%·chlorantraniliprole 12%	OD	Low



62	Qingdao Haina Biotechnology Co., Ltd.	Diafenthiuron·abamectin-aminomethyl	Diafenthiuron 25%·abamectin-aminomethyl 2.60%	SC	Low
63	Qingdao Jiner Agrochemicals R&D Co., Ltd.	Thiamethoxam·lambda-cyhalothrin	Thiamethoxam 12.60%·lambda-cyhalothrin 9.40%	SC	Low
64	Shandong Aokun Crop Science Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 200g/L	SC	Low
65	Shandong Aosheng Biological Technology Co., Ltd.	Emamectin benzoate	Abamectin-aminomethyl 8%	SL	Low
66	Shandong Dacheng Biochemical Co., Ltd.	Fenpropathrin	Fenpropathrin 300g/L	EC	Moderate
67	Shandong Dongtai Agrochemical Co., Ltd.	Dinotefuran	Dinotefuran 10%	SC	Mild
68	Shandong Dongyuan Bio-Technology Co., Ltd.	Bifenazate·spirotetramat	Bifenazate 24%·spirotetramat 12%	SC	Mild
69	Shandong Dongyuan Bio-Technology Co., Ltd.	Bifenazate·etoxazole	Bifenazate 30%·etoxazole 15%	SC	Mild
70	Shandong Guihe Biotechnology Co., Ltd.	Fonicamid	Fonicamid 10%	SC	Low
71	Shandong Kangqiao Biotechnology Co., Ltd.	Abamectin·fluopyram	Abamectin 2%·fluopyram 6%	SC	Moderate (TC: highly toxic)
72	Shandong Keyuan Chemical Co., Ltd.	Profenofos	Profenofos 500g/L	EC	Low
73	Shandong Keyuan Chemical Co., Ltd.	Profenofos	Profenofos 720g/L	EC	Low
74	Shandong Luba Chemical Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 96%	TC	Low





75	Shandong Shangnong Agricultural Technology Co., Ltd.	Petroleum oil	Petroleum oil 99%	EC	Mild
76	Jinan Jindi Pesticide Co., Ltd.	Chlorfenapyr	Chlorfenapyr 240g/L	SC	Low
77	Jinan Yinong Chemical Co., Ltd.	Indoxacarb·chlorantraniliprole	Indoxacarb 10%·chlorantraniliprole 5%	SC	Low
78	Shandong Shibang Agrochemicals Co., Ltd.	Chlorfenapyr·chlorantraniliprole	Chlorfenapyr 20%·chlorantraniliprole 10%	SC	Low
79	Shandong Weifang Rainbow Chemical Co., Ltd.	Pyriproxyfen	Pyriproxyfen 10%	EC	Low
80	Shandong Xinlong Agrochemical Co., Ltd.	Chlorfenapyr·abamectin-aminomethyl	Chlorfenapyr 19%·abamectin-aminomethyl 1.80%	SC	Low
81	Shandong Xinxing Biotechnology Co., Ltd.	Indoxacarb·chlorantraniliprole	Indoxacarb 10%·chlorantraniliprole 10%	SC	Low
82	Shandong A&Fine Agrochemicals Co., Ltd.	Chlorfenapyr·chlorantraniliprole	Chlorfenapyr 24%·chlorantraniliprole 8%	SC	Low
83	Shandong Youdao Chemical Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 200g/L	SC	Low
84	Shandong Zhongxin Kenong Bio-Technology Co., Ltd.	Bifenazate·etoxazole	Bifenazate 30%·etoxazole 15%	SC	Low
85	Shandong Zhongxin Kenong Bio-Technology Co., Ltd.	Fonicamid	Fonicamid 10%	SC	Low
86	Shandong Zhongxin Kenong Bio-Technology Co., Ltd.	Clothianidin	Clothianidin 30%	SC	Low





87	Shandong Zhongxin Kenong Bio-Technology Co., Ltd.	Bifenthrin·clothianidin	Bifenthrin 10%·clothianidin 10%	SC	Low
88	Shandong Zhongxin Kenong Bio-Technology Co., Ltd.	Pyridaben·dinotefuran	Pyridaben 20%·dinotefuran 15%	WG	Low
89	Shaanxi Huarong Kaiwei Biological Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 35%	WG	Mild
90	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	Abamectin	Abamectin 10%	SC	Moderate (TC: highly toxic)
91	Shaanxi Nuozheng Biotechnology Co., Ltd.	Emamectin benzoate	Abamectin-aminomethyl 8%	SL	Moderate
92	Shaanxi Nuozheng Biotechnology Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 96%	TC	Low
93	Shaanxi Sunger Road Bio-Science Co., Ltd.	Chlorfenapyr·tolfenpyrad	Chlorfenapyr 15%·tolfenpyrad 15%	SC	Moderate
94	Shaanxi Xiannong Biology Science Co., Ltd.	Abamectin-aminomethyl·tolfenpyrad	Abamectin-aminomethyl 1.80%·tolfenpyrad 10%	SC	Low
95	Shaanxi Pure Biological Engeneering Co., Ltd.	Chlorantraniliprole	Chlorantraniliprole 96%	TC	Mild
96	Shaanxi Yitianfeng Crop Science and Technology Co., Ltd.	Cyromazine·deltamethrin	Cyromazine 370g/L·deltamethrin 30g/L	SC	Low
97	Shaanxi Yitianfeng Crop Science and Technology Co., Ltd.	Cyromazine·thiamethoxam	Cyromazine 35%·thiamethoxam 35%	WG	Low





