

# **Crop Farming China E-News**

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## Headline

The Hubei Plants Protection Station published the 2017 key pesticides and equipment for promotion.

2017 will witness ups in demand for fungicide and herbicide while downs in insecticide and acaricide in Hubei Province.

Monsanto announced 2017 updates on progress made across its R&D pipeline. The company's commitment to this annual pipeline showcase is founded in a dedication to innovations that support farmers as they work to meet the needs of society while using natural resources more efficiently. The company's industry-leading pipeline integrates seeds, traits, crop protection and data science to support growers by mitigating challenges posed by weeds, insects, diseases and environmental shifts resulting from climate change each season.\* News on [agropages.com](http://agropages.com).

Agriviation is now becoming a hot spot in the pesticide industry in China. Kunshan Longzhixiang, a joint venture with a registered capital of USD1 million, co-established by Jiangsu Rotam and Taiwan Geosat, was founded on 28 Dec., 2016 in Kunshan.

China released the 2016 National Food Safety Standards on MRLs for Pesticides in Foods, which specified 4,140 MRLs for 433 pesticides in 13 categories of agricultural products, with an increase of 490 limits compared with the 2014 version, covering almost all kinds of commonly-used pesticides and major agricultural products.

On 6 Dec., 2016, the 15th Anniversary Celebration of Cuikang & the Listing Conference for Cuikang Bichong cohosted by Guangdong Tianhe and Yara was held in Guangzhou. In 2009, Guangdong Tianhe took over the national exclusive distribution right of Cuikang, and proceeded with Yara this cooperation agreement of national exclusive distribution right again for another 5 years ever since 2011, which fully fulfilled the aspiration of cooperative partner for the long-term proxy and stable product promotion.

On 12 Dec., 2016, the ICAMA published the list of 18 pesticides that passed the evaluations for formal registration on the 20th Plenary Session of the 8th National Pesticide Registration Review Committee. Bayer CropScience's 7 herbicides, including 4 active ingredients of terfuryltrione, triafamone, flurtamone, and flufenacet, were in the list. It marks that these products will be formally registered in China for the first time.

In late-Oct. 2016, Yangnong Chemical won the Chinese Patent Award on its preparation process of pyrethroid compound intermediate.

Jiangsu Yangnong was awarded a China Industry Award for its "green efficient pyrethroids development and application program".

The No.3 Central Environmental Protection Inspectorate was settled in Hubei Province in the last 10 days of Nov. 2016. The environmental pollution issues in enterprises as Hubei Sanonda, Hubei Boerde and Hubei Jiaying reported by complainants have been resolved. As verified by investigations, the reported issues were partially true.

As reported by Agropages on 13 Dec., 2016, France-based InVivo Corporation (InVivo) announced that it has reached an agreement with its Chinese partner HVH, a supplier of generic phytosanitary products, to establish a joint venture company in Shanghai. The joint venture company was being set up to commercialize and market generic pesticides. InVivo expects its first commercialization by 2018-2019, with the focus on field crops, especially corn. Moreover, InVivo also expects another partnership agreement with a Brazilian agrochemical company CCAB AGRO S.A. (CCAB) on commercialization of generic pesticides before the end of Dec."Faced with the concentration of global agrochemical sector, we are willing to keep access to complementary solutions to strengthen InVivo's market position", underlined Laurent Martel, director of the InVivo Agriculture division. The company also plans to focus its development on the areas of digital innovation, notably in terms of biocontrol and precision farming. As the largest agricultural corporation in France, and global leading enterprise in the industry, InVivo sustains an annual revenue of Euro5.7 billion with 6,600 staff in 20 countries. In March this year, InVivo signed agreement to acquire Bioline, specializing in marketing biological control agents, a subsidiary of Syngenta Participations AG. Founded in 2007, CCAB mainly engages in pesticides registration, export, marketing and pesticide application technical services. The shareholder of its holding company CCAB Participaes S.A. refers to Brazil's major producer's cooperative of cotton, soybean, corn and coffee, with an annual output value of over USD8 billion, and its annual pesticide consumption accounts for 20% of the entire Brazil. In Dec. 2016, Huapont Life Sciences Co., Ltd. participated in CCAB for its increase in capital and share with no more than USD20 million, landing 7.5% of CCAB's stock rights.

The development of intelligent agricultural machinery will be a focus in the Chinese agricultural machinery market in 2017, especially the large-scale compound machinery. Besides, prices are expected to rise.

Gao Xiangzhao, chief expert of the NAESC, recently made judgment of the market prospects of microbial fertilizer: at present, it is impossible for microbial fertilizer to replace chemical fertilizer, and vice versa. However, microbial fertilizer is likely to take place of chemical fertilizer when the microbial technology develops to a certain extent.

Petrochemical industry is an important industrial pillar industry in Hubei. To speed up the transformation and upgrading of the petrochemical industry, enhance the quality and efficiency of industrial development, and achieve green and sustainable development, Hubei announced the implementation plan on promoting the transformation, upgrading, and green development of the petrochemical industry. The plan proposed to nurture and grow new industries, and one of them was to speed up the development of new pesticide varieties, including low toxic, high efficient, and low residual pesticides, herbicides, fungicides, viral inhibitors, and



seed treating agents.

In this article, CCM will provide the ex-works price of 23 pesticide TC (TK) in Nov. and Dec. 2016, including 8 herbicides, 8 insecticides and 7 fungicides. The 8 herbicides are 2,4-Dichlorophenoxyacetic acid 96% technical, acetochlor 92% technical, butachlor 92% technical, dicamba 98% technical, diuron 97% technical, glyphosate 95% technical, paraquat 42% TK and trifluralin 95% technical; the 8 insecticides are acetamiprid 95% technical, bifenthrin 97% technical, chlorpyrifos 95% technical, dimethoate 98% technical, imidacloprid 97% technical, lambda-cyhalothrin 95% technical, methomyl 98% technical and pymetrozine 95% technical; the 7 fungicides are azoxystrobin 96% technical, carbendazim 98% technical (white color), chlorothalonil 98% technical, mancozeb 90% technical, prochloraz 97% technical, propiconazole 95% technical and thiophanate-methyl 96% technical (white color).

The minimum purchase prices of corn in 19 regions in China on 19 Jan., 2017 will be introduced in this article.

The minimum purchase prices of corn in 19 regions in China on 12 Jan., 2017 will be introduced in this article.

The minimum purchase prices of corn in 19 regions in China on 5 Jan., 2017 will be introduced in this article.

The minimum purchase prices of corn in 19 regions in China on 29 Dec., 2016 will be introduced in this article.

The minimum purchase prices of rice in 10 regions in China on 19 Jan., 2017 were introduced in this article.

The minimum purchase prices of rice in 10 regions in China on 12 Jan., 2017 were introduced in this article.

The minimum purchase prices of rice in 10 regions in China on 5 Jan., 2017 were introduced in this article.

The minimum purchase prices of rice in 10 regions in China on 29 Dec., 2016 were introduced in this article.

The minimum purchase prices of wheat in 13 regions in China on 19 Jan., 2017 will be introduced in this article.

The minimum purchase prices of wheat in 13 regions in China on 12 Jan., 2017 will be introduced in this article.

The minimum purchase prices of wheat in 13 regions in China on 5 Jan., 2017 will be introduced in this article.

The minimum purchase prices of wheat in 13 regions in China on 29 Dec., 2016 will be introduced in this article.

The minimum purchase prices of rapeseed in 4 regions in China on 19 Jan., 2017 will be introduced in this article.

The minimum purchase prices of rapeseed in 4 regions in China on 12 Jan., 2017 will be introduced in this article.

The minimum purchase prices of rapeseed in 4 regions in China on 5 Jan., 2017 will be introduced in this article.

The minimum purchase prices of rapeseed in 4 regions in China on 29 Dec., 2016 will be introduced in this article.

The minimum purchase prices of soybean in 4 regions in China on 19 Jan., 2017 will be introduced in this article.

The minimum purchase prices of soybean in 4 regions in China on 12 Jan., 2017 will be introduced in this article.

The minimum purchase prices of soybean in 4 regions in China on 5 Jan., 2017 will be introduced in this article.

The minimum purchase prices of soybean in 4 regions in China on 29 Dec., 2016 will be introduced in this article.

The minimum purchase prices of potato in 6 regions in China on 19 Jan., 2017 will be introduced in this article.

The minimum purchase prices of potato in 6 regions in China on 12 Jan., 2017 will be introduced in this article.

The minimum purchase prices of potato in 6 regions in China on 5 Jan., 2017 will be introduced in this article.

The minimum purchase prices of potato in 6 regions in China on 29 Dec., 2016 will be introduced in this article.

The minimum purchase prices of peanut in 11 regions in China on 19 Jan., 2017 will be introduced in this article.

The minimum purchase prices of peanut in 11 regions in China on 12 Jan., 2017 will be introduced in this article.

The minimum purchase prices of peanut in 11 regions in China on 5 Jan., 2017 will be introduced in this article.

The minimum purchase prices of peanut in 11 regions in China on 29 Dec., 2016 will be introduced in this article.

The minimum purchase prices of cotton in 7 regions in China on 19 Jan., 2017 are introduced in this article.

The minimum purchase prices of cotton in 7 regions in China on 12 Jan., 2017 are introduced in this article.





The minimum purchase prices of cotton in 7 regions in China on 5 Jan., 2017 are introduced in this article.

The minimum purchase prices of cotton in 7 regions in China on 29 Dec., 2016 are introduced in this article.

In Nov. 2016, China imported 2,476 tonnes of pesticide formulations, up 66.64% YoY (year on year); import value hit USD27.98 million, up 1.09% YoY. The export volume and value of pesticide formulations was 105,910 tonnes and USD289.68 million, up 55.31% and 38.28% YoY respectively.





## Editor's Note

China's agriculture includes four industries, namely crop farming, forestry, animal husbandry, and fishery. Of these, crop farming plays an important role, and it is the basis of the whole agriculture. In China, the total output value and compound annual growth rate of crop farming accounts for over 50% of that of agriculture respectively. In 2004-2013, the compound annual growth rate of China's agriculture reached 27.71%.

The control and prevent of pests and diseases as well as the application of fertilizers mostly affect the development of crop farming. And a large amount of laboratory studies and actual application studies are the foundations for pests and diseases control and prevention and fertilizer application. Therefore, the results made from above studies will be again applied in crops production, and further the development of crop farming. As a result, Crop Farming China E-News will publish scientific research and academic dynamics related to pests & diseases control and prevention or fertilizer application.

The USD/RMB exchange rate in this newsletter is USD1.00=RMB6.9498 on 3 Jan., 2017, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.





## Crop and Seed Dynamics

### Nongyi Net to launch promotions for glyphosate and glufosinate-ammonium 2017 'Spring Ploughing Festival'

Nongyi Net (16899.com) first proposed the "Spring Ploughing Festival on 3 March" activity and is committed to develop the festival into farmers' own festival and a shopping carnival of the agricultural means of production industry. The 2017 Spring Ploughing Festival will witness promotions, "Shopping Rush with RMB1", of the two herbicides, namely glyphosate and glufosinate-ammonium. In addition, all products will be sold at ex-works price, and there will be a lucky draw section.

Agricultural means of production E-commerce was silent during 2016, but Nongyi Net, on the contrary, made remarkable achievements, with its sales exceeding USD43.17 million (RMB300 million). Its sales in the 3<sup>rd</sup> Agricultural Means of Production E-commerce Singles Day in 2016 reached USD5.05 million (RMB35.09 million). Two years ago, the 2014 National Plant Protection Conference witnessed the 1<sup>st</sup> Agricultural Means of Production E-commerce Singles Day, and back then, the sales of Nongyi Net was only a few millions RMB. The sales in 2016 proved that the development mode of Nongyi Net was gradually being recognized by consumers. The achievements were closely related to its principle "genuine traceability, high quality with favorable price, product innovation and brand creation", its innovative mode of products "platform sharing for unified innovation", and its new policies such as one purchasing agent in one area, focusing on business district, and establishing business as purchasing agents.

### Hubei publishes key pesticides and equipment for promotion in 2017

Summary: The Hubei Plants Protection Station published the 2017 key pesticides and equipment for promotion.

In early Dec. 2016, the Hubei Plants Protection Station published the 2017 key pesticides and equipment for promotion. Pesticides produced by DuPont, Syngenta (China) Investment Co., Ltd. (Syngenta Investment), Dow AgroSciences LLC (Dow AgroSciences), Sipcam SPA (Sipcam), Mitsui Chemicals Agro, Inc. (Mitsui Agro), BASF (China) Co., Ltd. (BASF China) and Agrorum SA were included.

#### Insecticides for rice, cotton, wheat, vegetables, fruit trees and tea leaves

1. Chlorantraniliprole 200 g/L SC (product name: Kangkuan) produced by DuPont, prevents and controls rice-stem borer, *sesamia inferens* walker, rice leaf roller, yellow rice borer, *lissorhoptus oryzophilus kuschel*, corn borer, etc.
2. Chlorantraniliprole-thiamethoxam 40% WG (product name: Fuge) produced by Syngenta China, prevents and controls *cnaphalocrocis medinalis guenee*, chilo suppressalis walker, *lissorhoptus oryzophilus kuschel* and *nilaparvata lugens*.
3. Spinetoram-methoxyfenozide 34% SC (product name: Sipinnuo) produced by Dow AgroSciences, prevents and controls *cnaphalocrocis medinalis guenee* and chilo suppressalis walker.
4. Abamectin-chlorantraniliprole 6% SC (product name: Baojian) produced by Syngenta China, prevents and controls chilo suppressalis walker, *cnaphalocrocis medinalis guenee*, *plutella xylostella*, and beet armyworm.
5. Bacillus thuringiensis 32,000 IU/mg WP (product name: Wudi Xiaozi) produced by Wuhan Kernel Bio-tech Co., Ltd., prevents and controls *cnaphalocrocis medinalis guenee*, cruciferae vegetable green insect, *plutella xylostella* and papper *heliiothis assulta*







*guenee*.

6. Nitenpyram-pymetrozine 80% WG (product name: Yanhua Saofei) produced by Beijing Yolo Pesticide Co., Ltd., prevents and controls rice plant hopper.
7. Pymetrozine 25% WP (product name: Feidian) produced by Jiangsu Anpon Electrochemical Co., Ltd., prevents and controls rice plant hopper and wheat aphid.
8. Pymetrozine 25% WP (product name: Wanzi) produced by Yancheng Shuangning Agricultural Chemical Co., Ltd., prevents and controls rice plant hopper and wheat aphid.
9. Pymetrozine 50% WP (product name: Feijian) produced by Jiangsu Jianshen Biology Agrochemical Co., Ltd., prevents and controls rice plant hopper.
10. Pymetrozine 25% WP (product name: Shenyue) produced by Jiangsu Kwin Group Co., Ltd., prevents and controls rice plant hopper.
11. Pymetrozine-clothianidin 20% SC (product name: Demantian) produced by Jiangsu Mindleader Crop Science Co., Ltd., prevents and controls rice plant hopper.
12. Pymetrozine-isoprocarb 50% WP (product name: Migui) produced by Sipcam, prevents and controls rice plant hopper.
13. Nitenpyram-pymetrozine 80% WG produced by Hunan Dongyong Chemical Co., Ltd., prevents and controls rice plant hopper.
14. Emamectin benzoate-indoxacarb 16% SC (product name: Shengjiu) produced by Jiangsu Shengjiu Agrochemical Co., Ltd., prevents and controls *cnaphalocrocis medinalis guenee*.
15. Emamectin benzoate-indoxacarb 25% WG (product name: Zhanjing) produced by Jiangsu Tongzhou Zhengda Pesticides & Chemicals Co., Ltd., prevents and controls *cnaphalocrocis medinalis guenee*.
16. Methoxyfenozide-indoxacarb 40% SC (product name: Jiamei) produced by Nanjing Nannong Agriculture Science and Technology Development Co., Ltd., prevents and controls *cnaphalocrocis medinalis guenee*.
17. Indoxacarb 15% SC (product name: Ding'en) produced by Yancheng Limin Chemical Co., Ltd., prevents and controls *cnaphalocrocis medinalis guenee* and cabbage caterpillar.
18. Ethofenprox 10% SE (product name: Lvxie) produced by Shanxi Lvhai Agrochemical Co., Ltd. (Shanxi Lvhai), prevents and controls *lissorhoptrus oryzophilus kuschel* and rice planthopper. Beauveria bassiana 40 billion/g WG (product name: Lvhai) produced by Shanxi Lvhai, prevents and controls *cnaphalocrocis medinalis guenee*.
19. Lambda-cyhalothrin-imidacloprid 33% SC (product name: Rotam Jingyong) produced by Jiangsu Rotam Agrochemical Co., Ltd., prevents and controls cabbage aphid.
20. Dinotefuran 20% SG (product name: Hurui) produced by Mitsui Agro, prevents and controls chilo suppressalis walker, rice planthopper, cucumber whitefly and rice thrips.
21. Chlorpyrifos 40% EC (product name: Xinnongbao) produced by Zhejiang Xinnong Chemical Co., Ltd., prevents and controls





*unaspis yanonensis*, cotton bollworm, apple tree cotton aphid rice plant hopper and *cnaphalocrocis medinalis guenee*.

22. Azadirachtin 0.3% EC (product name: Greengold) produced by Chengdu Greengold Biotechnology Co., Ltd., prevents and controls *euproctis pseudoconspersa strand*, citrus leaf moth, corn borer and cruciferous vegetable diamondback moth.

### Fungicides for rice, wheat, vegetables and fruit trees

1. Jingtangmycin A 24% AS (product name: Jundao) produced by Wuhan Kernel Bio-tech Co., Ltd., prevents and controls rizoctonia solani, rice false smut and rice sheath blight.

