AGRICULTURE
STRONGER THAN THE STORM

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China's Pesticide Strategy Outlook:
Choosing Between Difficulties

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Vice President of SPM Biosciences (Beijing) Inc.

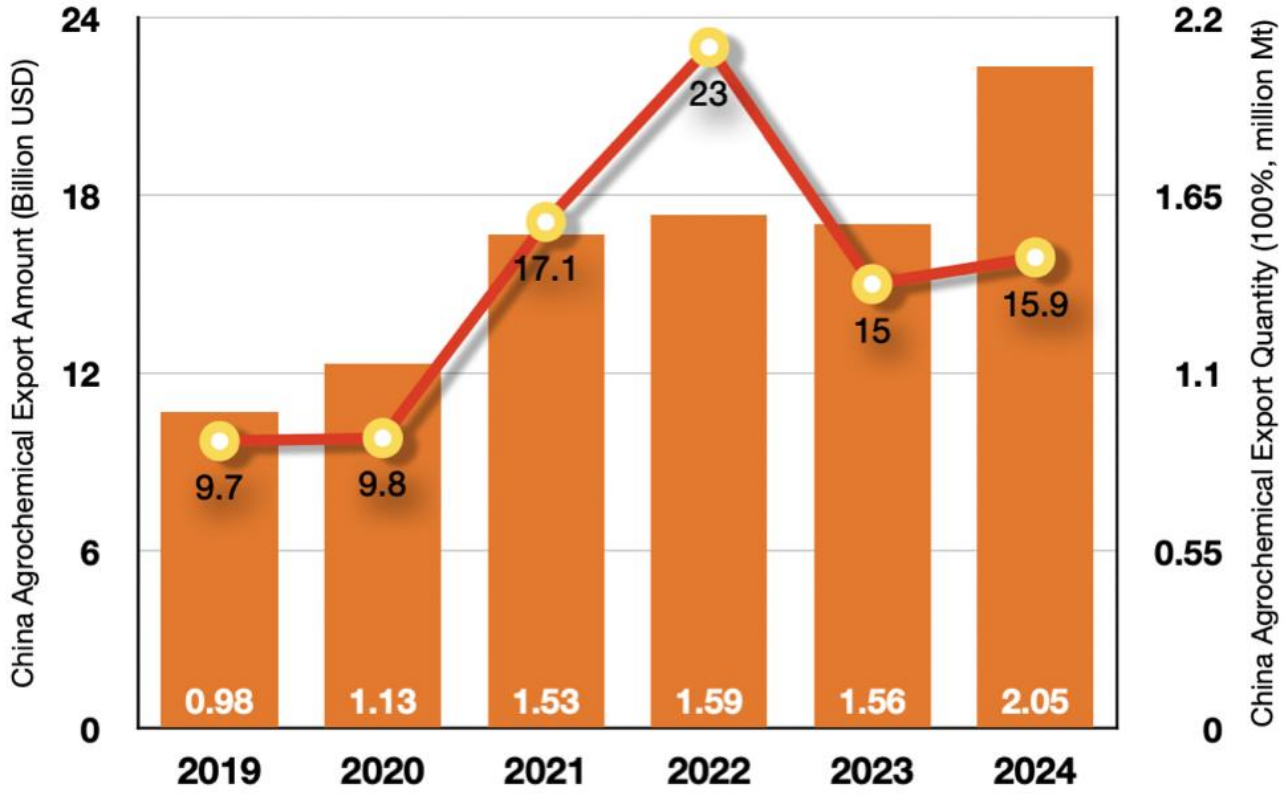
2025 ADJUVANTS, INERTS & CROP PROTECTION CONFERENCE

cpda

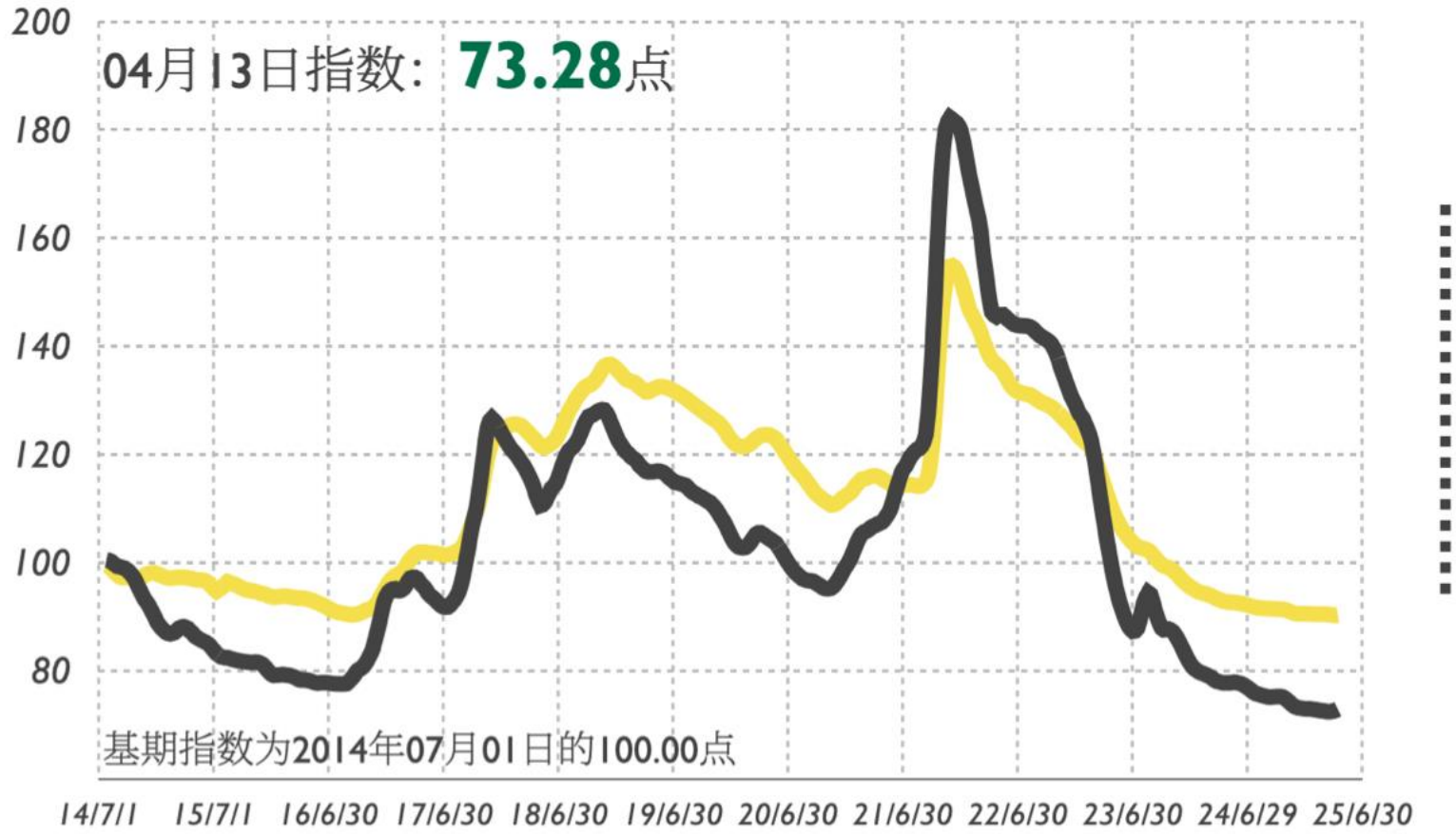
Structure Adjustment of China Agrochemical Industry

Strong Pesticide Exports But Meager Profits in 2024

