

Insecticides China Monthly Report 202306

Issue 6 June 30 2023





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Headline

In early June, prices of insecticides TC had different changes, yet in general, insecticide TC price continued to drop. Although nicotinoid insecticides TC saw the price edge up a little due to slight increase in the price of CCMP, price decrease was the mainstream in organophosphorus insecticides TC, carbamate insecticides TC and pyrethroid insecticides TC, with steady price in a few individual products though.

In late June, insecticide market was still tepid. Prices of pyrethroid insecticides TC kept falling, while prices of nicotinoid insecticides TC recovered slightly supported by increased raw material price.

On 5 June, brief information of the construction project 2,000 t/a lufenuron and 1,000 t/a dinotefuran (2,000 t/a lufenuron for phase I), and the construction project 2,000 t/a picoxystrobin and 10,000 t/a thiamethoxam of Jiangxi Oushi was released by local government. Once the planned lines are completed, the company will have production capacity of 2,000 t/a lufenuron TC and 10,000 t/a thiamethoxam TC.

On 7 June, the EI report of Jiangxi Lianbai's 1,500 t/a azoxystrobin and 1,500 t/a chlorfenapyr technological upgrading project was published by local government. Once the project is completed, the company will have 3,000 t/a new capacity for pesticides TC.

On 9 June, the EI report of Shandong Jingbo Biotech's industrial chain extension to 16,000 t/a green high-end chemicals and technological upgrading and transformation project (phase I) was approved by local government. The company plans to build production lines for flonicamid TC and tebufenozide TC with this project.

On 1 June, multiple departments of Jiangsu Province jointly issued the Implementation Plan to Better Fight the Battle against Heavy Air Pollution, Ozone Pollution and Diesel Truck Exhaust Pollution, which aims at eliminating heavy air pollution days in the province, stopping growing concentration of PM2.5 and ozone, and reducing the total emissions from mobile sources like diesel trucks.

On 21 June, 2023, the Department of Agrochemical Management of MARA released a batch of products approved of registration renewal, which include 128 insecticide products, of which eight are TC products. The majority of the 100 plus insecticide products are of low toxicity.

On 1 June, NATESC released its forecast on the occurrence of early rice pests & diseases in 2023, which predicted that relatively heavy occurrence in general was expected, with a total occurring area reaching 16.87 million ha. Major attacking pests include *Chilo suppressalis*, rice planthoppers and rice leaf roller.

In March–April 2023, China's insecticide formulation products were mainly exported to Myanmar, Brazil, Thailand, etc.; the two-month export volume jumped by some 75% YoY. During the same period, China mainly imported insecticide formulation products from Japan, Vietnam, France, etc.; the two-month import volume also expanded by almost 50% YoY.

In 2022, imidacloprid products from China were mainly exported to India, Brazil, the US, Russia, etc. The total export volume of imidacloprid products grew by about 30% YoY.







Editor's note

In June, prices of some insecticides TC still declined, affected by sluggish market demand. Given a relatively large insecticide output in China, quite big inventories in the majority of insecticide producers, and unlikely big changes to the demand in the short term, it is believed that insecticide TC price will remain weak in general.

However, weak market has not dampened companies' confidence in the future of this market, and has not prevented them from planning new production capacity for insecticides. Jiangxi Oushi has revealed its plan to build capacity of 2,000 t/a lufenuron TC and 10,000 t/a thiamethoxam TC, Jiangxi Lianbai has planned to build 1,500 t/a chlorfenapyr TC capacity, and Shandong Jingbo Biotech has planned to extend its reach to the production of flonicamid TC and tebufenozide TC.

In recent years, along with rapid development of science and technology, the resources on the earth have been over-exploited and wasted. Challenged by the earth's deteriorating ecological environment, governments around the world have paid their due attentions to improving the eco-environment and reducing pollutions. China has released new regulations and put forward stricter requirements on upgrading technologies adopted and on strengthening environmental protection efforts in the chemical industry. The 14th Five-Year Plan proposed to accelerate the transformation and upgrading of enterprises in key industries, chemical industry included, and improve the green manufacturing system. Various provincial and municipal governments have released their own implementation plans for achieving carbon dioxide peaking and carbon neutrality in industrial sectors, which emphasise the reduction of pollution and carbon in the overall processes of production and energy use. Efforts have been made to achieve green transformation of industrial structure to reduce carbon use, through upgrading of traditional industries, the development of clean production, and the growth of green low-carbon economy, etc. Specifically, for pesticide and agriculture industries, enterprises have been encouraged to follow a green development path, such as drug use reduction, toxicity reduction and better environmental protection performance. Currently, chemical enterprises are faced with a major challenge, and those high-tech and environment-friendly enterprises will become the mainstream in the industry in the future.

The USD/CNY exchange rate in this newsletter is USD1.00 = CNY7.0965 on 1 June, 2023, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.





Market analysis

Insecticide TC price still decline in general in early June

Summary: In early June, prices of insecticides TC had different changes, yet in general, insecticide TC price continued to drop. Although nicotinoid insecticides TC saw the price edge up a little due to slight increase in the price of CCMP, price decrease was the mainstream in organophosphorus insecticides TC, carbamate insecticides TC and pyrethroid insecticides TC, with steady price in a few individual products though.

In early June, prices of many insecticides TC were still on the decline amid weak market demand and a lack of enthusiasm for purchase. Some TC products under the categories organophosphorus insecticide, carbamate insecticide and pyrethroid insecticide had their prices set lower, some others had stable price. However, nicotinoid insecticides TC experienced small price recovery as the price of the intermediate 2-chloro-5-(chloromethyl)pyridine (CCMP) went up a bit.

Organophosphorus insecticides: Ex-works prices of malathion TC and phoxim TC were stable, while the prices of profenofos TC and chlorpyrifos TC went down 3.44% and 4.80% MoM, respectively. For chlorpyrifos, market demand was limited and the prices manufacturers quoted relatively stabilised. Early this month, chlorpyrifos TC producers Chongqing Huage Biochemical Co., Ltd. and Inner Mongolia Miraculous Crop Science Co., Ltd. suspended their lines for maintenance. It is believed that a surge in demand for organophosphorus insecticides is rather impossible and prices of products under this category would remain relatively stable in the short term.

Carbamate insecticides: Ex-works price of isoprocarb TC was stable, while the price of carbofuran TC slipped by 2.86% MoM and that of methomyl TC plunged 10.15% MoM. Since the market and the demand is still weak, and supplies are ample in producers, prices of some carbamate insecticides are expected to decrease in the near future.

Pyrethroid insecticides: Ex-works prices of most pyrethroid insecticides TC decreased mainly for continued sluggish domestic demand. Prices of bifenthrin TC, lambda-cyhalothrin TC and deltamethrin TC went down by 3.41%, 5.80% and 9.30% MoM, respectively. As few signs for the demand to improve are seen, prices of some pyrethroid insecticides TC may still follow a downtrend in the short term.

Nicotinoid insecticides: Ex-works of imidacloprid TC and acetamiprid TC increased by 0.11% and 0.74% MoM, respectively, mainly because of slightly recovered price of CCMP. Early this month, Wuzhong Linghang Biological & Pharmaceutical Co., Ltd. resumed operation of its lines of imidacloprid TC and acetamiprid TC. Besides, the supply of 2-nitroaminoimidazoline, an intermediate for imidacloprid production, increased as producers resumed production one after another. Supply of CCMP was normal, and the price climbed up a bit. Ex-works prices of nicotinoid insecticides are expected to remain stable in the short term under steady demand.