2. Jingtangmycin-epoxiconazole 24% SE (product name: Sevencontinent Napowen) produced by Jiangsu Sevencontinent Green Chemical Co., Ltd., prevents and controls rice sheath blight.

3. Oxathiapiprolin 10% OF (product name: Zengwei Yinglv) produced by DuPont, prevents and controls downy mildew, tomato late blight, pepper phytophthora blight, grape downy mildew and late blight.

4. azoxystrobin·benzothiazolinone 23% SC (product name: Daoyou) produced by Shaanxi Xidahuate Co., Ltd., prevents and controls rice blast.

5. Tebuconazole·azoxystrobin 29% SC (product name: Kusite) produced by ADAMA, prevents and controls early blight.

6. Tebuconazole·albendazole 40% SC (product name: Jianshengyuan) produced by Jiangsu Sword Agrochemicals Co., Ltd., prevents and controls wheat head blight.

7. Zinc thiazole 20% SE (product name: Bisheng) produced by Zhejiang Xinnong Chemical Co., Ltd., prevents and controls rice bacterial leaf streak, foot rot and citrus canker.

8. Carbendazim·triadimefon·thiram 40% WP (product name: Shuangning) produced by Yancheng Shuangning Agricultural Chemical Co., Ltd., prevents and controls wheat powdery mildew and fusarium blight.

9. Oligosaccharins 5% AS (product name: Zhengye Haidaosu) produced by Hainan Zhengye Zhongnong High-tech Stock Co., Ltd., prevents and controls rice blast, watermelon blight, wheat head blight, tobacco virosis and corn rough dwarf.

10. Tetramycin 0.3% AS (product name: Shuanggong Miding) produced by Liaoning Wkioc Bioengineering Co., Ltd., prevents and controls wheat powdery mildew and fusarium blight.

11. Epoxiconazole·prochloraz 30% ME (product name: Xianxingzhe) produced by Beijing Green Agricultural Science and Technology Group Co., Ltd., prevents and controls rice sheath blight.

12. Tebuconazole·prochloraz 42% WP (product name: Shengjiu) produced by Jiangsu Shengjiu Agrochemical Co., Ltd., prevents and controls wheat head blight.

13. Tebuconazole 80% WG (product name: Quge) produced by Jiangsu Jianshen Biology Agrochemical Co., Ltd., prevents and controls rice false smut.

14. Tebuconazole·prochloraz 400 g/L EW (product name: Fumanjia) produced by Anhui Youngsun Pesticides Co., Ltd., prevents





and controls wheat head blight.

15. Prochloraz 25% EW (product name: Jinglei) produced by Nanjing Red Sun Co., Ltd., prevents and controls wheat head blight, rice blast and false smut.

16. Propiconazol-prochloraz 36% SC (product name: Miyou) produced by Jiangsu Yangzhou Suling Agricultural Chemicals Co., Ltd., prevents and controls rice blast, sheath blight and false smut.

17. Prochloraz 25% EC (product name: Shibaike) produced by Jiangsu Huifeng Agrochemical Co., Ltd., prevents and controls heat powdery mildew, fusarium blight and rape sclerotinose.

18. Prochloraz-tricyclazole 40% WP (product name: Hewenke) produced by Anhui Zhongbang Biological Engineering Co., Ltd., prevents and controls rice blast.

19. Tebuconazole-prochloraz 45% EW (product name: Jizu) produced by Jiangsu Kwin Group Co., Ltd., prevents and controls rice blast and wheat head blight.

20. Prochloraz-thiophanate-methyl 42% DP (product name: Suiyuankang) produced by Jiangsu Lvdun Plant Protection Agrochemical Experimental Co., Ltd., prevents and controls wheat head blight and rice blast.

21. Tebuconazole-prochloraz 40% SE (product name: Xinsida) produced by Anhui Sida Agrochemicals Co., Ltd., prevents and controls wheat head blight.

22. Difenconazole-propiconazol 30% EC (product name: Aimi) produced by Guangdong Foshan Yinghui Crop Science Co., Ltd., prevents and controls rice sheath blight.

23. Thifluzamide 50% WG (product name: Furuide) produced by Hebei Sanlen Agrochemical Co., Ltd., prevents and controls rice sheath blight.

24. Thiophanate-methyl-tebuconazole 41% SC (product name: Wenda) produced by Jiangsu Rotam Agrochemical Co., Ltd., prevents and controls rice sheath blight.

25. Chloroisobromine cyanuric acid 50% SP (product name: Du'anding) produced by Jiangsu Dongbao Pesticide Chemical Co., Ltd., prevents and controls rice bacterial leaf blight, rice bacterial leaf streak, rice stripe disease and Chinese cabbage soft rot.

26. Prochloraz-carbendazim 59.7% WP (product name: Baigong) produced by Jiangsu Huifeng Agrochemical Co., Ltd., prevents and controls wheat head blight and rice blast.

27. Thifluzamide 240 g/L SC (product name: Daolu) produced by Hebei Guanlong Agrochemical Co., Ltd., prevents and controls rice sheath blight.

28. Qingxijunzhi 25% SC (product name: Jinghu) produced by Jiangsu Pesticide Research Institute Co., Ltd., prevents and controls wheat head blight and rice bakanae disease.

29. Pyraclostrobin-epoxiconazole 17% SE (product name: Oupa) produced by BASF China, prevents and controls wheat powdery mildew, *cercospora arachidicola hori*, soybean chocolatespot and corn northern leaf blight.





30. Tebuconazole-thiram 35% SC (product name: Qimei) produced by Nanjing Nannong Agriculture Science and Technology Development Co., Ltd., prevents and controls wheat head blight.
31. Thifluzamide 240 g/L SC (product name: Huanglong Suixi) produced by Yancheng Limin Chemical Co., Ltd., prevents and controls wheat head blight.
32. Thifluzamide·hexaconazole 50% SC (product name: Youman) produced by Beijing Yoloo Pesticide Co., Ltd., prevents and controls wheat head blight.
33. Thifluzamide·azoxystrobin 45% SC (product name: Jinjiaan) produced by Ganzhou Xingu Bio-Chemical Co., Ltd., prevents and controls rice false smut, rice blast, and sheath blight.
34. Fenoxanil·kresoxim-methyl 26% SC (product name: Jinmi) produced by Jingbo Agrochemicals Technology Co., Ltd., prevents and controls rice blast and sheath blight.
35. Trifloxystrobin-tebuconazole 75% WG (product name: Shexi) produced by Shandong Qingdao Audis Bio-technology Co., Ltd., prevents and controls rice sheath blight, false smut and cucumber powdery mildew.
36. Epoxiconazole-isoprothiolane 40% SC (product name: Daolingdan) produced by Jiangsu Huanong Biochemical Co., Ltd., prevents and controls rice sheath blight, rice blast, and false smut.
37. Hexaconazole-isoprothiolane 33% ME (product name: Lemijia) produced by Jiangxi Zhonghe Chemical Co., Ltd., prevents and controls rice false smut, rice blast and sheath blight.
38. Dimethomorph·pyraclostrobin 27% WG (product name: Adili) produced by Jiangxi Oumei Biotechnology Co., Ltd., prevents and controls downy mildew.
39. Kasugamycin 2% AS (product name: Shikejia) produced by Shandong Heyi Biotech Technology Co., Ltd., prevents and controls rice blast and leaf mold.
40. Coniothyrium minitans ZS-1SB 4 billion spore/g WG (product name: Xinfeng) produced by Hubei Xinfeng Crop Protection Co., Ltd., prevents and controls rice sclerotinia.
41. Thifluzamide·epoxiconazole 20% SC (product name: Jinji Baoguan) produced by Qingdao Hailir Agricultural Means of Production Co., Ltd., prevents and controls rice sheath blight.

#### Herbicides for rice

1. Pretilachlor 300 g/L EC (product name: Sofit) produced by Syngenta China, prevents and controls paddy field annual weeds and annual weeds in direct sowing paddy field.
2. Pretilachlor 300 g/L EC (product name: Zhibochu) produced by Anhui Fengle Agrochemical Co., Ltd., prevents and controls annual weeds in direct sowing paddy field.
3. Bensulfuron-methyl·pretilachlor 40% WP (product name: Zhiboqing) produced by Zhejiang Leji Chemical Co., Ltd., prevents and controls some perennial weeds and annual weeds in direct sowing paddy field.





4. Penoxsulam 25 g/L OF (product name: Daojie) produced by Dow AgroSciences, prevents and controls annual weeds in paddy field and rice seedling field.
5. Penoxsulam 25 g/L OF (product name: Daohefu) produced by Anhui Youngsun Pesticides Co., Ltd., prevents and controls annual weeds in paddy (transplanting) field.
6. Halosulfuron-methyl·quinclorac·bispyribac-sodium 60% WP (product name: Xiaobai) produced by Anhui Suzhou Chemical Factory, prevents and controls annual weeds in direct sowing paddy field.
7. Bispyribac-sodium 20% WP (product name: Shuangjian) produced by Jiangsu Jianshen Biology Agrochemical Co., Ltd., prevents and controls annual weeds in direct sowing paddy field.
8. Cyhalofop-butyl 20% OF (product name: Zujin2) produced by Anhui Zhongbang Biological Engineering Co., Ltd., prevents and controls barnyardgrass, Chinese sprangletop and other gramineae weeds in direct sowing paddy field.
9. Bensulfuron-methyl·acetochlor 22% WP (product name: Yelao Daobao) produced by Zhejiang Tianfeng Biological Sciences Co., Ltd., prevents and controls annual weeds and some perennial weeds in transplanting paddy field.

#### **Herbicides for arid land**

1. Paraquat 20% GW (product name: Dujixing) produced by Nanjing Red Sun Co., Ltd., prevents and controls weeds in no-tillage land.
2. Fomesafen 250 g/L AS (product name: Beinong Xiaochutou) produced by Hubei Best Agricultural Chemicals Co., Ltd., prevents and controls annual broad-leaf weeds in spring soybean and summer soybean.
3. Mesotrione·propisochlor·atrazine SC (product name: Huxiao) produced by Anhui Fenge Agrochemical Co., Ltd., prevents and controls annual weeds in corn field.
4. Glufosinate-ammonium 30% AS (product name: Shandianzhan) produced by Anhui Huaxing Chemical Industry Co., Ltd., prevents and controls weeds in no-tillage land.
5. Pendimethalin 330 g/L EC (product name: Shitianbu) produced by Jiangsu Rotam Agrochemical Co., Ltd., prevents and controls annual weeds in corn field, cotton field and peanut field.
6. Glyphosate-isopropylammonium 41% AS (product name: Nongwang) produced by Zhejiang Wynca Chemical Industry Group Co., Ltd., prevents and controls weeds in winter rape field, citrus field, cotton field, no-tillage spring rape field and no-tillage seedling throwing late paddy field.
7. Fluroxypyr 288 g/L EC (product name: Kuofeng) produced by Sichuan Lier Crop Science Co., Ltd., prevents and controls annual weeds and some broad-leaf weeds in winter wheat field.
8. Saflufenacil 70% WG (product name: Babaijin) produced by BASF, prevents and controls broad-leaf weeds in non-cultivated land and citrus garden.





9. Clethodim 240 g/L SC (product name: Zhanjian) produced by Hebei Cangzhou Green Chemical Co., Ltd., prevents and controls annual gramineae weeds in soybean field.

### Seed treatment

Imidacloprid 600 g/L FS (product name: Banlefeng) produced by Jiangsu Changqing Bio-technology Co., Ltd., prevents and controls wheat aphid and corn aphid.

### Plant growth regulator

1. Gibberellins acid·indol-3-ylacetic acid·brassinolide 0.136% WP (product name: Bihu) produced by Agrorum SA, regulates growth and increase yield of wheat, rice, cucumber, tea leaf and apple tree.

2. Paclobutrazol·mepiquat chloride 10% WP (product name: Aifeng) produced by Sichuan Guoguang Agricultural Means of Production Co., Ltd., regulates growth and increase yield of wheat, peanut and soybean.

3. Brassinolide 0.01% SL (product name: Yuntianli) produced by Shanghai Lvze Biotechnology Co., Ltd., regulates growth and increase yield of wheat, rice, corn, cotton and citrus.

### Agricultural equipment

1. Remote/ automatic big data unmanned aerial vehicle (UAV, brand: Tianwang) produced by Lockheed (Wuhan) UAV Science Institute Co., Ltd.

2. Agricultural UAV (brand: Jifei) produced by Guangzhou Jifei Technology Co., Ltd.

3. Solar whirlwind insect killer (brand: Bajige) produced by Hubei Liannong Agricultural Machinery Co., Ltd.

4. Suction intelligent insect traps (brand: Benye) produced by Hunan Benye Green Prevention and Control Technology Co., Ltd.

## Demand for fungicide and herbicide expected to rise in Hubei in 2017

Summary: 2017 will witness ups in demand for fungicide and herbicide while downs in insecticide and acaricide in Hubei Province.

According to the Hubei Crop Protection Station, 2017 will witness ups in demand for fungicide and herbicide while downs in insecticide and acaricide in Hubei Province.

The total demand for pesticide is expected to be about 47.20 thousand tonnes (12.80 thousand tonnes after converted in to 100% AI), which is slightly lower than that in 2016. Specifically,

- Insecticide: 22 thousand tonnes
- Acaricide: 1.30 thousand tonnes
- Fungicide: 7.80 thousand tonnes
- Herbicide: 15.10 thousand tonnes
- Plant growth regulator: 854 tonnes
- Rodenticide: 5.97 tonnes





Besides, crop protection machinery maintain a steady growth in demand, and demand for crop protection unmanned aerial vehicles, knapsack boom sprayers, self-propelled boom sprayers will also be strong.

Zhang Kaixiong, section chief of the Hubei Crop Protection Station, analyzed the reasons for the increased market demand for fungicides. The heavy crop diseases occur frequently, including rice sheath blight, rice false smut and rice blast, and the implicated area expanded year by year. What's more, wheat Scab and sclerotinia occurred frequently year by year, these all contribute to the increasing use of fungicides. Planting area of pollution-free vegetables and other economic crops expanded, so as the pest and disease. Besides, continuous planting are the common situation, leading to easy accumulation of bacteria, which is conducive to the occurrence of disease. With the promotion of the scientific farming, farmers' awareness of disease prevention has been strengthened, so there are more paddy fields have been associated with the disease prevention.

Reasons for the rising consumption of herbicides, especially glufosinate-ammonium and glyphosate are: the expanded direct sowing area, growing number of large farms, rising area which applies chemical herbicides, increasing less-tillage or no-till planting area, the promotion of chemical weeding technology, especially the enlarged non-cultivated land.

As for the reasons of decreased demand of acaricides, they are as follows: With the superior control ability and reasonable price, acaricide has the tendency to replace the conventional acaricides; The acreage of cotton was shrinking year by year, and farmers' general awareness of cotton insect pests was enhanced. What's more, The occurrence of cotton spider is not that high, and the trend of citrus red spider almost remains the same.

Reasons for the decreased demand for acaricide are: abamectin enjoys competitiveness in both efficacy and price; reducing planting area of cotton; farmers' consciousness of preventing and controlling cotton pests improves; rare occurrence of two-spotted spider mite and citrus red spider mite.

Reasons for weakened demand for insecticide are: highly efficient and low toxic pesticides are widely used; this bitter winter is not conducive to some winter pests and diseases. It is expected that the crop pests and diseases will be fewer and the consumption of insecticide will decrease in 2017.





## China to achieve full coverage of central environmental inspection in 2017

On 10 Jan., 2017, the 2017 National Environmental Protection Work Conference was held in Beijing. Chen Jining, minister of the Ministry of Environmental Protection of the People's Republic of China (MEP) said in the conference that in 2017, China aimed to achieve the full coverage of central environmental inspection.

As far as CCM knows, by now, 16 provinces in China have received central environmental inspection. Chen Jining also disclosed that the MEP would try its best to finish inspections of other provinces with accordance to the requirement of making central environmental inspections of all provinces/ regions/ municipalities in two years. In addition, re-inspections would be arranged duly in order to make sure problems were fixed.

Chen Jining said that in Jan. 2016, the pilot project of central environmental inspection was first launched in Hebei Province. As of the end of Dec. 2016, inspections of another 15 provinces were finished in two sections. Among them, 8 provinces/ regions, namely the Inner Mongolia Autonomous Region, Heilongjiang, Jiangsu, Jiangxi, Henan, Guangxi, Yunnan, and Ningxia Hui Autonomous Region, had made feedback of the inspection results. The inspection groups have entered and been stationed in 7 provinces and municipalities, namely Beijing, Shanghai, Hubei, Guangdong, Chongqing, Shaanxi, and Gansu. By now, a total of more than 33,000 cases reported by the masses have been accepted, more than 8,500 cases have been filed, USD63.32 million (RMB440 million) have been fined, more than 800 cases on file have been investigated, 720 people have been kept in detention, 6,307 people have been interviewed and questioned, and 6,454 people have been asked to take responsibilities.

## Monsanto involved in dicamba lawsuit

According to the news released on 10 Jan., 2017 on agropages.com, Monsanto Company (Monsanto) has recently been involved in a lawsuit in terms of the use of dicamba, which was brought by a peach farm in Missouri.

The farm owners accuse Monsanto of knowingly marketing its Xtend cotton and soybean seeds without a safe dicamba formulation. The suit says farmers used old dicamba that was highly volatile, and the drift of the product has caused a loss of 30,000 fruit and nut trees on the farm and USD1.50 million.

Monsanto has said it sympathizes with the farmers who suffered damage but that the losses were caused by illegally using dicamba. The company also said that the Xtend seeds are of great help to yield increase, and Monsanto's dicamba formulations had received Environmental Protection Administration's registration approval in last year.

Since June 2016, the US Department of Agriculture has investigated more than 100 complaints involving crops damaged by dicamba. The complaints, which have come from 5 counties in Southeast Missouri. Damaged crops included soybean, peach, watermelon, tomato, cotton, peanut and some alfalfa.







