Quick mind, perceiving potential markets
Swift action, grabbing anticipate opportunity
Wise decision, approaching business success

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Asia Crop Protection Forum
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Jakarta, Indonesia

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Organized by:
China Crop Protection Industry Association (CCPIA)
China National Chemical Information Center (CNICIC)
China Agricultural Machinery Distribution Association (CAMDA)

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China Crop Protection Industry Association
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2014 International Forum on the Procurement & Services of Crop Protection Products and International Conference on Crop Protection Science & Technology Call for Papers

2014 International Forum on the Procurement & Services of Crop Protection Products and Conference on Crop Protection Science & Technology, in parallel with AgroChemEx (ACE) 2014, organized by China Crop Protection Industry Association, will be held in Shanghai in October, 2014. The events will cover marketing, new legislation and new data requirements, as well as innovation and technology improving. Since it began six years ago, the events has attracted thousands people, especially for technical and regulatory staffs and marketing specialists. Original papers, surveys and presentations on all aspects of crop protection are invited. Possible topics for submission to the various sessions include, but are not limited to:

Markets: status of local agrochemical industry or agriculture, strategies of international marketing, cooperation with Chinese companies
Policies: registration overseas, view of local pesticides regulation
R&D: synthesis of technicals, intermediates and pro-pesticides
Environmental science: new pollution treatment technology, green process, energy reduction and comprehensive use of resources
Process and application: formulation process, adjuvant and formula, application and efficiency
Bio-pesticides: biosafety test of GM Crops bring on pesticide markets
Others: Agrochemical Residue & Metabolism Chemistry

All papers should make clear titles, abstract, author(s), the affiliation (institution, agency or company) and location (city and state or country). Deadline is July 30th, 2014. Excellent papers will be elected and be presented in the forum, the authors will be awarded.

All the papers should be sent to yousheng@ccpia.org.cn before July 30th 2014.

China Released the Most Rigorous National Standards on Pesticide Maximum Residue Limits

Recently, Ministry of Agriculture and National Health and Family Planning Commission jointly released the most rigorous national standard on maximum residue limits for pesticides in food, raising the existing 2,293 maximum residue limits to 3,650, an increase of 1,357 limits. The new standard will come into effect on August 1st 2014, and the old one will be repealed.

The National Food Safety Standards on Maximum Residue Limits (MRLs) for Pesticides in Foods (GB2763-2012) covers 3,650 residue limits for 387 pesticides in 284 kinds of agricultural products and foods. Compared with the standard released in 2012, there is an increase of 65 pesticides, 43 kinds of agricultural products and foods and 1,357 residue limits in the new standard.

In order to solve the problem of excessive pesticide residues in vegetables, fruits, tea and other fresh agricultural products and food, the new standard focuses on the maximum residue limits for pesticides in fresh agricultural products, specifying 2,499 residue limits for 115 kinds of vegetables and 85 kinds of fruits, an increase of 904 new limits compared with the 2012 version. The increase of the maximum pesticide limits on vegetables and fruits accounts for 67% of the total increase, which shows that there is an increase of 473 limits for fruits and 431 limits for vegetables (including edible fungus).

Currently, there are some 350 pesticides commonly used in China, and the new standard set maximum residue limits for 387 kinds of pesticide, which almost covers all the commonly used pesticides. The coverage will be further expanded in the future.

The new standard set maximum residue limits for pesticides in 284 kinds of agricultural products and food, covering 12 main categories, including vegetables, fruit, grain, oil plants and fat, sugar crops, beverages, seasoning, nut, edible fungus, mannanimal meat, egg, bird viscous and meat.

The new standard set maximum residue limits for pesticide in primary products such as juice, preserved fruit and dried fruit for the first time, which basically covers food categories of regular consumption.

In the new standard, there are 1,999 limits which are also specified by Codex Alimentarius Commission (CAC). Of the 1,999 national standard limits, 1,811 limits are equal to or more rigorous than those specified by CAC’s standard, accounting for 90.6% of the total. During the standard formulation process, the limit standards were reported to all WTO members who gave their appraisals on the limits. In response to WTO members’ questions, the formulation team made scientific and convincing explanations. The national limit standard is basically in line with the international standard.

To ensure a scientific and practical standard, the standard setting team obtained the pesticide residue limits based on toxicological data, pesticide residue field trial data, dietary consumption data and monitoring data of domestic agricultural market. The standard was finally formulated after the team carried out scientific risk assessment and solicited the opinions of the public, agricultural production and import & export enterprises, and industry associations and sectors.

According to the authority, as the only mandatory national standards for maximum residue limits for pesticide in food, the new standard strives to ensure “safety for tongue” by offering legal technical basis with the most rigorous standards, the most stringent regulations, the most severe punishment and the most serious accountability system.