TABLE 1: Ex-works prices of major insecticide TC products in China in early June 2023

Category	Product	Ex-works price (RMB/t)	Ex-works price (USD/t)	RMB MoM change
Organophosphorus insecticide	90% Phoxim technical	39,000	5,495.67	0.00%
	95% Chlorpyrifos technical	35,700	5,030.65	-4.80%
	90% Malathion technical	38,000	5,354.75	0.00%
	90% Profenofos technical	78,500	11,061.79	-3.44%
Carbamate insecticide	98% Carbofuran technical	102,000	14,373.28	-2.86%
	98% Methomyl technical	69,900	9,849.93	-10.15%
	98% Isoprocarb technical	45,500	6,411.61	0.00%
Pyrethroid insecticide	97% Bifenthrin technical	170,000	23,955.47	-3.41%
	95% Lambda-cyhalothrin technical	130,000	18,318.89	-5.80%
	94% Cypermethrin technical	68,000	9,582.19	0.00%
	98% Deltamethrin technical	390,000	54,956.67	-9.30%
Nicotinoid insecticide	97% Imidacloprid technical	90,000	12,682.31	0.11%
	95% Acetamiprid technical	81,400	11,470.44	0.74%

Source:CCM

Weak price for insecticides TC continues in late June

Summary: In late June, insecticide market was still tepid. Prices of pyrethroid insecticides TC kept falling, while prices of nicotinoid insecticides TC recovered slightly supported by increased raw material price.

In late June, tepid insecticide market continued and trade had little improvement. Prices of some insecticides TC decreased slightly, and those of some others stabilised. Specifically, pyrethroid insecticides TC experienced price falls, while nicotinoid insecticides TC saw upticks in the price.

Organophosphorus insecticides: In late June, ex-works prices of phoxim TC, malathion TC and profenofos TC were stable, but the price of chlorpyrifos TC still went down by 5.90% MoM. Operation in chlorpyrifos producers remained steady, and the supply saw little change. It is expected that prices of some organophosphorus insecticides would stay at current level in the short term amid few changes to the market demand.





Carbamate insecticides: In late June, the prices of carbofuran TC and methomyl TC edged down by 1.96% and 1.29%, respectively, on a monthly basis. The price of isoprocarb TC kept stable. Considering weak downstream demand, it is believed that some carbamate insecticides would still experience slight decreases in their prices in the short term.

Pyrethroid insecticides: Ex-works prices of pyrethroid insecticides TC declined on a monthly basis; the prices of bifenthrin TC and deltamethrin TC slipped by 0.82% and 1.27%, respectively, and the prices of lambda-cyhalothrin TC and cypermethrin TC dropped by 5.38% and 4.41%, respectively. Given decreased price of raw materials as well as dull demand, prices of pyrethroid insecticides TC would continue to fall in the near future.

Nicotinoid insecticides: Ex-works prices of nicotinoid insecticides recovered. The price of imidacloprid TC went up by 1.11% MoM, and that of acetamiprid TC up by 3.23% MoM. The increases were mainly propelled by growing price of 2-chloro-5-chloromethylpyridine (CCMP). In H2 June, major producers of imidacloprid and acetamiprid operated stably, and the supply of key intermediates 2-nitroaminoimidazoline and CCMP was steady. It is estimated that ex-works prices of nicotinoid insecticides would fluctuate slightly, following changes in raw material price.

TABLE 2: Ex-works prices of major insecticide TC products in China in late June 2023

Category	Product	Ex-works price (RMB/t)	Ex-works price (USD/t)	RMB MoM change
Organophosphorus insecticide	90% Phoxim technical	39,000	5,495.67	0.00%
	95% Chlorpyrifos technical	35,100	4,946.10	-5.90%
	90% Malathion technical	38,000	5,354.75	0.00%
	90% Profenofos technical	78,500	11,061.79	0.00%
Carbamate insecticide	98% Carbofuran technical	100,000	14,091.45	-1.96%
	98% Methomyl technical	69,000	9,723.10	-1.29%
	98% Isoprocarb technical	45,500	6,411.61	0.00%
Pyrethroid insecticide	97% Bifenthrin technical	169,600	23,899.11	-0.82%
	95% Lambda-cyhalothrin technical	123,000	17,332.49	-5.38%
	94% Cypermethrin technical	65,000	9,159.44	-4.41%
	98% Deltamethrin technical	390,000	54,956.67	-1.27%
Nicotinoid insecticide	97% Imidacloprid technical	91,000	12,823.22	1.11%
	95% Acetamiprid technical	83,000	11,695.91	3.23%

Source:CCM





Company and supply

Jiangxi Oushi plans to build capacity for lufenuron TC & thiamethoxam TC

Summary: On 5 June, brief information of the construction project 2,000 t/a lufenuron and 1,000 t/a dinotefuran (2,000 t/a lufenuron for phase I), and the construction project 2,000 t/a picoxystrobin and 10,000 t/a thiamethoxam of Jiangxi Oushi was released by local government. Once the planned lines are completed, the company will have production capacity of 2,000 t/a lufenuron TC and 10,000 t/a thiamethoxam TC.

On 5 June, the Xingan County Government released brief information of the construction project 2,000 t/a lufenuron and 1,000 t/a dinotefuran (2,000 t/a lufenuron for phase I), and the construction project 2,000 t/a picoxystrobin and 10,000 t/a thiamethoxam of Jiangxi Oushi Chemical Co., Ltd. (Jiangxi Oushi). According to the plan, Jiangxi Oushi will build Workshop No.5 with 2,000 t/a lufenuron lines, build Workshop No.2 with 1,500 t/a picoxystrobin lines and take advantage of existing Workshop 103 for another 500 t/a picoxystrobin, and build Workshop No.1 and No.6 with 10,000 t/a thiamethoxam lines.

In Feb. 2015, second-time publicity of Jiangxi Oushi's pesticide TC & chemical intermediate project (phase I) was made in related government website. The company planned 200 t/a kresoxim-methyl, 200 t/a trifloxystrobin, 3,000 t/a captan, 2,000 t/a monosultap and 300 t/a 3-isochromanone in this phase I project. And in April 2020, the company proposed to construct 4,000 t/a monosultap transformation & expansion and 3,000 t/a cartap project, which would add 3,000 t/a monosultap to Jiangxi Oushi's existing monosultap production capacity, and at the same time phase out some previous lines.

At present, Jiangxi Oushi has active capacity of 5,000 t/a monosultap, 3,000 t/a cartap, along with 4,875 t/a production scale for by-product salt, yet operation of the 200 t/a trifloxystrobin line is suspended due to unsatisfied sales in trial-run period. In the future, once the newly-proposed large-scale insecticide project completed, Jiangxi Oushi will gain certain advantages in the insecticide market.

Of the products covered in this new project, lufenuron is a broad-spectrum insecticide with high efficacy and low toxicity. It can inhibit insect molting. According to data from the China Pesticide Information Network, as of early June, 2023, 25 companies had obtained pesticide registration certificates for their lufenuron TC products in China. Currently, major domestic lufenuron TC producers are Jiangsu Flag Chemical Industry Co., Ltd., Anhui Neotec Co., Ltd., Jiangsu Youjia Crop Protection Co., Ltd., etc. In addition, some companies have so far disclosed their plans to establish new lufenuron TC production lines.



TABLE 3: Lufenuron TC capacity in some Chinese producers (potential capacity included), as of June 2023

Category	Company	Capacity, t/a
Built up capacity	Jiangsu Flag Chemical Industry Co., Ltd.	3,000
	Jiangsu Jiannong ABA Agrochemical Co., Ltd.	500
	Anhui Neotec Co., Ltd.	3,000
	Jiangsu Youjia Crop Protection Co., Ltd.	1,000
	Henan Jinpeng Chemical Co., Ltd.	300
Potential capacity	Shangyu Nutrichem Co., Ltd.	1,000
	Shandong Binhai Hansen Biologic Science Co., Ltd.	500
	Jingmen Jinxianda Biotechnology Co., Ltd.	500
	Jiangxi Hetian Technology Co., Ltd.	300
	Yunnan Nanyi Biotechnology Co., Ltd.	500
	Jiangxi Oushi Chemical Co., Ltd.	2,000

Source:CCM

Jiangxi Lianbai plans to build chlorfenapyr TC capacity

Summary: On 7 June, the EI report of Jiangxi Lianbai's 1,500 t/a azoxystrobin and 1,500 t/a chlorfenapyr technological upgrading project was published by local government. Once the project is completed, the company will have 3,000 t/a new capacity for pesticides TC.