China's total pesticide product exports increased by 31.41% YOY2023, but the total export value increased by only 6% YOY 2023!



China Agrochemical Price Index by SinoAgri



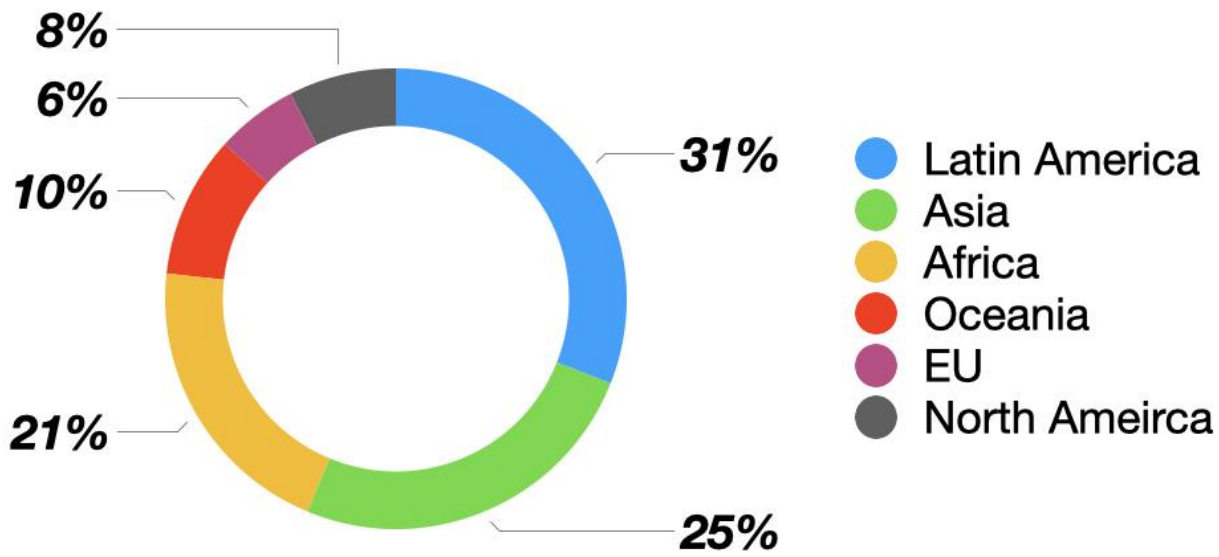
- **Herbicide** prices continue to decline, diquat TC due to the shortage of upstream bromine led to price increases;
- **Fungicide** prices remain stable downward;
- **Insecticide** prices rose due to the low start rate like CTPR, abamectin, etc.