## EC to launch European Citizens' Initiative 'Ban Glyphosate' on 25 Jan., 2017

The European Commission (EC) is going to launch a Citizens' Initiative "Ban Glyphosate". It announced in a communique that this initiative suggests its member countries to ban glyphosate and establish compulsory objectives concerning the reduction in the use of pesticides.

It will officially launch this initiative on 25 Jan., which marks the beginning of a 12-month period, during the course of which signatures in favor of the ECI proposal will be gathered by its organizers. If the initiative receives one million signatures, or at least seven member countries' support, within one year, the European Commission will give a final respond to the ban on glyphosate within three months and claim its reasons for the resolution to the final decision.

It's known that glyphosate is the highest selling herbicide substance in Europe but its effect upon health is the subject of much debate. In June 2016, the European Commission approved the temporary renewal of glyphosate extended to the end of 2017, so as to allow the European Chemicals Agency to conduct a new evaluation of this substance, which is suspected of potentially being a carcinogen.

*\* News on [agropages.com](http://agropages.com).*

## Hunan to focus on clean-up and remediation of agricultural environmental problems

On 9 Jan., 2017, the Hunan Provincial Plant Protection Station issued a notice requiring all plant protection departments to well prepare for the central environmental protection supervision. In the notice, the Central Environmental Protection Supervision Group will carry out environmental supervision in Hunan Province in the first half of 2017. In order to do a good preparatory work to meet the central environmental supervision and inspection, in accordance with the unified plan of the work leading group for the province's environmental protection supervision, each provincial Plant Protection Station should do the following work:

1. Establish the liaison mechanism for agricultural environmental protection supervision;
2. Carry out concentrated clean-up and remediation work on the severe agricultural environmental problems;
3. Establish and improve the work files and accounting for agricultural environmental protection.

## China's nano-pesticides technology to lead the world during 13th Five-year Period

Summary: Facing the great demand of scientific and technological support for the development of agriculture and the increase of farmers' income in China, the Chinese Academy of Agricultural Sciences has formulated the scientific and technological development plan for the 13<sup>th</sup> Five-year Period, and simultaneously promulgated its implementation plan on 9 Jan., 2017, revealing that the Chinese Academy of Agricultural Sciences will basically complete a world-class research institute by 2020. Mei Xirong, director of the Chinese Academy of Agricultural Science and Technology Bureau predicated on 9 Jan., 2017 that China's nano-pesticides and other technologies will lead the world, and the intelligent agriculture is also expected to achieve a major breakthrough during the 2016-2020.

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major breakthrough during the 13th Five-year Period (2016-2020) .

After years of construction and development, China's agricultural science and technology has witnessed rapid development, which plays a more and more important supporting role in agricultural development, and its contribution rate in 2015 is more than 56%. For example, agricultural genomics research, new drought-resistant crop breeding, green super rice cultivation, avian influenza vaccine development and other technologies are all among the best in the world. However, the overall development of China's agricultural science and technology still remain in a situation that there is a small number of leading technology, and the most is parallel or slightly behind the world level. Obviously, there is still a big gap between China and developed countries as for the key technologies such as large animal breeding.

Facing the great demand of scientific and technological support for the development of agriculture and the increase of farmers' income in China, the Chinese Academy of Agricultural Sciences has formulated the scientific and technological development plan for the 2016-2020, and simultaneously promulgated its implementation plan on 9 Jan., 2017, revealing that the Chinese Academy of Agricultural Sciences will basically complete a world-class research institute at by 2020.

According to the plan, more than 6 world-class agricultural science centers and about 30 national agricultural science and technology centers will be built during 2016-2020, to overcome a number of urgent technical problems of industrial development, form and promote 500 major new breeds, technologies and products, build 30 integrated technology production mode, and also to break the bottleneck of industrial development. In addition, to construct about 50 major public platforms and joint laboratories in the field with advantage and specialty and to establish about 100 comprehensive test bases and professional test bases, which will become important platforms to demonstrate the international cooperation and pilot results .

"China will focus on crop genetic improvement and the cultivation of new breeds, promote high-quality, safe, green industrial technology, and also make great efforts in the development of mechanization during 2016-2020. What's more, China will also actively develop the husbandry science and technology such as large animal breeding, healthy breeding and so on, as well as the cutting-edge technology like intelligent operations based on Beidou navigation," said Mei Xurong.

## **Kuwaiti government tenders for hygienic insecticide and rodenticide**

On 11 Jan., 2017, a Kuwaiti consultant firm disclosed that the Ministry of Health of the State of Kuwait is currently inviting pesticide enterprises worldwide to bid for registration and supply of hygienic insecticide and rodenticide, under the precondition that bidders must have a factory or a local agent in Kuwait and should be able to meet the asked requirements.

The founder of the Kuwaiti consultant firm used to work as the deputy chief in the Public Authority for Agriculture Affairs of Kuwait, and has rich government and agricultural experiences. Although established his own private enterprise, he provides service to both government and business sectors, as well as working as an agent for foreign pesticide enterprises.

The pesticide product under the Kuwaiti government procurement program covers 8 kinds of insecticide including deltamethrin and 4 kinds of rodenticide including bromadiolone.

*\* News from agropages.com.*





## Vote of Shandong Cynda's IPO application postponed

On 13 Jan., 2017, the China Securities Regulatory Commission (CSRC) announced that the vote of Shandong Cynda Chemical Co., Ltd. (Shandong Cynda)'s IPO application was postponed. In 2014, Shandong Cynda was planning to be listed on the Shanghai Stock Exchange (SSE), but due to the incomplete application documents, the audit process could not be continued, and the review of Shandong Cynda was thus suspended. Two years later, Shandong Cynda's IPO application was frustrated again. Whether the company could successfully be listed on SSE was still full of variables.

According to the *Announcement on the Review Results of the 5<sup>th</sup> Meeting of the SSE Issuance Examination Committee in 2017*, the vote of Shandong Cynda's IPO application was postponed.

Shandong Cynda's *IPO Prospectus (draft)* reveals that the total number of shares to be issued will be no more than 20 million shares, whose proportion of the total amount of shares after the issue of shares will be no less than 25%. And the company intends to combine public issue and the sales of stock shares. The IPO is intended to raise USD42.88 million (RMB298 million), which will be used to invest in the construction of the company's projects. One project is the 1,000 t/a clethodim TC and 1,500 t/a clomazone TC production line; the other project is to construct a comprehensive formulation workshop whose annual production capacity is 9,000 t/a, and a research center. The construction period of the above mentioned projects are both 12 months.

Shandong Cynda is mainly engaged in R&D, production, and sales of safe, high efficient, low toxic, and environmentally friendly herbicide TC and herbicide formulations. It is also engaged in fungicides, pharmaceutical and pesticide intermediates.

## India to ban use of 18 pesticides since 2018

According to the news released on 10 Jan., 2017 on agropages.com, the Ministry of Agriculture, Government of India has issued a draft recently, asking manufacturers, importers and state authorities to completely ban 12 pesticides (benomyl, carbaryl, diazinon, fenarimol, fenthion, linuron, methoxy ethyl mercury chloride, methyl parathion, sodium cyanide, thiometon, tridemorph and trifluralin) from 1 Jan., 2018 and remaining 6 (alachlor, DDVP, phorate, phosphamidon, triazophos and trichlorfon) from 31 Dec., 2020.

Though these pesticides have been banned or restricted in other countries, they are still being used in India. Some of them are highly toxic to bees and birds. Use of these pesticides also contaminates water bodies and thereby affects aquatic organisms. "The central government after considering the recommendations of the said expert committee of the Indian Agricultural Research Institute and after consultation with the registration committee is satisfied that the use of 18 pesticides are likely to involve risk to human being and animals as to render it expedient or necessary to take immediate action", says the draft issued by the ministry on 15 Dec., 2016.

The ministry, through this order, sought objections or suggestions from stakeholders within 45 days. "All the suggestions will be examined and the final order, banning these 18 pesticides, will be issued next month", said an official.

Since the ban will come into force beginning early next year, the ministry has instructed current importers and manufacturers to incorporate in the label and leaflet of the product about the danger associated with the use of specific pesticide to water bodies and aquaculture or its toxic effect to human being, bees and birds.





## **Monsanto announces 2017 updates on R&D pipeline: strengthen comprehensive solutions and improve farmers' productivity**

Summary: Monsanto announced 2017 updates on progress made across its R&D pipeline. The company's commitment to this annual pipeline showcase is founded in a dedication to innovations that support farmers as they work to meet the needs of society while using natural resources more efficiently. The company's industry-leading pipeline integrates seeds, traits, crop protection and data science to support growers by mitigating challenges posed by weeds, insects, diseases and environmental shifts resulting from climate change each season.

*\* News on [agropages.com](http://agropages.com).*

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"The role that agriculture plays in our daily lives has never been more critical – including meeting the world's growing needs and driving on-farm practices that preserve biodiversity and our natural resources like soil and water," said Robert Fraley, Ph.D., Monsanto's chief technology officer. "Science is helping us identify new solutions to help farmers and this marks a record year for our R&D pipeline – with 14 projects advancing to launch and the first unveiling for more than 35 projects in the Climate pipeline. These advancements demonstrate how we're delivering new ways that farmers can manage the 40+ key decisions they must make throughout the growing season to enable a successful harvest. Going forward, we believe we have a greater opportunity to accelerate innovation, optimize integrated solutions and expand offerings through our combination with Bayer – translating to significant benefits for farmers around the world."

Monsanto's R&D platforms span five areas of agricultural technology: data science, plant breeding, plant biotechnology, crop protection and ag biologicals. These platforms support sustainable agriculture practices by delivering solutions that:

### **1. Reduce the footprint of global ag production through better harvests:**

The world's current agriculture production footprint is under continuous pressure from expanding urban populations and environmental challenges. This means that farmers must identify ways to reduce impact on our natural resources while delivering food for society on existing farm land. Better harvests mean that additional land does not need to be brought into production – an action that can help further stem the release of greenhouse gases into the environment and protect existing forest land. The 2017 R&D highlights include:

- The BioAg Alliance, a partnership between Monsanto and Novozymes that focuses on microbial solutions, continues to grow the depth and breadth of its pipeline. The Alliance's BioYield platform is an example of this growth through expansion to new crops and development of next-generation projects that are designed to help improve yield potential by helping crops use nutrients in the soil more efficiently.
- The Climate FieldView™ platform allows farmers to collect and analyze field data from multiple sources – including the soil, field and atmosphere – and provides valuable insights to help farmers get the most out of every acre. The platform continues to evolve





research efforts to develop new digital tools, including insights that help farmers make more informed decisions about crop nutrition and fertility, as well as which seed and planting approaches will help enable a more productive harvest each year. The Climate FieldView™ platform continues to be the most widely adopted digital ag platform in the industry.

- Higher-Yielding Corn, a family of corn plants with traits for increased yield potential, is also advancing in the pipeline. This project is part of the company's Yield & Stress research collaboration with BASF.

## 2. Protect harvests from increasing threats:

Every growing season farmers work to mitigate pressures from insects, weeds, diseases and environmental variables that can result in food loss in the field and after harvest. The effects of climate change can further exacerbate these pressures. The 2017 R&D highlights include:

- Broad, integrated solutions to address yield-limiting diseases, for example:

- A package of insights to identify and predict disease vulnerability and diagnose key crop diseases are planned to be added to Climate FieldView™ offerings.
- Breeding research that aims to curb the effects of disease on both vegetables and row crops, including Downy Mildew-Resistant Lettuce and the DEKALB® Disease Shield™ corn hybrids platform.
- Through a collaboration with Bayer, Acceleron® Seed Applied Solutions - Enhanced Disease Control, is aimed at managing disease infections during key stages of the growing season.

- Next-generation insect and weed control technologies – including Bollgard® 3 XtendFlex® Cotton and Fourth-Generation Herbicide-Tolerant Corn, respectively – are poised to offer farmers new ways to mitigate challenges from damaging pests and weeds. Herbicide-tolerant technologies help enable greater flexibility in weed management, including allowing farmers the ability to adopt and maintain conservation tillage practices which helps reduce greenhouse gas emissions.

## 3. Deliver continuous improvement to global ag production:

As agriculture producers work to deliver better harvests on existing farmland and protect crops, the entire sector must continue to improve on-farm solutions and the practices used within global ag production. Monsanto R&D focuses on achieving this through next-generation products that improve upon platforms that are already impactful for growers, and through novel solutions. The 2017 R&D highlights include:

- Research to promote the health of honey bees, which are critically important pollinators for our food system. Honey bee hives are routinely impacted by the Varroa mite – a threat which introduces viruses into the bee's home and greatly reduces their numbers and productivity. Research underway at Monsanto, called BioDirect™ Technology: Bee Health Varroa Control, represents an innovative biological approach to target this devastating threat to bees.
- To help more of the world's farmers increase productivity with digital tools, the company plans to continue to grow the Climate FieldView™ platform geographically, with expansion expected in the U.S., Brazil and Canada this year – and Europe, South Africa, Australia and Argentina over the next few years.
- Continued development of NemaStrike™ Technology, a novel seed -applied nematode-control solution, has demonstrated the ability to control pressure from multiple nematode species. Nematodes are one of the largest pest challenges in agriculture.





## **Brassica rapa (L.) resistant to 2,4-D detected in central Argentina**

According to the news released on 16 Jan., 2017 on agropages.com, the first confirmed case of resistance to 2,4-D herbicide was detected in the central part of the province of Buenos Aires in Argentina. Identified as *Brassica rapa* (L.), commonly known as "Nabo". It belongs to the cruciferae family. The species is native to Europe and Asia, and in general, it is present in paddocks and stubble, along the banks and in marginal areas.

In the central and southeastern part of the province of Buenos Aires, during the last two years, controls and treatments with 2,4-D have been studied. There have been suspicions of the presence of a resistant biotype in Azul, province of Buenos Aires, Argentina.

In order to confirm resistance, the Plant Therapeutics Research Group of the National University of the Center of the Province of Buenos Aires, started exploratory tests to evaluate and determine the resistance index of the biotype. Researchers collected weed seeds from those lots where control failures with the 2,4-D herbicide were recorded and these were planted in pots. The plants grew up to a pink state 6 leaves and were applied with 2,4-D dimethyl amine CS salt 60% in doses of 0, 50, 100, 200, 400, 800, 1,600, 3,200 and 6,400 g ea/ha. It was observed that the biotype plants were resistant to a dose of up to 800 g/ha while those of biotype were susceptible up to 200 g ea/ha. The resistance index calculated from the final dry weight 42 days from the application was found to be approximately 5.

It is to be noted that in Argentina, the Azul region in particular, there are confirmed records of multiple resistance of this species to glyphosate and ALS inhibitors. The results gained by the research group further confirmed that *Brassica rapa* (L.) are resistant to EPSPs and ALS herbicides.





## Australia may ban dimethoate

According to the news released on 12 Jan., 2017 on agropages.com, one of Australian peak grain farmer bodies, the Grain Producers Australia (GPA), has warned another key chemical, dimethoate, used in insecticides to control pests may be banned. Dimethoate is an organic phosphorous insecticide that has been widely used to prevent and control acarid and other harmful insects.

Andrew Weidemann, president of the GPA, said that the current review of dimethoate could result in it being banned for use in crop protection in Australia.

The chemical regulator, the Australian Pesticides and Veterinary Medicines Authority (APVMA) announced in Oct., 2016 it was reviewing the registration of dimethoate, which is a widely used organic phosphorous insecticide used to control mites and insects. Dimethoate products are registered for more than 200 uses, including before and after harvest of cereal and fruit crops, to control more than 80 pest species.

It comes after the APVMA announced recently another key chemical, omethoate, would be banned from December next year. Omethoate is a breakdown product or a metabolite of dimethoate.

The APVMA said it was reconsidering dimethoate's registration "because of concerns over toxicological, occupational health and safety, trade and residues issues".

Mr Weidemann said the review of omethoate and dimethoate came after a revision of the acceptable daily intake level of the chemical at an international level a few years ago. "The product is widely used in Australia and we really need it. The problem is the product is becoming globally unacceptable," said Mr Weidemann. And he feared the active ingredient of dimethoate would also be banned or its use restricted.

Mr Weidemann also disclosed that the broader issue was chemical companies were not investing in new chemicals for the Australian agriculture market after their patents expired. "Once a chemical goes off patent they don't want to invest any future in the product," he said, "Australia is such a small player in the use of the products; unless we have global consumption of the product, it's hard for companies to get a return on investment."

Submissions to the APVMA review will close on 27 Jan., 2017.

## Qingdao Hailir successfully listed at SSE

On 12 Jan., 2017, the listing ceremony of Qingdao Hailir Pesticides & Chemicals Co., Ltd. (Qingdao Hailir, stock code: 603639) was held at the Shanghai Stock Exchange (SSE), which means that Qingdao Hailir became a member of the A share market.



## Forecast: no major changes in US crop prices and overall demand

Recently, Dr. Pat Westhoff, director of the Food and Agricultural Policy Research Institute at the University of Missouri, said in the American Farm Bureau Federation's 2017 Annual Convention, that the US grain price outlook and crop demand for 2017-2018 will likely show no major changes. In the convention, Dr. Westhoff also made predictions of the global and the US market of major crops, such as corn, soybean, wheat, cotton, and rice, and in his opinion, there will be no major changes.

Trends for 2017 seem to stay similar to that of 2016, unless a major disruption in outside factors occurs, such as weather or foreign market changes, according to Westhoff. "Prices will continue to be below average, and lower than 2016, based on trends," he said.