On 7 June, the Ecological Environment Bureau of Wannian County published the environmental impact (EI) report of Jiangxi Lianbai Technology Co., Ltd. (Jiangxi Lianbai)'s 1,500 t/a azoxystrobin and 1,500 t/a chlorfenapyr technological upgrading project. The company plans to invest USD2.82 million (RMB20 million) to construct new production lines for chlorfenapyr TC, as well as to add equipment to its existing lines for methyl (E)-2-[2-(6-chloropyrimidin-4-yloxy)phenyl]-3-methoxyacrylate and thus extend to the production of azoxystrobin TC. According to Jiangxi Lianbai's plan, once the project completed, part of the methyl (E)-2-[2-(6-chloropyrimidin-4-yloxy)phenyl]-3-methoxyacrylate will be used to produce azoxystrobin, and the rest could be sold to others.

Previously in Sept. 2019, the EI report of Jiangxi Lianbai's 1,500 t/a methyl (E)-2-[2-(6-chloropyrimidin-4-yloxy)phenyl]-3-methoxyacrylate and 1,500 t/a 2,6-difluorobenzamide project was approved by Shangrao Municipal Ecological Environment Bureau; the production lines were put into trial run in Dec. 2020. It should be noted that the company cancelled the 2,6-difluorobenzamide lines in the construction period due to market changes.



Jiangxi Lianbai's registered business scope covers R&D, production, processing and sale of organic intermediates, basic chemical materials and active pharmaceutical ingredients. Its production plant is located in the Fengchao Industrial Park, Wannian High-Tech Zone, Shangrao City, Jiangxi Province. In 2022, it decided to launch the new 3,000 t/a pesticide TC project to respond to market demand and foster better development in the long run. It believes that the project could help adjust the company's positioning, improve its environmental protection performance, make better use of its resources and boost its competitiveness in the pesticide market. On 8 Dec., 2022, record of the new project was filed at the Bureau of Industry and Information Technology of Wannian County, and brief information on environmental impact assessment of the project was published in the same month.

Data from the Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs (ICAMA) show that as of June 2023, 13 companies hold valid pesticide registration for their chlorfenapyr TC products in China. However, Jiangxi Lianbai is not one of them. At present, major chlorfenapyr TC producers in China are Shandong Weifang Shuangxing Agrochemical Co., Ltd., Shandong United Pesticide Industry Co., Ltd., Qingdao Hengning Biotechnology Co., Ltd., etc.

TABLE 4: Chlorfenapyr TC registration in China, as of June 2023

No.	Registration code	Registrant	Content	Expiry date
1	PD20080476	BASF SE	94.5%	2028/3/30
2	PD20173044	Qingdao Hengning Biotechnology Co., Ltd.	98%	2027/12/19
3	PD20120650	Shandong Weifang Shuangxing Agrochemical Co., Ltd.	95%	2027/1/18
4	PD20161494	Shandong United Pesticide Industry Co., Ltd.	98%	2026/11/14
5	PD20152358	Shandong Weunite Biotech Co., Ltd.	96%	2025/10/22
6	PD20150898	Jiangsu Flag Chemical Industry Co., Ltd.	95%	2025/5/26
7	PD20150258	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	96%	2025/1/15
8	PD20150248	Shandong Weifang Rainbow Chemical Co., Ltd.	97%	2025/1/15
9	PD20150136	Shijiazhuang Richem Co., Ltd.	98%	2025/1/12
10	PD20142487	Kaifeng Biocar Biochemical Co., Ltd.	95%	2024/11/19
11	PD20142391	Shandong Shinlon Group Biotechnology Co., Ltd.	98%	2024/11/6
12	PD20142364	Hebei Xingbai Agricultural Technology Co., Ltd.	98%	2024/11/4
13	PD20142305	Hengshui Northern Pesticide & Chemical Co., Ltd.	95%	2024/11/3

Source: ICAMA





Shandong Jingbo Biotech to build capacity for flonicamid TC and tebufenozide TC

Summary: On 9 June, the EI report of Shandong Jingbo Biotech's industrial chain extension to 16,000 t/a green high-end chemicals and technological upgrading and transformation project (phase I) was approved by local government. The company plans to build production lines for flonicamid TC and tebufenozide TC with this project.

On 9 June, the Bureau of Administrative Examination and Approval of Binzhou City announced that it had approved the environmental impact (EI) report of Shandong Jingbo Biotech Co., Ltd. (Shandong Jingbo Biotech)'s industrial chain extension to 16,000 t/a green high-end chemicals and technological upgrading and transformation project (phase I). The phase I will add some new equipment to its existing line for 4-(trifluoromethyl)nicotinoyl chloride (molecular formula: $C_7H_3F_3OCIN$), and extend to the production of flonicamid TC with capacity of 500 t/a.

Previously in March and May this year, local government announced acceptance of the EI reports for the company's industrial chain extension and technological upgrading and transformation project phase I and phase II. The project has already acquired a record certificate for construction project (project code: 2301-371603-07-02-212392) issued by Shandong provincial government. Shandong Jingbo Biotech has planned to invest USD4.23 million (RMB30.04 million) in the whole project, which will transform its existing refining workshops No.3 and No.4. According to its plan, in refining workshops No.3, new equipment will be added to use 4-trifluoromethylnicotinoyl chloride as a main raw material to produce flonicamid TC, and in refining workshops No.4, already existed 1,200 t/a line for the product 4-amino-1-(2-(hydroxymethyl)-1,3-oxathiolan-5-yl)pyrimidin-2(1H)-one will be made use of and a new line of 400 t/a tebufenozide TC will be added.

Shandong Jingbo Biotech was established by Shandong Jingbo Agrochemicals Technology Co., Ltd. in Nov. 2019. Its registered business scope covers R&D, production and sale of chemical products, development, transfer and services of technologies in biological and environmental protection sectors, etc. Its plant is located in the Chemical Industrial Park of Zhanhua Economic Development Zone, Binzhou City, Shandong Province. The park is a provincial-level accredited chemical park.

The company believes the industrial chain extension and technological upgrading and transformation project will boost its competitiveness both at home and abroad, speed up its structural adjustment, facilitate healthy development in the future, promote improvement in related industries and better satisfy the needs for a variety of high-end products in the market.





Policy

Jiangsu issues new action plan of pollution control

Summary: On 1 June, multiple departments of Jiangsu Province jointly issued the Implementation Plan to Better Fight the Battle against Heavy Air Pollution, Ozone Pollution and Diesel Truck Exhaust Pollution, which aims at eliminating heavy air pollution days in the province, stopping growing concentration of PM2.5 and ozone, and reducing the total emissions from mobile sources like diesel trucks.

On 1 June, multiple departments of Jiangsu Province jointly issued the Implementation Plan to Better Fight the Battle against Heavy Air Pollution, Ozone Pollution and Diesel Truck Exhaust Pollution. The document set the goals by 2025 that in the province, heavy air pollution days will be basically eliminated, the control of PM2.5 (particulate matters with diameters that are generally 2.5 micrometers and smaller) and ozone have satisfied results and the growing concentration of ozone be effectively checked, and treatment of diesel truck exhaust pollution be improved and the total air pollutant emissions from mobile sources be reduced. In this way, the province will have its prominent air environment issues properly dealt with and air quality steadily improved.