Export as Majority of China Agrochemical Sales

85%

of pesticide products produced in China are exported

2024 China Pesticide Export Destinations (% Quantity)



Key Partners of China Agrochemical Export

Brazil's export volume accounted for 17.59% of China's pesticide product exports, and the export value accounted for 36.91%.

The United States is the third largest single market for China's pesticide exports, accounting for 5.8% of the export volume and 5.06% of the export value.

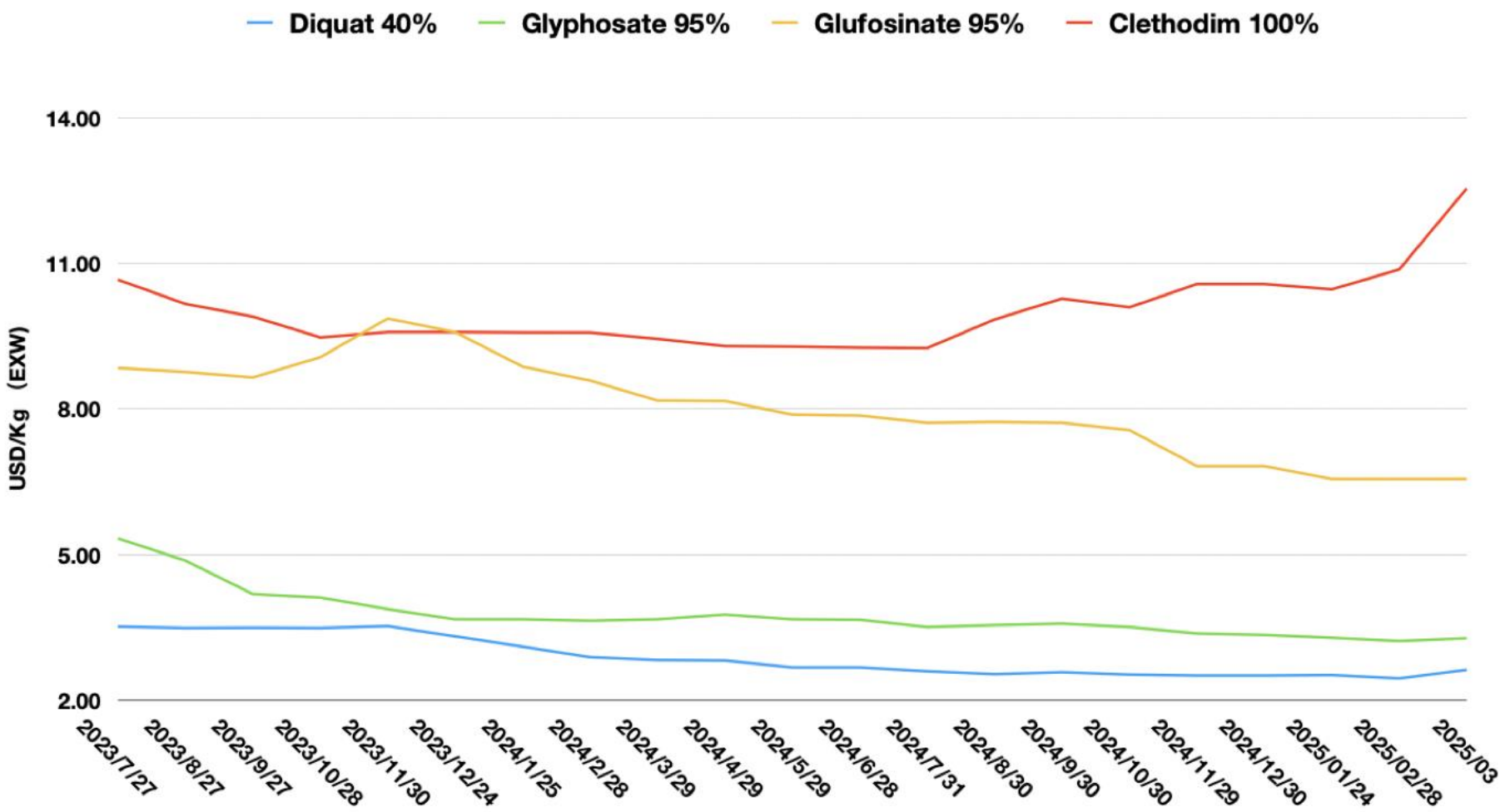
Struggling: 2024 Earning Preview of China Listed Agrochemical Companies