Schedule of Formulating Standards for Pesticide Water Pollution Discharge and Atmospheric Pollutant Emission Released

The “Historically Most Rigid” environment protection law in China has been released. The pesticide industry has always been the focus of society when it comes to environmental protection. The existing water pollution discharge standard for the pesticide industry was established in 2001, but with a rapid replacement rate of the pesticide products in recent years, OCPs, carbamate and other certain pesticides in the oldest 10 standards have been eliminated, so the standard must be revised.

Recently, sponsored by China Crop Protection Industry Association (CCPIA), the 3rd Seminar on HSE of China Pesticide Industry was held in Shanghai. This seminar opened up discussions with regard to the water pollution discharge standard and air pollution emission standard for pesticide industry which would follow soon. There is no doubt that the establishment of the two standards is favorable to elimination of backward production capacity, energy conservation and clean production of the pesticide industry in China. However, there are still a lot of problems existing in the process of establishing the two standards; the most prominent issue lies in the difficulty of achieving a uniform emission standard, which exerts a lot of pressure on the pesticide enterprises.

Hu Linlin, Deputy Director of the Institute of Environmental Standards of MEP, expounded the main problems existing in the current pesticide water pollution discharge standard: the indirect emission limits are less-stringent, while the integrated wastewater discharge standard for COD is too stringent, coverage of particular pollutant indicators is inadequate, and some indicators are remarkably obsolete due to yield change of pesticide varieties. Also there are following problems existing in current work: firstly, there is not any quantified result in the existing 10 standards in the pesticide industry; secondly, the supporting work for the monitoring methods requires improvement; thirdly, integrated toxicity index is not established; fourthly, the discharge and emission standards do not apply to indirect emissions from industrial parks; and fifthly, discharge standards for controlling pollutants in formulation products are not taken into consideration as a whole. Hu said the new standard will be open for comments by the end of this year, and go through administrative review procedures next year. It is expected that the new standards will officially take effect in 2017.

Liang Xingyin, Secretary-General of the Professional Committee of Technical Standards for Environmental Protection introduced the framework and requirements for the pesticide industry’s atmospheric pollutant emission. He emphasized that the emission standard is established to control atmospheric pollutants emitted by the pesticide industry, reduce the emission of particulate matter, volatile organic compounds, odor gases, and toxic gas, and reduce the impact of haze weather on environment and human beings. Furthermore, it can optimize the industrial structure, promoting the survival of the fittest. The standard will cover atmospheric pollutants emitted from pesticide production (including production, storage, and packaging of TC, pesticide intermediates and formulations). A two years’ transitional period will be given to the existing enterprises, while for new enterprises, their practice should follow strictly the standard. Currently, data and information gathering, analysis, sampling, emission concentration inspection for pollutant emission standard are proceeding in an orderly way. It is expected that the Atmospheric Pollutant Emission Standard for the Pesticide Industry will be released by the end of 2014.

Emission standard of air pollutants was first proposed in the Chinese pesticide industry; therefore, it has caught wide attention from the industry. Some industrial representatives indicated that the establishment of atmospheric pollutant emission standard is the inevitable trend. However, there are too many uncontrollable factors in collecting exhaust gas sample, so it is difficult to form a unified standard. In the meantime, the existing testing equipment and approaches are not sufficient to meet the new standards. Experts from MEP said that the standard setting would be based on the study of Standard for the Pesticide Producers. A majority of the Chinese enterprises will be invited to participate in the setting of the standards. The purpose for establishing the standard is not to restrict but rather to promote healthy and sustainable development of China’s pesticide industry.
**INDUSTRIAL POLICIES**

**Action Plan for Reducing High-risk Pollutants Issued**

Recently, the Action Plan for Reducing High-risk Pollutants was issued jointly by MIIT and MOF. In the Action Plan, main objectives are made clear. Pesticide-related requirements in the Plan include: By 2017, through the implementation of the Plan, substitute HHPs 50,000 tonnes a year and reduce the use of harmful solvents such as benzene, toluene and xylene by 33,000 tonnes a year.

To implement the clean production projects of HHPs’ alternatives, it is proposed in the Action Plan to develop a batch of HHPs’ alternatives, and support pesticide enterprises to adopt efficient, safe and environment-friendly new pesticides and develop alternatives for 12 HHPs (methidathion, phorate, isofenphos-methyl, methomyl, ethoprophos, aldicarb, aluminium phosphide, omethoate, isocarboxphos, methyl bromide and endosulfan). Meanwhile, in response to the Limit Standards for Harmful Solvents in Pesticide EC Formulations issued not long ago, the Action Plan has proposed promoting the optimization and upgrading of pesticide formulation types, including replacing out-dated formulations such as powder with water-based formulations (such as EW, SC and WDG etc.), accelerating eliminating the use of harmful auxiliaries such as alkylphenol in pesticides, and reducing the use of harmful organic solvents.

Additionally, to encourage the popularization of clean production technologies, the special fund for clean production of the central government will reward projects with remarkable implementation effect.

Since last year, the government has attached great importance to issuing and implementing environmental protection policies, which has positive impact on the development of the pesticide industry. HHPs are being replaced more rapidly. The rise of the formulation market threshold can help inhibit excessive production capacity, regulate improper competition in the market and promote sustainable development of the industry.