According to the implementation plan, the following principles should be abided by:

- Pollution control must be targeted, scientific and law-based. In autumn and winter, PM2.5 and heavily-polluted weather are the main focuses, while in spring and summer, ozone pollution is the main focus. Throughout the year, diesel truck exhaust pollution should stay on the radar. Control of these pollutions and supervisions over them should be strictly based on laws and regulations.
- At-the-source pollution control must be carried out, and structure optimised. Efforts should be made to optimise structures of industry, energy and transport, and improve cleanness and low-carbon operation in these sectors. Further promote energy conservation and emission reduction, and low-carbon green transformation. Improve the response mechanism for heavily-polluted weather.
- Systemic view must be held, and synergy forged. Make concerted efforts in air pollution prevention & control and greenhouse gas reduction, which helps to facilitate synergy between pollution reduction and carbon reduction. Strengthen coordinated control of PM2.5 and ozone pollution, as well as multi-pollutant control. Intensify regional collaboration in pollution control, and adopt joint prevention and control measures.
- Cross-department collaboration must be continued, and responsibilities defined. Work should be divided clearly, and thus better cooperation between related departments can be achieved. Support and guidance should be strengthened, while supervision and evaluation seriously conducted.

Key tasks put forward in the implementation plan:

- Integrate air pollution control and "double carbon" (carbon peaking and carbon neutrality) goals, launch campaigns to promote synergy between pollution reduction and carbon reduction, and cut down air pollutants and carbon emissions through optimisation of the structures of industry, energy and transport. Encourage green transition in industrial sectors, upgrade traditional industries and stem the haphazard development of energy-intensive, large-emission projects with out-dated technologies. Build a green transport system and increase cleanness and low carbon emission levels in motor-driven vehicles and vessels, and non-road mobile machinery.
- Strengthen coordinated control of multi-pollutants including VOCs and NOx. For VOCs, whole-process control from sources to terminal treatment should be reinforced, and set focuses on industries of petrochemical, chemical, coating, pharmaceutical, packaging & printing, and oil storage & transportation. Keep promoting ultra-low emission transformation in iron and steel, coking and cement industries, and apply advanced treatment technologies in other industries. Carry out comprehensive upgrading and transformation programs targeting low-efficiency treatment facilities.
- Strictly control the quality of treatment projects, and take a variety of measures to crack down upon low price tender issues. Joint





punishment of enterprises, environmental protection companies as well as operation and maintenance agencies should be increased when these parties deliver poor construction quality, operate and manage environmental protection facilities with inferior services, or even engage in fraudulent behaviours. In the process of air pollution control, due safety precautions should be taken at the same time.





Registration

Eight insecticides TC approved of registration renewal in June

Summary: On 21 June, 2023, the Department of Agrochemical Management of MARA released a batch of products approved of registration renewal, which include 128 insecticide products, of which eight are TC products. The majority of the 100 plus insecticide products are of low toxicity.

On 21 June, 2023, the Department of Agrochemical Management of the Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) released a batch of pesticide products approved of registration renewal, which include 128 insecticide products. Over 60% of these insecticides are of low toxicity, and the most popular form is SC.

Major active ingredients in these insecticide products with registration renewed are abamectin-aminomethyl, clothianidin, pymetrozine, chlorpyrifos, etc. Of the 128 insecticides, eight are insecticide TC products—a 98% thiamethoxam TC from Shandong Weifang Rainbow Chemical Co., Ltd., a 95% indoxacarb TC from Jiangsu Flag Chemical Industry Co., Ltd., a 92% abamectin TC from Shandong Qilu King-Phar Pharmaceutical Co., Ltd., a 90% indoxacarb TC and a 98% lufenuron TC from Shandong Jingbo Agrochemicals Technology Co., Ltd., a 98% thiamethoxam TC from Rudong Zhongyi Chemical Co., Ltd. and a 97% cycloxaprid TC and a 95% pyriproxyfen TC from Liaoning Zhonghui Biotechnology Co., Ltd.

TABLE 5: Insecticide products approved of registration renewal by toxicity released on 21 June, 2023

No.	Toxicity	Number
1	Low	77
2	Moderate	30
3	Mild	10
4	Low (TC: highly toxic)	6
5	Moderate (TC: highly toxic)	3
6	Low (TC: moderately toxic)	1
7	High	1
Total		128

Source: The Department of Agrochemical Management of MARA



TABLE 6: Insecticide products approved of registration renewal by form released on 21 June, 2023

No.	Form	Number
1	SC	36
2	EC	29
3	WG	15
4	ME	10
5	TC	8
6	GR	7
7	WP	5
8	EW	4
9	ZC	3
10	FS	3
11	SP	1
12	JK	1
13	CS	1
14	SG	1
15	FU	1
16	OD	1
17	DP	1
18	AS	1
Total		128

Source: The Department of Agrochemical Management of MARA

TABLE 7: Major active ingredients of insecticide products approved of registration renewal released on 21 June, 2023

No.	Active ingredient	Number
1	Abamectin-aminomethyl	11
2	Clothianidin	8
3	Pymetrozine	8
4	Chlorpyrifos	8
5	Beta-cypermethrin	7
6	Thiamethoxam	6
7	Imidacloprid	6
8	Abamectin	5
9	Chlorfenapyr	5

Source: The Department of Agrochemical Management of MARA

TABLE 8: Registrants with at least three insecticide products approved of registration renewal released on 21 June, 2023

No.	Registrant	Number
1	SixF Crop Protection Co., Ltd.	5
2	Hailir Pesticides and Chemicals Group Co., Ltd.	4
3	Shandong Jingbo Agrochemicals Technology Co., Ltd.	4
4	ADAMA Huifeng (Jiangsu) Co., Ltd.	4
5	Guangxi Yulin Nongbao Pesticide Factory	3
6	Shandong Hailir Chemicals Co., Ltd.	3
7	Shandong Weifang Rainbow Chemical Co., Ltd.	3
8	Shandong Binhai Hansen Biologic Science Co., Ltd.	3
9	Shaanxi Hengtian Biological Agriculture Co., Ltd.	3

Source: The Department of Agrochemical Management of MARA

Pest

NATESC forecasts relatively heavy occurrence of early rice pests & diseases

Summary: On 1 June, NATESC released its forecast on the occurrence of early rice pests & diseases in 2023, which predicted that relatively heavy occurrence in general was expected, with a total occurring area reaching 16.87 million ha. Major attacking pests include *Chilo suppressalis*, rice planthoppers and rice leaf roller.

On 1 June, National Agro-Tech Extension and Service Centre (NATESC) released its forecast on the occurrence of early rice pests & diseases in 2023, after analysing factors like current insect population, situation of rice cultivation and weather conditions. It forecasted relatively heavy occurrence in general, with an estimated occurring area of 16.87 million ha nationwide. Major attacking pests include *Chilo suppressalis*, rice planthoppers and rice leaf roller. Specifically, on the whole, the occurrence of *Chilo suppressalis* would be relatively heavy and show a trend to deteriorate, with some local areas suffering heavy infestation; the occurrence of rice planthoppers and rice leaf roller would be generally moderate, but with worse results than the previous year, and some local areas would encounter relatively heavy occurrence.

