

# Insecticides China Monthly Report 202209

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## Headline

Zhongnong Ruihua has planned to build new capacity for acetamiprid TC, clethodim TC, acrylaldehyde, 2-methylene-4-cyanobutyraldehyde, CCMP and pesticide formulations in Yumendong Building Materials Chemical Industrial Park in Jiuquan City, Gansu Province.

Gansu Wobilin has planned to launch a 9,850 t/a pesticide technical project, which will build large-scale production capacity for insecticides malathion TC, chlorfenapyr TC and some herbicides TC.

By mid-Sept., Jiangxi Oushi's 4,000 t/a monosultap TC expansion and 3,000 t/a cartap TC project (Phase I) had passed acceptance check. The company now boasts large-scale production capacity for both monosultap TC and cartap TC.

On 5 Sept., the EI report of Shandong Youdao's green crop protection products project (Phase I) was approved by Weifang Municipal Ecology and Environment Bureau. The Phase I project will build capacity of 1,000 t/a chlorantraniliprole TC, 500 t/a cyantraniliprole TC, 100 t/a methoxyfenozide TC, 3,000 t/a 2-amino-3-methylbenzoic acid, and capacity for other intermediates.

In early Sept., the ex-work price of imidacloprid TC kept stable, while the price of acetamiprid TC was lowered mainly due to weak sales. It is worth mentioning that Shandong Hailir, a supplier of the two products, suspended the production lines recently after an accident, and the time for production resumption is undecided yet. Some imidacloprid TC suppliers reveal that this product is in tight inventory currently.

In late Sept., China's insecticide market saw sluggish demand. Most organophosphorus insecticides TC and pyrethroid insecticides TC had stable price, but some saw decreasing price. A few nicotinoid insecticides TC had their price set higher, mainly due to tight supply.

In Sept., fall armyworms began to damage late-sown summer maize and autumn maize fields in the Huang-Huai-Hai region and southern China, and some fields recorded high-density population. Based on the comprehensive analysis of monitoring data of maize planting and the weather in Sept., it is expected that fall armyworm will occur moderately to relatively heavily in general, attacking 0.33 million ha (5 million mu) land in autumn maize growing areas.

In H1 2022, chlorpyrifos products from China were mainly exported to Brazil, Pakistan, Colombia, etc. Although the total export volume dropped YoY, export volume to Colombia ballooned. Colombia's share to China's total chlorpyrifos export went up 19.58 percentage points YoY.

On 6 Sept., the Department of Agriculture and Rural Affairs of Hainan Province and the Hainan Provincial Department of Transport issued a notice on strengthening the management of pesticides entering the island province, which informs implementation of a "white list" system on the pesticides starting from 15 Sept.

In Sept. 2022, ICAMA approved 14 newly-registered insecticide products, including a hygienic insecticide product.







### Editor's Note

From 1 Sept. 2022, the Ministry of Agriculture and Rural Affairs of the People's Republic of China has revoked pesticide registration involving four organophosphorus insecticidal active ingredients (AI)—phorate, isofenphos-methyl, isocarbophos and ethoprophos. Production of pesticide technical & formulation products containing these AIs is prohibited.

In late Sept., China's insecticide market saw sluggish demand. Most organophosphorus insecticides TC and pyrethroid insecticides TC had stable price, but some saw decreasing price. A few nicotinoid insecticides TC had their price set higher, mainly due to tight supply. It is worth noting that the suspension of Shandong Hailir may impact the supply of some nicotinoid insecticides, such as imidacloprid TC, acetamiprid TC and clothianidin TC, and the time for its production resumption is yet undecided.

As to supply of insecticides TC, Jiangxi Oushi's 4,000 t/a monosultap TC expansion and 3,000 t/a cartap TC project (Phase I) has passed the acceptance check, and Jiangxi Huihe's 300 t/a spirotetramat TC production line may be put into production in Nov. 2022.

In terms of policy, Hainan has strengthened the management of pesticides into the island, and starting from 15 Sept., a "white list" system on the pesticides was implemented. Active ingredients fenvalerate, daminozide, chlorpyrifos, triazophos and flubendiamide are prohibited from sale and use in Hainan. Besides, in Hunan, seven chemical producers along the mainstream and major tributaries of the Yangtze River Hunan Section have been required to shut down before the end of Oct.

*The USD/CNY exchange rate in this newsletter is USD1.00 = CNY6.8821 on 1 Sept., 2022, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.*







## Company Dynamics

### Zhongnong Ruihua to build new capacity for acetamiprid TC

Summary: Zhongnong Ruihua has planned to build new capacity for acetamiprid TC, clethodim TC, acrylaldehyde, 2-methylene-4-cyanobutyraldehyde, CCMP and pesticide formulations in Yumendong Building Materials Chemical Industrial Park in Jiuquan City, Gansu Province.

In late Aug., 2022, Zhongnong Ruihua (Gansu) Pharmaceutical Co., Ltd. (Zhongnong Ruihua) revealed that the company would build Phase I program of the "pesticide & pharmaceutical intermediates, pesticide technical and formulations" project in Yumendong Building Materials Chemical Industrial Park, Yumen City, Jiuquan City, Gansu Province. The company will invest USD29.06 million (RMB200 million) in the first phase, which will mainly be used for construction of new production workshops & supporting facilities, and the purchase of production equipment. Phase I program will build capacity of 2,000 t/a acetamiprid TC, 4,000 t/a clethodim TC, 8,000 t/a acrylaldehyde, 3,000 t/a 2-methylene-4-cyanobutyraldehyde, 3,000 t/a of 2-chloro-5-chloromethylpyridine (CCMP), and 10,000 t/a pesticide formulation products.

These proposed products are closely connected—acrylaldehyde is a key raw material for the synthesis of 2-methylene-4-cyanobutyraldehyde, and the latter is a precursor in the production of CCMP, a key intermediate for acetamiprid production. Once the project put into full operation, Zhongnong Ruihua will not only have large-scale supply capability of acetamiprid TC, but also has an advantage in industrial chain integration.

Acetamiprid is one of the first-generation nicotinoid insecticides, and a mainstream product in the market. So far, many Chinese pesticide producers have brought into operation their large-scale acetamiprid TC production lines, these manufacturers including Shandong Hailir Chemicals Co., Ltd. (Shandong Hailir), Shandong United Pesticide Industry Co., Ltd., Jiangsu Changqing Agrochemical Co., Ltd., Ningxia Ruitai Technology Co., Ltd., Ningbo Sunjoy Agrosience Co., Ltd., Lanzhou Chemspec-Weier Chemical Co., Ltd., Hebei Yetian Agrochemicals Co., Ltd. and Wuzhong Linghan Biological & Pharmaceutical Co., Ltd.

It is worth mentioning that an accident causing two deaths took place in Shandong Hailir's production plant in Lingang Industrial Park, Weifang City, Shandong Province on 14 Aug., 2022, which pushed the company to suspend production temporarily for further safety inspections. The plant accommodates 1,200 t/a of acetamiprid TC and 2,500 t/a CCMP production lines, along with lines for imidacloprid TC, pyraclostrobin TC, clothianidin TC, thiamethoxam TC and prothioconazole TC.

### Gansu Wobilin to build new capacity for malathion TC & chlorfenapyr TC

Summary: Gansu Wobilin has planned to launch a 9,850 t/a pesticide technical project, which will build large-scale production capacity for insecticides malathion TC, chlorfenapyr TC and some herbicides TC.