**China to Regulate the Use of GMO Food Labeling and Build Food Traceability System**

The General Office of the State Council recently issued “The 2014 Main Task Arrangement on Food Safety” which brings up certification activity and use of certification mark for “pollution-free agricultural products,” “green food,” “organic product,” “halal food” and other food as well as agricultural products should be standardized; and the use of GMO labeling should be regulated, so that consumers’ ability to identity food and products’ quality mark and certification could be enhanced.

The “Task Arrangement” also proposes to establish food origin traceability system and quality labeling system, accelerate the establishment of the "farm to fork" traceability system, start the study and drafting of administrative measures for tracking important edible agricultural products, and steadily promote the establishment of traceability system for agricultural product safety, meat and vegetables circulation, alcohol circulation, and dairy product safety. With the establishment of the traceability system in the future, food “identity information” will gradually achieve traceability, and each agricultural product will have its own identity.

**First Major Change on the Environmental Protection Law in 25 Years**

The Standing Committee of China’s National People’s Congress (NPC) voted to adopt revisions to the Environmental Protection Law of the People’s Republic of China at the 8th Meeting of the 12th Standing Committee. The revised law will be carried out from January 1, 2015.

The revised Environmental Protection Law has made significant breakthroughs in establishing clear government responsibilities, giving harsher punishments for illegal pollution discharge and increasing information disclosure. The revision is considered a major effort of China to declare war against pollution with strict law.

Generally, the draft amendment of a law is put to vote after three readings by the Standing Committee of the NPC. However, this amendment went through four readings, two public invitations for opinions and several modifications before it was passed. The whole process lasts nearly three years. The revision is a major change rather than simple repair to the Environmental Protection Law, according to the analysis of legal experts.

The major change is mainly found in establishing clear governmental responsibilities and giving harsher punishments for illegal pollution discharge.

The revised Environmental Protection Law states that the nation should draw the line for ecological protection in areas such as major ecological function zones and ecological environmental sensitivity and vulnerable areas for strict protection. In the meantime, it says that regional governments of provincial level and above should organize relevant departments or trust professional organizations to perform inspection and evaluation on environmental conditions, and establish a monitoring and early-warning mechanism on environmental resources carrying capacity.

The revised law also stipulates that, first, a unified standard should be established for joint pollution prevention efforts in the major areas and river basins in cross-administrative regions; second, the nation should promote clean production and the recycling use of resources, relevant departments of the State Council and local governments at all levels should take measures to promote the production and use of clean energy; third, governments above county level should establish a public early warning mechanism for environmental pollution and organize to formulate early warning plans, and should publish
early warning information according to law in a timely manner and adopt emergency measures when the environment is polluted and may influence public health and environmental safety.

To the long-term social denunciation of "low illegal cost and high law-abiding cost", the revised law stipulates it is necessary to record the information on the violation of environmental laws by enterprises, public institutions and other manufacturers and operators in their credit archives, and make public the list of law breakers; and in the meantime establish clear rules on daily-based fine and implement the rules according to the operation cost of pollution prevention facilities pursuant to relevant laws and regulations; the revised law also says that the types of unlawful acts for continuous punishment by day may be added in local regulations according to the actual need for environmental protection.

For behaviors of gross violation of environmental laws, the revised law makes it clear that administrative detention will be applied; for environmental monitoring agencies or environmental monitoring equipment and pollution prevention facility maintenance or operation agencies that practice fraud, the revised law stipulates that they should assume joint and several liability.

The revised Environmental Protection Law also specifies citizens' obligations while emphasizing the responsibilities of the government and enterprises. It nominates June 5 as Environment Day, and says it is necessary to record the information on the violation of environmental laws by enterprises, public institutions and other manufacturers and operators in their credit archives, and make public the list of law breakers; and in the meantime establish clear rules on daily-based fine and implement the rules according to the operation cost of pollution prevention facilities pursuant to relevant laws and regulations; the revised law also says that the types of unlawful acts for continuous punishment by day may be added in local regulations according to the actual need for environmental protection.

The meeting made arrangement of the compiling phases and proposed four major work including focusing on the research of major subjects in the earlier stage.

National food security, sustainable development of agriculture and quality safety of agricultural products are new issues, and also key issues, of the "Thirteenth Five-year Plan". During the "Thirteenth Five-year Plan" period, new policies, new programs and new projects will be launched.

Thirteenth Five-Year Plan for Agricultural and Rural Economic Development Launched

On May 27, MOA held the kick-off meeting of compiling work of agricultural and rural economic development planning for the "Thirteenth Five-year Plan" period, marking the full start of the compiling work.

The meeting made arrangement of the compiling phases and proposed four major work including focusing on the research of major subjects in the earlier stage.