TABLE 9: Forecasts on occurrence of early rice pests & diseases in 2023

Pest	Occurrence forecast	Estimated occurring area, '000 ha
<i>Chilo suppressalis</i>	Relatively heavy occurrence in rice planting areas in Jiangnan region and the middle and lower reaches of the Yangtze River, with heavy occurrence at some local areas; moderate occurrence rice planting areas in South China, with a trend of deteriorating	4,000
Rice planthoppers	Relatively heavy occurrence in rice planting areas in central and western parts of South China; moderate occurrence in rice planting areas in southern and eastern parts of South China, southern part of Southwest China, Jiangnan region and the middle and lower reaches of the Yangtze River	4,000
Rice leaf roller	Relatively heavy occurrence in rice planting areas in central and western parts of South China; moderate occurrence in rice planting areas elsewhere	3,066.67
Others	Occurrence to certain degree would take place in some rice planting areas in general. Specifically, there would be sporadic-to-mild occurrence of yellow rice borer, <i>Sesamia inferens</i> , Southern rice black-streaked dwarf virus and rice stripe disease.	1,333.33

Source:NATESC

The forecast was made based upon the following facts:

- Many pests and diseases have the favourable conditions for moderate-to-heavy occurrence: The populations of *Chilo suppressalis*, rice planthoppers and rice leaf roller are much larger than the last year.
- Greater pest resistance to pesticides increases the threats: This year, major varieties of early rice sowed are high-quality and high-yield ones, which usually have poorer performance in disease resistance and thus have greater risks of disease epidemics.

Moreover, a national agricultural pest resistance monitoring report shows that in areas monitored:



- *Nilaparvata lugens* has medium-level to high-level resistance to insecticides such as imidacloprid, thiamethoxam, buprofezin, dinotefuran and pymetrozine.
- White-backed planthopper has medium-level to high-level resistance to insecticides such as buprofezin and chlorpyrifos.
- Rice leaf roller has medium-level to high-level resistance to insecticides including chlorantraniliprole.
- For *Chilo suppressalis*, the scope where the pest shows high-level resistance to chlorantraniliprole expands; in areas surrounding Poyang Lake in Jiangxi Province, eastern coastal areas in Zhejiang Province, etc., the pest has medium-level to high-level resistance to abamectin. This makes it a demanding task to apply pesticides in a scientific manner.
- The weather conditions set a desirable background for the occurrence and prevalence of pests and diseases. Weather forecasts by the National Meteorological Centre of China Meteorological Administration read that this June, compared with the same period in recent years, the majority of main early rice planting areas in China would have the temperature at or around the same level, but the amount of precipitation would become 20% to 50% more. Besides, the number of typhoons that would land in China would not change much, but the possibility of northward movement would be greater. These conditions will set the stage for infestation of migratory rice pests and epidemics of rice blast and bacterial diseases.





Trade analysis

China's insecticide formulation Imp. & Exp. increase in March–April 2023

Summary: In March–April 2023, China's insecticide formulation products were mainly exported to Myanmar, Brazil, Thailand, etc.; the two-month export volume jumped by some 75% YoY. During the same period, China mainly imported insecticide formulation products from Japan, Vietnam, France, etc.; the two-month import volume also expanded by almost 50% YoY.

According to statistics from General Administration of Customs of the People's Republic of China (China Customs), in March–April 2023, China exported 55,215.79 tonnes (actual volume, the same hereafter) of insecticide formulation products with a total export value of USD295.39 million. Major export destinations were Myanmar, Brazil, Thailand, Indonesia, etc. Compared with the volume of insecticide formulations exported in the same period last year, this year's figure soared by 75.13%.

The average export price of China's insecticide formulations in March–April 2023 was USD5.35/kg, down 22.13% YoY. It is worth noting that ex-works prices of insecticides TC in China followed a general downward trend so far into 2023. As regards export destination, China's insecticide formulations were exported to at least 138 countries or regions in March–April 2023. Of the top ten export destinations, Myanmar experienced significant growth of insecticide formulations exported from China; Myanmar saw the volume rocket to 7,951 tonnes in these two months, up by 6,952 tonnes YoY, and its position in the top destination list came to the first place from the tenth in March–April 2022.

In terms of China's insecticide formulation imports, in March–April 2023, China imported 2,393.84 tonnes with a combined import value of USD56.33 million. The two-month import volume recorded a YoY increase of 49.95%.

The import price of insecticide formulations averaged at USD21.94/kg in this period, down 37.81% from the average in March–April 2022. China mainly imported the products from 18 origins; major ones were Japan, Vietnam, France, etc. Of these origins, Japan had an impressive performance; China imported some 1,031 tonnes of insecticide formulations from Japan in March–April 2023, an increase of 735 tonnes YoY, and Japan topped the origin list, one place up from the same period last year.

TABLE 10: Insecticide formulation exports from China, March–April 2023 vs March–April 2022

Month	2023		2022	
	Volume, kg	Average price, USD/kg	Volume, kg	Average price, USD/kg
March	28,013,226	5.74	19,382,016	6.99
April	27,202,566	4.95	12,145,771	6.69
Total	55,215,792	5.35	31,527,787	6.87

Note:1. The data were updated to 2 June, 2023.

2. All the data here are calculated by actual volume.



Source:China Customs

TABLE 11: Top 10 destinations of insecticide formulations exported from China, March–April 2023 vs March–April 2022

No.	March–April 2023			March–April 2022		
	Destination	Volume, tonne	Share	Destination	Volume, tonne	Share
1	Myanmar	7,951	14.40%	Brazil	2,981	9.46%
2	Brazil	3,287	5.95%	Thailand	2,083	6.61%
3	Thailand	3,045	5.51%	Vietnam	1,826	5.79%
4	Indonesia	2,376	4.30%	Indonesia	1,752	5.56%
5	Cote d'Ivoire	2,256	4.09%	Pakistan	1,237	3.92%
6	Ghana	2,143	3.88%	Nigeria	1,187	3.77%
7	Vietnam	1,925	3.49%	Bangladesh	1,143	3.63%
8	Pakistan	1,725	3.12%	Ghana	1,136	3.60%
9	Cambodia	1,484	2.69%	Tanzania	1,012	3.21%
10	Bangladesh	1,449	2.62%	Myanmar	999	3.17%

Note:1. The data were updated to 2 June, 2023.

2. All the data here are calculated by actual volume.

Source:China Customs

TABLE 12: Insecticide formulation imports to China, March–April 2023 vs March–April 2022

Month	2023		2022	
	Volume, kg	Average price, USD/kg	Volume, kg	Average price, USD/kg
March	1,500,179	21.18	904129	38.65
April	893,659	23.21	692325	30.89
Total	2,393,838	21.94	1,596,454	35.28

Note:1. The data were updated to 2 June, 2023.

2. All the data here are calculated by actual volume.

Source:China Customs

TABLE 13: Top 10 origins of insecticide formulations imported to China, March–April 2023 vs March–April 2022

No.	March–April 2023			March–April 2022		
	Origin	Volume, tonne	Share	Origin	Volume, tonne	Share
1	Japan	1,031	43.05%	Indonesia	546	34.21%
2	Vietnam	356	14.86%	Japan	296	18.51%
3	France	296	12.35%	South Korea	239	14.97%
4	Singapore	194	8.09%	Singapore	217	13.61%
5	South Korea	146	6.09%	France	109	6.81%
6	India	114	4.75%	The US	82	5.14%
7	Indonesia	113	4.73%	Vietnam	31	1.94%
8	The US	73	3.07%	Thailand	26	1.63%
9	Israel	30	1.24%	India	18	1.11%
10	Thailand	24	1.02%	Israel	10	0.63%

Note:1. The data were updated to 2 June, 2023.

2. All the data here are calculated by actual volume.

Source:China Customs

Imidacloprid exports in 2022 increases by 30% YoY

Summary: In 2022, imidacloprid products from China were mainly exported to India, Brazil, the US, Russia, etc. The total export volume of imidacloprid products grew by about 30% YoY.

According to the export data updated on 2 June from Tranalysis, in 2022, the export volume of imidacloprid products from China to major destinations totalled 17,667.60 tonnes (actual volume), up 29.91% or 4,067.82 tonnes (actual volume) from the 2021 figure. Specifically, China's imidacloprid TC products were mainly exported to India, Brazil, the US, Russia, etc. Total imidacloprid TC export volume expanded by nearly 4,652 tonnes (100% AI volume), or 62.79% (calculated on 100% AI volume) year on year. Top five export destinations of China's imidacloprid TC products all increased their volumes compared with 2021.