In Sept. 2022, CCM learned from Gansu Wobilin Plant Protection Co., Ltd. (Gansu Wobilin) that it had planned to build a 9,850 t/a pesticide technical project in Yumendong Building Materials Chemical Industrial Park in Jiuquan City, Gansu Province. Proposed products





and their capacity in the project are:

- Insecticides: 5,000 t/a malathion TC, 800 t/a chlorfenapyr TC;
- Herbicides: 1,500 t/a clomazone TC, 800 t/a nicosulfuron TC, 600 t/a imazethapyr TC, 500 t/a imazapyr TC, 500 t/a imazamox TC, 150 t/a imazapic TC.

Malathion is a high-efficacy and low-toxicity organophosphorus insecticide widely used in control of agricultural pests. It is also used as a grain protectant. Malathion is one of the recommended chemical pesticides for locust control, since it is highly efficient in killing locusts. At present, there are two Chinese pesticide producers boasting large-scale malathion TC production capacity—Dezhou Luba Fine Chemical Co., Ltd. (Dezhou Luba) with 3,000 t/a capacity and Liaoning Huludao Lingyun Group Pesticides Chemical Co., Ltd. with 1,500 t/a. Dezhou Luba is a subsidiary of Shandong Luba Chemical Co., Ltd. (Shandong Luba). The parent company Shandong Luba has also planned to build 5,000 t/a malathion TC production lines in another subsidiary Shandong Hengdong Biotechnology Co., Ltd., which was newly established in March 2022. Once Gansu Wobilin's 5,000 t/a malathion TC lines put into operation successfully, malathion supply in domestic market will be greatly expanded.

Chlorfenapyr is a low-toxicity, high-efficacy insecticide, too. It is broad-spectrum and widely applicable, so it has attracted attentions from many Chinese pesticide producers. Right now major chlorfenapyr TC producers in China are: Qingdao Hengning Biotechnology Co., Ltd. (Qingdao Hengning), Shandong Shinlon Group Biotechnology Co., Ltd. (Shinlon Biotechnology), Kaifeng Biocar Biochemical Co., Ltd. and Shandong Weifang Shuangxing Agrochemical Co., Ltd. Among them, Qingdao Hengning (2,000 t/a chlorfenapyr TC) and Shinlon Biotechnology (600 t/a chlorfenapyr TC) completed the construction of the lines no earlier than Q4 2021.

The Yumendong Building Materials Chemical Industrial Park, where Gansu Wobilin is located, is one of the key chemical industrial parks supporting the development of pesticide industry in Gansu Province. It is also listed as a key park for pesticide capacity expansion in the *14th Five-Year Development Plan for the Pesticide Industry*. Having favourable geographical advantages and supportive policies, coupled with pesticide capacity relocation from eastern coastal provinces to central and western China, this chemical industrial park has been showered with plenty of development opportunities. Many high-quality pesticide producers have set their eyes on it and a large number of new construction projects been planned here. Gansu Wobilin's 9,850 t/a pesticide technical project is just one of the key projects.

### **Jiangxi Oushi expands monosultap TC & cartap TC capacity**

Summary: By mid-Sept., Jiangxi Oushi's 4,000 t/a monosultap TC expansion and 3,000 t/a cartap TC project (Phase I) had passed acceptance check. The company now boasts large-scale production capacity for both monosultap TC and cartap TC.

In Sept. 2022, CCM learned from Jiangxi Oushi Chemical Co., Ltd. (Jiangxi Oushi) that its 4,000 t/a monosultap TC expansion and 3,000 t/a cartap TC project (Phase I) had already passed acceptance check.

Jiangxi Oushi, established in July 1998, is located in the Salt Chemical Industry Zone, Xingan County, Ji'an City, Jiangxi Province. Before the monosultap & cartap project kicked off, the company had set up production lines in three workshops:

- Workshop 101: 200 t/a kresoxim-methyl TC;
- Workshop 102: 2,000 t/a monosultap TC, 300 t/a 3-isochromanone;





- Workshop 103: 200 t/a trifloxystrobin TC.

The monosultap & cartap project has planned to transform the kresoxim-methyl TC line and the 3-isochromanone line into 4,000 t/a monosultap TC line, and build up 3,000 t/a cartap TC production capacity. Once those production lines are put into operation successfully, its monosultap TC capacity and cartap TC capacity will increase to 6,000 t/a and 3,000 t/a, respectively. The 4,000 t/a monosultap TC expansion has been divided into two phases:

- Phase I: dismantle kresoxim-methyl TC production line and build a 3,000 t/a monosultap TC line;
- Phase II: transform the 3-isochromatone production line into 1,000 t/a monosultap TC line.

The Phase I program started in Feb. 2021 and completed in Aug. 2021. On 23 July, 2022, Jiangxi Oushi organised an acceptance expert panel to carry out a company-led environmental protection acceptance check upon completion, and the panel decided it was a qualified work.

Monosultap and cartap are nereistoxin insecticides and play an important role in the control of agricultural pests. Since they are highly toxic to silkworm, their use in mulberry fields should be avoided. Major Chinese pesticide producers that have capacity of monosultap TC and cartap TC are Anhui Huaxing Chemical Industry Co., Ltd., Hunan Gofar Fine Chemical Industry Tech Co., Ltd., Hunan Haohua Chemical Co., Ltd. and Chongqing Pesticide and Chemical Industry (Group) Co., Ltd. Besides, Jiangsu Tianrong Group Co., Ltd. (Jiangsu Tianrong) and Zhejiang Udragon Bioscience Co., Ltd. (Zhejiang Udragon) once helped facilitate the development of these two insecticides in China. Jiangsu Tianrong had 6,600 t/a monosultap TC and 3,000 t/a cartap TC capacity in Jiangsu Xiangshui Ecological Chemical Park, which was shut completely in 2020 due to environmental protection problems. Zhejiang Udragon used to have 500 t/a monosultap TC capacity and planned to build 200 t/a cartap TC capacity. However, with a change to its development strategy, the company phased out the monosultap TC lines and called off construction of cartap TC line.

### **EI report of Shandong Youdao's insecticide & intermediate project approved**

Summary: On 5 Sept., the EI report of Shandong Youdao's green crop protection products project (Phase I) was approved by Weifang Municipal Ecology and Environment Bureau. The Phase I project will build capacity of 1,000 t/a chlorantraniliprole TC, 500 t/a cyantraniliprole TC, 100 t/a methoxyfenozide TC, 3,000 t/a 2-amino-3-methylbenzoic acid, and capacity for other intermediates.

On 5 Sept., the environmental impact (EI) report of Shandong Youdao Chemical Co., Ltd.'s (Shandong Youdao) green crop protection products project (Phase I) was approved by Weifang Municipal Ecology and Environment Bureau. The company will build capacity of 1,000 t/a chlorantraniliprole TC, 500 t/a cyantraniliprole TC, 100 t/a methoxyfenozide TC, 3,000 t/a 2-amino-3-methylbenzoic acid, and capacity for other intermediates in the Phase I project.

The project is planned in Renhe Chemical Industrial Park, Gaomi City, Weifang City, Shandong Province. Shandong Youdao will invest USD54.73 million (RMB376.65 million) in the project, of which USD1.83 million (RMB12.57 million), or 3.3% of the total, is for environmental protection. It has planned the production capacity of chlorantraniliprole (Kangkuan) and its intermediates in this project, which will help the company obtain an upstream raw material advantage in chlorantraniliprole production.