98	Shanghai Huiian Biopharmaceutical (Xiayi) Co., Ltd.	Abamectin-aminomethyl-lufenuron	Abamectin-aminomethyl 2.60%·lufenuron 5%	SC	Low
99	Shanghai Yuelian Biological Technology Co., Ltd.	Acetamiprid·flonicamid	Acetamiprid 10%·flonicamid 15%	ME	Low
100	Shanghai Yuelian Biological Technology Co., Ltd.	Clothianidin·chlorantraniliprole	Clothianidin 30%·chlorantraniliprole 10%	SC	Low
101	Shanghai Yuelian Biological Technology Co., Ltd.	Spinosad·chlorantraniliprole	Spinosad 2.50%·chlorantraniliprole 10%	SC	Low
102	Shidike Biotechnology (Henan) Co., Ltd.	Bifenazate·etoxazole	Bifenazate 30%·etoxazole 15%	SC	Low
103	Synwill Co., Ltd.	Lufenuron-lambda-cyhalothrin	Lufenuron 9.50%·lambda-cyhalothrin 9.50%	SC	Low
104	Sichuan Jiadeli Technology Development Co., Ltd.	Indoxacarb·tolfenpyrad	Indoxacarb 5%·tolfenpyrad 15%	SC	Moderate
105	Sichuan Woye Agrochemical Co., Ltd.	Bifenazate·etoxazole	Bifenazate 25%·etoxazole 15%	SC	Mild
106	Yongnong BioSciences Co., Ltd.	Ettoxazole	Ettoxazole 96%	TC	Low
107	Zhejiang Lanjian Biotechnology Co., Ltd.	Cypermethrin·imiprothrin	Cypermethrin 0.16%·imiprothrin 0.15%	AE	Mild
108	Zhejiang Longyou Eastern Anasac Crop Science Co., Ltd.	Thiamethoxam·lambda-cyhalothrin	Thiamethoxam 12.60%·lambda-cyhalothrin 9.40%	SC	Low
109	Zhongtu Chemical (Anhui) Co., Ltd.	Fludioxonil·ipconazole·clothianidin	Fludioxonil 2%·ipconazole 4%·clothianidin 40%	FS	Low

Source: Department of Agrochemical Management, MARA





## Pest

### NATESC: aphids to occur relatively heavily in most wheat growing regions in China in 2024

Summary: According to the Pest Forecasting Division of NATESC, an overall relatively heavy occurrence of major wheat diseases and pests is expected in China in 2024, with occurrence area totalling 59.33 million ha. Aphids will occur relatively heavily in general with total occurrence area reaching 13.33 million ha; certain areas in wheat growing regions in North China may suffer heavy occurrence. Wheat mites will occur moderately and other pests occur mildly in general.

News from the Pest Forecasting Division of National Agro-Tech Extension and Service Centre (NATESC) released on 2 April sounded the alarm that about 85% of major wheat diseases and pests (in terms of occurrence area) would take place at middle-to-late growth stage and aphids would occur relatively heavily in most wheat growing regions across China. Previously, it was forecasted that major wheat diseases and pests would occur relatively heavily in China in 2024; total occurrence area may reach 59.33 million ha, with the occurrence area of major wheat pests reaching 24.67 million ha.

Estimated occurrence trends of wheat pests:

- Aphids will occur relatively heavily in general with total occurrence area reaching 13.33 million ha. Certain areas in wheat growing regions in North China may suffer heavy occurrence. Peak occurrence period in wheat growing regions in northern Yangtze-Huaihe region and Huang-Huai area is from late-April to mid-May, and the peak in wheat growing regions in North China and Northwest China is from early-May to early-June.
- Wheat mites will occur moderately in general with total occurrence area reaching 6 million ha. Main regions to be affected are wheat growing regions in Yangtze-Huaihe region, Huang-Huai area, North China and middle and eastern parts of Northwest China.
- Other pests will occur mildly in general with total occurrence area reaching 5 million ha. Specifically, underground pests will occur in wheat growing regions in North China and Northwest China with an area of 2.67 million ha, wheat sawflies will occur in North China with 1 million ha, and 1st-generation armyworms, wheat blossom midges, locusts, etc. will occur in some wheat growing regions with 1.33 million ha.