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Review on China Glyphosate Market during H1 2014

China's environmental protection scrutiny on glyphosate (PMIDA), starting from May in 2013, affects the glyphosate market greatly, making glyphosate the most profitable pesticide in 2013. However, for various reasons, the qualified list of the scrutiny was not released until June 13, 2014.

Four glyphosate enterprises showed up on the list, in which Hubei Taisheng is being purchased by Xingfa Group. It is said that Xingfa Group plans to issue 94.6 million shares to Zhejiang Jinfanda, to purchase its 51% shares of Taisheng. Besides, Zhenjiang Jiangnan Chemical belongs to Wynca Chemical Group, and Youth Chemical belongs to Yangnong Chemical.

Dr. Duan Yousheng: Environmental scrutiny on glyphosate was carried out for the first time in China's pesticide industry, which might affect the industry's development profoundly. With the scrutiny, the glyphosate industry will be increasingly concentrated, which, for many years, mainly consists of scattered small-scale enterprises. The scrutiny is a starting point for higher environmental requirements, which means even the listed enterprises need to work harder to set a strict threshold. The experience of the scrutiny could be referred to by the whole pesticide industry, and would be helpful for mergers and acquisitions. The future of pesticide industry is quite prospective.

Up-to-standard Glyphosate (PMIDA) Manufacturers

<table>
<thead>
<tr>
<th>No.</th>
<th>Company Name</th>
<th>Manufacturing Technology</th>
<th>Main Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Zhenjiang Jiangnan Chemical Co., Ltd (Jiangsu)</td>
<td>Glycine route</td>
<td>Glyphosate</td>
</tr>
<tr>
<td>2</td>
<td>Nantong Jiangshan Agrochemical and Chemical Co., Ltd (Jiangsu)</td>
<td>Glycine route, IDA route</td>
<td>Glyphosate PMIDA</td>
</tr>
<tr>
<td>3</td>
<td>Youth Chemical Co., Ltd (Jiangsu)</td>
<td>IDA route</td>
<td>Glyphosate PMIDA</td>
</tr>
<tr>
<td>4</td>
<td>Hubei Taisheng Chemical Co., Ltd(Hubei)</td>
<td>Glycine route</td>
<td>Glyphosate</td>
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</table>
Specifications for Production Conditions of Non-AS Paraquat Formulations will be launched soon

Deadline of the ban for paraquat AS production is coming, to guarantee the safety and regulate the production conditions of non-AS paraquat formulation production, recently, the Ministry of Industry and Information Technology (MIIT) in Beijing organized a seminar on specifications of non-AS paraquat formulation production conditions. The seminar invited some experts and manufacturer representatives from the paraquat industry. Mr. Zhang Wenming, director of Department of Raw Materials of MIIT, arranged the follow-up work of setting the specifications. Zhang expressed that the regulation work for non-AS paraquat formulation production will be opened for public comments in a few days. The seminar focused on the production specifications of paraquat 5G (water soluble granule) and GW (water soluble gel), key product control indexes, and feasibility of the specifications. According to the requirements of Announcement No. 1745 jointly issued by MOA, MIIT and AQSIQ, production of paraquat AS (aqueous solution) will be halted from July 1st, 2016. Given the release of this ban, price of paraquat TC in the previous year kept soaring, but the approaching day of paraquat aqueous solution’s doom will exert a negative impact on the price of paraquat TC if there is no suitable alternative formulation launched into the market in the future. Seen from the price tendency of recent months, VWAP of paraquat TC hit a historical high (during the past year) in Q1 2014, while declined slightly in Q2. Major manufacturers are operating steadily. Since more than 70% of the paraquat aqueous solution is for export, and since the ban clearly states that “paraquat aqueous solution production for export is allowed,” the benefits of China's leading paraquat enterprises are temporarily protected, but in the long run, the R&D and production of non-AS paraquat formulation is the real solution to save paraquat. The setting of specifications of non-AS paraquat formulation production will undoubtedly bring the opportunity for China’s paraquat industry.

Volume Weighted Average Price Tendency of Some Major Pesticides

The latest issue of CCPIA Monthly Bulletin of Statistics of China Agrochemicals was just released. Here follows some major pesticides’ price tendency and manufacturers’ operation situation as reference.

1. Glyphosate

According to CCPIA Monthly Bulletin of Statistics of China Agrochemicals, VWAP of glyphosate TC declined by $67 per tonne last month, while output increased by more than 20% month-on-month with same number of manufacturers operating in May. Compared with that of April, sales volume of glyphosate TC didn’t change that much in May. It’s estimated that impacted by the qualified list of glyphosate environmental protection scrutiny which was released by MEP (the Ministry of Environmental Protection), glyphosate market may welcome another rise in the next few months.