Details of China's imidacloprid exports in 2022 are as follows:

- Major specifications for export: 97% TC, 98% TC, 95% TC, 96% TC, 200g/L SL, 10% WP and 70% WG;
- Top three destinations of imidacloprid TC: India, Brazil and the US altogether imported 8,724 tonnes (100% AI volume) of TC products from China, which accounts for 73.77% (calculated on 100% AI volume) of China's total imidacloprid TC export.
- Major exporters of imidacloprid TC: The top three exporters, Hailir Pesticides and Chemicals Group Co., Ltd., Hebei Bestar Commerce and Trade Co., Ltd. and Nufarm Chemical (Shanghai) Co., Ltd., together exported 3,901 tonnes (100% AI volume) of



imidacloprid TC products, the amount making up 32.99% (calculated on 100% AI volume) of the total imidacloprid TC exported.





TABLE 14: Export volume of imidacloprid products from China, 2022 vs 2021

Category	Specification	Volume in 2022, kg	Volume in 2021, kg
Technical	97% TC	6,674,516	4,223,960
	98% TC	4,164,027	2,360,750
	95% TC	939,646	707,990
	96% TC	395,000	189,150
	Subtotal	12,173,189	7,481,850
Formulation	200g/L SL	1,208,864	1,036,621
	10% WP	1,033,465	1,094,884
	70% WG	1,001,980	1,681,635
	350g/L SC	850,875	693,965
	25% WP	615,190	808,819
	600g/L FS	315,598	512,881
	200g/L SC	248,516	72,173
	10% SL	68,400	/
	600g/L SC	60,315	72,400
	20% WP	41,760	15,000
	70% WP	25,353	38,052
	2% GR	22,100	40,857
	70% WS	2,000	26,000
	50% WP	/	3,000
	5% EC	/	8,000
	36% FS	/	8,614
	2.50% BG	/	31
	10% SC	/	5,000





	Subtotal	5,494,416	6,117,932
	Total	17,667,605	13,599,782

Note: The data were updated to 2 June, 2023.

Source: Tranalysis

TABLE 15: Top 10 destinations of imidacloprid TC products exported from China, 2022 vs 2021

No.	2022			2021		
	Destination	Volume (100% AI), tonne	Share	Destination	Volume (100% AI), tonne	Share
1	India	3,333	28.18%	India	1,979	27.24%
2	Brazil	2,949	24.94%	Brazil	1,451	19.97%
3	The US	2,442	20.65%	The US	1,198	16.49%
4	Russia	1,144	9.67%	Argentina	487	6.71%
5	Argentina	532	4.50%	Russia	466	6.41%
6	Mexico	410	3.47%	Ukraine	442	6.09%
7	Israel	284	2.40%	Mexico	339	4.66%
8	Turkiye	131	1.10%	Turkiye	197	2.71%
9	Paraguay	110	0.93%	Paraguay	196	2.69%
10	France	66	0.56%	Vietnam	102	1.40%

Note: The data were updated to 2 June, 2023.

Source: Tranalysis



TABLE 16: Top 10 imidacloprid TC exporters in China, 2022 vs 2021

No.	2022			2021		
	Exporter	Volume (100% AI), tonne	Share	Exporter	Volume (100% AI), tonne	Share
1	Hailir Pesticides and Chemicals Group Co., Ltd.	1,426	12.05%	Suzhou Bianjing Agro-Biochemical Co., Ltd.	757	10.43%
2	Hebei Bestar Commerce and Trade Co., Ltd.	1,299	10.99%	Hebei Bestar Commerce and Trade Co., Ltd.	700	9.63%
3	Nufarm Chemical (Shanghai) Co., Ltd.	1,176	9.95%	Shanghai Psyche Chemicals Co., Ltd.	619	8.52%
4	Suzhou Bianjing Agro-Biochemical Co., Ltd.	1,155	9.76%	Hailir Pesticides and Chemicals Group Co., Ltd.	396	5.45%
5	Shanghai Psyche Chemicals Co., Ltd.	629	5.31%	Shandong United Pesticide Industry Co., Ltd.	312	4.30%
6	ADAMA Ltd.	495	4.19%	Nufarm Chemical (Shanghai) Co., Ltd.	268	3.69%
7	Jiangsu Yangnong Chemical Co., Ltd.	460	3.89%	Shandong Sino-Agri United Biotechnology Co., Ltd.	248	3.41%
8	UPL (Shanghai) Limited	414	3.50%	Kunshan Microchem Specialties Co., Ltd.	197	2.72%
9	Jiangsu Changlong Agrochemical Co., Ltd.	397	3.35%	Suzhou Greenlands Chemical Co., Ltd.	178	2.44%
10	Shandong Weifang Rainbow Chemical Co., Ltd.	304	2.57%	ADAMA Anpon (Jiangsu) Ltd.	173	2.38%

Note: The data were updated to 2 June, 2023.

Source: Tranalysis



Brief news

China in the major flood season and disaster-prone period

On 5 June, China Meteorological Administration published an article informing that the major flood season and disaster-prone period have come in China, and there would be frequent and heavy occurrences in the near future of disastrous weather such as torrential rain and forced convection. Considering this, the Administration set out the following four requirements on weather services during the flood season:

- Provide meteorological support for emergency rescue in an orderly manner, strengthen meteorological monitoring and early warning services, and pay close attention to adverse weather like rains and forced convection that may happen in the next few weeks and would affect emergency rescue work.
- Improve meteorological monitoring and early warning services targeting disastrous weather, especially the weather which has high potential influences. Provide solid and timely support for the wheat growing areas that are currently busy with harvesting.
- Forge better cross-department synergy, intensify cooperation with other departments of agriculture and rural affairs, water resources, natural resources, forest-fire prevention, etc., and enhance decision-making support.
- Put more efforts into popularisation of knowledge of disastrous weather, and into the transmission of the knowledge of emergency escape & self-rescue at the right time, so as to reinforce public awareness and build up the ability of self-rescue and mutual-rescue.

Fuxin Jinfeng to build capacity for fipronil intermediates

In late May, the Ecological Environment Bureau of Fuxin City approved the environmental impact report of Fuxin Jinfeng Fluorochemical Co., Ltd. (Fuxin Jinfeng)'s 3,000 t/a fine chemical project. The company plans to invest USD6.80 million (RMB48.26 million) in this project, which will construct in its plant in the Liaoning Fuxin Fluorine Industrial Development Zone, Fuxin City, Liaoning Province, production lines of 200 t/a cyclohexanecarboxylic acid chloride, 850 t/a ethyl 2,3-dicyanopropionate, 800 t/a 4,4'-dithiobis(5-amino-3-cyano-1-(2,6-dichloro-4-trifluoromethylphenyl)pyrazole), 50 t/a 2-bromo-4-nitro-1-(trifluoromethoxy)benzene, 100 t/a O,O,O-tris(4-aminophenyl) phosphorothioate (also known as TPTA) and 1,000 t/a 2,6-dichloro-4-(trifluoromethyl)aniline. The planned products are intermediate products widely used in the production of pesticides and pharmaceuticals. Of them, ethyl 2,3-dicyanopropionate and 2,6-dichloro-4-(trifluoromethyl)aniline are important intermediates for the production of the insecticide fipronil.

Guangdong Greatchem to issue 18.5 million shares on the ChiNext Market

On 4 June, Yingde Greatchem Chemicals Co., Ltd. (Guangdong Greatchem) published its IPO prospectus. The company would get listed on the ChiNext Market and issue 18.50 million shares, which account for 25% of the total share capital after the issuance. Part of the money raised will be invested in its 4,500 t/a specialty chemical project, and the rest will be used as supplementary working capital.

Specifically, some 2.77 million strategic allotment shares will be issued according to Guangdong Greatchem's plan; the number makes up 15% of the total shares to be issued. For the company's IPO, initial inquiry date fell on 7 June and the date for application for the new shares on 13 June.