Bases for the estimation:

- For aphids: So far aphids have occurred in various wheat growing regions with area combined at 0.96 million ha, down 50.3% YoY and 54.3% from the average for 2018–2022 period. Population is relatively larger in some parts in wheat growing regions in Southwest China and Northwest China; on average, aphid population is 165 to 360 per hundred plants in Southwest China, and that in Shaanxi and Gansu provinces is 9 to 25 per hundred plants, the figures being slightly higher than those in the same period in 2023 while lower than those in the same period in recent years. For most parts in the rest wheat growing regions in China, the average aphid population is 1.5 to 11 per hundred plants, lower than figures in the same period in 2023 as well as in recent years;
- For wheat mites: So far wheat mites have occurred in various wheat growing regions with area combined at 2.43 million ha, down 27.8% YoY and 28.7% from the average for 2018–2022 period. In Hebei, Shanxi, Shandong, Shaanxi, Henan provinces, average single-line wheat mite population is 19 to 48 per chi (about 33cm); specifically, the average in Shaanxi is 28. The figure is slightly higher than that in the same period in 2023. For most parts in the rest wheat growing regions, relatively small population is recorded.

It is worth noting that late sowing in some regions has led to unsynchronised growth stages. Prolonged heading-and-flowering stage and staggered filling-to-ripening stage enable aphids, wheat mites and other pests to cause sustained and repeated damages. Besides, it is forecasted that northern Huang-Huai area and North China will see lower precipitation in April, which provides favourable conditions for







the expansion of aphid and wheat mite population, and the lower precipitation situation in the two regions will continue in May, which may help aphids cause damages in ear development stage.

### Heilongjiang to focus on safeguarding bumper harvest

Summary: Heilongjiang Province will start to focus its agricultural work on pest & disease control, thus safeguarding a bumper harvest. On 8 April, the provincial department of agriculture and rural affairs rolled out the *Action Plan of Heilongjiang Province for Winning the Battle against Pests and Better Safeguarding a Bumper Harvest*. Previously in late March, local government projected an overall relatively heavy occurrence of rats in farmlands in 2024.

Spring ploughing in Heilongjiang Province is close to an end in April, and the next focus is to ensure a good pest & disease control and thus safeguard a bumper harvest. On 8 April, the provincial department of agriculture and rural affairs rolled out the *Action Plan of Heilongjiang Province for Winning the Battle against Pests and Better Safeguarding a Bumper Harvest*. Previously in late March, local government projected an overall relatively heavy occurrence of rats in farmlands in 2024. Key affected regions will be agro-pastoral and agro-forestry ecotone, paddy fields along rivers and main planting areas of cash crops like vegetables, and therefore a sound prevention and control work should be carried out.

#### Forecasted occurrence trend of major pests on rice, maize and soybean in Heilongjiang in 2024

- On rice: There would be moderate occurrence of rice leaf-miners and *Oulema oryzae* in general, but relatively heavy occurrence in some local areas; there would be mild occurrence of striped rice stem borers in general, but moderate occurrence in some fields, along with expanding area of occurrence; occurrence of rice planthoppers and rice white tip nematode is on the rise in some local areas; there would be moderate occurrence of *Naranga aenescens* and rice locusts in some fields; rice midges may cause some damages in some fields in some individual counties;
- On maize: There would be mild occurrence of armyworms in general, but the larvae may occur intensively in some individual fields where weeds run rather riot in certain counties in central-southern part and eastern part of the province; there would be moderate occurrence of corn borers, and relatively heavy occurrence in counties with quite large overwintering base; there would be sporadic occurrence of underground pests such as wireworms and cutworms, and pests in seedling stage like Mongolia weevil; there would be mild occurrence of corn aphids, corn spider mites and double-spotted leaf beetle in general, but relatively heavy occurrence in some fields; the occurrence of *Helotropha leucostigma* is on the rise in some counties;
- On soybean: There would be sporadic occurrence of beet webworm, and local damages may be caused if overseas population migrate into central-western part of the province, but domestic overwintering population may not cause harm in the province; there would be moderate occurrence of soybean pod borers in general, but relatively heavy occurrence in some counties; there would be mild occurrence of soybean aphids and soybean panonychus in general, but relatively heavy occurrence in some fields; there would be mild occurrence of underground pests and pests in seedling stage such as grubs, cutworms, soybean root maggot, soybean thrips, *Paraluperodes suturalis nigrobilineafus* and Mongolia weevil; there would be moderate occurrence of defoliators of the Noctuidae family like *Heliothis dipsacea* in some individual fields in main soybean planting areas in eastern and northern parts of the province; there would be mild occurrence of double-spotted leaf beetle and soybean stem fly.