3. Imidacloprid

According to CCPIA Monthly Bulletin of Statistics of China Agrochemicals, in May, VWAP of imidacloprid TC increased slightly by 3.3% than that of April. One more manufacturer was operating last month, however output fell by 8.8%, and sales volume down by 9.7% month-on-month. Since the peak season for insecticides almost ended in May, some enterprises tended to de-stock, meanwhile demand of Southeast Asia was less than expected, hence both reasons resulted in the declining trend since April.
4. Chlorpyrifos
According to CCPIA Monthly Bulletin of Statistics of China Agrochemicals, in May, VWAP of chlorpyrifos TC increased by $433.3 per tonne than that of April. With four less manufacturers operating in May, output of chlorpyrifos TC fell by 15.4%, and sales volume down 26% month-on-month. Suffered from the CocaCola “Minute Maid” case, market of carbendazim TC in China has been depressed. However impacted by the stricter environmental policies, some carbendazim manufacturers shut down in 2014, which resulted in a rise trend of carbendazim's price. Since the second half year is always peak season for carbendazim, it’s estimated that future market of carbendazim will kept on booming.

6. Chlorothalnil
According to CCPIA Monthly Bulletin of Statistics of China Agrochemicals, in May, VWAP of chlorothalonil TC kept the same level with that of April. With same number of operating manufacturers, output of chlorothalonil TC increased by 14%, and sale volume up by 35% month-on-month. Seen from export, two manufacturers’ export volume doubled in May, which led to the significant increase in sales volume.

5. Carbendazim
According to CCPIA Monthly Bulletin of Statistics of China Agrochemicals, in May, VWAP of carbendazim TC almost kept same level with that of April. With same number of operating manufacturers, output of carbendazim TC declined by 7.1%, and sales volume down 6.7% month-on-month. Consider that environmental protection policies is stricter than before, supply of chlorpyrifos’ main raw material has been in shortage, which may be the major reason for the increasing of chlorpyrifos’ price.

Lists of China’s 2014 Top 100 Pesticide Manufacturers and Top 30 Formulators Released
Lists of China’s 2014 top 100 pesticide manufacturers and top 30 formulators (by sales) were released in May. The lists are based on the statistics from CCPIA on the annual sales of over 1000 pesticide enterprises.

1. Introduction
According to the lists, the strength and scale of China’s pesticide enterprises were increasing during 2013, which lifted up the threshold of Top 100 list. As the top 30 formulators’ list shows, there is not so much change in the top 5 from last year. Shenzhen Noposion Agrochemicals Co., Ltd. topped the list again with an annual sales volume of 288.3 million dollars. With frequent mergers and acquisitions last year, its sales increased by 8.8% compared to that of last year. Rotam CropSciences ranked the second with an annual sales volume of 181.7 million dollars, up 1.9% from last year. In comparison, the annual sales volume of the third and fourth Syngenta (SuZhou) Crop Protection Limited and Guangxi Tianyuan Biochemistry Corp., Ltd. increased significantly, by 17.8% and 16.9% respectively, narrowing the gap with Rotam CropSciences significantly. Sino Quick Agro-Chemical Company still ranked the fifth, with an increase in sales volume of over 10%. In general, the development of formulation industry and growth in export were the main reasons boosting the sales up.

The sales of multinational corporations in China are also worth noting. Syngenta (Jiangsu) and Syngenta (Nantong) ranked 29 and 39, and Shanghai Dupont (joint venture company of Dupont) ranked 65. The rankings of the three didn’t change much from last year. Suzhou FMC ranked 71, making great progress from last year when it ranked 81.

In general, with the intensification of China’s pesticide industry, large-scale enterprises have more and more advantages. In 2014, facing high cost and high environmental pressure, China’s pesticide industry still need to speed up mergers and restructurings, and get transformed and updated.
Regional Workshop on “Practical aspects of pesticide risk assessment and phasing out of Highly Hazardous Pesticides” was Held in Nanjing

Recently, FAO Asian-Pacific Regional Office, Asia and Pacific Plant Protection Commission (APPPC) and ICAMA jointly held the Regional Workshop on “Practical aspects of pesticide risk assessment and phasing out of Highly Hazardous Pesticides (HHPs)” in Nanjing.

In recent years, China has made significant achievements in the elimination of HHPs, pesticide registration management and pesticide quality control. A regional platform is of great significance to the communication and cooperation among countries. As China's experiences have practical guiding significance for the development of relevant fields in developing countries, FAO Asian-Pacific Regional Office and APPPC decided to hold the regional seminar in Nanjing, China.

The seminar lasted three days. ICAMA introduced the experiences and measures of China in pesticide registration management, pesticide quality control and elimination of HHPs. Shirley Xia, Deputy Secretary General of China Crop Protection Industry Association (CCPIA), shared with attendees on aspects of recent development tendency of Chinese pesticide industry, elimination and alternation of HHPs and experience that got from the elimination actions. In addition, the achievements that China has made in the pesticide import & export management, the management of pesticide names and the construction and application of official pesticide websites were also the focus of the representatives attending the meeting.

The meeting will promote the ability of Asian countries in pesticide management and advance the elimination process of HHPs. In the meantime, China's pesticide management experiences will exert greater influence over the region and benefit other countries.