Guangdong Greatchem is a tech company engaged in R&D, production and sale of pesticide technical and formulation products and pesticide intermediates. It is a main supplier of biphenylhydrazine acaricides and pyrethroid insecticides in China. Its main products





include bifenazate and beta-cypermethrin.

China and Argentina signs Belt and Road cooperation plan

On 2 June, government representatives of China and Argentina signed the cooperation plan on jointly promoting Belt and Road Initiative in Beijing. The plan mainly concerns policy, infrastructure, trade and financial connectivity between the two countries, and will deepen China and Argentina's mutually beneficial cooperation on areas including infrastructure, energy, economy and trade, finance, as well as people-to-people and cultural exchanges. It is conducive to promoting cooperation in various fields and will create more cooperation opportunities for enterprises of both sides.

Argentina is a major export destination of pesticide products from China. It is believed that the cooperation plan will benefit China's pesticide exports to Argentina in the future.

Jiangsu Pesticide Research Institute to expand formulation capacity, pyrethroid insecticides included

On 9 June, local government announced that it was to approve the environmental impact (EI) report of Jiangsu Pesticide Research Institute Co., Ltd. (Jiangsu Pesticide Research Institute)'s 6,000 t/a pesticide formulation project. The company plans to invest USD7.05 million (RMB50 million) to build the project in its existing plant in the Nanjing Jiangbei New Material Science and Technology Park, Nanjing City, Jiangsu Province. Estimated construction period is three months.

Jiangsu Pesticide Research Institute has capacity for insecticides such as cypermethrin TC, beta-cypermethrin TC and fufenozide TC. And with this new project, it will shed its capacity for imidacloprid TC and tebuconazole TC.



TABLE 17: Insecticide and acaricide formulations planned in Jiangsu Pesticide Research Institute's 6,000 t/a pesticide formulation project

No.	Product	Capacity, t/a
1	Niclosamide 25% SC	50
2	Buprofezin 50% SC	100
3	Chlorantraniliprole 5% SC	50
4	Imidacloprid 35% WP	100
5	Pyridaben 20% WP	100
6	Buprofezin 25% WP	100
7	Pymetrozine 25% WP	100
8	Pymetrozine·chlorpyrifos 30% WP	100
9	Pyridaben 15% EC	100
10	Cypermethrin 10% EC	100
11	Beta-cypermethrin 4.50% EC	100
12	Cypermethrin 5% EC	100
13	Lambda-cyhalothrin 25g/L EC	100
14	Beta-cypermethrin 4.50% EW	200
15	Lambda-cyhalothrin 10% EW	200
16	Lambda-cyhalothrin 2.50% EW	200
17	Emamectin benzoate 5.70% ME	200
18	Lambda-cyhalothrin 2.50% ME	200
19	Dinotefuran·indoxacarb 60% WG	50
20	Imidacloprid 70% wet seed dressing agent	200
21	Imidacloprid 10% SL	100
22	Cyromazine 50% SL	100

Source:EI report of the 6,000 t/a pesticide formulation project



Qianjiang Shengjie plans to build TC capacity for methoprene series

On 9 June, second-time publicity of the environmental impact assessment of Shengjie Life Technology (Qianjiang) Co., Ltd. (Qianjiang Shengjie)'s phase I program of the production and R&D project of 195 t/a methoprene series biopesticides TC, 1,300 t/a S-methoprene biopesticide formulation, and 1,000 t/a citronellal and menthol. The phase I focuses on methoprene series; the company will build 195 t/a TC production lines, including 150 t/a line for S-methoprene and 10 t/a line for S-hydroprene.

Overview of the project

- Project nature: New construction;
- Location: Zekou Industrial Park, Qianjiang National High-tech Industrial Development Zone, Qianjiang City, Hubei Province;
- Investment: USD28.18 million (RMB200 million).

China's air quality forecasted to range from moderate air to light pollution in general in H2 June

On 15 June, the national air quality forecasting consultation for mid-to-late June was jointly participated by the China National Environmental Monitoring Centre, the National Meteorological Centre of China Meteorological Administration, National Joint Research Centre for Tackling Key Problems in Air Pollution Control, five main regional air quality forecasting centres and Beijing Municipal Environmental Monitoring Centre.

According to the results of the forecasting consultation, in H2 June, the air quality across China mainly ranges between moderate air and light pollution, but moderate pollution or more severe pollution may be seen in some local areas. Moderate ozone pollution may be found in central and southern parts of Beijing-Tianjin-Hebei area, western Shandong Province, central and northern parts of Henan Province, some areas in the Yangtze River Delta, central and southern parts of the Fen-Wei Plain, most of Liaoning Province, central and western parts of Jilin Province, some areas in Chengdu-Chongqing area, and some cities in eastern Northwest China. Some cities in southern and eastern Xinjiang Uygur Autonomous Region may suffer heavy pollution due to sand-dust weather.

National Development Plan for Modern Protected Agriculture (2023–2030) rolled out

On 15 June, the National Development Plan for Modern Protected Agriculture (2023–2030) was jointly issued by the Ministry of Agriculture and Rural Affairs of the People's Republic of China and three other government bodies.

The plan puts forward as its main goals that, by 2030, the scale of modern protected agriculture across the nation should be further expanded, regional distribution optimised, technological equipment input improved, the ability to ensure stable yield and supply strengthened, and quality, benefits and competitiveness of the industry all increased during the development. Moreover, by 2030, goals for some specific aspects are set as follows:

- The share of output of vegetables via protected cultivation to the national total will reach 40%, and the output share of aquatic products via protected cultivation to the national total will reach 60%;
- The rate of large-scale animal husbandry will reach 83%;
- The mechanisation rate of protected agriculture and the contribution rate of scientific and technological progress to the industry will reach 60% and 70%, respectively;
- A batch of pioneering innovation bases for modern protected agriculture will be built up;





- The pass rate of randomly sampled agricultural products via protected cultivation will stabilise at around 98% across the country.

MARA proposes to revise Measures for the Administration of Pesticide Business Licensing

On 20 June, the Department of Agrochemical Management, Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) published a notice to solicit opinions on the Measures for the Administration of Pesticide Business Licensing (Revised Draft for Comments). According to MARA, the revision is made in order to further strengthen administration on the processes of pesticide business operation, regulate operation behaviours, and promote pesticide use in a scientific manner.

A big revision in the draft is made to the requirements on pesticide business operators. These operators are no longer required to have educational background of a technical secondary school or above in agronomy, plant protection, pesticide or any other specialties or the learning experience of more than 56 credit hours in professional education and training institutions. Instead, they should employ pesticide management professionals and technicians suitable for pesticide operation activities. Such professionals and technicians should be in good health and under the age of 70.

Lanzhou Zhaofeng plans to build chlorfenapyr capacity

On 6 June, the Ecological Environment Bureau of Lanzhou New Area announced that it planned to approve the environmental impact report of Lanzhou Zhaofeng Chemical Technology Co., Ltd. (Lanzhou Zhaofeng)'s 500 t/a tralopyril and 400 t/a 2-chloroacrylonitrile project (phase II program 1,200 t/a chlorfenapyr and supporting intermediate). The company has planned to invest USD5.64 million (RMB40 million) to construct production lines of 1,200 t/a chlorfenapyr and 1,500 t/a (chloromethoxy)ethane in its plant in the Lanzhou New Area Chemical Park, Lanzhou City, Gansu Province.