## Trade analysis

## Q1 2024 witnesses YoY growth in insecticide formulation exports

Summary: In Q1 2024, export volume and value of insecticide formulations from China grew by some 30% and 13% YoY, respectively. However, the average export price slipped by nearly 13% YoY.

According to the statistics from General Administration of Customs of China (China Customs), China exported 88,593.40 tonnes (actual volume, the same hereafter) of insecticide formulation products in Q1 2024, the value totalling USD425.44 million. On a yearly basis, the volume expanded by 30.08%, and the value increased by 13.33%. Export price averaged USD4.80/kg in this period, down 12.88% YoY. In March alone, the export volume grew by 13.02% YoY, yet the value dropped by 6.05% YoY, and thus the average export price fell by 16.90% YoY.

Top three export destinations of China's insecticide formulations in this period were Brazil, Thailand and Bangladesh. Specifically,

- For the exports to Brazil, the volume ballooned 125.23% YoY to 11,895.50 tonnes, the value increased by 59.91% YoY, while the average export price decreased by 29.00% YoY;
- For the exports to Thailand, the volume grew by 50.57% YoY to 7,230.13 tonnes, the value increased by 20.28% YoY, while the average export price fell by 20.11% YoY;
- For the exports to Bangladesh, the volume surged 92.36% YoY to 4,434.88 tonnes, the value went up 38.97% YoY, while the average export price decreased by 27.75% YoY.

**TABLE 5:** Exports of insecticide formulations from China, Q1 2023 vs Q1 2024

Month	2023			2024		
	Actual volume, kg	Value, USD	Average price, USD/kg	Actual volume, kg	Value, USD	Average price, USD/kg
Jan.	22,774,349	125,659,826	5.52	33,614,554	158,417,421	4.71
Feb.	17,346,315	89,078,877	5.14	23,349,532	116,062,986	4.97
March	27,984,746	160,669,130	5.74	31,629,309	150,956,435	4.77
<b>Total</b>	<b>68,105,410</b>	<b>375,407,833</b>	<b>5.51</b>	<b>88,593,395</b>	<b>425,436,842</b>	<b>4.80</b>

*Note: The insecticide formulations include products both in retail packaging (bioinsecticide formulations included) and in non-retail packaging.  
Source: China Customs*





TABLE 6: Major destinations of insecticide formulations exported from China, Q1 2023 vs Q1 2024

No.	Q1 2023				Q1 2024			
	Destination	Actual volume, kg	Value, USD	Average price, USD/kg	Destination	Actual volume, kg	Value, USD	Average price, USD/kg
1	Brazil	5,281,514	48,821,690	9.24	Brazil	11,895,498	78,071,022	6.56
2	Myanmar	5,276,359	7,035,251	1.33	Thailand	7,230,134	27,583,150	3.82
3	Thailand	4,801,830	22,931,559	4.78	Bangladesh	4,434,877	21,519,809	4.85
4	Indonesia	3,239,381	13,988,394	4.32	Vietnam	3,872,330	15,234,416	3.93
5	Nigeria	3,161,452	10,372,470	3.28	Indonesia	3,390,694	12,294,586	3.63
6	Cote d'Ivoire	2,819,703	12,159,596	4.31	Myanmar	3,011,065	7,405,818	2.46
7	Vietnam	2,611,077	12,175,134	4.66	Cambodia	3,006,455	11,967,140	3.98
8	Ghana	2,358,325	14,959,545	6.34	Ghana	2,834,076	8,376,796	2.96
9	Bangladesh	2,305,502	15,485,049	6.72	Pakistan	2,802,004	10,868,543	3.88
10	Cambodia	1,680,818	7,013,609	4.17	Tanzania	2,477,897	9,718,092	3.92
	Others	34,569,449	210,465,536	6.09	Others	43,638,365	222,397,470	5.10
	<b>Total</b>	<b>68,105,410</b>	<b>375,407,833</b>	<b>5.51</b>	<b>Total</b>	<b>88,593,395</b>	<b>425,436,842</b>	<b>4.80</b>

Note: The insecticide formulations include products both in retail packaging (bioinsecticide formulations included) and in non-retail packaging.  
Source: China Customs





## Brief news

### Less maize but more soybean planting area in China and the US in 2024

According to survey results released by the National Agricultural Statistics Service (NASS) of the US Department of Agriculture in late March, the US farmers intend to plant less maize and more soybean acres in 2024. Total maize planting area in the US is expected to shrink by 5% YoY in 2024, while the planting area of soybean is projected to expand by 3% YoY. Specifically, the survey showed that planted acreage intentions for maize were down or unchanged in 38 of the 48 estimating states.