Company	2024 Net Profit Attributable to Equity Holders of the Company (million USD)	YOY 2023	Weighted Average Return on Net Assets (%) Until Q3	YOY 2023
Noposion	70.42 to 84.51	137.66% to 163.13%	12.17%	4.93%
NeoAgri	7.32 to 8.45	304.93% to 336.46%	6.39%	4.5%
Hailir	28.17	-57.73%	5.65%	-7.88%
Huilong	20.83 to 26.46	93.23% to 145.5%	4.99%	1.71%
RedSun	64.79 to 91.55	218.22% to 267.05%	2.65%	0.82%
Lier	26.76 to 30.98	-68.54% to -63.57%	1.75%	-5.94%
Flagchem	1.41 to 2.11	-94.78% to -92.17%	1.22%	-8.48%
Hebang Bio	4.2 to 5.6	-97.66% to -96.88%	1.16%	-4.07%
Changqing	-14.08 to -11.26	-236.77% to -209.42%	0.96%	-2.63%
LianheTech	12.67 to 19.01	119.34% to 129.02%	0.51%	1.60%
Suli	-1.69 to -1.13	-159.77% to -139.85%	0.35%	-1.05%
ABA	-37.32 to -26.06	-222.02% to -124.80%	-2.49%	-5.66%
Yongtai Tech	-67.61 to -50.70	22.55% to 41.91%	-2.87%	0.13%
Nutrichem	-84.51 to -70.42	-727.07% to -622.56%	-3.79%	2.49%
SinoAgri Union	-19.15 to -15.49	29.34% to 42.85	-3.87%	1.62%

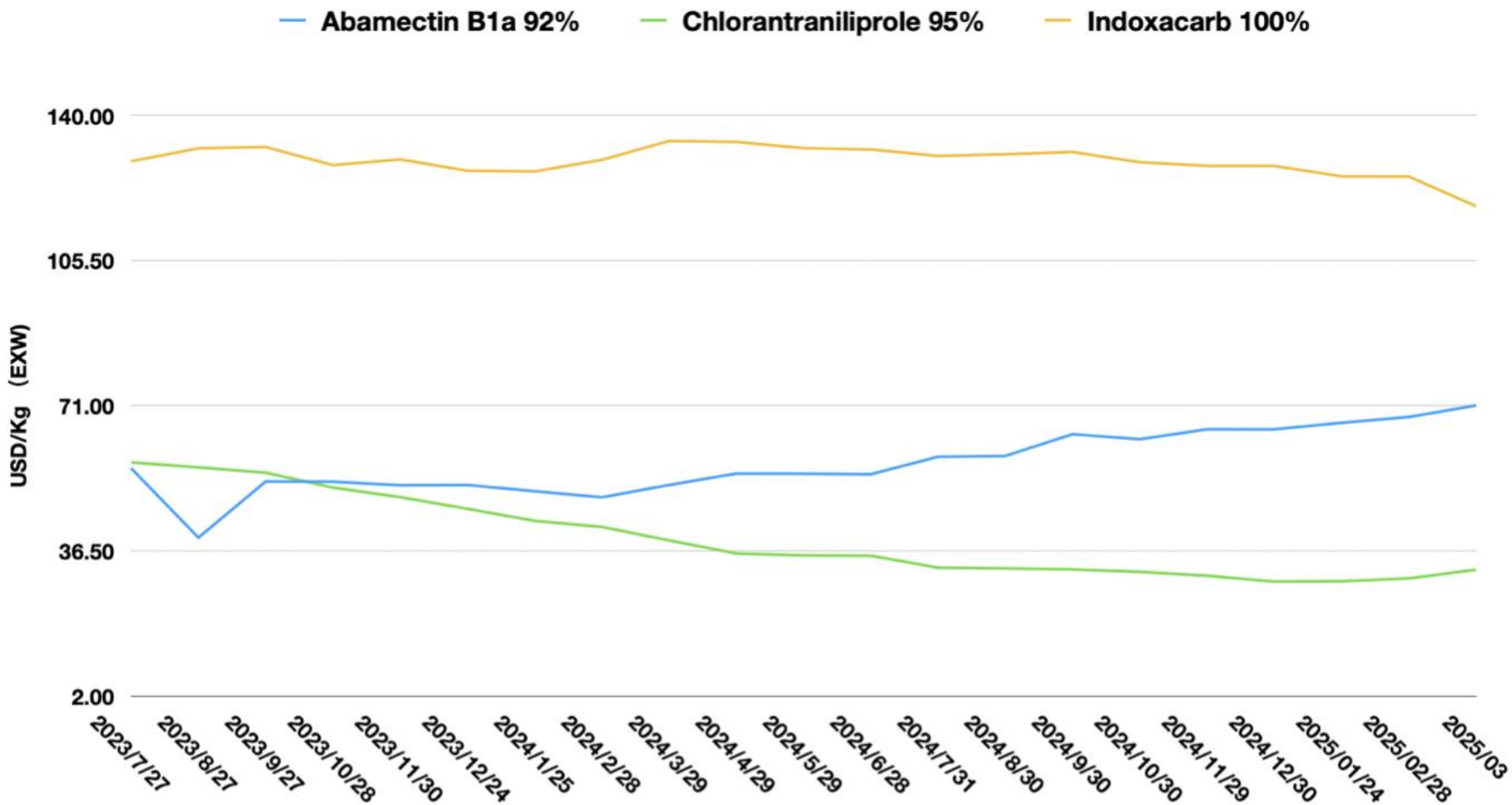
Over Capacity Comes from Asset Mismatches