Shandong Youdao, a subsidiary of Shandong Himile Chemicals Co., Ltd., was established in Aug. 2019 in Renhe Chemical Industrial Park. The company is engaged in continuous-flow production technology R&D, production and sale of pesticides, pharmaceuticals and related fine chemical intermediates. Its main products include chlorantraniliprole intermediate 2-nitro-3-methylbenzoic acid and methoxyfenozide intermediate 3-methoxy-2-methylbenzoic acid.

**TABLE 1:** Designed products of Shandong Youdao's green crop protection products project (Phase I)

Category	Product	Capacity, t/a
Insecticides	Chlorantraniliprole TC	1,000
	Cyantraniliprole TC	500
	Methoxyfenozide TC	100
Intermediates	2-Amino-N,3-dimethylbenzamide	3,000
	2-Amino-3-methylbenzoic acid	3,000
	2-Amino-5-chloro-N,3-dimethylbenzamide	2,000
	2-Amino-5-chloro-3-methylbenzoic acid	2,000
	3-Amino-2-methylbenzoic acid	1,500
	4-Amino-3-methylbenzoic acid	600
By-product	Sodium bisulfite	6,292
	Hydrochloric acid (31%)	4,994

Source: Weifang Municipal Ecology and Environment Bureau





## Market Analysis

**Acetamiprid price dips & imidacloprid price stabilises in tight supply in early Sept.**

Summary: In early Sept., the ex-work price of imidacloprid TC kept stable, while the price of acetamiprid TC was lowered mainly due to weak sales. It is worth mentioning that Shandong Hailir, a supplier of the two products, suspended the production lines recently after an accident, and the time for production resumption is undecided yet. Some imidacloprid TC suppliers reveal that this product is in tight inventory currently.

In early Sept., ex-works price of 95% imidacloprid TC in China stayed at USD22,885/t (RMB157,500/t) while the price of 95% acetamiprid TC went down by 3.67% MoM (calculated with RMB price) to USD20,997/t (RMB144,500/t) due to slow sales. Besides, the price of 2-chloro-5-chloromethylpyridine (CCMP), an important intermediate for these two products, fell by 1.67%.

Inventory of imidacloprid TC and acetamiprid TC is relatively tight, as some manufacturers of the two products mainly fulfil their existing orders. CCM's monitoring in early Sept. shows that:

- Shandong United Pesticide Industry Co., Ltd. (Shandong United Pesticide): the production lines of imidacloprid TC and acetamiprid TC operate normally.
- Hebei Yetian Agricultural Chemical Co., Ltd. (Hebei Yetian): the imidacloprid TC production line run normally at present, but the inventory is tight. New orders should wait for a while before execution.
- Jiangsu Changlong Agrochemical Co., Ltd. (Jiangsu Changlong): it has suspended the imidacloprid TC production line since last year.
- Shandong Hailir Chemicals Co., Ltd. (Shandong Hailir): it has suspended all production lines after a workplace safety accident happened in mid-Aug. The company revealed that it still had some stock of both products.

**TABLE 2:** Production of imidacloprid TC & acetamiprid TC in some domestic producers, early Sept. 2022

No.	Producer	Product	Capacity, t/a	Remark
1	Shandong United Pesticide	Imidacloprid TC	2,000	Normal production
		Acetamiprid TC	2,000	
2	Hebei Yetian	Imidacloprid TC	5,000	Normal production
3	Shandong Hailir	Imidacloprid TC	2,500	Suspension
		Acetamiprid TC	1,200	
4	Jiangsu Changlong	Imidacloprid TC	2,000	Suspension for maintenance

Source:CCM

Shandong Hailir has production capacity of 2,500 t/a imidacloprid TC, 1,200 t/a acetamiprid TC and 2,500 t/a CCMP. It is unclear when the lines in Shandong Hailir would resume production. And its parent company Hailir Pesticides and Chemicals Group Co., Ltd. has already anticipated an impacted overall performance in 2022.



TABLE 3: Shandong Hailir's existing products and their capacity

Workshop No.	Product	Capacity, t/a	Note
1#	CCMP	2,500	/
	By-product hydrochloric acid	3,858	
2#	Imidacloprid	2,500	/
3#	Acetamiprid	1,200	/
4#	Pyraclostrobin	1,000	/
6#	Thiamethoxam	2,000	The company has stopped pymetrozine TC and fosthiazate TC production. It will use the vacant space in this workshop to build production capacity of 3,000 t/a clothianidin TC, 5,000 t/a thiamethoxam TC, 4,000 t/a 2,3-dichloro-1-propene, 5,500 t/a 2-chloro-5-chloromethylthiazole and 2,350 t/a 1,5-dimethyl-2-nitroimino-hexahydro-1,3,5-triazine.
	Clothianidin	1,000	
	Pymetrozine	500	
	Fosthiazate	200	
	30% Hydrochloric acid	1,045	
8#	Prothioconazole	2,000	/
	Azoxystrobin	1,000	
	Cyazofamid	200	
	Spirodiclofen	200	
	Thifluzamide	200	
	Trifloxystrobin	200	
	Amisulbrom	200	
	Spirotetramat	200	

Source: Shandong Hailir's latest environmental impact report, as of Aug. 2022.

Prices of some insecticides TC keep stable in late Sept.



Summary: In late Sept., China's insecticide market saw sluggish demand. Most organophosphorus insecticides TC and pyrethroid insecticides TC had stable price, but some saw decreasing price. A few nicotinoid insecticides TC had their price set higher, mainly due to tight supply.

In late Sept., China's insecticide market saw sluggish demand. Most organophosphorus insecticides TC and pyrethroid insecticides TC had stable price, but some saw decreasing price. A few nicotinoid insecticides TC had their price set higher, mainly due to tight supply.

**Organophosphorus insecticides:** Some organophosphorus insecticides TC had stable price, such as profenofos TC and malathion TC. But the price of chlorpyrifos TC decreased mainly due to sluggish demand. Major chlorpyrifos TC manufacturers have operated normally, such as Hubei Benxing Agrochemical Co., Ltd., Nanjing Red Sun Co., Ltd. and Jiangsu Fengshan Group Co., Ltd. Considering a relatively slack demand for these insecticides, ex-works prices of organophosphorus insecticides TC may decline in the short term.

**Pyrethroid insecticides:** Ex-works prices of some pyrethroid TC insecticides were lowered mainly due to slow sales. The prices of bifenthrin TC and lambda-cyhalothrin TC had MoM decreases, while the price of cypermethrin TC increased. It is noteworthy that Zibo Qixiang Tengda Chemical Co., Ltd. suspended production after a fire, which may impact the supply of some raw materials for pyrethroid insecticides; the insecticides might be affected include lambda-cyhalothrin TC and permethrin TC. Considering a possible upward trend in raw material price, price hikes are expected for some products under this category in the short term.

**Nicotinoid insecticides:** Ex-works prices of clothianidin TC and imidacloprid TC went up. In particular, clothianidin TC price climbed by more than 6% MoM, mainly because of tight supply. It is worth noting that the suspension of Shandong Hailir Chemicals Co., Ltd. may impact the supply of some nicotinoid insecticides, such as imidacloprid TC, acetamiprid TC and clothianidin TC. Besides, prices of some important intermediates rose, such as 3-methyl-4-nitroiminoperhydro-1,3,5-oxadiazine, 2-nitroaminoimidazoline and ethyl N-cyanoethanimideate, which might encourage price hikes in nicotinoid insecticides TC in the near future.