For the year 2024, it is estimated that China will also experience a YoY decrease in total maize planting area and a YoY increase in soybean planting area. Encouraged by favourable policies and supported by the corn-soybean strip intercropping technology, planting area and yield of soybean have grown fast in China in recent years.

### Hunan Haili reports negative revenue growth for 2023

On 2 April, Hunan Haili Chemical Industry Co., Ltd. (Hunan Haili) released its 2023 annual report, which revealed that in 2023 the company suffered a 24.14% YoY decrease in total revenue, a 22.28% YoY drop in net profit attributable to shareholders of the listed company and a 47.11% YoY plunge in net profit excluding extraordinary profit and loss attributable to shareholders of the listed company.

As to the company's two main businesses:

- Agriculture and pesticide business: Revenue from this business, though dropped by 25.07% YoY, contributed to 64.38% of the total in 2023. Gross profit margin of the business was 31.85% in 2023;
- Li-ion battery business: Revenue from this business, though slipped by 10.41% YoY, accounted for 18.89% of the yearly total. Gross profit margin of the business was just 1.13% in 2023.

Hunan Haili's insecticide business focuses on carbamates which feature relatively higher toxicity and longer pesticide remaining time. Globally, carbamate market has kept shrinking as more and more countries, especially some developed countries, have introduced restriction or prohibition on carbofuran and methomyl in recent years. Seeing this trend, Hunan Haili has ramped up efforts on developing high-efficacy low-toxicity and low-residue insecticides such as thiodicarb, carbosulfan, benfuracarb and pirimiphos-methyl, actively exploring markets at home and abroad, and at the same time on developing innovative green products. Currently, Hunan Haili is working on a provincial-level key R&D program concerning a novel and green biomimetic insecticide for the control of major pests including fall armyworm.

### MARA: no registration approval granted to new pesticides based on adjuvants/food additives

On 7 April, the Department of Agrochemical Management, Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) made a response to the question of whether a food additive or pesticide adjuvant could be registered as a new pesticide product. Since a new pesticide should show originality and have obvious advantages over existing registered products in terms of safety profile, effectiveness, etc., MARA will in principle not grant approval to registration application of new products based on food additives or pesticide adjuvants.





## Pests on vegetables occur moderately in Guangdong in April

On 8 April, the Agricultural Pest Warning and Control Centre of Guangdong Province updated occurrence trend of diseases and pests on vegetables. From March to April, an overall moderate occurrence of pests on vegetables has been witnessed in Guangdong. In this period, major pests infest vegetable plants are: vegetable thrips, cabbage flea beetle, vegetable leafminers, diamondback moth, Silverleaf whitefly and aphids. Specifically,

- Cabbage flea beetle: The pest has occurred relatively heavily, and main targets are Chinese cabbage, Chinese flowering cabbage, etc.;
- Vegetable thrips: The pest has occurred moderately in general, but relatively heavily in certain local areas, main targets being chili, tomato, eggplant, etc.;
- Vegetable leafminers and diamondback moth: Both pests have occurred moderately;
- Silverleaf whitefly and aphids: Both pests have occurred mildly.

## Revised Measures for Pollutant Discharge Permitting Administration to take effect on 1 July

On 1 April, the Decree No. 32 of Ministry of Ecology and Environment of the People's Republic of China concerning the *Measures for Pollutant Discharge Permitting Administration* was published. The document will come into force on 1 July, 2024.

It is reported that the Measures will further standardise the pollutant discharge permit application and approval procedures, fully implement the one-licence management with regards to pollutant discharge permitting, and make sure that pollutant-discharging entities take their primary responsibility. On the one hand, pollutant discharge registration units are put under management—content of registration form-filling and processes of the registration are made clear, and it is required that the registration units should be accountable for the authenticity, accuracy and integrality of the information given in the form. On the other hand, the supervision according to the permit and quality verification will be strengthened. The revision covers two key measures for the implementation of the discharge permit system: to reinforce permit-based supervision and to improve the quality of pollutant discharge permit.

Concerning intensified supervision and examination efforts, the Measures specifies that ecological and environmental authorities shall regularly carry out inspections on the real practices of pollutant discharge permit compliance reports; focuses are on the timeliness of report submission, completeness of the report content, compliance of pollutant discharge behaviour, and the accuracy of pollutant discharge data. At the same time, the authorities shall set up a quality audit mechanism and regularly carry out quality verifications of pollutant discharge permits. Concerning further standardisation of permit application and approval procedures, the document clarifies the circumstances for first application, re-application and changes of permit content, specifies the materials that should be provided by enterprises, and the requirements on examination and approval departments, and it mentions the application of available techniques of pollution prevention and control in the application and approval procedures; the document also makes improvements in provisions related to permit renewal, modification, revocation, cancellation and reissuance due to loss.