Price update

Ex-works prices of major insecticides in China, 8 June, 2023

TABLE 18: Ex-works prices of major insecticides in China, 8 June, 2023

Product	20230508		20230608	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	419,000	60,677.15	395,000	55,661.24
97% Acephate technical	47,500	6,878.67	47,500	6,693.44
95% Acetamiprid technical	80,800	11,700.99	81,400	11,470.44
95% Azocyclotin technical	220,000	31,859.12	220,000	31,001.2
95% Beta-Cypermethrin technical	130,000	18,825.85	128,200	18,065.24
97% Bifenthrin technical	176,000	25,487.3	170,000	23,955.47
95% Buprofezin technical	70,000	10,136.99	70,000	9,864.02
98% Carbofuran technical	105,000	15,205.49	102,000	14,373.28
98% Chlorfenapyr technical	150,000	21,722.13	155,000	21,841.75
95% Chlorfluazuron technical	400,000	57,925.68	400,000	56,365.81
95% Chlorpyrifos technical	37,500	5,430.53	35,700	5,030.65
94% Cypermethrin technical	68,000	9,847.37	68,000	9,582.19
99% Cyromazine technical	132,000	19,115.47	132,000	18,600.72
98% Deltamethrin technical	430,000	62,270.11	390,000	54,956.67
95% Diafenthiuron technical	120,000	17,377.7	115,000	16,205.17
98% Dimethoate technical	47,600	6,893.16	47,600	6,707.53
70% Emamectin benzoate technical	374,500	54,232.92	346,500	48,826.89
92% Fenvalerate technical	140,000	20,273.99	140,000	19,728.03
95% Fipronil technical	486,800	70,495.55	470,000	66,229.83
98% Hexaflumuron technical	460,000	66,614.53	460,000	64,820.69





97% Imidacloprid technical	89,900	13,018.8	90,000	12,682.31
98% Isoprocarb technical	45,500	6,589.05	45,500	6,411.61
95% Lambda-cyhalothrin technical	138,000	19,984.36	130,000	18,318.89
90% Malathion technical	38,000	5,502.94	38,000	5,354.75
95% Methidathion technical	90,000	13,033.28	90,000	12,682.31
Methomyl 90% SP	72,500	10,499.03	65,000	9,159.44
98% Methomyl technical	77,800	11,266.55	69,900	9,849.93
75% Omethoate technical	52,000	7,530.34	52,000	7,327.56
90% Phoxim technical	39,000	5,647.75	39,000	5,495.67
90% Profenofos technical	81,300	11,773.39	78,500	11,061.79
90% Propargite technical	60,000	8,688.85	60,000	8,454.87
95% Pymetrozine technical	110,000	15,929.56	119,500	16,839.29
95% Pyridaben technical	102,000	14,771.05	102,000	14,373.28
97% Spirodiclofen technical	155,000	22,446.2	155,000	21,841.75
85% Triazophos technical	69,000	9,992.18	69,000	9,723.1

Note: Ex-works price includes VAT.

Source: CCM

Shanghai Port prices of major insecticides in China, 8 June, 2023





TABLE 19: Shanghai Port prices of major insecticides in China, 8 June, 2023

Product	20230508		20230608	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	419,500	60,749.56	395,500	55,731.7
97% Acephate technical	48,000	6,951.08	48,000	6,763.9
95% Acetamiprid technical	81,300	11,773.39	81,900	11,540.9
95% Azocyclotin technical	220,500	31,931.53	220,500	31,071.66
95% Beta-Cypermethrin technical	130,500	18,898.25	128,700	18,135.7
97% Bifenthrin technical	176,500	25,559.71	170,500	24,025.93
95% Buprofezin technical	70,500	10,209.4	70,500	9,934.47
98% Carbofuran technical	105,500	15,277.9	102,500	14,443.74
98% Chlorfenapyr technical	150,500	21,794.54	155,500	21,912.21
95% Chlorfluazuron technical	400,500	57,998.09	400,500	56,436.27
95% Chlorpyrifos technical	38,000	5,502.94	36,200	5,101.11
94% Cypermethrin technical	68,500	9,919.77	68,500	9,652.65
99% Cyromazine technical	132,500	19,187.88	132,500	18,671.18
98% Deltamethrin technical	430,500	62,342.51	390,500	55,027.13
95% Diafenthiuron technical	120,500	17,450.11	115,500	16,275.63
98% Dimethoate technical	48,100	6,965.56	48,100	6,777.99
70% Emamectin benzoate technical	375,000	54,305.33	347,000	48,897.34
92% Fenvalerate technical	140,500	20,346.4	140,500	19,798.49
95% Fipronil technical	487,300	70,567.96	470,500	66,300.29
98% Hexaflumuron technical	460,500	66,686.94	460,500	64,891.14
97% Imidacloprid technical	90,400	13,091.2	90,500	12,752.77
98% Isoprocarb technical	46,000	6,661.45	46,000	6,482.07





95% Lambda-cyhalothrin technical	138,500	20,056.77	130,500	18,389.35
90% Malathion technical	38,500	5,575.35	38,500	5,425.21
95% Methidathion technical	90,500	13,105.69	90,500	12,752.77
Methomyl 90% SP	73,000	10,571.44	65,500	9,229.9
98% Methomyl technical	78,300	11,338.95	70,400	9,920.38
75% Omethoate technical	52,500	7,602.75	52,500	7,398.01
90% Phoxim technical	39,500	5,720.16	39,500	5,566.12
90% Profenofos technical	81,800	11,845.8	79,000	11,132.25
90% Propargite technical	60,500	8,761.26	60,500	8,525.33
95% Pymetrozine technical	110,500	16,001.97	120,000	16,909.74
95% Pyridaben technical	102,500	14,843.46	102,500	14,443.74
97% Spirodiclofen technical	155,500	22,518.61	155,500	21,912.21
85% Triazophos technical	69,500	10,064.59	69,500	9,793.56

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 June, 2023





TABLE 20: FOB Shanghai prices of major insecticides in China, 8 June, 2023, USD/t

Product	20230508	20230608
95% Abamectin technical	59,126.24	54,238.54
97% Acephate technical	6,585.13	6,407.8
95% Acetamiprid technical	11,474.35	11,248.27
95% Azocyclotin technical	31,169.88	30,330.52
95% Beta-Cypermethrin technical	17,787.56	17,068.91
97% Bifenthrin technical	24,014.39	22,571.08
95% Buprofezin technical	9,999.38	9,730.11
98% Carbofuran technical	14,927.15	14,110.17
98% Chlorfenapyr technical	21,231.37	21,348.29
95% Chlorfluazuron technical	56,470.94	54,950.25
95% Chlorpyrifos technical	5,403.54	5,005.65
94% Cypermethrin technical	9,365.43	9,113.23
99% Cyromazine technical	18,062.06	17,575.67
98% Deltamethrin technical	58,537.21	51,662.19
95% Diafenthiuron technical	16,437.66	15,328.55
98% Dimethoate technical	6,619.65	6,441.39
70% Emamectin benzoate technical	52,852.77	47,584.31
92% Fenvalerate technical	19,177.27	18,660.85
95% Fipronil technical	68,690.44	64,533.94
98% Hexaflumuron technical	64,922.33	63,174.05
97% Imidacloprid technical	12,762.7	12,432.83
98% Isoprocarb technical	6,334.38	6,163.8
95% Lambda-cyhalothrin technical	18,860.9	17,289.05





90% Malathion technical	5,315.55	5,172.41
95% Methidathion technical	12,828.07	12,482.62
Methomyl 90% SP	10,360.46	9,038.55
98% Methomyl technical	12,091.82	10,571.43
75% Omethoate technical	7,219.15	7,024.75
90% Phoxim technical	5,589.87	5,439.34
90% Profenofos technical	11,192.64	10,516.14
90% Propargite technical	8,603.21	8,371.54
95% Pymetrozine technical	15,072.66	15,933.45
95% Pyridaben technical	14,513.62	14,122.79
97% Spirodiclofen technical	21,204.43	20,633.43
85% Triazophos technical	9,896.69	9,630.18

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

Source: CCM



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Publisher : Kcomber Inc.

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