**TABLE 4:** Ex-works prices of major insecticide TC products in China in late Sept. 2022

Category	Product	Ex-works price (RMB/t)	Ex-works price (USD/t)	MoM change
Organophosphorus insecticide	95% Chlorpyrifos technical	52,500	7,628	-1.69%
	90% Profenofos technical	82,665	12,012	0.00%
	90% Malathion technical	37,000	5,376	0.00%
Pyrethroid insecticide	94% Cypermethrin technical	84,000	12,206	1.20%
	98% Deltamethrin technical	530,000	77,011	0.00%
	95% Lambda-cyhalothrin technical	200,000	29,061	-0.50%
	97% Bifenthrin technical	273,000	39,668	-2.15%
Nicotinoid insecticide	97% Imidacloprid technical	157,500	22,885	0.38%
	95% Acetamiprid technical	146,500	21,287	0.00%
	98% Clothianidin technical	130,000	18,890	6.12%
Antibiotic insecticide	95% Abamectin technical	580,000	84,277	-2.52%
	70% Emamectin benzoate technical	560,000	81,371	-3.03%

Note: MoM change is calculated with RMB price.

Source: CCM



## Pest

### Autumn maize to suffer moderate-to-relatively-heavy occurrence of fall armyworm

Summary: In Sept., fall armyworms began to damage late-sown summer maize and autumn maize fields in the Huang-Huai-Hai region and southern China, and some fields recorded high-density population. Based on the comprehensive analysis of monitoring data of maize planting and the weather in Sept., it is expected that fall armyworm will occur moderately to relatively heavily in general, attacking 0.33 million ha (5 million mu) land in autumn maize growing areas.

This month, fall armyworms began to damage late-sown summer maize and autumn maize fields in the Huang-Huai-Hai region and southern China, and some fields recorded high-density population. In mid-Sept., the National Agro-Tech Extension and Service Centre (NATESC) released an occurrence trend forecast of fall armyworm in autumn maize. It expected a general moderate-to-relatively-heavy occurrence of fall armyworm on 0.33 million ha (5 million mu) land in autumn maize growing regions, based on a comprehensive analysis of monitoring data of maize planting and the weather in Sept. Specifically, it will occur relatively heavily in Southwest China and South China, occur moderately in the Jiang-Huai region and Jiangnan region, and occur intensively in some fields in the Huang-Huai-Hai region.

As of 1 Sept., fall armyworm had occurred in 2.35 million ha (35.31 million mu) in 846 counties in 27 provincial areas this year. Compared with the same period last year, this year the pest occurs in two more provinces, but in 394 fewer counties, yet the occurred area grows by 1.22 million ha (18.34 million mu).

In late Aug. and early Sept., the northern part of North China encountered fall armyworm adult peak. Weather forecast predicted that in Sept., precipitation would be larger than the average in recent years in eastern and central parts of Northwest China and northern part of Southwest China, which provides favourable conditions for migration and breeding of fall armyworms and damages caused by them. However, precipitation in southern Huang-Huai region, Jiang-Huai region, middle & lower reaches of the Yangtze River and Jiangnan region was forecasted lesser than usual, which is unfavourable for the hatching and growing of fall armyworms.

To control fall armyworms on maize, biopesticides formulations are recommended, such as products with active ingredients spinetoram, *Empedobacter brevis*, *Bacillus thuringiensis*. For emergency control in fields where pest density reaches ten per one hundred plants, high-efficacy, less-toxicity insecticide sprays for prevention and control of Noctuidae pests are recommended, such as products with active ingredients chlorantraniliprole, beta-cyfluthrin, and mixture of emamectin benzoate and indoxacarb.







## Import and Export

### Chlorpyrifos exports to Colombia see a big YoY increase in H1 2022

Summary: In H1 2022, chlorpyrifos products from China were mainly exported to Brazil, Pakistan, Colombia, etc. Although the total export volume dropped YoY, export volume to Colombia ballooned. Colombia's share to China's total chlorpyrifos export went up 19.58 percentage points YoY.

According to the import and export data updated on 22 Sept. from Tranalysis, in H1 2022, chlorpyrifos products from China were mainly exported to Brazil, Pakistan, Colombia, etc. The total export volume was 6,278.61 tonnes (actual volume), or 5,140.95 tonnes (100% AI volume) in the first half of 2022, down 34.61% YoY. However, export volume to Colombia rocketed to 1,286.48 tonnes (actual volume), or 1,113.51 tonnes (100% AI volume), which takes up 20.49% of total export, making Colombia the third largest export destination in this period.

The details of China's chlorpyrifos exports in H1 2022 are as follows:

- Specification for export: 94% TC, 95% TC, 97% TC, 400g/L EC, 480g/L EC
- Average export price: USD7.10/kg for TC products and USD4.32/kg for formulation products
- Major exporter: The top 3 exporters, Zhejiang Xinnong Chemical Co., Ltd. (Zhejiang Xinnong), Nanjing Bodao Logistics Co., Ltd. and JAT Offshore S.A.L., exported 2,874.45 tonnes (actual volume) of chlorpyrifos products, making up 45.78% of China's total chlorpyrifos products exported to major destinations.

It is worth noting that in H1 2021, the export to Colombia only stood at 87.28 tonnes (actual volume), or 83.95 tonnes (100% AI volume). Its share to China's total chlorpyrifos export was merely 0.91% then, and the share in H1 2022 jumped by 19.58 percentage points YoY. Zhejiang Xinnong was the main exporter of China's chlorpyrifos to Colombia in H1 2022, with a volume of 1,119.44 tonnes (actual volume), or 1,085.86 tonnes (100% AI volume), and the product exported was 97% TC.



**TABLE 5:** Top 10 exporters of chlorpyrifos products from China, H1 2022 vs H1 2021

No.	H1 2022			H1 2021		
	Exporter	Volume, kg	Share to total	Exporter	Volume, kg	Share to total
1	Zhejiang Xinnong Chemical Co., Ltd.	1,838,869	29.29%	Shandong Weifang Rainbow Chemical Co., Ltd.	875,182	9.12%
2	Nanjing Bodao Logistics Co., Ltd.	554,048	8.82%	Nanjing Bodao Logistics Co., Ltd.	645,572	6.72%
3	JAT Offshore S.A.L.	481,531	7.67%	JAT Offshore S.A.L.	537,516	5.60%
4	Zhejiang Chemicals Import and Export Corp.	370,800	5.91%	Sino-Agri Red Sun Bio-Technology Co., Ltd.	426,433	4.44%
5	Jiangsu Fengshan Group Co., Ltd.	333,750	5.32%	China Jiangsu International Economic and Technical Cooperation Group, Ltd.	289,920	3.02%
6	Shandong Weifang Rainbow Chemical Co., Ltd.	284,997	4.54%	Zhejiang Xinnong Chemical Co., Ltd.	266,291	2.77%
7	Sinochem Agro Co., Ltd.	273,751	4.36%	Vink Corporation DMCC	238,343	2.48%
8	Esaaachem Company	200,832	3.20%	JOC Uniwell Industrial Co., Ltd.	210,905	2.20%
9	Shandong Luba Chemical Co., Ltd.	160,000	2.55%	Hangzhou Yimin Chemical Co., Ltd.	192,394	2.00%
10	Zhuochen Industries (Shanghai) Co., Ltd.	120,000	1.91%	Qingdao Rainbow Chemical Co., Ltd.	190,000	1.98%