## CCPIA approves of 14 association standards, including 4 insecticide-related standards

On 15 April, the China Crop Protection Industry Association (CCPIA) approved of 14 association standards, all of which came into force from the same day on. Of the 14 standards, 10 are standards on product and 4 standards on administration. Specifically, four standards





are concerned with insecticides: the product standard on emamectin benzoate + chlorantraniliprole suspension concentrate, and three administration standards—Guideline on Safe Use of Neonicotinoid Pesticides to Protect Honeybee, Technical Regulation for Precise Application of Insecticides against Fall Armyworm (*Spodoptera frugiperda*), and Procedures for Broadcasting Granules by Unmanned Aerial Vehicle to Control Fall Armyworm (*Spodoptera frugiperda*).

### **Inner Mongolia Chengding plans 8,000 t/a methomyl-oxime project**

On 10 April, the environmental impact report (exposure draft) of Inner Mongolia Chengding Chemical Co., Ltd. (Inner Mongolia Chengding)'s 8,000 t/a pesticide intermediate methomyl-oxime project was published. The company has planned to invest USD11.98 million (RMB85 million) to build 8,000 t/a new capacity for methomyl-oxime along with supporting facilities in the Baolongshan Fine Chemical Park, Horqin Left Wing Middle Banner, Tongliao City, Inner Mongolia Autonomous Region. Methomyl-oxime is an intermediate for the synthesis of carbamate insecticides such as methomyl, thiodicarb and alanycarb.

Inner Mongolia Chengding, established on 26 Sept., 2023 with a registered address in Baolongshan Park, Baolongshan Town, Horqin Left Wing Middle Banner, engages in production and sale of chemicals.

### **India-based Dhanuka Agritech launched new insecticide formulation (bifenthrin·fluxametamide)**

It is learned that the Indian agrochemical company Dhanuka Agritech Limited (Dhanuka Agritech) launched a new insecticide formulation product "LaNevo", which is based on two active ingredients bifenthrin and fluxametamide. A fruit of the collaboration with the Japanese company Nissan Chemical Corporation, the product, with a unique mode of action, offers enhanced crop protection against sucking and chewing pests, helps slow down resistance development and promotes healthier growth and higher yields.

### **NATESC: overall moderate occurrence of locusts (migratory ones included) in China in 2024**

From 19 to 20 April, the consultation meeting for 2024 China locust occurrence trend was held in Jining City of Shandong Province. This meeting, which was organised by the National Agro-Tech Extension and Service Centre (NATESC), forecasted an overall moderate occurrence of locusts and migratory locusts in China in 2024, with relatively heavy occurrence in some regions and possible high-density locust nymph spots/areas in Tianjin-Hebei Dagang Wetland, locust-affecting areas along the Yellow River in Shandong and Henan provinces, basins of Tongtian River and Jinsha River, China-Kazakhstan border areas in Xinjiang (such as Aksu and Tacheng), and agro-pastoral ecotones in northern China.

Concerning sustainable locust control, it was pointed out in the meeting that:

- To strengthen monitoring and early warning: Intensify investigation efforts on locust developments in agro-pastoral ecotones, natural reserves and newly-emerged locust habitable areas, closely follow locust occurrences in border areas between China and Kazakhstan, Laos, India, etc.;
- To strengthen preparedness for locust control: Organise local locust-control emergency response teams at a proper time, reserve in advance drugs, plant protection UAVs and other efficient plant protection devices for emergency control, and deliver immediate emergency response once high-density locust attacks happen;
- To strengthen technical guidance: Seize the time before occurrence peak to promote wider use of green prevention and control technologies such as biological control, and in the critical locust control period, dispatch agrotechnicians to the front line to give





technical guidance on locust control.

### **Price of pyrethroid intermediate lambda-cyhalothric acid goes up in late April**

In late April, although price downtrend continued in multiple pyrethroid intermediates as well pyrethroid TC products, the ex-works price of lambda-cyhalothric acid ticked up to USD15,506/t (RMB110,000/t), up 3.77% MoM, mainly due to an increase in replenishment orders from some downstream buyers. However, demand for lambda-cyhalothric acid remained dull in general since there were ample inventories of pyrethroid insecticides in the market. The downstream buyers often demanded a lower price and deals were stricken at prices with less than 1% MoM increase. It is reported that lambda-cyhalothric acid is mainly used in the production of cyhalothrin TC and bifenthrin TC.