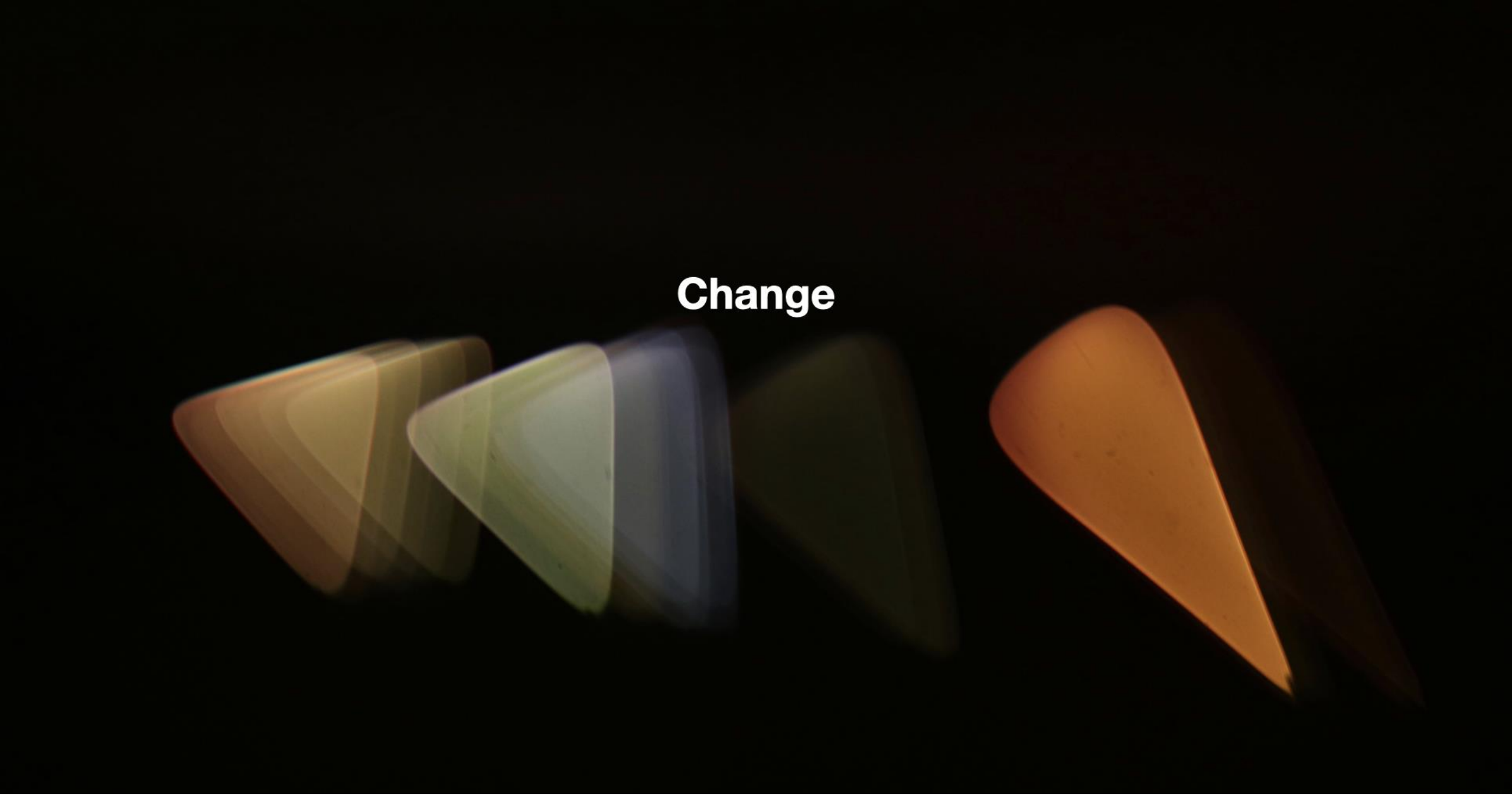
Manufacturers	Pyroxasulfone Capacity (Mt/a)
Seven Continent (Jining)	5,000
Hubei Shengkang (Greatchem)	2,000
Jingbo	2,000
Zhanhua Guochang (Binnong)	2,000
Rainbow	Future 2,000
Anhui Ningyitai (Flag Chem)	1,200
Gansu Huashi (Beijing Purpana)	1,000
Yifan	1,000
Inner Mongulia Zhong Gao	1,000
Zhanhua Yonghao Pharm	1,000
Jiangsu Fuding Chemical	800
Jiuyi	600
Hebi Bao Rui De Chemical (Kingtai Chemicals Co., Ltd)	500
Shandong Cheng Hui	500
Chengxin	N/A
CAC Nantong	N/A
Total	**18,600 to 20,600**

Price Trend: Shortage of Upstream Intermediate Drive Price Up



Price Trend: Low Operation Push Up Insecticide Price




Change

Guidance for Industry Structure Adjustment

According to the “Guidance Catalog for Industrial Structure Adjustment (2024)” issued by the China Development and Reform Commission (DRC), the Chinese government will take measures to restrict new construction of the following pesticide products.