*Note: The data, sourced from Tranalysis, were updated on 22 Sept., 2022.*

*Source: Tranalysis*

**TABLE 6:** Export of China's chlorpyrifos products to top 20 destinations, H1 2022 vs H1 2021

No.	H1 2022			H1 2021		
	Destination	Volume, kg	Share to total	Destination	Volume, kg	Share to total
1	Brazil	1,660,000	26.44%	Brazil	1,894,750	19.73%
2	Pakistan	1,324,232	21.09%	Pakistan	1,273,112	13.26%
3	Colombia	1,286,480	20.49%	Peru	845,667	8.81%
4	Nigeria	548,466	8.74%	Nigeria	775,859	8.08%
5	Bangladesh	400,468	6.38%	Indonesia	746,250	7.77%
6	Peru	287,468	4.58%	Argentina	699,360	7.28%
7	India	160,000	2.55%	Mexico	663,500	6.91%
8	The Philippines	140,000	2.23%	The US	436,019	4.54%
9	Australia	88,000	1.40%	Ghana	305,280	3.18%
10	Ecuador	81,676	1.30%	Russia	285,642	2.97%
11	Venezuela	67,520	1.08%	Vietnam	271,000	2.82%
12	Mexico	50,000	0.80%	Bangladesh	246,160	2.56%
13	Kenya	44,021	0.70%	The Philippines	147,000	1.53%
14	Tanzania	23,905	0.38%	Chile	109,989	1.15%
15	Spain	20,000	0.32%	Ecuador	109,505	1.14%
16	Malaysia	19,200	0.31%	Honduras	99,303	1.03%
17	Chile	18,688	0.30%	Colombia	87,280	0.91%
18	Oman	16,000	0.25%	Uzbekistan	82,480	0.86%
19	Singapore	15,840	0.25%	Kenya	77,971	0.81%
20	Uganda	11,648	0.19%	Costa Rica	60,000	0.62%

Note: The data, sourced from Tranalysis, were updated on 22 Sept., 2022.

Source: Tranalysis



## Policy

### Hainan strengthens management of pesticides into the island from 15 Sept.

Summary: On 6 Sept., the Department of Agriculture and Rural Affairs of Hainan Province and the Hainan Provincial Department of Transport issued a notice on strengthening the management of pesticides entering the island province, which informs implementation of a "white list" system on the pesticides starting from 15 Sept.

On 6 Sept., the Department of Agriculture and Rural Affairs of Hainan Province and the Hainan Provincial Department of Transport issued a notice on strengthening the management of pesticides entering the island province, which informs implementation of a "white list" system on the pesticides starting from 15 Sept.

Detailed rules are as follows:

- Only producers that have obtained pesticide production licence issued by Hainan provincial government can transport pesticides technical into the island province either by themselves or by transportation companies to whom they entrust the goods. Carriers with pesticides technical must provide paper or digital waybill (or copy of purchase contract or agreement) issued by the qualified pesticide producers before entering the island.
- Only pesticide operators that have obtained business licence for pesticide wholesaling issued by Hainan provincial government can transport pesticide products into the province either by themselves or by transportation companies to whom they entrust the goods. Carriers with pesticide products must provide paper or digital waybill issued by the qualified pesticide operators before entering the island; the waybill is formulated by Hainan provincial government.
- Only pesticide products that have passed the filing and review via the Hainan Provincial Pesticide Supervision Platform can be sold, stored and applied in Hainan Province.
- If it is necessary to purchase pesticides from outside the island for the purposes of scientific research, promotion and demonstration, etc., the pesticides involved should first be approved by the Department of Agriculture and Rural Affairs of Hainan Province.
- Vehicles carrying pesticides into the island without a qualified pesticide purchase waybill is deemed as a violation of the *Several Provisions of Hainan Special Economic Zone on Pesticide Administration*. Under this circumstance, cross-sea ferry tickets may not be sold to such vehicles.
- Law enforcement division organised by the Department of Agriculture and Rural Affairs of Hainan Province shall dutifully investigate and dispose the pesticides entering the island in violation of the *Several Provisions of Hainan Special Economic Zone on Pesticide Administration*.



**TABLE 7:** List of qualified pesticide producers & operators in Hainan Province, as of early Sept. 2022

Category	No.	Qualified enterprises in Hainan Province
Producer	1	Hainan Jianghe Pesticide & Chemical Co., Ltd.
	2	Hainan Bosswell Agrochemical Co., Ltd.
	3	Hainan Zhengye Zhongnong High-Tech Co., Ltd.
	4	Hainan Neemtech Bio-pesticide Co., Ltd.
	5	Shanghai Jahwa (Hainan) Daily Chemical Co., Ltd.
	6	Hainan Runhe Pesticide Co., Ltd.
	7	Hainan Liege Genetic Engineering Co., Ltd.
	8	Hainan Zhongwei Biotechnology Co., Ltd.
Operator	1	Hainan Zhengye Zhongnong High-Tech Co., Ltd.
	2	Hainan Haiken Agricultural Means Co., Ltd.
	3	Hainan Agricultural Means of Production Group Co., Ltd.
	4	Hainan Zhonghesheng Agriculture Co., Ltd.
	5	Hainan Rundeli Agricultural Means Development Co., Ltd.
	6	Hainan Shennong Technology Co., Ltd.
	7	Hainan Zhizhuangkang Biotechnology Co., Ltd.

Source: Department of Agriculture and Rural Affairs of Hainan Province

**TABLE 8:** List of pesticides prohibited from sale & use in Hainan Special Economic Zone (2021 revised version)

Level of prohibition	Active ingredient
Active ingredients in pesticides prohibited from production, transportation, storage, sale and use	HCH, DDT, camphechlor, dibromochloropropane, chlordimeform, ethylene dibromide, nitrofen, aldrin, dieldrin, mercury compounds, arsenic, lead, fluoroacetamide, gliflor, tetramine, sodium fluoroacetate, silatrane, methamidophos, parathion, parathion-methyl, monocrotophos, phosphamidon, phorate, omethoate, isocarbophos, terbufos, phospholan-methyl, sulfotep (except sulfotep-containing organophosphorus pesticides with amount below upper limit allowed by related standards), isofenphos-methyl, demeton, aldicarb, carbofuran, methomyl, ethoprophos, phosfolan, coumaphos, fonofos, isazofos, fenamiphos, methidathion, endosulfan, pentachlorophenol, chlordane, mirex, methyl bromide, aluminium phosphide, zine phosphide, calcium phosphide, magnesium phosphide, cadusafos, Bis-ADTA, hexachlorobenzene, carbosulfan, dimethoate, fipronil, acephate, chlorsulfuron, asomate, urbacide, metsulfuron-methyl, ethametsulfuron-methyl, dicofol, lindane, sulfluramid, paraquat, 2,4-D butylate, octachlorodipropyl ether and chloropicrin
Active ingredients in pesticides prohibited from sale and use	Fenvalerate, daminozide, chlorpyrifos, triazophos and flubendiamide

Source: Department of Agriculture and Rural Affairs of Hainan Province



## Registration

### ICAMA releases 14 newly-registered insecticides in Sept.

Summary: In Sept. 2022, ICAMA approved 14 newly-registered insecticide products, including a hygienic insecticide product.