"Lots of pressure will be placed on labor markets where there hasn't been in the last several years," Westhoff said, "this is a result of poor labor markets and a slowing rate of population growth." "China and biofuels accounted for all the growth in per capita consumption since 1980," Westhoff said, "ethanol production and an increase in Chinese consumption per capita has had the greatest effect on grains and oilseeds global markets. "Remove those two factors and we have about the same per capita use of grains and oilseeds. Yields for global grains and oilseeds have increased by roughly 1% per year since 1980; this is the same rate as the global growth in population, Westhoff said. The area harvested for wheat, rice, corn and soybeans around the world between 2002 and 2014 increased by 17%; world per capita consumption is at a 16% yearly increase. With the slowed increase of the demand for biofuel in a global range, the grain and oilseed markets stand to continue current trends."

*\* News on agropages.com.*

## Jiangsu Rotam officially enters agriaviation field by establishing joint venture subsidiary

Summary: Agriaviation is now becoming a hot spot in the pesticide industry in China. Kunshan Longzhixiang, a joint venture with a registered capital of USD1 million, co-established by Jiangsu Rotam and Taiwan Geosat, was founded on 28 Dec., 2016 in Kunshan.

On 10 Jan., 2017, Kunshan Longzhixiang Intelligent Technology Co., Ltd. (Kunshan Longzhixiang), a joint venture was co-established by Jiangsu Rotam Agrochemical Co., Ltd. (Jiangsu Rotam) and Taiwan Geosat Aerospace & Technology Inc. (Taiwan Geosat) in Kunshan City, Jiangsu Province on 28 Dec., 2016. This is another pesticide formulations producer that enters the agriaviation field, following Guangxi Tianyuan Biochemistry Co., Ltd., Jiangsu Kwin Group Co., Ltd., Zhejiang Wynca Chemical Group Co., Ltd., Hebei Veyong Bio-Chemical Co., Ltd., Qingdao Hailir Pesticides & Chemicals Co., Ltd. and Jiangxi Zhengbang Biochemical Co., Ltd.

### Basic information of Kunshan Longzhixiang:

- Uniform social credit code/ registration number: 91320583MA1N82J938
- Type: Limited Liability Company (Sino-foreign joint venture)
- Legal representative: Luo Zhengfang
- Registered capital: USD1 million
- Date of establishment: 28 Dec., 2016
- Registration Authority: Kunshan Municipal Market Supervision and Administration Bureau
- Address: No. 968, Tongfeng East Road, the Development Zone, Kunshan City, Jiangsu Province





- Business Scope: R&D, wholesale, import and export, and commission agents of agricultural unmanned aerial vehicles, agricultural aircraft, mechanized agricultural equipment, and model airplane and its spare and accessory parts; agricultural machinery maintenance; agricultural pest prevention and control services; agricultural machinery automation technology consulting and technical services and technology transfer; model design services, software development and sales, and electronic information technology services. (For projects subject to approval of laws, relevant business activities shall be operated after being approved by relevant authorities)
- Shareholders: Geosat Aerospace Inc., Jiangsu Rotam Boshimo Packing Material Co., Ltd., Jiangsu Rotam, and Rotam International Trade (Kunshan) Co., Ltd.

## China releases 2016 National Food Safety Standards on MRLs for pesticides in foods

Summary: China released the 2016 National Food Safety Standards on MRLs for Pesticides in Foods, which specified 4,140 MRLs for 433 pesticides in 13 categories of agricultural products, with an increase of 490 limits compared with the 2014 version, covering almost all kinds of commonly-used pesticides and major agricultural products.

In the end of Dec. 2016, the 2016 version of the *National Food Safety Standards on Maximum Residue Limits (MRLs) for Pesticides in Foods* (the *Standards*) was officially issued and implemented. The new *Standards* made relatively huge breakthroughs both in the number of standards and the coverage range. It specified 4,140 MRLs for 433 pesticides in 13 categories of agricultural products, with an increase of 490 limits compared with the 2014 version, covering almost all kinds of commonly-used pesticides and major agricultural products.

The new *Standards* has the following three characteristics: firstly, it set 184 MRLs for 24 banned or restricted pesticides, including fenamiphos, which provided judgment basis to the supervision and management of illegal use of banned or restricted pesticides; secondly, the new *Standards* exempted MRLs for 33 pesticides posing no dietary risks in line with international practices, which increased the scientificity, practicability, and systematicness of China's standards on MRLs for pesticides in foods; thirdly, in addition to recommending testing techniques for MRLs included in this version, the new *Standards* also provided national standards on 106 MRLs testing techniques.

It is reported that the *Standards* are enacted after scientific risk assessment of a lot of data, such as field test data of pesticide residue, dietary consumption data of Chinese citizens, pesticide toxicology data, and domestic agricultural market monitoring data. At the same time, to guarantee that the standards are scientific, impartial, and open, during the period of setting standards, the government not only solicited opinions from various sides, such as the production field, scientific research institutes and personnel, management professionals and the public, but also accepted appraisals of the scientificity of the standards by the World Trade Organization. Therefore, the standards could both ensure the quality of agricultural products and adapt to the actual condition of China's agricultural production.

As the host state of the international *Codex Committee on Pesticide Residues*, China is one of the few countries involved in the formulation of international standards. During the 12<sup>th</sup> Five-year Plan period (2010-2015), China's ability and influence in enacting international standards were gradually improved. There have been 11 international standards using China's residual data. At present, the principles, methods, and requirements of data volume of China's pesticide residue risk assessment have been geared to international standards.





According to reports, the 13<sup>th</sup> Five-year Plan has made clear tasks and plans for the formulation of the standards on MRLs for pesticides in foods: newly formulate 6,000 items of standards on MRLs for pesticides; focus on setting MRLs standards for vegetables, fruits, and Chinese characteristic agricultural products; improve approaches for testing MRLs for pesticides; gradually implement the *Import Limit Standard and the All Limit Standard*, in order to expand the coverage of China's limit standards. At the same time, China will focus on independent innovation of pesticides, actively participate in the formulation of international codex standards, and promote China's independent innovation of pesticides.

## Guangdong Tianhe and Yara host 15th Anniversary Celebration of Cuikang

Summary: On 6 Dec., 2016, the 15th Anniversary Celebration of Cuikang & the Listing Conference for Cuikang Bichong cohosted by Guangdong Tianhe and Yara was held in Guangzhou. In 2009, Guangdong Tianhe took over the national exclusive distribution right of Cuikang, and proceeded with Yara this cooperation agreement of national exclusive distribution right again for another 5 years ever since 2011, which fully fulfilled the aspiration of cooperative partner for the long-term proxy and stable product promotion.

On 6 Dec., 2016, the 15th Anniversary Celebration of Cuikang & the Listing Conference for Cuikang Bichong cohosted by Guangdong Tianhe Agricultural Means of Production Co., Ltd. (Guangdong Tianhe) and Yara International ASA (Yara) was held in Guangzhou themed "cooperation, win-win, and prospect" attended by Yara, Guangzhou Tianhe, Cuikang planting talents, Cuikang national core dealers and retailers, altogether 230 odd participants. The conference successfully pushed the whole series of activities themed "15 years' Cuikang: eternal choice" to the grand climax. In 2009, Guangdong Tianhe took over the national exclusive distribution right of Cuikang, and proceeded this cooperation agreement of national exclusive distribution right again with Yara for another 5 years ever since 2011, which fully fulfilled the aspiration of cooperative partner for long-term agency and stable product promotion.

Yara is a No.1 fertilizer brand with high reputations worldwide, and Cuikang is a famous leaf fertilizer and water soluble fertilizer brand belonging to Yara. Since Cuikang series joined the Chinese market in 2001, they have been widely recognized by farmers across China. In 2009, Yara reached the agreement of exclusive distribution right with Guangdong Tianhe, the leading enterprise in domestic agricultural supply circulation area, and since then, Cuikang has been enjoying rapid development in China.

Zou Ning, president of Guangzhou Tianhe, and Liu Jinfa, general manager of Yara China delivered a speech in the celebration that 2016 marked the 15<sup>th</sup> anniversary of Cuikang brand in China, and the highly consistent development creed and trust coordination in both parties for years has facilitated the success that in 2016 Cuikang products was expected to exceed an annual sales volume of 3,000 tonnes.

At the conference, Cui yongtao, general manager of the agrochemical division of Guangdong Tianhe, reviewed the marketing history of Cuikang in the past 15 years. Cui revealed that ever since Cuikang series stepped into Chinese market, the superior leaf fertilizer as the Seniphos and Huaguoling have laid solid foundation for Cuikang brand. In 2009 Guangdong Tianhe's takeover of the national exclusive distribution right gave stronger impetus to Cuikang's development in China.

Firstly, the distribution area has been progressively expanded to the whole country. Currently provinces with an annual sales volume of over 100 tonnes involve Guangdong, Zhejiang, Shandong, Guangxi, Hunan and Jiangxi, which altogether realizes an overall



development of core crops regional market nationwide.

Secondly, Cuikang used to specialize in crops as tangerine, water melon and apple, and now has already touched upon various economic crops and field crops in an all-round way, such as cucurbits and vegetables, grapes and rice, which Cuikang has exceeded 100 tonnes in terms of their annual consumption.

Thirdly, with the successful participation of Cuikang Miao Zhuang, Bishi and Bichong, Cuikang series have established the product pattern of foliage spray, root rinse and trickle irrigation with 15 whole series varieties and matching, covering the nutritional requirements of various stages for the crops, and providing a comprehensive crops nutrition scheme.

Picture 1: Zou Ning, president of Guangdong Tianhe, is delivering a speech



Source: Guangdong Tianhe Agricultural Means of Production Co., Ltd.

Picture 2: Liu Jinfa, general manager of Yara, is delivering a speech



Source: Guangdong Tianhe Agricultural Means of Production Co., Ltd.

Picture 3: Guangdong Tianhe and Yara are signing the 5-year long-term cooperation agreement on Cuikang



Source: Guangdong Tianhe Agricultural Means of Production Co., Ltd.

Picture 4: Cuikang Bichong is listed nationwide



Source: Guangdong Tianhe Agricultural Means of Production Co., Ltd.

Picture 5: Cui kang planting talents win awards



Source: Guangdong Tianhe Agricultural Means of Production Co., Ltd.

## Bayer CropScience to obtain registration of 4 active ingredients for first time in China

Summary: On 12 Dec., 2016, the ICAMA published the list of 18 pesticides that passed the evaluations for formal registration on the 20<sup>th</sup> Plenary Session of the 8<sup>th</sup> National Pesticide Registration Review Committee. Bayer CropScience's 7 herbicides, including 4 active ingredients of terfuryltrione, triafamone, flurtamone, and flufenacet, were in the list. It marks that these products will be formally registered in China for the first time.

On 12 Dec., 2016, the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA) published the list of 18 pesticides that passed the evaluations for formal registration on the 20<sup>th</sup> Plenary Session of the 8<sup>th</sup> National Pesticide Registration Review Committee. Bayer CropScience AG (Bayer CropScience)'s 7 herbicides, including 4 active ingredients of terfuryltrione, triafamone, flurtamone, and flufenacet, were in the list. It marks that these products will be formally registered in China for the first time.

### Terfuryltrione

There are 2 products in this public notification involving terfuryltrione: terfuryltrione 97% TC and triafamone·terfuryltrione 27% SC (triafamone 9% + terfuryltrione 18%). The formulations were registered for prevention and control of annual weeds in rice transplanting fields, and it is usually cast around or buried under the soil with an active ingredient dosage of 72-108 g/hm<sup>2</sup>. This is going to be the first-time terfuryltrione has been registered in China.

Terfuryltrione (development code: AVH-301, CAS No.: 473278-76-1, chemical name: 2-{2-Chloro-4-methanesulfonyl-3- [(RS) - tetrahydrofuran-2-ylmethoxymethyl] benzoyl} cyclohexane-1, 3-dione) is a benzoyl-cyclohexanedione herbicide developed jointly by Bayer CropScience, Hokko Chemical Industry, Co., Ltd. and ZEN-NOH Group.

Being an HPPD inhibitor for prevention and control of annual weed and perennial broadleaf weed in rice and cereal fields, which can be pre-emergence and post-emergence applied. Its active ingredient is very effective in ALS herbicide-resistant weeds.

In 2008, terfuryltrione was marketed in the Japanese market, followed by registration of the triafamone·terfuryltrione formulations



(product name: Council Complete) in 2014 in South Korea. The global sales of terfuryltrione in 2013 was USD25 million. Although the figure was less than USD30 million, its annual compound average growth rate reached as high as 20.10% in 2009-2014.

Currently, terfuryltrione is mainly mixed with pyraclonil (product name: Get-Star), pyraclonil + metazosulfuron (product name: Comet), oxaziclomefone (product name: A-one), fentrazamide (product name: Bodyguard), and triafamone (product name: Council Complete).

### Flufenacet

There are 2 products in this public notification involving flufenacet: flufenacet 95% TC and flufenacet·diflufenican·flurtamon 33% SC (flufenacet 11% + diflufenican 11% + flurtamon 11%). The formulation product was registered for prevention and control of annual weeds in winter rice fields, which is usually spraying around with an effective dosage of 324-432 g/hm<sup>2</sup>.

This is going to be the first-time that flufenacet got registered in China. In May 2015, Bayer CropScience had obtained temporary registration of these two products, of which the product name of marketed formulations was "Baibao Ma".

Flufenacet (development code: BAY FOE 5043、FOE 5043 (Bayer CropScience), CAS No.: 142459-58-3, chemical name: 4'-fluoro-N-isopropyl-2-(5-trifluoromethyl-1,3,4-thiadiazol-2-yloxy) acetanilide) is an amide herbicide developed by Bayer CropScience.

Being a systemic herbicide used in the pre-emergence and post-emergence early stage. The product has apoplast transmission and distribution characteristics, as well as meristematic activity.

Flufenacet is a broad-spectrum selective herbicide effective in prevention and control of grassy weed and some broad-leaf weeds. Corn and soybean should be taken care before plant and during pre-emergence period; while tomato before plant; potato and sunflower pre-emergence; corn, wheat and rice post-emergence. And the dosage is up to 0.9 kg/hm<sup>2</sup>.

Flufenacet is of high compatibility, which is usually mixed with metribuzin, terbutin, isoxazole oxadiazon, pendimethalin, Sulcetazolam, pyriithiofenac, amine fluoride, acetochlor + furazolidone, atrazine, atrazine + metribuzin and 2,4-D.

Flufenacet was introduced to the market in 1998. Its global sales hit USD110 million, USD110 million, USD140 million and USD205 million in 2007, 2009, 2011 and 2014 respectively, an annual compound average growth rate of 19.3% in 2009-2014. The product patent EP0456826 expired on 13 June, 2009 in Europe, and the US patent US4968342 expired on 14 June, 2009.

### Flurtamon

There are 2 products in the public notification involving flurtamon: flurtamon 98% TC and "Baibao Ma". This was also the first time for flurtamon to be registered in China. In May 2015, Bayer CropScience had obtained the temporary registration on the two products.

Flurtamon (development code: RE-40885, SX 1802, RPA 590515, CAS No.: 96525-23-4, chemical name: (RS) -5-methylamino-2-phenyl-4-( $\alpha$ ,  $\alpha$ ,  $\alpha$ -trifluoro-m-tolyl) furan-3 (2H)-ketone) is a carotenoid synthetic inhibitor, being pre-sowing mixed for pre-emergence and post-emergence control of broadleaf weeds and some grassy weeds, for protection of cereal, peanut, cotton, pea and sunflower, with an dosage of 250-375 g/hm<sup>2</sup>.





Flurtamon was brought to the market in 1997. Its global sales in 2014 was below USD10 million, an annual compound average growth rate of -27.5% in 2009-2014.

### **Triafamone**

There are two products in this public notification involving triafamone: triafamone 93.6% TC and triafamone 19% SC. The formulation product is registered for prevention and control of annual weed in rice fields. This was also the first time for triafamone to get registered in China. In March 2015, Bayer CropScience had obtained temporary registration of these two products.

Triafamoneas (development code: AE1887196, BSC-BX60309, CAS No.: 874195-61-6) is a novel patented sulfonamide herbicide developed by Bayer CropScience.

Triafamone is an ALS inhibitor used for control of rice field grassy weeds, nutgrass flatsedge and broadleaf weeds, which was registered in 2014 in South Korea, using the product name of Council Complete (triafamone + terfuryltrione) for application in rice fields. Since 2015, Bayer CropScience has begun to strengthen the promotion of triafamone in the prime rice growing countries of Asia. On 17 March of the same year, the company was granted a first-time registration of triafamone TC and formulations in China.

Triafamone has a combined function of controlling and eradicating weeds, which is effective not only to the bud of weeds, but also to the barnyard grass with 0 to 3 leaf stage; and its effect period is up to 40 to 45 days. So even the first time use can help to solve the problem of weeding throughout the season in the South Rice fields, and in the North can control the amount of weeds in the early period, reducing the risk of weeding and the labor in the later period. In addition, flumetazepam also has a board usage period, flexible compound ingredient, as well as no harm to rice. The special "zero-day spraying" technology, changing the rice weeding mode, which has realized the synchronization of rice transplanting and herbicide spraying, saving time and effort.

### **Yangnong Chemical wins Chinese Patent Award on preparation process of pyrethroid compound intermediate**

Summary: In late-Oct. 2016, Yangnong Chemical won the Chinese Patent Award on its preparation process of pyrethroid compound intermediate.

In late-Oct. 2016, the result of the 18<sup>th</sup> Chinese Patent Award was revealed. Jiangsu Yangnong Chemical Co., Ltd. (Yangnong Chemical) got the award on its preparation process of pyrethroid compound intermediate (patent No.: ZL200310122496.1).

The company put forward a novel synthetic route to make 2,3,5,6-tetrafluoro-4-hydroxymethyl-phenyl)-methano, an important intermediate of pyrethroid, by the reduction of tetrafluoro-4-hydroxymethyl-phenyl)-methano. Researchers conducted adequate studies, put forward many applicative reduction methods, namely applying reductant and catalytic hydrogenation, and chose the preferred reaction conditions including reactive solvent, temperature, pressure and time. The research has reference value for the future reduction process of other compounds with similar structure. The process is safe, can be easily controlled, has fewer by-products, high yield, environmentally friendly, and does not need high temperature and high pressure. Besides, the purity can reach 97%+.