Restricted products:

Glyphosate, chloropyrifos, triazophos, paraquat, chlorothalonil, abamectin, imidacloprid, acetochlor, chloropicrin, alachlor, 2,4-D, acetamiprid, thiamethoxam, atrazine, butachlor, MCPA, ametryn, dicamba, diqua, glufosinate, clethodim, mancozeb, trichlorfon, triadimenol, propiconazol, iprodione, paclobutrazol, lime sulfur.

Full Industry Value Chain Investment

Ranking of China Capacity Investment in 2024

Ranking	Portfolios	EXW Pricing (USD/Kg)	Underlying Logic of Investment.
1	cyantraniliprole	-	Replace chlorantraniliprole; The industrial layout in China has just begun, presenting early stage market opportunity.
2	pyroxasulfone	49.29	Gradually replace acetochlor, metolachlor, and S-metolachlor; relatively high market prices.
3	trifloxystrobin	37.56	It has reasonable profits and mix with fluopyram.
4	flumioxazin	25.04	Control pernicious weeds and conduct resistance management; mix with pyroxasulfone.
5	fluroxypyr-meptyl	11.26	Matura stage of life cycle for cash flow; economy of scale.
6	prothioconazole	18.73	Key and effective AI for controlling soybean rust in Brazil, and it commands a relatively high market price overseas.
7	fluopyram	78.88	The brand value of the Bayer's "Luna" series; mix trifloxystrobin.
8	indoxacarb	127.98	Higher margin
9	tembotrione	41.73	Cover America market
10	boscalid	52.86	Higher margin and economy of scale

Top Products which China Focus On

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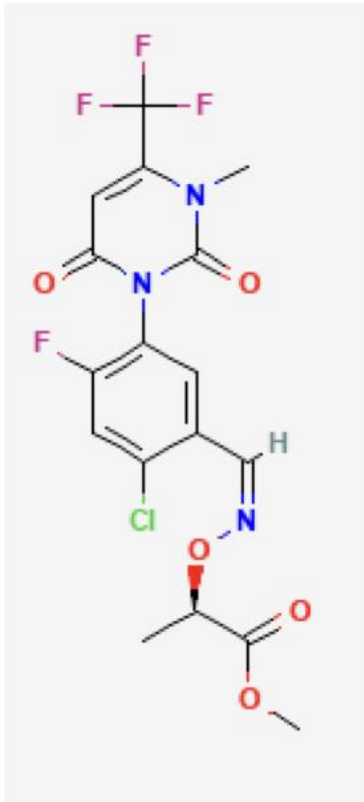
Nufarm and KingAgroot Partner on New Herbicide

KingAgroot

Nufarm



flufenoximacil

Strategic Cooperation between Limin Subsidiary and BASF

Focus on AI + innovative molecule discovery

innopodium®
德彦智创

BASF

Qilu Pharm Launch Spinetoram Portfolio in China

齐鲁制药
QILU PHARMACEUTICAL

Spinetoram TC:
Innovative process without patent infringement

Future US registration: fluxapyroxad, fluopyram

Shinehigh Innovation: Innovation Extends from Cosmetics/Pharmas to Crop Protection

L'ORÉAL GROUPE

Press Releases / Research and Innovation / L'ORÉAL ANNOUNCES ITS INVESTMENT IN "SHINEHIGH INNOVATION"

L'ORÉAL ANNOUNCES ITS INVESTMENT IN "SHINEHIGH INNOVATION"

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22.09.2023 - Research and Innovation

L'Oréal Announces its Investment in "SHINEHIGH INNOVATION"

First open innovation investment in China by Meicifang

ADVANCED FUNCTIONAL MATERIALS

Research Article

A Novel Salicylic Rice Safener Fulfilled through Supramolecular Capsulation

Xile Deng, Yong Zhang, Yanan Deng, Jichuan Zhang, Yajun Peng, Tianqi Liu, Zhichao Dong, Jiaheng Zhang, Lianyang Bai