In Sept. 2022, the Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs of the People's Republic of China (ICAMA) approved registration of 14 insecticide products, including a hygienic insecticide product. These products are applicable on cabbage, citrus trees, tomato, etc.; their control targets are diamondback moth, phylloxera, beet armyworm, etc. Popular active ingredients used in these products include spirotetramat, lufenuron, clothianidin and abamectin-aminomethyl.

There are two spirotetramat formulations approved registration this month: the spirotetramat SL (export to Colombia only) from Jiangsu Yunfan Chemical Co., Ltd. and the spirotetramat-thiacloprid SC from Yifan Biotechnology Group Co., Ltd.

**TABLE 9:** Toxicity of newly-registered insecticides in China, 18 Aug.–14 Sept., 2022

No.	Toxicity	Number
1	Low	10
2	Mild	2
3	Moderate	2
<b>Total</b>		<b>14</b>

Source:ICAMA

**TABLE 10:** Forms of newly-registered insecticides in China, 18 Aug.–14 Sept., 2022

No.	Form	Number
1	SC	7
2	WG	2
3	SG	2
4	EC	1
5	OD	1
6	SL	1
<b>Total</b>		<b>14</b>

Source:ICAMA

**TABLE 11:** Applicable crop or applied site of the newly-registered insecticides in China, 18 Aug.–14 Sept., 2022

No.	Crop/Site	Number
1	Cabbage	3
2	Citrus tree, rice, cabbage, tomato (protected area), apple tree, pepper (protected area)	1
3	Indoor	1
4	Leek	1
5	Tea tree	1
6	Tomato	1
7	Citrus tree	1
<b>Total</b>		<b>9</b>

Note: Five products are applied without specified applicable crop or applied site.

Source: ICAMA

**TABLE 12:** Control target of the newly-registered insecticides in China, 18 Aug.–14 Sept., 2022

No.	Control target	Number
1	Diamondback moth	2
2	Phylloxera	1
3	Empoasca pirusuga	1
4	Beet armyworm	1
5	<i>Chilo suppressalis</i> , peach fruit moth, cotton bollworm, <i>Lyonetiidae</i> moths, tobacco budworm, beet armyworm, rice leaf roller	1
6	<i>Bemisia tabaci</i>	1
7	Cockroach	1
8	Chinese chive maggot	1
总计		<b>9</b>

Note: Five products are applied without specified control target.

Source: ICAMA



TABLE 13: Registrant of the newly-registered insecticides in China, 18 Aug.–14 Sept., 2022

No.	Registrant	Number
1	Bayer CropScience (China) Co., Ltd.	1
2	Chengdu Kelilong Biochemistry Co., Ltd.	1
3	Yixing Xingnong Chemical Products Co., Ltd.	1
4	Jiangsu Yunfan Chemical Co., Ltd.	1
5	Ningbo Sunjoy Agrosience Co., Ltd.	1
6	Qingdao Rainbow Chemical Co., Ltd.	1
7	Shandong Binnong Technology Co., Ltd.	1
8	Shandong Lukang Biological Pesticides Co., Ltd.	1
9	Shandong Weifang Rainbow Chemical Co., Ltd.	1
10	Shandong Yuanfeng Biotechnology Co., Ltd.	1
11	Shaanxi Yitianfeng Crop Science Co., Ltd.	1
12	Xuchang Jian'an Changsheng Daily Chemical Co., Ltd.	1
13	Yifan Biotechnology Group Co., Ltd.	1
14	Yucheng Agro-unitek Biotechnology Co., Ltd.	1
<b>Total</b>		<b>14</b>

Source:ICAMA



**TABLE 14:** Active ingredient & content of the newly-registered insecticides in China, 18 Aug.–14 Sept., 2022

No.	Active ingredient & content	Number
1	0.4% Abamectin-aminomethyl·1.8% Bacillus thuringiensis (calculated with toxin protein)	1
2	10% Flufenoxuron	1
3	11% Thiacloprid·11% spirotetramat	1
4	15% Clothianidin·5% cyromazine	1
5	15% Lufenuron	1
6	15% Tolfenpyrad·5% lufenuron	1
7	150g/L Spirotetramat	1
8	16% Clothianidin	1
9	18% D-limonene	1
10	200g/L Tetraniliprole	1
11	26.4% Abamectin-aminomethyl	1
12	27g/L Bifenthrin	1
13	40% Dinotefuran	1
14	50% Buprofezin	1
<b>Total</b>		<b>14</b>

Source: ICAMA

## News in Brief

**Sichuan Guoguang's two subsidiaries back to normal production**

On 29 Aug., Sichuan Guoguang Agrochemical Co., Ltd. (Sichuan Guoguang) announced production resumption in two subsidiaries after power supply got back to normal in Sichuan and Chongqing area. Previously, Sichuan Guoguang notified production suspension in its wholly-owned subsidiary Sichuan Run'er Technology Co., Ltd., located in Jianyang City, Sichuan Province, from 15 Aug. to 25 Aug., and in the wholly-owned subsidiary Chongqing Yi'er Shuangfeng Technology Co., Ltd., located in Chongqing Municipality, from 17 Aug. to 24 Aug.

**Anhui Zhongbei to build capacity for insecticide formulations**

On 29 Aug., local authorities made public the information on Anhui Zhongbei Biotechnology Co., Ltd. (Anhui Zhongbei)'s high-efficacy biopesticide project before final approval. Anhui Zhongbei plans to set up four new production workshops, supporting utility facilities, warehouses and environmental protection equipment in the Fine Chemical High-tech Industrial Base, Bengbu City, Anhui Province.

**TABLE 15:** Planned products and their capacity of Anhui Zhongbei's high-efficacy biopesticide project

Category	Product	Capacity, t/a
Insecticides	Azadirachtin 0.3% EC	3,000
	Acetamiprid 70% DF	2,000
	Spirotetramat 22.4g/L SC	1,500
	Petroleum oil 38% ME	1,000
	Lufenuron 5% EW	1,000
	Emamectin benzoate 5.7% WG	1,000
Herbicides	Clopyralid 30% AS	2,000
	Diuron 800g/L SC	1,500
	Glyphosate 68% SGX	1,000

Source: Environmental impact report of the project

**Seven chemical producers along rivers in Hunan have to shut before end of Oct.**

On 30 Aug., the Industry and Information Technology Department of Hunan Province and other two departments jointly announced the list of chemical producers within 1-km range along the mainstream and major tributaries of the Yangtze River Hunan Section (hereafter referred to as chemical producers along rivers) that had been approved of name change or of modification to type of transformation. The government examined and approved that five chemical producers may change company name and seven chemical producers may adjust



from relocation to shutdown. All the twelve companies have been ordered to relocation or transformation in the previous three-batch releases. At the same time, the fourth-batch list of chemical producers along rivers to relocate or transform was released, which had Cili Donglai Biotechnology Co., Ltd. (Cili Donglai) added into the list.