The 2,3,5,6-tetrafluoro-4-hydroxymethyl-phenyl)-methano and subsequent product 4-methyl- 2,3,5,6-tetrafluorobenzyl alcohol can be used to make a series of commercial pyrethroid insecticides including tefluthrin, tetramethylfluthrin, and meperfluthrin. At present, the sales of 4-methyl- 2,3,5,6-tetrafluorobenzyl alcohol have reached USD100.72 million (RMB700 million). And meperfluthrin was





the first Chinese innovative pesticide by Yangnong Chemical whose annual sales were over USD28.78 million (RMB200 million).

## **Yangnong Chemical wins China Industry's 'Oscar' for 'green efficient pyrethroids development and application program'**

Summary: Jiangsu Yangnong was awarded a China Industry Award for its "green efficient pyrethroids development and application program".

On 11 Dec., 2016, the 4<sup>th</sup> China Industry Awards Conference was held at the Beijings Great Hall. Jiangsu Yangnong Chemical Co., Ltd. (Jiangsu Yangnong) was awarded a China Industry Award for its "green efficient pyrethroids development and application program". The prize is praised as an Oscar award in Chinese industry award.

Zhou Qikui, the general manager of Yangnong Chemical introduced that, in 1990, Yangnong Chemical decided to select excellent staffs to organize a leader work group, so as to make technical breakthroughs in the pyrethroid project; in 1993, the company successfully marketed a novel product – bioallethrin whose efficacy meets the international level. "In 1994, we put the bioallethrin into operation, and then sold 9 tonnes of it at USD143,889/t (RMB1 million/t), USD43,166.71/t (RMB300,000/t) cheaper than the imported one from Japan. That year, we made a sales of USD1.30 million (RMB9 million)," said Zhou. In 2003, Sumitomo Chemical Co., Ltd. developed the second generation dimefluthrin, whose efficacy was 10 times that of Yangnong Chemical's bioallethrin, at the same dosage. In the face of this challenge, Yangnong Chemical completely abandoned the oil innovation method and developed the third generation product meperfluthrin in 2007, whose efficacy is 15 times that of bioallethrin. Yangnong Chemical regained the market say in China.

"When meperfluthrin was marketed, we reduced the price to USD287,778/t (RMB2 million/t) from USD863,334/t (RMB6 million/t)," said Jiang Youfa, vice president of Yangnong Chemical. Meperfluthrin broke the monopoly of foreign companies, realized an annual sales of over USD28.78 million (RMB200 million), becoming the first self-innovative pesticide whose sales surpassed USD14.39 million (RMB100 million) and hit a record high in China. In 2016, Yangnong Chemical exported more than USD10 million of meperfluthrin to Japan, and the pyrethroid products of Yangnong Chemical account for respectively 70% and 50% of the total of Chinese market and world market. "Coming up next the research into outdoor sanitary product will be our new direction of research and development," said Zhou. Sanitary insecticides can prevent mosquito bites in the open air and kill pests on plants and trees, which enjoy broad market prospect and have become the hotspot among pesticide companies at home and abroad.

Pyrethroid is a novel pesticide with high efficiency and low toxicity. For a long time, the production technique of pyrethroid was monopolized by multinational corporations due to its complicated structure and high technical threshold. Before the 1990s, China's pyrethroid was completely imported as foreign companies represented by Japan have blockaded the technologies.

## **Hubei Sanonda ordered to relocate due to excessive discharge of water pollutants**

Summary: The No.3 Central Environmental Protection Inspectorate was settled in Hubei Province in the last 10 days of Nov. 2016. The environmental pollution issues in enterprises as Hubei Sanonda, Hubei Boerde and Hubei Jiaying reported by complainants have been resolved. As verified by investigations, the reported issues were partially true.

Ever since the No.3 Central Environmental Protection Inspectorate was settled in Hubei Province in the last 10 days of Nov. 2016, Jingzhou City, Hubei Province seized the opportunity and fully cooperated with them, taking initiatives to make a difference. In order







to investigate seriously the pollutant discharging issues of industries and enterprises of Yangtze River in Hubei section, and secure the water ecosystem of Yangtze river basin, the No.4 Pollution Disposal Inspectorate for industries and enterprises of the Yangtze River basin in Hubei section came to Jingzhou and inspected Hubei Sanonda Co., Ltd. (Hubei Sanonda), Hubei Boerde Chemical Co., Ltd. (Hubei Boerde), and Hubei Huida Chemical Co., Ltd. (Hubei Huida), conducting inspections and supervisions over the reported issues from the residents and imposing specific rectification requirements on environmental pollution issues of those enterprises. Up to 5:30 p.m. on 11 Dec., 2016, the Jingzhou Government has received 54 cases assigned by the No.3 Central Environmental Protection Inspectorate, 22 of which have been closed and 32 under investigation.

Specifically speaking, environmental pollution issues in enterprises as Hubei Sanonda, Hubei Boerde and Hubei Jiaying Co., Ltd. (Hubei Jiaying) reported by complainants have been resolved. As verified by investigations, the reported issues were partially true. As to Hubei Sanonda's illegal activities of discharging excessive water pollutants, Jingzhou Environmental Protection Agency released Letter of Decision on Ordering to Correct Illegal Acts and Prior Notice of Administrative Penalty on 6 Dec., 2016, demanding a penalty of USD6,712 (RMB46,650) and ordered the company to accelerate its overall relocation process, pinpoint every specific worknode and inform the public.

### **InVivo establishes joint venture with HVH**

As reported by Agropages on 13 Dec., 2016, France-based InVivo Corporation (InVivo) announced that it has reached an agreement with its Chinese partner HVH, a supplier of generic phytosanitary products, to establish a joint venture company in Shanghai. The joint venture company was being set up to commercialize and market generic pesticides. InVivo expects its first commercialization by 2018-2019, with the focus on field crops, especially corn. Moreover, InVivo also expects another partnership agreement with a Brazilian agrochemical company CCAB AGRO S.A. (CCAB) on commercialization of generic pesticides before the end of Dec.

"Faced with the concentration of global agrochemical sector, we are willing to keep access to complementary solutions to strengthen InVivo's market position", underlined Laurent Martel, director of the InVivo Agriculture division.

The company also plans to focus its development on the areas of digital innovation, notably in terms of biocontrol and precision farming.

As the largest agricultural corporation in France, and global leading enterprise in the industry, InVivo sustains an annual revenue of Euro5.7 billion with 6,600 staff in 20 countries. In March this year, InVivo signed agreement to acquire Bioline, specializing in marketing biological control agents, a subsidiary of Syngenta Participations AG.

Founded in 2007, CCAB mainly engages in pesticides registration, export, marketing and pesticide application technical services. The shareholder of its holding company CCAB Participaes S.A. refers to Brazil's major producer's cooperative of cotton, soybean, corn and coffee, with an annual output value of over USD8 billion, and its annual pesticide consumption accounts for 20% of the entire Brazil. In Dec. 2016, Huapont Life Sciences Co., Ltd. participated in CCAB for its increase in capital and share with no more than USD20 million, landing 7.5% of CCAB's stock rights.





## Dow AgroSciences to market paddy field herbicide 'Lingsike' in Zhejiang in 2017

On 20 Dec., 2016, Dow AgroSciences LLC (Dow AgroSciences) displayed its two leading insecticides "Sipinnuo" (斯品诺™) and "Aoshoule" (爱收乐™) at the 24<sup>th</sup> Zhejiang Crop Protection Conference. Dow AgroSciences disclosed that the company will market the revolutionary paddy field herbicide "Lingsike" series (灵斯科™) in 2017.

## Chinese agricultural machinery market may surge in 2017

Summary: The development of intelligent agricultural machinery will be a focus in the Chinese agricultural machinery market in 2017, especially the large-scale compound machinery. Besides, prices are expected to rise.

The Chinese agricultural machinery market is undergoing profound changes, during the 13<sup>th</sup> Five-year Plan period (2016-2020). With the agricultural transformation and structural adjustment in modern agriculture, the development of agricultural mechanization in China has presented some new features under the modern agricultural development path, whose features are structural adjustment, efficient output, product safety, resource saving and environment friendly. The development of intelligent agricultural machinery will be a focus in the Chinese agricultural machinery market in 2017, especially the large-scale compound machinery. Besides, prices are expected to rise.

As the country effectively reduce production capacity, raw material prices will rebound. In 2016, prices of raw materials, energy, logistics presented a fluctuated but overall up trend. At the same time, with the labor cost increasing continuously, along with the replacement of diesel engines, product upgrades and new products promotion, 185 tractor enterprises at large scale have gained revenue and total profits of USD8.18 billion (RMB56.87 billion) and USD261.16 million (RMB1.82 billion), as of the end of Oct. 2016, down by 2.22% and 10.71% YoY respectively.

Although the overall scale of the market present a promising prospect, there is a substantial decline in profits and an obvious increase in production costs. Therefore, the price of tractors will climb in 2017, so there will be a significant increase in cost of purchase. Meanwhile, some experts predict that the prices of the main grains and economic crops will remain low, and farmers will lose benefit, leading to the slump of customers' purchasing power.

"In H2 2016, relevant departments began to intensify the regulations on the overloaded vehicles, leading to continuous rising costs in logistics, which is one of the reasons that lead to the surging price of agricultural machinery in 2017", pointed out Zhu Linjun, Sales General Manager of Jiangsu Wode Agricultural Machinery Co., Ltd.



## China likely to become largest market for biostimulants

According to the news released on 29 Dec., 2016 on agropages.com, China may become the largest market for biostimulants. In recent years, biostimulants, represented by humic acid, chitin, fish protein and alginic acid, have been gradually entering into China from European countries and the US, and they have become edge tools in terms of enhancing the quality and efficacy of fertilizers and pesticides. Industry insiders believe that agricultural means of production enterprises have been scrambling for biostimulants. At present, it is estimated that the global market value of biostimulants is about USD1.3 billion, among which the Chinese market value is approximately USD200 million. It is expected that by 2020, the global market value will reach USD2 billion to USD3 billion, with an annual growth rate of more than 10%. In the coming 3 to 5 years, the Chinese market value of biostimulants will reach USD400 million to USD500 million. It is very likely that China will become the largest market for the product.

## Vietnam plans to expand planting area of GM corn

The Department of Agricultural and Rural Development of Vietnam planned to expand the planting area of genetically modified (GM) corn to improve yield and quality. The field trial of GM corn in Trung Son commune (Do Luong district, Vietnam) in 2015 with 0.5 acre (1,800 m<sup>2</sup>) area has gained high yield and economic efficiency. At present, Trung Son commune has 560 ha of agricultural land, in which 80 ha is specialized for corn planting. In 2016, Trung Son has expanded the area of GM corn in 6 ha for 55 farmers. The result of evaluation has shown that GM corn is high yielding. Forty eight tonnes of corn was harvested in 6 ha of GM corn area in Trung Son commune this year. The advantage of GM corn is its insect resistance. However, the price of GM corn seeds is higher compared to others, which refrains farmers to purchase and apply. On average, non-GM corn seed price is about 90,000-130,000 VND/kg, while GM corn is priced at 210,000 VND/kg. Although farmers might have to pay more for this seed, they will save money from pesticides and herbicides application.

## Chemical fertilizer expected to be completely replaced by microbial fertilizer in future

Summary: Gao Xiangzhao, chief expert of the NAESC, recently made judgment of the market prospects of microbial fertilizer: at present, it is impossible for microbial fertilizer to replace chemical fertilizer, and vice versa. However, microbial fertilizer is likely to take place of chemical fertilizer when the microbial technology develops to a certain extent.

"At present, it is impossible for microbial fertilizer to replace chemical fertilizer, and vice versa", said Gao Xiangzhao, chief expert of the National Agro-Tech Extension and Service Center (NAESC). By saying that, Gao confirmed the market prospects of microbial fertilizer.

In major planting provinces of economic crops, such as Shandong, Henan, Shaanxi and Gansu, especially in the planting region of old fruit trees, microbial fertilizer has become the first choice of distributors and farmers, which is able to ensure crop yield and quality, as well as retrieving economic loss.

At present, there is a rich variety of microbial fertilizers in the market, but their quality is uneven. In the choice of microbial fertilizer, Tao Shuxing, a microbiology professor of the College of Life Science at Shaanxi Normal University, reminded consumers to choose microbial fertilizer produced by legitimate manufacturers who have microbial fertilizer registrations issued by the Ministry of Agriculture of the People's Republic of China, including microbial agent registrations, biological organic fertilizer registrations and compound microbial fertilizer registrations. At present, the executive standard for microbial agents is the GB 20287-2006, and that



for biological organic fertilizer and compound microbial fertilizer is the industrial standard, NY884-2012 and NY/T 798-2015 respectively.

## Hubei issues policy to accelerate development of new pesticide varieties

Summary: Petrochemical industry is an important industrial pillar industry in Hubei. To speed up the transformation and upgrading of the petrochemical industry, enhance the quality and efficiency of industrial development, and achieve green and sustainable development, Hubei announced the implementation plan on promoting the transformation, upgrading, and green development of the petrochemical industry. The plan proposed to nurture and grow new industries, and one of them was to speed up the development of new pesticide varieties, including low toxic, high efficient, and low residual pesticides, herbicides, fungicides, viral inhibitors, and seed treating agents.

Petrochemical industry is an important industrial pillar industry in Hubei Province. The province issued the implementation plan on promoting the transformation, upgrading, and green development of its petrochemical industry, in order to speed up the transformation and upgrading of the petrochemical industry, enhance the quality and efficiency of industrial development, and achieve green and sustainable development. The plan proposed to speed up the development of new pesticides, including low toxic, high efficient, and low residual pesticides, herbicides, fungicides, viral inhibitors and seed treating agents.

The plan also proposed to promote the upgrading of the fertilizer industry, supporting fertilizer enterprises to implement technological transformation for improve improvement, energy saving, environmental protection, safety production, comprehensive utilization of resources, and improvement of production process and equipment. Besides, it encourages enterprises to develop high efficient and environmentally friendly fertilizers, and build a new agrochemical service system that integrates soil testing and fertilizing, package fertilizer distribution, scientific fertilizing technical guidance, agricultural knowledge consulting and training, demonstration and popularization, and information services.

The development objectives of this plan included the following 5 aspects:

1. By 2020, the ethylene industry chain continues to expand; organic raw materials, advanced chemical materials and high-end chemical industry rapidly developing.
2. Accelerate the elimination of production lines with outmoded production process and equipment, huge safety risks, serious environmental pollution, and high consumption of resources and energy, to effectively reduce excess production capacity.
3. Enterprises producing hazardous chemicals that are located in densely populated urban areas or environmentally sensitive areas shall move to industrial parks or be shut down.
4. All newly built petrochemical projects shall be located in the chemical industrial park or the petrochemical industrial park; the construction of parks shall be more standardized and the industrial layout shall be more rational; build a number of technology research and development centers with international standards and large-scale enterprise groups with relatively strong competitiveness.
5. Emissions of major pollutants such as waste water, waste gas, solid waste, chemical oxygen demand (COD), ammonia nitrogen compounds, sulfur dioxide, and volatile organic compounds, shall strictly follow the state's requirements of the overall amount of



emissions in Hubei. At the same time, pollutants should be effectively controlled and comprehensively utilized. The disposal and treatment of all kinds of solid waste shall be in accordance with the requirements of reduction, innocuous disposal, and recycling.

## Price Dynamics

### Ex-works price of major pesticide technical products in China in Dec. 2016

Summary: In this article, CCM will provide the ex-works price of 23 pesticide TC (TK) in Nov. and Dec. 2016, including 8 herbicides, 8 insecticides and 7 fungicides. The 8 herbicides are 2,4-Dichlorophenoxyacetic acid 96% technical, acetochlor 92% technical, butachlor 92% technical, dicamba 98% technical, diuron 97% technical, glyphosate 95% technical, paraquat 42% TK and trifluralin 95% technical; the 8 insecticides are acetamiprid 95% technical, bifenthrin 97% technical, chlorpyrifos 95% technical, dimethoate 98% technical, imidacloprid 97% technical, lambda-cyhalothrin 95% technical, methomyl 98% technical and pymetrozine 95% technical; the 7 fungicides are azoxystrobin 96% technical, carbendazim 98% technical (white color), chlorothalonil 98% technical, mancozeb 90% technical, prochloraz 97% technical, propiconazole 95% technical and thiophanate-methyl 96% technical (white color).

Table 1: Ex-work price of major pesticide technical products in China, Dec. 2016 and Jan. 2017

Spec.	2016 12 08		2017 01 08	
	USD/t	RMB/t	USD/t	RMB/t
2,4-Dichlorophenoxyacetic acid 96% technical	2,284.27	15,700	2,266.76	15,700
95% Acetamiprid technical	16,586.4	114,000	19,924.35	138,000
Acetochlor 92% technical	2,575.26	17,700	2,598.83	18,000
96% Azoxystrobin Technical	25,607.08	176,000	24,977.62	173,000
97% Bifenthrin technical	26,480.05	182,000	27,432.07	190,000
92% Butachlor technical	2,546.16	17,500	2,526.64	17,500
98% Carbendazim technical (White color)	4,801.33	33,000	5,053.28	35,000
98% Chlorothalonil technical	5,092.32	35,000	5,168.78	35,800
95% chlorpyrifos technical	4,292.1	29,500	4,475.76	31,000
Dicamba 98% technical	15,713.43	108,000	15,592.97	108,000
98% Dimethoate technical	3,637.37	25,000	3,753.86	26,000
97% Diuron technical	3,855.61	26,500	3,970.43	27,500
95% Glyphosate technical	3,491.87	24,000	3,826.05	26,500
97% Imidacloprid technical	16,877.39	116,000	18,624.93	129,000
95% Lambda-cyhalothrin technical	20,660.26	142,000	21,368.14	148,000
90% Mancozeb technical	2,735.3	18,800	2,714.33	18,800
98% Methomyl technical	6,983.75	48,000	7,002.4	48,500
Paraquat 42% TK	1,600.44	11,000	2,166	15,000
97% Prochloraz technical	8,293.2	57,000	8,229.62	57,000
95% Propiconazole technical	15,422.44	106,000	15,881.72	110,000
95% Pymetrozine technical	20,805.75	143,000	21,223.76	147,000
96% Thiophanate-methyl technical (White color)	4,001.11	27,500	4,071.5	28,200
95% Trifluralin technical	4,510.34	31,000	4,475.76	31,000

Note: 1. 20161208 refers to 8 Dec., 2016 and other times all adopt this rule in this article; 2. Ex-works price includes VAT, which will be provided in monday of the second/third week of each month.