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Shirley Xia: Highly Hazardous Pesticides (HHPs) not only harm safety of human and livestock, but also bring baneful influence on quality of agricultural products and ecological environment. Production of HHPs has no longer been fit to current pesticide industry. In China, the government has realized the harm brought by HHPs and committed to the actions of phasing out HHPs for years. Only combining the strength of the government, industry associations and pesticide enterprises can promote elimination and alternation of HHPs more effectively.

Food Safety Laws and Policies Triggered Bio-pesticides Development in China

Environment-friendly pesticide is brought in the spotlight, owing to China's serious concern over food safety and ecological construction, and the development of modern agriculture. Besides, with updated R&D technology and improved product quality, a great opportunity for bio-pesticides' development comes after years of promotion from the government and industry.

Chemical pesticides play an essential role for agricultural products' high outputs and profits, however some of them bring pollution to the air, the soil and the water environment. And among all the chemical pesticides, highly hazardous pesticides (HHPs) are the worst. Then how to ensure food security, food safety and sustainable development of agriculture without reducing the outputs and profits? Clearly, environmental friendly pesticide is the answer.

In China, though the application of bio pesticide is under 10%, it has started its golden time for many reasons: food safety and ecological construction are listed as national strategy; some HHPs get banned for exceeding residues and severe food safety issue it caused; more important, bio pesticides registration policy has been more relaxed than the chemical ones.

Measures carried out by MOA help the application of bio-pesticides. For this year, the application scope of Program on Allowance for Low Toxic Bio Pesticide reaches 13 provinces and 16 counties. And List of Low Toxic Pesticides for Crop Production (2014), in which bio-pesticides account most, is printed for farmers as a guide. In some places, special fund is set by local government to deter insects from vegetables, fruits, tea and corns, and subsidies for bio pesticides application are distributed in water source area, ecological protection area and horticultural crop area.

ICAMA has already enacted policies on exemption of registration to promote the development of bio pesticides. Currently, ICAMA is revising the registration requirements, relaxing the standards for the testing time of pesticide effectiveness, required information on residues and environment, and required information on technical concentrate.

At present, the quantity of China’s bio pesticide enterprises is around 260, with an annual output of nearly 130,000 tons, annual value of around 500 million dollars, accounting for 9% of the pesticide industry, and application area of 0.4 billion to 0.5 billion Mu (a unit of area, 1 mu =0.0667 hectares). It's estimated that in 10 years, the market share of China's bio pesticide would increase to 30%.

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CCPIA to Set up Ten Branches

At the Fourth Session of the Ninth Executive Committee, China Crop Protection Industry Association (CCPIA) put forward the proposal of setting up ten branches, which was greatly supported by the representatives of the Executive Committee. Below is a brief introduction to the ten branches and their functions:

I. CCPIA Professional Committee for Public Health Pesticide

1. Research development policies, strategies and planning for the industry, and provide services to the government in the preparation of industry development planning and policies;
2. Reflect the development situation of the industry and enterprise demands, and protect the rights and interests of public health pesticide enterprises;
3. Coordinate and integrate technological resources, promote technological innovation, guide the industry to strengthen its independent innovation ability, promote advanced key technology and enhance the technological and research & development level of the industry;
4. Guide and regulate market behaviors, maintain a fair market, strengthen enterprise self-discipline, and promote orderly competition;
5. Set up a technical and information communication platform and recommend Chinese public health products to the world.

II. CCPIA Professional Committee for Non-crop Agrochemicals

1. Policy support and coordination: actively consult with MOA and MIIT to speed up the issuance of relevant policies, and actively offer support and help in projects, funds and taxation;
2. Encourage innovation: encourage technological innovation and pesticide use innovation and the expansion of the field of application;
3. To set relevant access standard or regulation to provide a rule basis for the management of non-crop agrochemicals;
4. Promote new pesticide technologies and new varieties in non-crop fields.

III. CCPIA Committee for International Trading

1. To invite and receive foreign pesticide trade delegations; organize member enterprises to pay a visit or an inspection tour abroad, and develop exchange and cooperation with relevant international organizations, regional organizations, trade promotion organizations, chambers of commerce, associations and embassies in China;
2. To better expand the overseas market, organize Chinese pesticide trade delegations to hold pesticide trade exhibitions overseas every year;
3. Provide overseas customer information services for member enterprises;
4. Organize the communication among pesticide supporting enterprises, and hold technical and information exchange meetings on logistics, packaging, banking and insurance periodically for pesticide import and export supporting enterprises;
5. Provide legal consulting services on the disputes of intellectual property;
6. Organize members to actively participate in the “credit rating of the Chinese pesticide industry” organized by CCPIA under the authorization of the Ministry of Commerce;
7. To set market regulations for pesticide import and export enterprises;
8. Organize relevant meetings on analysis of the import and export trade of pesticides;
9. Invite experts to train member enterprises on the domestic and international pesticide registration procedures, the pesticide markets and the laws of relevant countries;
10. Under the leadership of CCPIA, communicate with relevant government departments with respect to pesticide import and export matters, reflect enterprise demands, strive for import and export policies favorable to the pesticide industry.