## Price update

## Ex-works prices of major insecticides in China, 8 April, 2024

TABLE 7: Ex-works prices of major insecticides in China, 8 April, 2024

Product	20240308		20240408	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	355,000	49,958.49	365,000	51,453.38
97% Acephate technical	42,000	5,910.58	42,000	5,920.66
95% Acetamiprid technical	74,000	10,413.88	70,500	9,938.26
95% Azocyclotin technical	230,000	32,367.47	230,000	32,422.68
95% Beta-Cypermethrin technical	122,000	17,168.83	121,800	17,169.92
97% Bifenthrin technical	139,000	19,561.21	136,000	19,171.67
95% Buprofezin technical	64,000	9,006.6	62,000	8,740.03
98% Carbofuran technical	100,000	14,072.81	100,000	14,096.82
98% Chlorfenapyr technical	150,000	21,109.22	155,000	21,850.07
95% Chlorfluazuron technical	400,000	56,291.25	391,000	55,118.55
95% Chlorpyrifos technical	35,400	4,981.78	37,100	5,229.92
94% Cypermethrin technical	55,000	7,740.05	55,000	7,753.25
99% Cyromazine technical	113,000	15,902.28	113,000	15,929.4
98% Deltamethrin technical	385,000	54,180.33	385,000	54,272.75
95% Diafenthiuron technical	108,000	15,198.64	105,000	14,801.66
98% Dimethoate technical	47,600	6,698.66	47,600	6,710.08
70% Emamectin benzoate technical	343,000	48,269.75	354,000	49,902.73
92% Fenvalerate technical	145,000	20,405.58	145,000	20,440.38
95% Fipronil technical	410,000	57,698.53	405,000	57,092.11
98% Hexaflumuron technical	450,000	63,327.66	430,000	60,616.31







97% Imidacloprid technical	85,000	11,961.89	81,500	11,488.91
98% Isoprocarb technical	46,000	6,473.49	45,000	6,343.57
95% Lambda-cyhalothrin technical	110,000	15,480.09	107,000	15,083.59
90% Malathion technical	35,000	4,925.48	35,000	4,933.89
95% Methidathion technical	90,000	12,665.53	90,000	12,687.14
90% Methomyl SP	58,900	8,288.89	61,400	8,655.45
98% Methomyl technical	67,000	9,428.78	70,000	9,867.77
75% Omethoate technical	52,000	7,317.86	52,000	7,330.34
90% Phoxim technical	33,000	4,644.03	33,000	4,651.95
90% Profenofos technical	58,000	8,162.23	58,000	8,176.15
90% Propargite technical	60,000	8,443.69	60,000	8,458.09
95% Pymetrozine technical	100,000	14,072.81	106,000	14,942.63
95% Pyridaben technical	107,000	15,057.91	115,000	16,211.34
97% Spirodiclofen technical	139,000	19,561.21	133,500	18,819.25
85% Triazophos technical	69,000	9,710.24	69,000	9,726.8

Note: Ex-works price includes VAT.

Source: CCM

### Shanghai Port prices of major insecticides in China, 8 April, 2024





TABLE 8: Shanghai Port prices of major insecticides in China, 8 April, 2024

Product	20240308		20240408	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	355,500	50,028.85	365,500	51,523.87
97% Acephate technical	42,500	5,980.95	42,500	5,991.15
95% Acetamiprid technical	74,500	10,484.25	71,000	10,008.74
95% Azocyclotin technical	230,500	32,437.83	230,500	32,493.16
95% Beta-Cypermethrin technical	122,500	17,239.2	122,300	17,240.41
97% Bifenthrin technical	139,500	19,631.57	136,500	19,242.16
95% Buprofezin technical	64,500	9,076.96	62,500	8,810.51
98% Carbofuran technical	100,500	14,143.18	100,500	14,167.3
98% Chlorfenapyr technical	150,500	21,179.58	155,500	21,920.55
95% Chlorfluazuron technical	400,500	56,361.61	391,500	55,189.04
95% Chlorpyrifos technical	35,900	5,052.14	37,600	5,300.4
94% Cypermethrin technical	55,500	7,810.41	55,500	7,823.73
99% Cyromazine technical	113,500	15,972.64	113,500	15,999.89
98% Deltamethrin technical	385,500	54,250.69	385,500	54,343.23
95% Diafenthiuron technical	108,500	15,269	105,500	14,872.14
98% Dimethoate technical	48,100	6,769.02	48,100	6,780.57
70% Emamectin benzoate technical	343,500	48,340.11	354,500	49,973.22
92% Fenvalerate technical	145,500	20,475.94	145,500	20,510.87
95% Fipronil technical	410,500	57,768.9	405,500	57,162.59
98% Hexaflumuron technical	450,500	63,398.02	430,500	60,686.8
97% Imidacloprid technical	85,500	12,032.25	82,000	11,559.39
98% Isoprocarb technical	46,500	6,543.86	45,500	6,414.05