Source: CCM

## China's minimum purchase prices of corn on 19 Jan., 2017

Summary: The minimum purchase prices of corn in 19 regions in China on 19 Jan., 2017 will be introduced in this article.

Currently, corn enjoys the largest planting area among all crops in China. In 2014, the planting area of corn hit 37.12 million ha (557.85 million mu). Heilongjiang, Jilin, Inner Mongolia Autonomous Region, Henan, Shandong, Hebei, Liaoning, Shanxi, Yunnan and Sichuan are the top ten corn planting regions in China, whose combined planting areas of corn accounted for around 78% of China's total. In this article, CCM introduces the minimum purchase prices of corn in China.

Table 2: Minimum purchase prices of corn in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	238.89	1,660	233.13	1,620
2	Hebei Province	205.79	1,430	202.91	1,410
3	Henan Province	225.94	1,570	221.62	1,540
4	Jiangsu Province	236.01	1,640	240.33	1,670
5	Liaoning Province	195.71	1,360	189.96	1,320
6	Heilongjiang Province	166.93	1,160	168.37	1,170
7	Jilin Province	181.32	1,260	181.32	1,260
8	Guangdong Province	225.94	1,570	224.50	1,560
9	Fujian Province	231.69	1,610	233.13	1,620
10	Hunan Province	244.64	1,700	237.45	1,650
11	Zhejiang Province	230.25	1,600	231.69	1,610
12	Shanxi Province	218.74	1,520	221.62	1,540
13	Anhui Province	224.50	1,560	215.86	1,500
14	Jiangxi Province	253.28	1,760	243.20	1,690
15	Hubei Province	244.64	1,700	241.76	1,680
16	Shaanxi Province	227.37	1,580	225.94	1,570
17	Inner Mongolia Autonomous Region	197.15	1,370	195.71	1,360
18	Sichuan Province	257.59	1,790	257.59	1,790
19	Xinjiang Uygur Autonomous Region	208.67	1,450	210.11	1,460

Source: CCM

## China's minimum purchase prices of corn on 12 Jan., 2017

Summary: The minimum purchase prices of corn in 19 regions in China on 12 Jan., 2017 will be introduced in this article.

Currently, corn enjoys the largest planting area among all crops in China. In 2014, the planting area of corn hit 37.12 million ha (557.85 million mu). Heilongjiang, Jilin, Inner Mongolia Autonomous Region, Henan, Shandong, Hebei, Liaoning, Shanxi, Yunnan and Sichuan are the top ten corn planting regions in China, whose combined planting areas of corn accounted for around 78% of China's total. In this article, CCM introduces the minimum purchase prices of corn in China.

Table 3: Minimum purchase prices of corn in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	227.37	1,580	238.89	1,660
2	Hebei Province	205.79	1,430	205.79	1,430
3	Henan Province	225.94	1,570	225.94	1,570
4	Jiangsu Province	247.52	1,720	236.01	1,640
5	Liaoning Province	184.92	1,285	195.71	1,360
6	Heilongjiang Province	166.93	1,160	166.93	1,160
7	Jilin Province	181.32	1,260	181.32	1,260
8	Guangdong Province	230.25	1,600	225.94	1,570
9	Fujian Province	244.64	1,700	231.69	1,610
10	Hunan Province	247.52	1,720	244.64	1,700
11	Zhejiang Province	238.89	1,660	230.25	1,600
12	Shanxi Province	212.98	1,480	218.74	1,520
13	Anhui Province	224.50	1,560	224.50	1,560
14	Jiangxi Province	253.28	1,760	253.28	1,760
15	Hubei Province	244.64	1,700	244.64	1,700
16	Shaanxi Province	227.37	1,580	227.37	1,580
17	Inner Mongolia Autonomous Region	214.42	1,490	197.15	1,370
18	Sichuan Province	257.59	1,790	257.59	1,790
19	Xinjiang Uygur Autonomous Region	210.11	1,460	208.67	1,450

Source: CCM

### China's minimum purchase prices of corn on 5 Jan., 2017

Summary: The minimum purchase prices of corn in 19 regions in China on 5 Jan., 2017 will be introduced in this article.

Currently, corn enjoys the largest planting area among all crops in China. In 2014, the planting area of corn hit 37.12 million ha (557.85 million mu). Heilongjiang, Jilin, Inner Mongolia Autonomous Region, Henan, Shandong, Hebei, Liaoning, Shanxi, Yunnan and Sichuan are the top ten corn planting regions in China, whose combined planting areas of corn accounted for around 78% of China's total. In this article, CCM introduces the minimum purchase prices of corn in China.

Table 4: Minimum purchase prices of corn in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	237.83	1,640	227.37	1,580
2	Hebei Province	205.92	1,420	205.79	1,430
3	Henan Province	194.32	1,340	225.94	1,570
4	Jiangsu Province	253.78	1,750	247.52	1,720
5	Liaoning Province	197.22	1,360	184.92	1,285
6	Heilongjiang Province	150.82	1,040	166.93	1,160
7	Jilin Province	189.97	1,310	181.32	1,260
8	Guangdong Province	230.58	1,590	230.25	1,600
9	Fujian Province	246.53	1,700	244.64	1,700
10	Hunan Province	266.83	1,840	247.52	1,720
11	Zhejiang Province	240.73	1,660	238.89	1,660
12	Shanxi Province	220.42	1,520	212.98	1,480
13	Anhui Province	229.12	1,580	224.50	1,560
14	Jiangxi Province	251.75	1,736	253.28	1,760
15	Hubei Province	266.83	1,840	244.64	1,700
16	Shaanxi Province	220.42	1,520	227.37	1,580
17	Inner Mongolia Autonomous Region	216.07	1,490	214.42	1,490
18	Sichuan Province	268.28	1,850	257.59	1,790
19	Xinjiang Uygur Autonomous Region	211.72	1,460	210.11	1,460

Source: CCM

### China's minimum purchase prices of corn on 29 Dec., 2016

Summary: The minimum purchase prices of corn in 19 regions in China on 29 Dec., 2016 will be introduced in this article.

Currently, corn enjoys the largest planting area among all crops in China. In 2014, the planting area of corn hit 37.12 million ha (557.85 million mu). Heilongjiang, Jilin, Inner Mongolia Autonomous Region, Henan, Shandong, Hebei, Liaoning, Shanxi, Yunnan and Sichuan are the top ten corn planting regions in China, whose combined planting areas of corn accounted for around 78% of China's total. In this article, CCM introduces the minimum purchase prices of corn in China.

Table 5: Minimum purchase prices of corn in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	240.73	1,660	237.83	1,640
2	Hebei Province	223.32	1,540	205.92	1,420
3	Henan Province	226.22	1,560	194.32	1,340
4	Jiangsu Province	232.03	1,600	253.78	1,750
5	Liaoning Province	189.97	1,310	197.22	1,360
6	Heilongjiang Province	174.02	1,200	150.82	1,040
7	Jilin Province	205.92	1,420	189.97	1,310
8	Guangdong Province	232.03	1,600	230.58	1,590
9	Fujian Province	249.43	1,720	246.53	1,700
10	Hunan Province	272.63	1,880	266.83	1,840
11	Zhejiang Province	256.68	1,770	240.73	1,660
12	Shanxi Province	226.22	1,560	220.42	1,520
13	Anhui Province	226.22	1,560	229.12	1,580
14	Jiangxi Province	265.38	1,830	251.75	1,736
15	Hubei Province	271.18	1,870	266.83	1,840
16	Shaanxi Province	229.12	1,580	220.42	1,520
17	Inner Mongolia Autonomous Region	210.27	1,450	216.07	1,490
18	Sichuan Province	266.83	1,840	268.28	1,850
19	Xinjiang Uygur Autonomous Region	211.72	1,460	211.72	1,460

Source: CCM

### China's minimum purchase prices of rice on 19 Jan., 2017

Summary: The minimum purchase prices of rice in 10 regions in China on 19 Jan., 2017 were introduced in this article.

Currently, rice enjoys the second largest planting area among all crops in China. In 2014, the planting area of rice hit 30.31 million ha (454.65 million mu). Hunan, Jiangxi, Heilongjiang, Jiangsu, Anhui, Hubei, Guangxi Zhuang Autonomous Region, Sichuan, Guangdong and Yunnan are the top ten rice planting regions in China, whose combined planting areas of rice accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of rice in China.

Table 6: Minimum purchase prices of rice in China, 19 Jan., 2017

Region	12 Jan., 2017		19 Jan., 2017	
	Purchase price of japonica rice		Purchase price of japonica rice	
	USD/t	RMB/t	USD/t	RMB/t
Jilin Province	453.31	3,150	453.31	3,150
Heilongjiang Province	440.36	3,060	440.36	3,060
Jiangsu Province	410.14	2,850	410.14	2,850
Region	Purchase price of indica rice		Purchase price of indica rice	
	USD/t	RMB/t	USD/t	RMB/t
	Anhui Province	369.84	2,570	379.92
Hubei Province	388.55	2,700	388.55	2,700
Jiangxi Province	368.40	2,560	368.40	2,560
Guangdong Province	374.16	2,600	388.55	2,700
Sichuan Province	365.53	2,540	365.53	2,540
Fujian Province	374.16	2,600	374.16	2,600
Hunan Province	371.28	2,580	371.28	2,580

Source: CCM



## China's minimum purchase prices of rice on 12 Jan., 2017

Summary: The minimum purchase prices of rice in 10 regions in China on 12 Jan., 2017 were introduced in this article.

Currently, rice enjoys the second largest planting area among all crops in China. In 2014, the planting area of rice hit 30.31 million ha (454.65 million mu). Hunan, Jiangxi, Heilongjiang, Jiangsu, Anhui, Hubei, Guangxi Zhuang Autonomous Region, Sichuan, Guangdong and Yunnan are the top ten rice planting regions in China, whose combined planting areas of rice accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of rice in China.

Table 7: Minimum purchase prices of rice in China, 12 Jan., 2017

Region	5 Jan., 2017		12 Jan., 2017	
	Purchase price of japonica rice		Purchase price of japonica rice	
	USD/t	RMB/t	USD/t	RMB/t
Jilin Province	453.31	3,150	453.31	3,150
Heilongjiang Province	440.36	3,060	440.36	3,060
Jiangsu Province	410.14	2,850	410.14	2,850
Region	Purchase price of indica rice		Purchase price of indica rice	
	USD/t	RMB/t	USD/t	RMB/t
	Anhui Province	369.84	2,570	369.84
Hubei Province	388.55	2,700	388.55	2,700
Jiangxi Province	359.77	2,500	368.40	2,560
Guangdong Province	388.55	2,700	374.16	2,600
Sichuan Province	365.53	2,540	365.53	2,540
Fujian Province	374.16	2,600	374.16	2,600
Hunan Province	371.28	2,580	371.28	2,580

Source: CCM

## China's minimum purchase prices of rice on 5 Jan., 2017

Summary: The minimum purchase prices of rice in 10 regions in China on 5 Jan., 2017 were introduced in this article.

Currently, rice enjoys the second largest planting area among all crops in China. In 2014, the planting area of rice hit 30.31 million ha (454.65 million mu). Hunan, Jiangxi, Heilongjiang, Jiangsu, Anhui, Hubei, Guangxi Zhuang Autonomous Region, Sichuan, Guangdong and Yunnan are the top ten rice planting regions in China, whose combined planting areas of rice accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of rice in China.

Table 8: Minimum purchase prices of rice in China, 5 Jan., 2017

Region	29 Dec., 2016		5 Jan., 2017	
	Purchase price of japonica rice		Purchase price of japonica rice	
	USD/t	RMB/t	USD/t	RMB/t
Jilin Province	456.80	3,150	453.31	3,150
Heilongjiang Province	443.75	3,060	440.36	3,060
Jiangsu Province	413.30	2,850	410.14	2,850
Region	Purchase price of indica rice		Purchase price of indica rice	
	USD/t	RMB/t	USD/t	RMB/t
	Anhui Province	372.69	2,570	369.84
Hubei Province	391.54	2,700	388.55	2,700
Jiangxi Province	362.54	2,500	359.77	2,500
Guangdong Province	391.54	2,700	388.55	2,700
Sichuan Province	368.34	2,540	365.53	2,540
Fujian Province	377.04	2,600	374.16	2,600
Hunan Province	374.14	2,580	371.28	2,580

Source: CCM

## China's minimum purchase prices of rice on 29 Dec., 2016

Summary: The minimum purchase prices of rice in 10 regions in China on 29 Dec., 2016 were introduced in this article.

Currently, rice enjoys the second largest planting area among all crops in China. In 2014, the planting area of rice hit 30.31 million ha (454.65 million mu). Hunan, Jiangxi, Heilongjiang, Jiangsu, Anhui, Hubei, Guangxi Zhuang Autonomous Region, Sichuan, Guangdong and Yunnan are the top ten rice planting regions in China, whose combined planting areas of rice accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of rice in China.

Table 9: Minimum purchase prices of rice in China, 29 Dec., 2016

Region	22 Dec., 2016		29 Dec., 2016	
	Purchase price of japonica rice		Purchase price of japonica rice	
	USD/t	RMB/t	USD/t	RMB/t
Jilin Province	456.80	3,150	456.80	3,150
Heilongjiang Province	443.75	3,060	443.75	3,060
Jiangsu Province	398.79	2,750	413.30	2,850
Region	Purchase price of indica rice		Purchase price of indica rice	
	USD/t	RMB/t	USD/t	RMB/t
	Anhui Province	372.69	2,570	372.69
Hubei Province	394.44	2,720	391.54	2,700
Jiangxi Province	362.54	2,500	362.54	2,500
Guangdong Province	391.54	2,700	391.54	2,700
Sichuan Province	368.34	2,540	368.34	2,540
Fujian Province	377.04	2,600	377.04	2,600
Hunan Province	374.14	2,580	374.14	2,580

Source: CCM

## China's minimum purchase prices of wheat on 19 Jan., 2017

Summary: The minimum purchase prices of wheat in 13 regions in China on 19 Jan., 2017 will be introduced in this article.

Currently, wheat enjoys the third largest planting area among all crops in China. In 2014, the planting area of wheat hit 24.07 million ha (361.04 million mu). Henan, Shandong, Anhui, Hebei, Jiangsu, Sichuan provinces, Xinjiang Uygur Autonomous Region, Shaanxi, Hubei and Gansu are the top ten wheat planting regions in China, whose combined planting areas of wheat accounted for around 89% of China's total. In this article, CCM introduces the minimum purchase prices of wheat in China.

Table 10: Minimum purchase prices of wheat in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Sichuan Province	368.40	2,560	368.40	2,560
2	Chongqing	366.96	2,550	366.96	2,550
3	Gansu Province	351.13	2,440	351.13	2,440
4	Ningxia Hui Autonomous Region	348.26	2,420	348.26	2,420
5	Hebei Province	351.13	2,440	351.13	2,440
6	Jiangsu Province	333.87	2,320	333.87	2,320
7	Hubei Province	330.99	2,300	330.99	2,300
8	Shandong Province	371.28	2,580	371.28	2,580
9	Henan Province	332.43	2,310	332.43	2,310
10	Anhui Province	339.62	2,360	339.62	2,360
11	Guangdong Province	388.55	2,700	388.55	2,700
12	Fujian Province	365.53	2,540	358.33	2,490
13	Shanxi Province	323.79	2,250	323.79	2,250

Source: CCM

## China's minimum purchase prices of wheat on 12 Jan., 2017

Summary: The minimum purchase prices of wheat in 13 regions in China on 12 Jan., 2017 will be introduced in this article.

Currently, wheat enjoys the third largest planting area among all crops in China. In 2014, the planting area of wheat hit 24.07 million ha (361.04 million mu). Henan, Shandong, Anhui, Hebei, Jiangsu, Sichuan provinces, Xinjiang Uygur Autonomous Region, Shaanxi, Hubei and Gansu are the top ten wheat planting regions in China, whose combined planting areas of wheat accounted for around 89% of China's total. In this article, CCM introduces the minimum purchase prices of wheat in China.

Table 11: Minimum purchase prices of wheat in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Sichuan Province	368.40	2,560	368.40	2,560
2	Chongqing	366.96	2,550	366.96	2,550
3	Gansu Province	351.13	2,440	351.13	2,440
4	Ningxia Hui Autonomous Region	348.26	2,420	348.26	2,420
5	Hebei Province	351.13	2,440	351.13	2,440
6	Jiangsu Province	333.87	2,320	333.87	2,320
7	Hubei Province	330.99	2,300	330.99	2,300
8	Shandong Province	366.96	2,550	371.28	2,580
9	Henan Province	332.43	2,310	332.43	2,310
10	Anhui Province	339.62	2,360	339.62	2,360
11	Guangdong Province	362.65	2,520	388.55	2,700
12	Fujian Province	359.77	2,500	365.53	2,540
13	Shanxi Province	323.79	2,250	323.79	2,250

Source: CCM

## China's minimum purchase prices of wheat on 5 Jan., 2017

Summary: The minimum purchase prices of wheat in 13 regions in China on 5 Jan., 2017 will be introduced in this article.