IV. CCPIA Committee for Using Pesticide Safely and Scientifically

1. Cooperate with NATESC and local governments, set up a training platform for safe and scientific pesticide use, and hold comprehensive, large-scale training sessions on safe and scientific pesticide use from time to time;
2. Improve the enterprise training system on safe and scientific pesticide use, and cultivate professional trainers on safe and scientific pesticide use;
3. To establish a pesticide packaging waste recycling mechanism, and explore and improve pesticide packaging waste recycling models to solve pesticide packaging waste problems in rural areas;
4. Foster a good company image with social responsibility and care among farmers;
5. Promote new pesticide use technologies and new pesticide varieties.

V. CCPIA Professional Committee for Pesticide Adjuvants

1. Gradually establish pesticide adjuvant standard, and based on the current agricultural packaging market, draft some standards and apply to a higher body for approval;
2. Cooperate with MOA in the pesticide packaging management work, and make national management policies serve enterprise development;
3. To promote the communication between the Committee and the formulators, and do well in the training on the use of pesticide packaging and of pesticide packaging equipments;
4. Do well in the technical communication among the member enterprises of the Committee.

VI. CCPIA Professional Committee for Pesticide Processing Facilities

1. To set up pesticide processing equipment and application regulations;
2. Do well in the training work on the operation of pesticide processing equipments and promote the application of advanced equipments in the pesticide industry;
3. Organize communication meetings promoting the communication between the Committee and the formulators;
4. Do well in the technical communication among the
VIII. Alliance for China Pesticide Industry Stewardship

1. Conduct research on basic work for stewardship, organize the research on stewardship evaluation index system and evaluation methods, and establish stewardship evaluation and authentication mechanism;
2. Organize and carry out stewardship publicity, research & discussion and special-subject training;
3. Organize and carry out communication, inspection and visit activities;
4. Actively strive for the policy support on stewardship from relevant government departments;
5. Develop international cooperation, learn information about the stewardship activities carried out by relevant international organizations, and organize communication and cooperation with international organizations and companies.

IX. CCPIA Technology Center for Pesticide Engineering

1. Design and demonstrate pesticide formulation factories, workshops and equipments;
2. Set up a pesticide formulation processing engineering team, and improve formulation processing equipment level as well as the quality level of formulations;
3. Gather relevant talents in pesticide synthesis process development and engineering research, cultivate a batch of high-level engineering technology and management talents, and set up a synthesis engineering technology platform of the pesticide industry for cleaner production and process optimization of pesticide synthesis;
4. Provide open service, undertake engineering technology research, design and experiment tasks assigned by governmental organs, institutions of higher education, scientific research institutions or enterprises.

X. CCPIA Alliance for Pesticide E-Commerce

1. Conduct enterprise communication, explore development model, avoid constraints in pesticide e-commerce, and gradually break through bottleneck and adapt to the new development trend of the industry;
2. Gradually set up a pesticide e-commerce trading platform, guide enterprises to develop e-commerce through the Alliance, shorten the marketing channel, and establish the most convenient trading approach for pesticide enterprises, pesticide dealers and users;
3. Do well in the internal communication work among the member enterprises of the Alliance, and solve the problems in the development using the development experiences of the member enterprises for reference.

Currently, CCPIA Committee for International Trading, CCPIA Committee for Using Pesticide Safely and Scientifically, CCPIA Professional Committee for Pesticide Adjuvants, CCPIA Professional Committee for Pesticide Packaging and CCPIA Technology Center for Pesticide Engineering have already been established, and the rest five are in their later preparation stage.

Zhiping shared current situation and development tendency of Chinese chemical industry with the attendees. Nowadays, output, investment and export of main chemical products are increasing steadily. However, key problems such as over production capacity and increasing cost result in price and profit declining in chemical industry. Although pesticide industry bucked the trend of chemical industry in the past two years, similar said problems should be paid attention. Enhancing innovation ability, promoting HSE activities, easing homogeneous competition and strengthening controlling ability of major enterprises should be pesticide industry's vital tasks.

Dr. Duan from CCPIA gave the lecture of Big Data Analysis on China Pesticide Industry. In the Conference, Deputy Secretary General of China Petroleum and Chemical Industry Federation (CPCIF), Mr. Zhao
Conference. From Dr. Duan’s report, the attendees comprehended a full view of pesticide production and usage in China for the very first time.

According to years’ of data accumulation by China Agrochemical Industry Network (www.ccopia.com.cn), Dr. Duan analyzed pesticide application situation in China. He pointed out that, in recent years, China has become the largest pesticide user in the world. Either seen from domestic usage or export situation, herbicide accounted the largest proportion of all pesticide varieties.