95% Lambda-cyhalothrin technical	110,500	15,550.46	107,500	15,154.08
90% Malathion technical	35,500	4,995.85	35,500	5,004.37
95% Methidathion technical	90,500	12,735.9	90,500	12,757.62
90% Methomyl SP	59,400	8,359.25	61,900	8,725.93
98% Methomyl technical	67,500	9,499.15	70,500	9,938.26
75% Omethoate technical	52,500	7,388.23	52,500	7,400.83
90% Phoxim technical	33,500	4,714.39	33,500	4,722.43
90% Profenofos technical	58,500	8,232.6	58,500	8,246.64
90% Propargite technical	60,500	8,514.05	60,500	8,528.57
95% Pymetrozine technical	100,500	14,143.18	106,500	15,013.11
95% Pyridaben technical	107,500	15,128.27	115,500	16,281.82
97% Spirodiclofen technical	139,500	19,631.57	134,000	18,889.73
85% Triazophos technical	69,500	9,780.6	69,500	9,797.29

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 April, 2024





TABLE 9: FOB Shanghai prices of major insecticides in China, 8 April, 2024, USD/t

Product	20240308	20240408
95% Abamectin technical	45,833.47	47,204.94
97% Acephate technical	5,230.6	5,239.52
95% Acetamiprid technical	9,554.02	9,117.67
95% Azocyclotin technical	29,694.93	29,745.58
95% Beta-Cypermethrin technical	15,193.66	15,194.62
97% Bifenthrin technical	17,310.81	16,966.08
95% Buprofezin technical	8,262.94	8,018.37
98% Carbofuran technical	12,910.84	12,932.86
98% Chlorfenapyr technical	19,366.26	20,045.93
95% Chlorfluazuron technical	51,643.35	50,567.48
95% Chlorpyrifos technical	4,572.2	4,798.09
94% Cypermethrin technical	6,849.6	6,861.28
99% Cyromazine technical	14,072.81	14,096.82
98% Deltamethrin technical	47,947.19	48,028.98
95% Diafenthiuron technical	13,450.12	13,098.81
98% Dimethoate technical	5,933.47	5,938.13
70% Emamectin benzoate technical	44,284.17	45,782.32
92% Fenvalerate technical	18,058.03	18,088.84
95% Fipronil technical	52,934.43	52,378.08
98% Hexaflumuron technical	58,098.77	55,611.3
97% Imidacloprid technical	10,974.21	10,540.28
98% Isoprocarb technical	5,740.17	5,613.78
95% Lambda-cyhalothrin technical	13,699.2	13,348.31





90% Malathion technical	4,388.41	4,366.27
95% Methidathion technical	11,619.75	11,639.57
90% Methomyl SP	7,604.48	7,940.78
98% Methomyl technical	9,428.78	9,867.77
75% Omethoate technical	6,475.98	6,487.03
90% Phoxim technical	4,239.6	4,240.27
90% Profenofos technical	7,223.21	7,235.53
90% Propargite technical	7,746.5	7,759.72
95% Pymetrozine technical	12,453.82	13,223.56
95% Pyridaben technical	13,814.6	14,872.79
97% Spirodiclofen technical	17,310.81	16,654.2
85% Triazophos technical	8,908.48	8,923.67

*Note: FOB price is calculated mainly based on ex-works price, tax refund, value added tax rate, exchange rate, etc.*

*Source: CCM*



**Journalist : Ying Huang, Yihua Huang**

**Editor : Joanna**

**Chief Editor : Anton**

**Publisher : Kcomber Inc.**

---

### **Kcomber's legal disclaimers**

1. Kcomber guarantees that the information in the report is accurate and reliable to the best of its knowledge and experience. Kcomber defines the report as a consulting product providing information and does not guarantee its information is completely in accordance with the fact. Kcomber shall not have any obligations to assume any possible damage or consequences caused by subscribers' any corporate decisions based upon subscribers' own understanding and utilization of the report.
2. The complete copyright of the report is and will be held by Kcomber. Subscribers shall not acquire, or be deemed to acquire the copyright of the report.
3. The report provided by Kcomber shall be only used as source of subscriber's internal business decisions and shall not be used for any other purposes without Kcomber's prior written consent, unless stated and approved in license contract signed by both parties. Subscribers shall not distribute, resell and disclose the whole report or any part of the report to third parties and shall not publish any article or report by largely or directly copying or citing the information or data based on Kcomber's report without the prior written consent of Kcomber.
4. **"Single User License"** means that there shall be only ONE person to receive, access and utilize the report. Subscriber can present the content of the report that marked the source from Kcomber to their internal colleagues for their internal communication and utilization, but cannot share the whole report to other individuals. Any citation, distribution, reselling and disclosure of the report as well as its partial content to any third party are prohibited, including but not limited to their parent companies or subsidiaries.
5. **"Corporate License"** means that subscriber shall not cite, distribute, resell the report or disclose information of the report to any third party without Kcomber's prior written consent, except subscribers' affiliates controlled with ownership of more than 50% of shares.

#### **Kcomber Inc.**

Any publication, distribution or copying of the content in this report is prohibited.

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