The seven producers allowed adjustment to shutdown should finish the work by the end of Oct. 2022. They are Zhuzhou Huaxing Chemical Co., Ltd., Hunan Dale Chemical Industry Co., Ltd., Yueyang Fangzhen Environmental Protection Technology Co., Ltd., Yueyang Xingsheng Compound Fertiliser Co., Ltd., Shaoyang Cailian Pigment Co., Ltd., Changde Yuda Alkali Halide Chemical Co., Ltd. and Hunan Hanjingrui Amino Acid Co., Ltd. And the newly-added Cili Donglai, which was encouraged to relocate, should move into a recognised chemical industrial park. It should carefully work out its relocation plan and finish the work as scheduled.

### **MARA revokes registration certificates with 4 organophosphorus insecticidal AIs from 1 Sept.**

From 1 Sept. 2022, the Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) has revoked pesticide registration involving four organophosphorus insecticidal active ingredients (AI)—phorate, isofenphos-methyl, isocarbophos and ethoprophos. Production of pesticide technical & formulation products containing these AIs is prohibited. So far, no valid registration with these four AIs could be found at the website of the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA). Such products that are legally produced before the set date can be sold and applied before their expiry dates; the sale and application will be banned from 1 Sept., 2024.

### **Hunan Haili's 3kt/a pirimiphos-methyl line to go into production in H2 2023**

On 7 Sept., Hunan Haili Chemical Industry Co., Ltd. (Hunan Haili) announced that construction of the 3,000 t/a pirimiphos-methyl project undertaken by its subsidiary Haili Guixi Chemical Pesticide Co., Ltd. had been progressing well and it expected that the line would be put into production in H2 2023. Besides, some production equipment in Ningxia Haili Technology Co., Ltd. may have gone into operation by the end of 2023; the subsidiary is now pushing ahead with the 5,000 t/a thiophanate-methyl, 4,000 t/a carbaryl and other pesticides with supporting 30,000 t/a phosgene project.

Regarding the impact of the COVID-19 resurgence on its business and performance, Hunan Haili revealed that logistics had been somewhat obstructed due to quarantine, traffic control and other COVID-19 control measures.

### **Qixiang Tengda's suspension may impact supply of some insecticidal raw materials**

On 7 Sept., a fire broke out in the northern part of Zibo Qixiang Tengda Chemical Co., Ltd. (Qixiang Tengda)'s plant. It was said that a feed pump of isobutane had the material leaked, which caused the fire. It was then effectively controlled after related equipment was brought to an emergency shutdown.

The accident may impact the supply of some insecticidal upstream raw materials, since Qixiang Tengda has capacity of 200,000 t/a maleic anhydride, 62,000 t/a tert-butanol, 30,000 t/a isobutylene, etc. Maleic anhydride is used for the synthesis of intermediates for organophosphorus insecticides malathion and pyridaphenthione, and pyrethroid insecticide tetramethrin, etc. Isobutylene is mainly used







for the synthesis of organophosphorus insecticide terbufos, pyrethroid insecticide permethrin and acaricide pyridaben. As to tert-butanol, it is a key intermediate for insecticides buprofezin, Yishijing (Cas No: 112225-87-3) and tebufenozide, and for acaricide pyridaben, etc. Its derivative sodium tert-butoxide is widely used in cyclisation reaction of pyrethroid insecticide synthesis.

### **Jiangxi Huihe's spirotetramat TC production line under acceptance check**

In Sept., CCM learned from Jiangxi Huihe Chemical Co., Ltd. (Jiangxi Huihe) that its 300 t/a spirotetramat TC production line may be put into production in Nov. 2022. The construction has completed and the line came into acceptance check recently. Jiangxi Huihe, a wholly-owned subsidiary and an important production base of Jiangxi Zhengbang Crop Protection Co., Ltd. (Jiangxi Zhengbang), is located in Xinghuo Industrial Park, Yongxiu Yunshan Economic Development Zone, Jiujiang City, Jiangxi Province.

Currently, there are not many spirotetramat TC producers in China. A leading player is Hebei Lansheng Biotech Co., Ltd. with 500 t/a production capacity. It is worth noting that several producers have planned to build capacity for spirotetramat TC, including Jiangsu Flag Chemical Industry Co., Ltd., Hebei Xingbai Pharmaceutical Group Co., Ltd. and Jiangsu Jiannong ABA Agrochemical Co., Ltd.

### **Identification of chemical parks in YEB to finish before the end of 2023**

On 8 Sept., the Ministry of Ecology and Environment and other 16 departments jointly issued the *Action Plan for Winning the Uphill Battle for Conservation and Restoration of the Yangtze River*. It requires that identification of all chemical parks in the Yangtze River Economic Belt (YEB) shall be finished before the end of 2023. By the end of 2025, sources of pollution from chemical industry along mainstream and tributaries of the Yangtze River shall be basically put under control, the use efficiency of chemical fertilisers and pesticides on major crops shall reach more than 43%, and at least 85% of agricultural films shall be recycled.

To beef up comprehensive management of phosphorus pollution, the Plan calls for stringent investigation and rectification of the "three phospho-s" enterprises (involved in phosphate ore mining, phosphorus chemical production and phosphogypsum stacking) in YEB. Supervision of key industries in key regions shall be strengthened, stable and up-to-standard discharge be promoted in enterprises involved in phosphate ore mining and phosphorus chemical production, and comprehensive utilisation of phosphogypsum be improved. Provincial governments in YEB should compile province-specific total phosphorus pollution control plans. And for provinces such as Hubei and Guizhou, where phosphate ore mining and phosphate fertiliser production are concentrated, stricter total phosphorus discharge control targets should be set.

### **Gansu Runtaihe to build 10kt/a mercaptan series products**

In Sept., some details of Gansu Runtaihe Science and Technology Co., Ltd. (Gansu Runtaihe)'s 10,000 t/a mercaptan series products were released. Gansu Runtaihe plans to build capacity of 6,000 t/a ethanethiol, 2,000 t/a butanethiol and 2,000 t/a 1-mercaptioctane in Liugou Coal Chemical Industry Park, Guazhou County, Jiuquan City, Gansu Province. The planned product ethanethiol is a clear and colourless liquid, which is used as an odorant in natural gas and coal gas. Besides, ethanethiol plays an important role in the production of pesticides such as clethodim TC, phorate TC, disulfoton TC and demeton TC.





### Anhui BPI Chemicals' lufenuron TC line comes into trial production

On 21 Sept., Zhejiang Jianfeng Group Co., Ltd. replied on an interaction platform for investors that its subsidiaries Anhui Biocompounds Pharmaceutical Co., Ltd. and Anhui Biocompounds Chemicals Co., Ltd. (Anhui BPI Chemicals) were carrying out technical transformation to build themselves into comprehensive R&D and production bases for active pharmaceutical ingredients (API), intermediates and pesticides, and promoting integrated production of APIs and formulation products. It also revealed that Anhui BPI Chemicals' lufenuron TC & its intermediate lines (in the workshop 205) had come into trial production recently.