First published: 23 February 2025 | https://doi.org/10.1002/adfm.202422664

Read the full text > PDF TOOLS SHARE

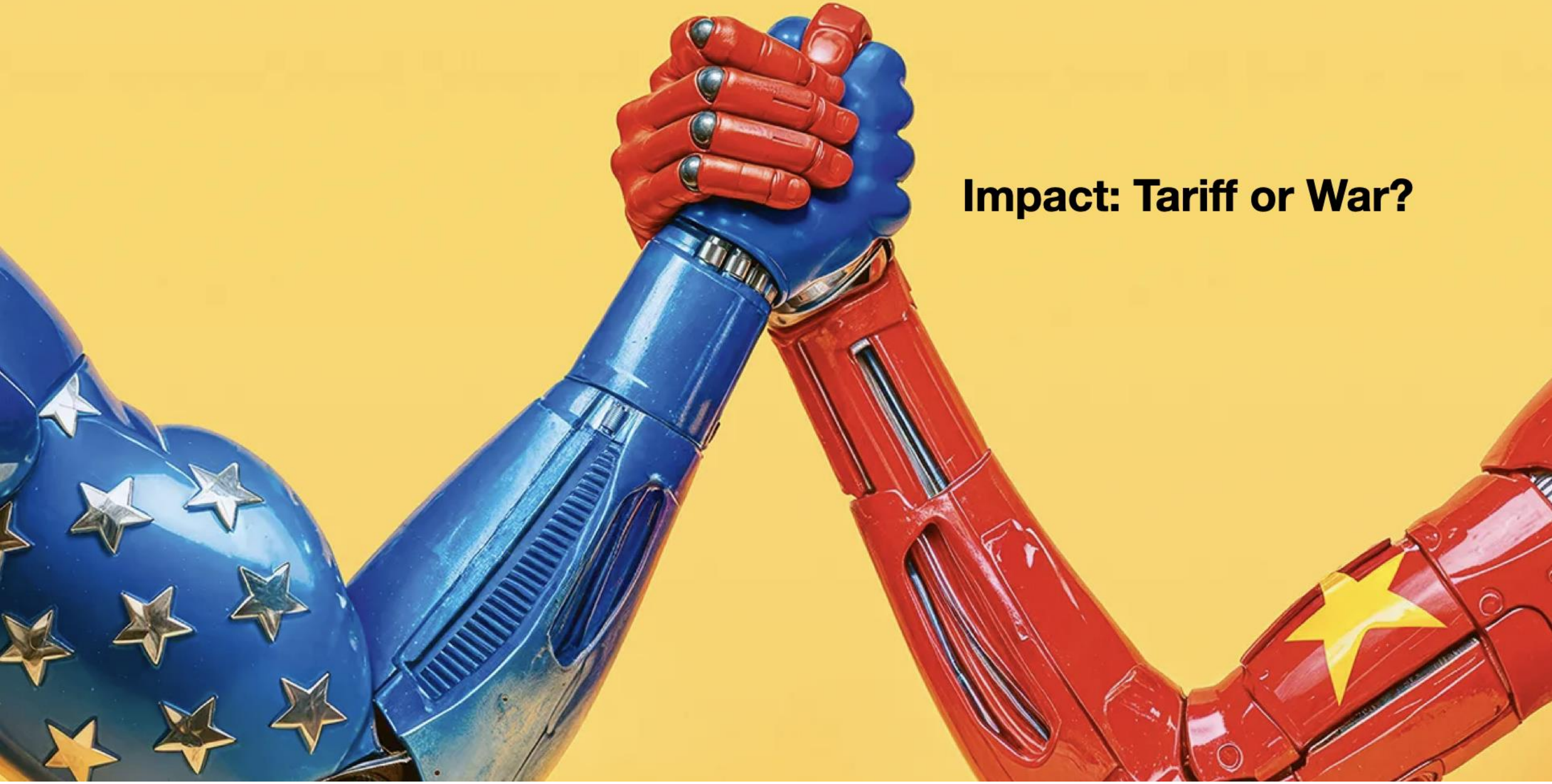
Abstract

Rice, a major global food crop, faces considerable challenges from herbicide damage, particularly pre-emergent herbicides like Pretilachlor (Pre). Herbicide-resistant rice varieties and efficient, environmentally friendly safeners for Pre are still lacking. Substituted salicylic acid safeners show the potential to relieve herbicide damage but are limited by poor solubility and penetration. This study explores a novel substituted salicylic acid derivative salt, matrine (MT)-3-nitrosalicylic acid (3-NO_2SA) salt (MNS), as a safener for Pre. MNS, with enhanced solubility, demonstrated better penetration in rice cells than fenclorin (Fen), the only commercial safener for Pre, which is less effective and poses environmental risks. MNS activates the glutathione metabolism detoxification pathway more effectively than Fen, leading to a superior safening effect. To further enhance solubility and plant uptake, MNS is loaded into a supramolecular nanocarrier, beta-hydroxycyclodextrin (HBPCD), to fabricate a nanoformulation (MNS@HBPCD). In field trials, MNS@HBPCD outperformed Fen, improving 26% seedlings number, 15% shoot height, 9% root length, 27% fresh weight, and 14% yield, while maintaining Pre's herbicidal efficacy. Toxicity tests indicated that it is significantly less toxic to zebrafish embryos, HepG2 cells, and HaCaT cells than Fen. Thus, MNS@HBPCD shows promise as an environmentally friendly crop protection material that effectively mitigates herbicide damage.

Future Trend: New Targets for Chinese Capital

Future Trend:
Global Branding + Flat Channelization

- *More formulation registrations in the global market*
- *Focus on friendship countries: “One Belt, One Road”, LATAM*
- *Currency swap deal: Argentina*


Impact: Tariff or War?

Econometrica, Vol. 89, No. 1 (January, 2021), 311–374

STRUCTURAL CHANGE WITH LONG-RUN INCOME AND PRICE EFFECTS

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Department of Economics, Boston College

MARTÍ MESTIERI
Research Department, FRB of Chicago and Department of Economics, Northwestern U.