Currently, wheat enjoys the third largest planting area among all crops in China. In 2014, the planting area of wheat hit 24.07 million ha (361.04 million mu). Henan, Shandong, Anhui, Hebei, Jiangsu, Sichuan provinces, Xinjiang Uygur Autonomous Region, Shaanxi, Hubei and Gansu are the top ten wheat planting regions in China, whose combined planting areas of wheat accounted for around 89% of China's total. In this article, CCM introduces the minimum purchase prices of wheat in China.

Table 12: Minimum purchase prices of wheat in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Sichuan Province	371.24	2,560	368.40	2,560
2	Chongqing	369.79	2,550	366.96	2,550
3	Gansu Province	353.84	2,440	351.13	2,440
4	Ningxia Hui Autonomous Region	350.94	2,420	348.26	2,420
5	Hebei Province	353.84	2,440	351.13	2,440
6	Jiangsu Province	336.44	2,320	333.87	2,320
7	Hubei Province	333.54	2,300	330.99	2,300
8	Shandong Province	375.59	2,590	366.96	2,550
9	Henan Province	334.99	2,310	332.43	2,310
10	Anhui Province	342.24	2,360	339.62	2,360
11	Guangdong Province	365.44	2,520	362.65	2,520
12	Fujian Province	362.54	2,500	359.77	2,500
13	Shanxi Province	326.29	2,250	323.79	2,250

Source: CCM

## China's minimum purchase prices of wheat on 29 Dec., 2016

Summary: The minimum purchase prices of wheat in 13 regions in China on 29 Dec., 2016 will be introduced in this article.

Currently, wheat enjoys the third largest planting area among all crops in China. In 2014, the planting area of wheat hit 24.07 million ha (361.04 million mu). Henan, Shandong, Anhui, Hebei, Jiangsu, Sichuan provinces, Xinjiang Uygur Autonomous Region, Shaanxi, Hubei and Gansu are the top ten wheat planting regions in China, whose combined planting areas of wheat accounted for around 89% of China's total. In this article, CCM introduces the minimum purchase prices of wheat in China.

Table 13: Minimum purchase prices of wheat in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Sichuan Province	371.24	2,560	371.24	2,560
2	Chongqing	369.79	2,550	369.79	2,550
3	Gansu Province	353.84	2,440	353.84	2,440
4	Ningxia Hui Autonomous Region	350.94	2,420	350.94	2,420
5	Hebei Province	353.84	2,440	353.84	2,440
6	Jiangsu Province	336.44	2,320	336.44	2,320
7	Hubei Province	333.54	2,300	333.54	2,300
8	Shandong Province	368.34	2,540	375.59	2,590
9	Henan Province	333.54	2,300	334.99	2,310
10	Anhui Province	342.24	2,360	342.24	2,360
11	Guangdong Province	365.44	2,520	365.44	2,520
12	Fujian Province	362.54	2,500	362.54	2,500
13	Shanxi Province	326.29	2,250	326.29	2,250

Source: CCM

## China's minimum purchase prices of rapeseed on 19 Jan., 2017

Summary: The minimum purchase prices of rapeseed in 4 regions in China on 19 Jan., 2017 will be introduced in this article.

Currently, rapeseed enjoys the fifth largest planting area among all crops in China. In 2014, the planting area of rapeseed hit 7.59 million ha (113.82 million mu). Hunan, Hubei, Sichuan, Anhui, Jiangxi, Guizhou, Jiangsu, Henan provinces and Inner Mongolia Autonomous Region, and Yunnan Province are the top ten largest rapeseed planting regions in China, whose combined planting areas of rapeseed accounted for around 86% of China's total. In this article, CCM introduces the minimum purchase prices of rapeseed in China.

Table 14: Minimum purchase prices of rapeseed in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Hubei Province	661.98	4,600	661.98	4,600
2	Jiangsu Province	661.98	4,600	661.98	4,600
3	Anhui Province	690.76	4,800	690.76	4,800
4	Hunan Province	575.63	4,000	575.63	4,000

Source: CCM

## China's minimum purchase prices of rapeseed on 12 Jan., 2017

Summary: The minimum purchase prices of rapeseed in 4 regions in China on 12 Jan., 2017 will be introduced in this article.

Currently, rapeseed enjoys the fifth largest planting area among all crops in China. In 2014, the planting area of rapeseed hit 7.59 million ha (113.82 million mu). Hunan, Hubei, Sichuan, Anhui, Jiangxi, Guizhou, Jiangsu, Henan provinces and Inner Mongolia

Autonomous Region, and Yunnan Province are the top ten largest rapeseed planting regions in China, whose combined planting areas of rapeseed accounted for around 86% of China's total. In this article, CCM introduces the minimum purchase prices of rapeseed in China.

Table 15: Minimum purchase prices of rapeseed in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Hubei Province	661.98	4,600	661.98	4,600
2	Jiangsu Province	661.98	4,600	661.98	4,600
3	Anhui Province	690.76	4,800	690.76	4,800
4	Hunan Province	575.63	4,000	575.63	4,000

Source: CCM

### China's minimum purchase prices of rapeseed on 5 Jan., 2017

Summary: The minimum purchase prices of rapeseed in 4 regions in China on 5 Jan., 2017 will be introduced in this article.

Currently, rapeseed enjoys the fifth largest planting area among all crops in China. In 2014, the planting area of rapeseed hit 7.59 million ha (113.82 million mu). Hunan, Hubei, Sichuan, Anhui, Jaingxi, Guizhou, Jiangsu, Henan provinces and Inner Mongolia Autonomous Region, and Yunnan Province are the top ten largest rapeseed planting regions in China, whose combined planting areas of rapeseed accounted for around 86% of China's total. In this article, CCM introduces the minimum purchase prices of rapeseed in China.

Table 16: Minimum purchase prices of rapeseed in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Hubei Province	667.07	4,600	661.98	4,600
2	Jiangsu Province	667.07	4,600	661.98	4,600
3	Anhui Province	696.08	4,800	690.76	4,800
4	Hunan Province	580.06	4,000	575.63	4,000

Source: CCM

### China's minimum purchase prices of rapeseed on 29 Dec., 2016

Summary: The minimum purchase prices of rapeseed in 4 regions in China on 29 Dec., 2016 will be introduced in this article.

Currently, rapeseed enjoys the fifth largest planting area among all crops in China. In 2014, the planting area of rapeseed hit 7.59 million ha (113.82 million mu). Hunan, Hubei, Sichuan, Anhui, Jaingxi, Guizhou, Jiangsu, Henan provinces and Inner Mongolia Autonomous Region, and Yunnan Province are the top ten largest rapeseed planting regions in China, whose combined planting areas of rapeseed accounted for around 86% of China's total. In this article, CCM introduces the minimum purchase prices of rapeseed in China.

Table 17: Minimum purchase prices of rapeseed in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Hubei Province	667.07	4,600	667.07	4,600
2	Jiangsu Province	667.07	4,600	667.07	4,600
3	Anhui Province	696.08	4,800	696.08	4,800
4	Hunan Province	580.06	4,000	580.06	4,000

Source: CCM

### China's minimum purchase prices of soybean on 19 Jan., 2017

Summary: The minimum purchase prices of soybean in 4 regions in China on 19 Jan., 2017 will be introduced in this article.

Currently, soybean enjoys the sixth largest planting area among all crops in China. In 2014, the planting area of soybean hit 6.80 million ha (102 million mu). Heilongjiang, Anhui, Inner Mongolia Autonomous Region, Henan, Sichuan, Jilin, Jiangsu, Shanxi, Shandong and Guizhou are the top ten rapeseed planting regions in China, whose combined planting areas of soybean accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of soybean in China.

Table 18: Minimum purchase prices of soybean in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	569.87	3,960	541.09	3,760
2	Liaoning Province	590.02	4,100	590.02	4,100
3	Henan Province	535.34	3,720	676.37	4,700
4	Heilongjiang Province	483.53	3,360	466.26	3,240
5	Inner Mongolia Autonomous Region	497.92	3,460	518.07	3,600

Source: CCM

### China's minimum purchase prices of soybean on 12 Jan., 2017

Summary: The minimum purchase prices of soybean in 4 regions in China on 12 Jan., 2017 will be introduced in this article.

Currently, soybean enjoys the sixth largest planting area among all crops in China. In 2014, the planting area of soybean hit 6.80 million ha (102 million mu). Heilongjiang, Anhui, Inner Mongolia Autonomous Region, Henan, Sichuan, Jilin, Jiangsu, Shanxi, Shandong and Guizhou are the top ten rapeseed planting regions in China, whose combined planting areas of soybean accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of soybean in China.

Table 19: Minimum purchase prices of soybean in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	541.09	3,760	569.87	3,960
2	Liaoning Province	590.02	4,100	590.02	4,100
3	Henan Province	535.34	3,720	535.34	3,720
4	Heilongjiang Province	518.07	3,600	483.53	3,360
5	Inner Mongolia Autonomous Region	497.92	3,460	497.92	3,460

Source: CCM

## China's minimum purchase prices of soybean on 5 Jan., 2017

Summary: The minimum purchase prices of soybean in 4 regions in China on 5 Jan., 2017 will be introduced in this article.

Currently, soybean enjoys the sixth largest planting area among all crops in China. In 2014, the planting area of soybean hit 6.80 million ha (102 million mu). Heilongjiang, Anhui, Inner Mongolia Autonomous Region, Henan, Sichuan, Jilin, Jiangsu, Shanxi, Shandong and Guizhou are the top ten rapeseed planting regions in China, whose combined planting areas of soybean accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of soybean in China.

Table 20: Minimum purchase prices of soybean in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	539.46	3,720	541.09	3,760
2	Liaoning Province	594.56	4,100	590.02	4,100
3	Henan Province	539.46	3,720	535.34	3,720
4	Heilongjiang Province	519.16	3,580	518.07	3,600
5	Inner Mongolia Autonomous Region	493.05	3,400	497.92	3,460

Source: CCM

## China's minimum purchase prices of soybean on 29 Dec., 2016

Summary: The minimum purchase prices of soybean in 4 regions in China on 29 Dec., 2016 will be introduced in this article.

Currently, soybean enjoys the sixth largest planting area among all crops in China. In 2014, the planting area of soybean hit 6.80 million ha (102 million mu). Heilongjiang, Anhui, Inner Mongolia Autonomous Region, Henan, Sichuan, Jilin, Jiangsu, Shanxi, Shandong and Guizhou are the top ten rapeseed planting regions in China, whose combined planting areas of soybean accounted for around 80% of China's total. In this article, CCM introduces the minimum purchase prices of soybean in China.

Table 21: Minimum purchase prices of soybean in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	553.96	3,820	539.46	3,720
2	Liaoning Province	561.21	3,870	594.56	4,100
3	Henan Province	536.56	3,700	539.46	3,720
4	Heilongjiang Province	571.36	3,940	519.16	3,580
5	Inner Mongolia Autonomous Region	493.05	3,400	493.05	3,400

Source: CCM

## China's minimum purchase prices of potato on 19 Jan., 2017

Summary: The minimum purchase prices of potato in 6 regions in China on 19 Jan., 2017 will be introduced in this article.

Currently, potato enjoys the seventh largest planting area among all crops in China. In 2014, the planting area of potato hit 5.57 million ha (83 million mu). Sichuan, Guizhou, Gansu, Yunan, Inner Mongolia Autonomous Region, Chongqing, Shaanxi, Heilongjinag, Hubei and Ningxia Hui Autonomous Region are the top ten potato planting regions in China, whose combined planting areas of soybean accounted for around 82% of China's total. In this article, CCM introduces the

minimum purchase prices of potato in China.

Table 22: Minimum purchase prices of potato in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	259.03	1,800	259.03	1,800
2	Guizhou Province	261.91	1,820	261.91	1,820
3	Hebei Province	259.03	1,800	253.28	1,760
4	Gansu Province	201.47	1,400	201.47	1,400
5	Inner Mongolia Autonomous Region	215.86	1,500	215.86	1,500
6	Shaanxi Province	224.50	1,560	224.50	1,560

Source: CCM

### China's minimum purchase prices of potato on 12 Jan., 2017

Summary: The minimum purchase prices of potato in 6 regions in China on 12 Jan., 2017 will be introduced in this article.

Currently, potato enjoys the seventh largest planting area among all crops in China. In 2014, the planting area of potato hit 5.57 million ha (83 million mu). Sichuan, Guizhou, Gansu, Yunan, Inner Mongolia Autonomous Region, Chongqing, Shaanxi, Heilongjinag, Hubei and Ningxia Hui Autonomous Region are the top ten potato planting regions in China, whose combined planting areas of soybean accounted for around 82% of China's total. In this article, CCM introduces the minimum purchase prices of potato in China.

Table 23: Minimum purchase prices of potato in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	259.03	1,800	259.03	1,800
2	Guizhou Province	261.91	1,820	261.91	1,820
3	Hebei Province	259.03	1,800	259.03	1,800
4	Gansu Province	201.47	1,400	201.47	1,400
5	Inner Mongolia Autonomous Region	215.86	1,500	215.86	1,500
6	Shaanxi Province	230.25	1,600	224.50	1,560

Source: CCM

### China's minimum purchase prices of potato on 5 Jan., 2017

Summary: The minimum purchase prices of potato in 6 regions in China on 5 Jan., 2017 will be introduced in this article.

Currently, potato enjoys the seventh largest planting area among all crops in China. In 2014, the planting area of potato hit 5.57 million ha (83 million mu). Sichuan, Guizhou, Gansu, Yunan, Inner Mongolia Autonomous Region, Chongqing, Shaanxi, Heilongjinag, Hubei and Ningxia Hui Autonomous Region are the top ten potato planting regions in China, whose combined planting areas of soybean accounted for around 82% of China's total. In this article, CCM introduces the minimum purchase prices of potato in China.



Table 24: Minimum purchase prices of potato in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	290.03	2,000	259.03	1,800
2	Guizhou Province	252.33	1,740	261.91	1,820
3	Hebei Province	261.03	1,800	259.03	1,800
4	Gansu Province	203.02	1,400	201.47	1,400
5	Inner Mongolia Autonomous Region	217.52	1,500	215.86	1,500
6	Shaanxi Province	237.83	1,640	230.25	1,600

Source: CCM

## China's minimum purchase prices of potato on 29 Dec., 2016

Summary: The minimum purchase prices of potato in 6 regions in China on 29 Dec., 2016 will be introduced in this article.

Currently, potato enjoys the seventh largest planting area among all crops in China. In 2014, the planting area of potato hit 5.57 million ha (83 million mu). Sichuan, Guizhou, Gansu, Yunnan, Inner Mongolia Autonomous Region, Chongqing, Shaanxi, Heilongjiang, Hubei and Ningxia Hui Autonomous Region are the top ten potato planting regions in China, whose combined planting areas of soybean accounted for around 82% of China's total. In this article, CCM introduces the minimum purchase prices of potato in China.

Table 25: Minimum purchase prices of potato in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Shandong Province	290.03	2,000	290.03	2,000
2	Guizhou Province	252.33	1,740	252.33	1,740
3	Hebei Province	261.03	1,800	261.03	1,800
4	Gansu Province	203.02	1,400	203.02	1,400
5	Inner Mongolia Autonomous Region	220.42	1,520	217.52	1,500
6	Shaanxi Province	237.83	1,640	237.83	1,640

Source: CCM

## China's minimum purchase prices of peanut on 19 Jan., 2017

Summary: The minimum purchase prices of peanut in 11 regions in China on 19 Jan., 2017 will be introduced in this article.

Currently, peanut enjoys the eighth largest planting area among all crops in China. In 2014, the planting area of peanut hit 4.60 million ha (69.06 million mu). Henan, Shandong, Guangdong, Hebei, Liaoning, Sichuan, Guangxi Zhuang Autonomous Region, Hubei, Anhui and Jiangxi are the top ten peanut planting regions in China, whose combined planting areas of peanut accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of peanut in China.

Table 26: Minimum purchase prices of peanut in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	1,007.35	7,000	1,007.35	7,000
2	Sichuan Province	1,208.82	8,400	1,208.82	8,400
3	Jiangxi Province	1,180.04	8,200	1,180.04	8,200
4	Anhui Province	1,151.26	8,000	1,151.26	8,000
5	Shanxi Province	1,122.48	7,800	1,122.48	7,800
6	Hubei Province	1,093.70	7,600	1,093.70	7,600
7	Hebei Province	1,122.48	7,800	1,151.26	8,000
8	Jiangsu Province	1,122.48	7,800	1,122.48	7,800
9	Shandong Province	1,122.48	7,800	1,122.48	7,800
10	Henan Province	1,122.48	7,800	1,122.48	7,800
11	Liaoning Province	1,122.48	7,800	1,122.48	7,800

Source: CCM

### China's minimum purchase prices of peanut on 12 Jan., 2017

Summary: The minimum purchase prices of peanut in 11 regions in China on 12 Jan., 2017 will be introduced in this article.

Currently, peanut enjoys the eighth largest planting area among all crops in China. In 2014, the planting area of peanut hit 4.60 million ha (69.06 million mu). Henan, Shandong, Guangdong, Hebei, Liaoning, Sichuan, Guangxi Zhuang Autonomous Region, Hubei, Anhui and Jiangxi are the top ten peanut planting regions in China, whose combined planting areas of peanut accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of peanut in China.