Price Update

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

TABLE 16: Ex-works prices of major insecticides in China, 8 Sept., 2022

Product	20220808		20220908	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	595,000	88,191.26	590,000	85,729.65
97% Acephate technical	58,000	8,596.8	58,000	8,427.66
95% Acetamiprid technical	150,000	22,233.09	144,500	20,996.5
95% Azocyclotin technical	220,000	32,608.53	210,000	30,513.94
95% Beta-Cypermethrin technical	166,400	24,663.91	166,400	24,178.67
97% Bifenthrin technical	280,000	41,501.77	275,000	39,958.73
95% Buprofezin technical	78,000	11,561.21	75,000	10,897.84
98% Carbofuran technical	115,000	17,045.37	115,000	16,710.02
98% Chlorfenapyr technical	321,000	47,578.82	321,000	46,642.74
95% Chlorfluazuron technical	485,000	71,887	485,000	70,472.68
95% Chlorpyrifos technical	53,000	7,855.69	53,500	7,773.79
94% Cypermethrin technical	83,000	12,302.31	83,000	12,060.27
99% Cyromazine technical	156,000	23,122.42	160,000	23,248.72
98% Deltamethrin technical	550,000	81,521.34	530,000	77,011.38
95% Diafenthiuron technical	145,000	21,491.99	145,000	21,069.15
98% Dimethoate technical	47,600	7,055.3	47,600	6,916.49
70% Emamectin benzoate technical	577,500	85,597.4	574,000	83,404.77
92% Fenvalerate technical	140,000	20,750.89	140,000	20,342.63
95% Fipronil technical	565,000	83,744.65	565,000	82,097.03
98% Hexaflumuron technical	530,000	78,556.92	530,000	77,011.38



97% Imidacloprid technical	157,500	23,344.75	157,500	22,885.46
98% Isoprocarb technical	44,000	6,521.71	44,000	6,393.4
95% Lambda-cyhalothrin technical	203,000	30,088.78	198,000	28,770.29
90% Malathion technical	36,000	5,335.94	37,000	5,376.27
95% Methidathion technical	90,000	13,339.86	90,000	13,077.4
Methomyl 90% SP	75,000	11,116.55	75,000	10,897.84
98% Methomyl technical	86,000	12,746.97	86,000	12,496.19
75% Omethoate technical	51,400	7,618.54	51,400	7,468.65
90% Phoxim technical	43,000	6,373.49	43,000	6,248.09
90% Profenofos technical	82,665	12,252.66	82,665	12,011.6
90% Propargite technical	58,000	8,596.8	60,000	8,718.27
95% Pymetrozine technical	146,500	21,714.32	144,300	20,967.44
95% Pyridaben technical	105,000	15,563.16	104,000	15,111.67
97% Spirodiclofen technical	167,000	24,752.84	165,000	23,975.24
85% Triazophos technical	58,500	8,670.91	58,500	8,500.31

Note: Ex-works price includes VAT.

Source: CCM

### Shanghai Port prices of major insecticides in China, 8 Sept. 2022





TABLE 17: Shanghai Port prices of major insecticides in China, 8 Sept., 2022

Product	20220808		20220908	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	595,500	88,265.37	590,500	85,802.3
97% Acephate technical	58,500	8,670.91	58,500	8,500.31
95% Acetamiprid technical	150,500	22,307.2	145,000	21,069.15
95% Azocyclotin technical	220,500	32,682.64	210,500	30,586.59
95% Beta-Cypermethrin technical	166,900	24,738.02	166,900	24,251.32
97% Bifenthrin technical	280,500	41,575.88	275,500	40,031.39
95% Buprofezin technical	78,500	11,635.32	75,500	10,970.49
98% Carbofuran technical	115,500	17,119.48	115,500	16,782.67
98% Chlorfenapyr technical	321,500	47,652.93	321,500	46,715.39
95% Chlorfluazuron technical	485,500	71,961.11	485,500	70,545.33
95% Chlorpyrifos technical	53,500	7,929.8	54,000	7,846.44
94% Cypermethrin technical	83,500	12,376.42	83,500	12,132.92
99% Cyromazine technical	156,500	23,196.53	160,500	23,321.37
98% Deltamethrin technical	550,500	81,595.45	530,500	77,084.03
95% Diafenthiuron technical	145,500	21,566.1	145,500	21,141.8
98% Dimethoate technical	48,100	7,129.41	48,100	6,989.15
70% Emamectin benzoate technical	578,000	85,671.51	574,500	83,477.43
92% Fenvalerate technical	140,500	20,825	140,500	20,415.28
95% Fipronil technical	565,500	83,818.76	565,500	82,169.69
98% Hexaflumuron technical	530,500	78,631.03	530,500	77,084.03
97% Imidacloprid technical	158,000	23,418.86	158,000	22,958.11
98% Isoprocarb technical	44,500	6,595.82	44,500	6,466.05





95% Lambda-cyhalothrin technical	203,500	30,162.89	198,500	28,842.94
90% Malathion technical	36,500	5,410.05	37,500	5,448.92
95% Methidathion technical	90,500	13,413.97	90,500	13,150.06
Methomyl 90% SP	75,500	11,190.66	75,500	10,970.49
98% Methomyl technical	86,500	12,821.08	86,500	12,568.84
75% Omethoate technical	51,900	7,692.65	51,900	7,541.3
90% Phoxim technical	43,500	6,447.6	43,500	6,320.75
90% Profenofos technical	83,165	12,326.77	83,165	12,084.25
90% Propargite technical	58,500	8,670.91	60,500	8,790.92
95% Pymetrozine technical	147,000	21,788.43	144,800	21,040.09
95% Pyridaben technical	105,500	15,637.27	104,500	15,184.32
97% Spirodiclofen technical	167,500	24,826.95	165,500	24,047.89
85% Triazophos technical	59,000	8,745.02	59,000	8,572.96

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 Sept. 2022







TABLE 18: FOB Shanghai prices of major insecticides in China, 8 Sept., 2022, USD/t

Product	20220808	20220908
95% Abamectin technical	85,921.1	83,524.14
97% Acephate technical	8,221.36	8,059.62
95% Acetamiprid technical	21,778.29	20,572.64
95% Azocyclotin technical	31,868.17	29,828.13
95% Beta-Cypermethrin technical	23,293.17	22,834.9
97% Bifenthrin technical	39,087.98	37,637.44
95% Buprofezin technical	11,400.12	10,751.92
98% Carbofuran technical	16,733.35	16,404.13
98% Chlorfenapyr technical	46,426.42	45,513.02
95% Chlorfluazuron technical	70,065.57	68,687.08
95% Chlorpyrifos technical	7,796.59	7,713.86
94% Cypermethrin technical	11,697.33	11,467.2
99% Cyromazine technical	21,847.17	21,962.55
98% Deltamethrin technical	76,628.46	72,394.78
95% Diafenthiuron technical	20,317.74	19,918
98% Dimethoate technical	6,775.36	6,642.06
70% Emamectin benzoate technical	83,398.63	81,263.25
92% Fenvalerate technical	19,622.55	19,236.49
95% Fipronil technical	81,596.86	79,991.51
98% Hexaflumuron technical	76,551.92	75,045.82
97% Imidacloprid technical	22,859.34	22,409.6
98% Isoprocarb technical	6,274.82	6,151.37
95% Lambda-cyhalothrin technical	28,381.99	27,142.08





90% Malathion technical	5,162.51	5,197.25
95% Methidathion technical	13,129.82	12,871.5
Methomyl 90% SP	10,967.7	10,751.92
98% Methomyl technical	13,668.9	13,399.98
75% Omethoate technical	7,303.71	7,160.01
90% Phoxim technical	6,315.14	6,190.9
90% Profenofos technical	11,650.76	11,421.54
90% Propargite technical	8,517.3	8,632.34
95% Pymetrozine technical	20,526.3	19,822.59
95% Pyridaben technical	15,291.93	14,849.77
97% Spirodiclofen technical	23,376.59	22,644.07
85% Triazophos technical	8,589.37	8,420.38

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

Source:CCM



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