Economies undergo large-scale sectoral reallocations of employment and capital as they develop, in a process commonly known as ***structural change****.*

These reallocations lead to a gradual fall in the relative size of the agricultural sector and a corresponding rise in manufacturing.

As income continues to grow, services eventually emerge as the largest sector in the economy.

Reloaded Safety Inventories to US

In Jan 2025, the import of agrochemicals increased **???** YOY 2024

Glyphosate	Glufosinate	2,4-D	Paraquat
30%	790%	79%	135%

Uncertainty of Trans-shipment

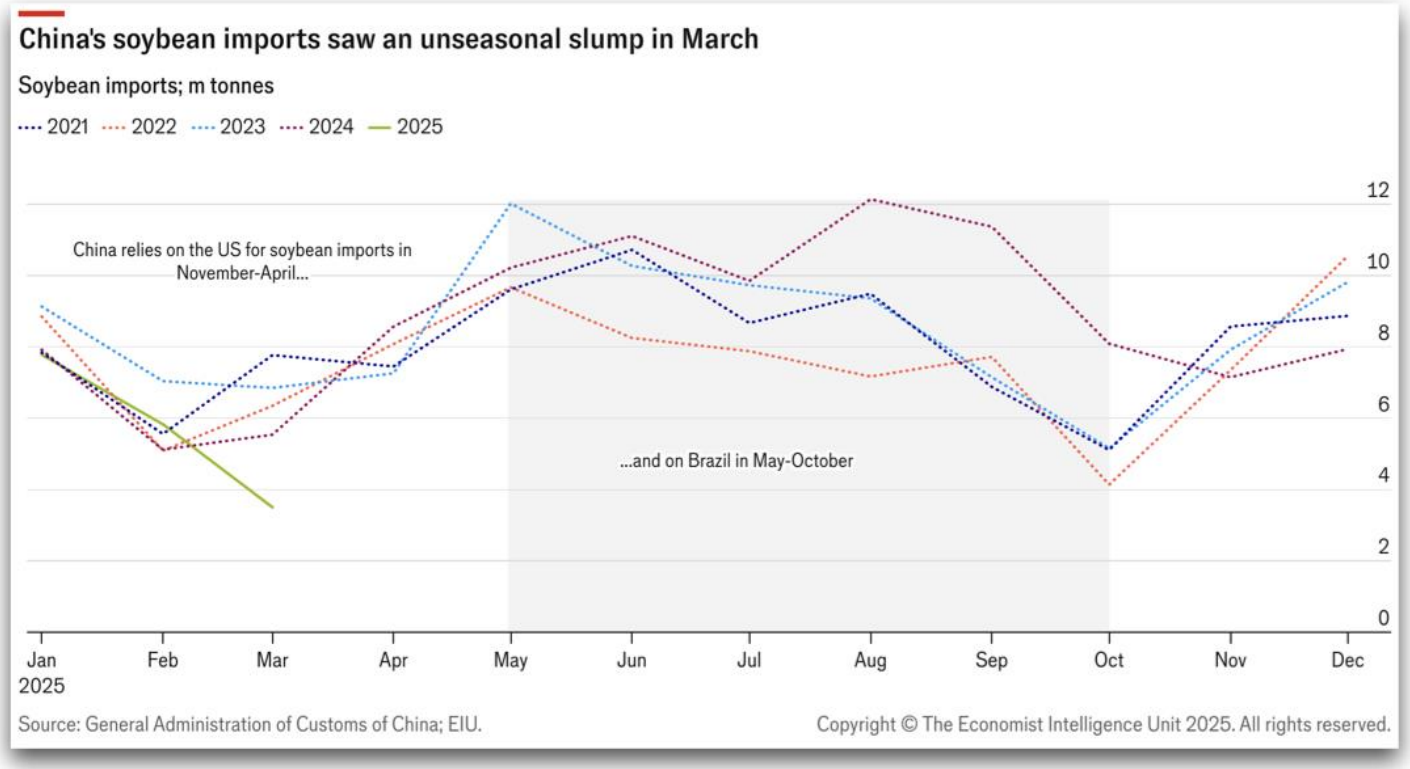
Lianhetech

- Maximum Capital: 200 million USD
- Portfolio: Intermediates of pesticides, TC, intermediate of API, chemicals of new energy track

HEBANG 和邦生物

- Maximum Capital: 800 million USD
- Portfolio: 300 thousands Mt/a glyphosate TC

Decoupling on Both Sides of the Pacific



Source: EIU, Dutch Bank

China is firmly committed to protecting its long-term national interests from external threats and internal hostage-taking.

2028

CHINA

- *Commodity Exporters*
- *Manufactured goods*
- *Outward Direct Investment*

USA

- *Energy Importer*
- *US Security Umbrella*
- *Capital Markets Access*

Source: Dutch Bank

Matrix Supply Chain

- New order of global trade
- Isolated US market by “Monroe Doctrine”
- Multi-manufacturing-site in Different Countries
- Re-globalization of China Manufacturing, not along, but with MNCs
- Global Supply Chain Replace China Supply Chain

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