Table 27: Minimum purchase prices of peanut in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	1,007.35	7,000	1,007.35	7,000
2	Sichuan Province	1,208.82	8,400	1,208.82	8,400
3	Jiangxi Province	1,180.04	8,200	1,180.04	8,200
4	Anhui Province	1,122.48	7,800	1,151.26	8,000
5	Shanxi Province	1,122.48	7,800	1,122.48	7,800
6	Hubei Province	1,093.70	7,600	1,093.70	7,600
7	Hebei Province	1,122.48	7,800	1,122.48	7,800
8	Jiangsu Province	1,122.48	7,800	1,122.48	7,800
9	Shandong Province	1,122.48	7,800	1,122.48	7,800
10	Henan Province	1,151.26	8,000	1,122.48	7,800
11	Liaoning Province	1,122.48	7,800	1,122.48	7,800

Source: CCM

### China's minimum purchase prices of peanut on 5 Jan., 2017

Summary: The minimum purchase prices of peanut in 11 regions in China on 5 Jan., 2017 will be introduced in this article.

Currently, peanut enjoys the eighth largest planting area among all crops in China. In 2014, the planting area of peanut hit 4.60 million ha (69.06 million mu). Henan, Shandong, Guangdong, Hebei, Liaoning, Sichuan, Guangxi Zhuang Autonomous Region, Hubei, Anhui and Jiangxi are the top ten peanut planting regions in China, whose combined planting areas of peanut accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of peanut in China.

Table 28: Minimum purchase prices of peanut in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	1,015.11	7,000	1,007.35	7,000
2	Sichuan Province	1,218.13	8,400	1,208.82	8,400
3	Jiangxi Province	1,189.13	8,200	1,180.04	8,200
4	Anhui Province	1,160.13	8,000	1,122.48	7,800
5	Shanxi Province	1,131.12	7,800	1,122.48	7,800
6	Hubei Province	1,102.12	7,600	1,093.70	7,600
7	Hebei Province	1,102.12	7,600	1,122.48	7,800
8	Jiangsu Province	1,131.12	7,800	1,122.48	7,800
9	Shandong Province	1,131.12	7,800	1,122.48	7,800
10	Henan Province	1,131.12	7,800	1,151.26	8,000
11	Liaoning Province	1,044.11	7,200	1,122.48	7,800

Source: CCM

### China's minimum purchase prices of peanut on 29 Dec., 2016

Summary: The minimum purchase prices of peanut in 11 regions in China on 29 Dec., 2016 will be introduced in this article.

Currently, peanut enjoys the eighth largest planting area among all crops in China. In 2014, the planting area of peanut hit 4.60 million ha (69.06 million mu). Henan, Shandong, Guangdong, Hebei, Liaoning, Sichuan, Guangxi Zhuang Autonomous Region, Hubei, Anhui and Jiangxi are the top ten peanut planting regions in China, whose combined planting areas of peanut accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of peanut in China.

Table 29: Minimum purchase prices of peanut in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Jilin Province	1,015.11	7,000	1,015.11	7,000
2	Sichuan Province	1,218.13	8,400	1,218.13	8,400
3	Jiangxi Province	1,131.12	7,800	1,189.13	8,200
4	Anhui Province	1,136.92	7,840	1,160.13	8,000
5	Shanxi Province	1,131.12	7,800	1,131.12	7,800
6	Hubei Province	1,160.13	8,000	1,102.12	7,600
7	Hebei Province	1,131.12	7,800	1,102.12	7,600
8	Jiangsu Province	1,131.12	7,800	1,131.12	7,800
9	Shandong Province	1,145.62	7,900	1,131.12	7,800
10	Henan Province	1,160.13	8,000	1,131.12	7,800
11	Liaoning Province	1,044.11	7,200	1,044.11	7,200

Source: CCM

### China's minimum purchase prices of cotton on 19 Jan., 2017

Summary: The minimum purchase prices of cotton in 7 regions in China on 19 Jan., 2017 are introduced in this article.

Currently, cotton enjoys the ninth largest planting area among all crops in China. In 2014, the planting area of cotton hit 4.22 million ha (63.33 million mu). Xinjiang Uygur Autonomous Region, Shandong, Hebei, Hunan, Anhui, Henan, Jiangsu, Hunan, Jiangxi and Gansu are the top ten cotton planting regions in China, whose combined planting areas of cotton accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of cotton in China.

Table 30: Minimum purchase prices of cotton in China, 19 Jan., 2017

No.	Region	12 Jan., 2017		19 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Zhejiang Province	2,252.16	15,650	2,273.74	15,800
2	Anhui Province	2,259.35	15,700	2,259.35	15,700
3	Henan Province	2,259.35	15,700	2,259.35	15,700
4	Shandong Province	2,273.74	15,800	1,993.12	13,850
5	Xinjiang Uygur Autonomous Region	2,187.40	15,200	2,055.29	14,282
6	Hebei Province	2,230.57	15,500	2,049.25	14,240
7	Jiangsu Province	2,173.01	15,100	2,145.95	14,912

Source: CCM

### China's minimum purchase prices of cotton on 12 Jan., 2017

Summary: The minimum purchase prices of cotton in 7 regions in China on 12 Jan., 2017 are introduced in this article.

Currently, cotton enjoys the ninth largest planting area among all crops in China. In 2014, the planting area of cotton hit 4.22 million ha (63.33 million mu). Xinjiang Uygur Autonomous Region, Shandong, Hebei, Hunan, Anhui, Henan, Jiangsu, Hunan, Jiangxi and Gansu are the top ten cotton planting regions in China, whose combined planting areas of cotton accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of cotton in China.

Table 31: Minimum purchase prices of cotton in China, 12 Jan., 2017

No.	Region	5 Jan., 2017		12 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Zhejiang Province	2,259.35	15,700	2,252.16	15,650
2	Anhui Province	2,259.35	15,700	2,259.35	15,700
3	Henan Province	2,086.66	14,500	2,259.35	15,700
4	Shandong Province	2,216.18	15,400	2,273.74	15,800
5	Xinjiang Uygur Autonomous Region	2,244.96	15,600	2,187.40	15,200
6	Hebei Province	2,216.18	15,400	2,230.57	15,500
7	Jiangsu Province	2,201.79	15,300	2,173.01	15,100

Source: CCM

### China's minimum purchase prices of cotton on 5 Jan., 2017

Summary: The minimum purchase prices of cotton in 7 regions in China on 5 Jan., 2017 are introduced in this article.

Currently, cotton enjoys the ninth largest planting area among all crops in China. In 2014, the planting area of cotton hit 4.22 million ha (63.33 million mu). Xinjiang Uygur Autonomous Region, Shandong, Hebei, Hunan, Anhui, Henan, Jiangsu, Hunan, Jiangxi and Gansu are the top ten cotton planting regions in China, whose combined planting areas of cotton accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of cotton in China.

Table 32: Minimum purchase prices of cotton in China, 5 Jan., 2017

No.	Region	29 Dec., 2016		5 Jan., 2017	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Zhejiang Province	2,291.25	15,800	2,259.35	15,700
2	Anhui Province	2,276.75	15,700	2,259.35	15,700
3	Henan Province	2,276.75	15,700	2,086.66	14,500
4	Shandong Province	2,204.24	15,200	2,216.18	15,400
5	Xinjiang Uygur Autonomous Region	2,247.75	15,500	2,244.96	15,600
6	Hebei Province	2,262.25	15,600	2,216.18	15,400
7	Jiangsu Province	2,276.75	15,700	2,201.79	15,300

Source: CCM

### China's minimum purchase prices of cotton on 29 Dec., 2016

Summary: The minimum purchase prices of cotton in 7 regions in China on 29 Dec., 2016 are introduced in this article.

Currently, cotton enjoys the ninth largest planting area among all crops in China. In 2014, the planting area of cotton hit 4.22 million ha (63.33 million mu). Xinjiang Uygur Autonomous Region, Shandong, Hebei, Hunan, Anhui, Henan, Jiangsu, Hunan, Jiangxi and Gansu are the top ten cotton planting regions in China, whose combined planting areas of cotton accounted for around 84% of China's total. In this article, CCM introduces the minimum purchase prices of cotton in China.

Table 33: Minimum purchase prices of cotton in China, 29 Dec., 2016

No.	Region	22 Dec., 2016		29 Dec., 2016	
		Purchase price, USD/t	Purchase price, RMB/t	Purchase price, USD/t	Purchase price, RMB/t
1	Zhejiang Province	2,291.25	15,800	2,291.25	15,800
2	Anhui Province	2,276.75	15,700	2,276.75	15,700
3	Henan Province	2,276.75	15,700	2,276.75	15,700
4	Shandong Province	2,204.24	15,200	2,204.24	15,200
5	Xinjiang Uygur Autonomous Region	2,247.75	15,500	2,247.75	15,500
6	Hebei Province	2,262.25	15,600	2,262.25	15,600
7	Jiangsu Province	2,305.75	15,900	2,276.75	15,700

Source: CCM

## Agrometeorological Dynamics

### Major meteorological disasters in China in Dec. 2016

Figure 1: Major meteorological disasters in China in Dec. 2016



Source: China Meteorological Administration

## Import and Export

### China's pesticide formulation import and export in Jan.-Nov. 2016

Summary: In Nov. 2016, China imported 2,476 tonnes of pesticide formulations, up 66.64% YoY (year on year); import value hit USD27.98 million, up 1.09% YoY. The export volume and value of pesticide formulations was 105,910 tonnes and USD289.68 million, up 55.31% and 38.28% YoY respectively.

China's imports and exports of insecticide formulations, fungicide formulations and herbicide formulations in Jan.-Nov. 2016 are introduced in this article.

In Nov. 2016, China imported 2,476 tonnes of pesticide formulations, up 66.64% YoY (year on year); import value hit USD27.98 million, up 1.09% YoY. The export volume and value of pesticide formulations was 105,910 tonnes and USD289.68 million, up 55.31% and 38.28% YoY respectively. Notably, import prices of pesticide formulations that month were still higher than export prices as usual.



Table 34: China's import and export of pesticide formulations, Jan. 2015 and Nov. 2016

Product	Item	2016			Nov.			Jan.-Nov.		
		Oct.	Nov.	MoM Change	2015	2016	YoY Change	2015	2016	YoY Change
Insecticide	Import volume (kg)	800,335	651,467	-18.60%	548,945	651,467	+18.68%	9,404,350	10,514,493	+11.80%
	Import value (USD)	6,385,023	9,365,126	+46.67%	10,214,335	9,365,126	-8.31%	131,740,822	145,453,703	+10.41%
	Export volume (kg)	14,901,320	19,225,815	+29.02%	11,542,928	19,225,815	+66.56%	153,029,857	182,660,787	+19.36%
	Export value (USD)	65,622,200	83,524,680	+27.28%	57,765,816	83,524,680	+44.59%	776,087,325	808,504,785	+4.18%
Fungicide	Import volume (kg)	932,825	1,076,825	+15.44%	850,491	1,076,825	+26.61%	21,219,494	22,200,669	+4.62%
	Import value (USD)	12,009,340	11,411,195	-4.98%	11,844,982	11,411,195	-3.66%	253,244,425	234,402,386	-7.44%
	Export volume (kg)	8,866,266	9,490,001	+7.03%	6,206,339	9,490,001	+52.91%	74,602,806	95,870,946	+28.51%
	Export value (USD)	42,383,181	48,040,028	+13.35%	30,068,749	48,040,028	+59.77%	392,629,608	472,994,299	+20.47%
Herbicide	Import volume (kg)	2,080,956	747,433	-64.08%	890,396	747,433	-16.06%	24,225,840	19,881,198	-17.93%
	Import value (USD)	11,048,332	7,204,515	-34.79%	9,672,042	7,204,515	-25.51%	163,221,681	125,157,954	-23.32%
	Export volume (kg)	50,014,724	77,194,347	+54.34%	43,914,662	77,194,347	+75.78%	754,763,986	872,347,385	+15.58%
	Export value (USD)	110,711,000	158,116,648	+42.82%	105,691,544	158,116,648	+49.60%	1,947,589,095	1,911,711,988	-1.84%
Total	Import volume (kg)	3,814,116	2,475,725	-35.09%	1,485,630	2,475,725	+66.64%	54,849,684	52,596,360	-4.11%
	Import value (USD)	29,442,695	27,980,836	-4.97%	27,679,159	27,980,836	+1.09%	548,206,928	505,014,043	-7.88%
	Export volume (kg)	73,782,310	105,910,163	+43.54%	68,194,869	105,910,163	+55.31%	982,396,649	1,150,879,118	+17.15%
	Export value (USD)	218,716,381	289,681,356	+32.45%	209,496,194	289,681,356	+38.28%	3,116,306,028	3,193,211,072	+2.47%

Note: MoM refers to month on month, YoY refers to year on year.

Source: CCM and China Customs

Table 35: China's import prices of pesticide formulations, Jan. 2015-Nov. 2016

Product	Import price, USD/kg								
	Oct. 2016	Nov. 2016	MoM Change	Nov. 2015	Nov. 2016	YoY Change	Jan.-Nov. 2015	Jan.-Nov. 2016	YoY Change
Insecticide	7.98	14.38	+80.19%	18.61	14.38	-22.74%	14.01	13.83	-1.25%
Fungicide	12.87	10.60	-17.69%	13.93	10.60	-23.91%	11.93	10.56	-11.53%
Herbicide	5.31	9.64	+81.55%	10.86	9.64	-11.26%	6.74	6.30	-6.56%
<b>Total</b>	<b>7.72</b>	<b>11.30</b>	<b>+46.41%</b>	<b>18.63</b>	<b>11.30</b>	<b>-39.34%</b>	<b>9.99</b>	<b>9.60</b>	<b>-3.93%</b>

Note: MoM refers to month on month, YoY refers to year on year.

Source: CCM and China Customs

Table 36: China's export prices of pesticide formulations, Jan. 2015-Nov. 2016

Product	Export price, USD/kg								
	Oct. 2016	Nov. 2016	MoM Change	Nov. 2015	Nov. 2016	YoY Change	Jan.-Nov. 2015	Jan.-Nov. 2016	YoY Change
Insecticide	4.40	4.34	-1.35%	5.00	4.34	-13.19%	5.07	4.43	-12.72%
Fungicide	4.78	5.06	+5.90%	4.84	5.06	+4.49%	5.26	4.93	-6.26%
Herbicide	2.21	2.05	-7.47%	2.41	2.05	-14.89%	2.58	2.19	-15.07%
<b>Total</b>	<b>2.96</b>	<b>2.74</b>	<b>-7.73%</b>	<b>3.07</b>	<b>2.74</b>	<b>-10.97%</b>	<b>3.17</b>	<b>2.77</b>	<b>-12.53%</b>

Note: MoM refers to month on month, YoY refers to year on year.

Source: CCM and China Customs

Table 37: China's import and export of insecticide formulations, Jan.-Nov. 2016

Item	Jan	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
Import volume (kg)	1,504,756	733,675	1,076,223	1,256,671	1,370,180	1,076,436	1,072,015	551,586	800,335	421,149	651,467	<b>10,514,493</b>
Import value (USD)	14,324,842	16,176,363	26,865,078	13,840,469	19,876,777	17,115,783	13,121,214	3,297,181	6,385,023	5,085,847	9,365,126	<b>145,453,703</b>
Export volume (kg)	14,751,063	10,724,452	16,490,477	16,940,798	17,353,045	18,015,723	19,200,551	18,504,098	14,901,320	16,553,445	19,225,815	<b>182,660,787</b>
Export value (USD)	68,295,565	48,086,857	75,778,760	74,355,498	80,701,864	77,426,778	83,499,037	78,075,359	65,622,200	73,138,187	83,524,680	<b>808,504,785</b>

Source: CCM and China Customs





Table 38: China's import and export of fungicide formulations, Jan.-Nov. 2016

Item	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
Import volume (kg)	2,947,856	1,963,917	4,311,394	3,751,725	2,710,057	1,850,009	1,135,498	940,748	932,825	579,815	1,076,825	<b>22,200,669</b>
Import value (USD)	22,936,905	25,680,173	39,615,953	41,062,588	24,504,414	20,124,495	14,702,682	15,486,452	12,009,340	6,868,189	11,411,195	<b>234,402,386</b>
Export volume (kg)	8,683,964	5,966,140	9,528,510	9,369,201	8,340,365	8,803,522	9,746,860	7,718,232	8,866,266	9,357,885	9,490,001	<b>95,870,946</b>
Export value (USD)	42,618,204	30,495,678	45,654,194	48,034,301	41,132,925	43,851,820	46,929,287	37,087,063	42,383,181	46,767,618	48,040,028	<b>472,994,299</b>

Source: CCM and China Customs

Table 39: China's import and export of herbicide formulations, Jan.-Nov. 2016

Item	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
Import volume (kg)	2,467,951	2,144,006	4,964,968	3,521,368	1,576,166	806,145	541,509	889,353	2,080,956	141,343	747,433	<b>19,881,198</b>
Import value (USD)	16,109,300	14,504,103	26,503,888	17,628,154	9,893,769	4,585,733	9,841,874	6,304,755	11,048,332	1,533,531	7,204,515	<b>125,157,954</b>
Export volume (kg)	79,338,631	65,251,096	99,871,744	103,567,749	99,955,743	82,699,253	84,519,235	74,361,817	50,014,724	55,573,046	77,194,347	<b>872,347,385</b>
Export value (USD)	192,659,542	163,983,246	228,776,184	224,637,119	212,370,427	174,411,418	175,691,392	149,638,700	110,711,000	120,716,312	158,116,648	<b>1,911,711,988</b>

Source: CCM and China Customs





**Journalist: Shuanglin He**  
**Editor: Wanwen Cai**  
**Chief Editor: Shuanglin He**  
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17th Floor, Huihua Commercial & Trade Building, No.80 XianlieZhong Road Guangzhou, 510070, P.R.China

**Tel: +86-20-37616606**

Fax: +86-20-37616768

E-mail: [econtact@cnchemicals.com](mailto:econtact@cnchemicals.com)

Website: [www.cnchemicals.com](http://www.cnchemicals.com)