Export has always been an important index for China pesticide industry. In recent years, China has exported more and more pesticide to abroad, and the percentage of formulation products has been increasing. According to data collected from ACE Exhibition and CAC Exhibition (two largest exhibitions for pesticide products in China), there have been more and more foreign businessmen attracted in the past few years, and a positive correlation is showed between the products’ popularity degree and their export volume.

The global pesticide market has been increasing since 2009. Dr. Duan analyzed some major pesticides’ (including glyphosate, paraquat, imidacloprid and chlorpyrifos etc.) export tendency using the integrated diagrams based on export big data.

Dr. Duan pointed out that low-end market competition still exist in China pesticide industry. However the factors of global economic downturn and high pressure of environmental protection are pushing China pesticide enterprises to find their way to breakthrough and realize automation and mechanization. Future trend for Chinese manufacturers are to transfer their manpower from the part of production to the part of crop protection service and build up their own brand to expand domestic demand.

Hence Dr. Duan considered that there are six factors that may promote the industry’s growth: transformation and upgrading (represented by HSE promotion), environmental protection pressure leading to the concentration degree up, reduce enterprises’ administrative cost, provide service chain of using pesticide safely, promote GMO crops and make scientific decisions based on BIG DATA.

Epilogue:
The conference also invited leaders and experts of pesticide and financial fields. They analyzed current policy environment, bottleneck and opportunities of pesticide industry and gave suggestions for the enterprises’ future development plan. The conference built up a platform for the attendees to share latest dynamics and industry data information.

On the drizzling morning of April 17, 2014, the First Training Meeting on Using Pesticide Safely and Scientifically & Launching Ceremony of CCPIA Committee for Using Pesticides Safely and Scientifically was officially held in Nanjing, marking a historical step in the Chinese pesticide industry.

Sun Shubao, Chairman of CCPIA, pointed out in his opening speech that pesticide use is the most important aspect in the pesticide industry, and farmers’ knowledge of safe and scientific use of pesticides directly relates to the control effect of pesticides on crop diseases, the health of the personal applying the pesticides, the quality and safety of agricultural products. Under the current situation, it is an urgent task to initiate and establish the Committee for Using Pesticides Safely and Scientifically (the “Committee”), and it is also a duty of the CCPIA and the enterprises in the industry to jointly carry out this work.

SinoChem Global Agrochemical Greening Activity was also launched the same day. With this great opportunity, Zhang Xiaobo, Deputy General Manager of SinoChem, said that SinoChem will spare no effort to promote activities on safe and scientific use of pesticides and make use of its advantages to make contributions to the health development of the pesticide industry together with the initiating founders.

Mr. Raghavan Sampathkumar, Manager of CropLife Asia, Mr. Ou, Head of R&D of Syngenta (China) Investment Co., Ltd., and Professor Jiang Bin of Shenyang Research Institute of Chemical Industry, who are responsible for training members on safe and scientific use of pesticides, shared their experiences in safe and scientific use of pesticides from global and national perspectives and from different aspects such as management and technology, and gave suggestions on the future development of the Committee.

Foundation of the Committee is only a beginning. Till now, cooperated with member enterprise, Bayer, the Committee has already held three Training Classes on Using Pesticide Safely and Scientifically in Shandong Shouguang, Jiangxi Ganzhou, and Heilongjiang Wuchang respectively. In the future, the Committee will cooperate with more member enterprises to launch the said activities in nationwide. By the end of 2014, the training classes will cover more than 20,000 people including farmers and dealers. More than 50,000 training brochures will be issued freely.

Carrying out waste pesticide package recycling work, establishing waste paid-recycling system, discussing ways of waste recycling and management are also main tasks of the Committee. It’s planned that in September, CCPIA will cooperate with NATFSC and CropLife China to held a training meeting on pesticide empty package recycling and farmland ecological protection in Hainan.
CCPIA to promote the Environmental-friendly F&P Technology and Production Equipments

Recently, the Fourth Seminar on the Environmental-friendly F&P Technology and Production Equipments (the Seminar) was successfully held in Shanghai. Over 20 leaders and experts from government, associations, colleges, multinational corporations and leading companies in China presented at the Seminar and brought wonderful reports to the attendees.

Among the over 20,000 pesticide formulations which are registered in China, there are more than 13,000 liquid ones, of which more than 9,000 are EC formulations. EC now accounts for the largest proportion of pesticide formulations. Limit Standards of Harmful Solvents in EC Formulations have been carried out since March 2014, and most formulators paid much attention on the policy.

Dr. Li Zhonghua from CCPIA pointed out that, since EC has been banned from registration years ago in China for the reason of harmful organic solvents, the Standards no doubt brought a chance of survival for the EC formulators. She introduced work plan for the next step and recommend some safe organic solvents to formulators. Now officials from MOA, AQSIQ and MEP voiced support for the implementation of the Standards. It’s suggested that MIIT should announced the action plan to guide the implementation of the Standards. “Formulators should comply with the Standards, accelerate the alternation of EC formulas and bring forward comments and suggestions”, She said.

Moreover, officials from government shared development tendency of pesticide industry with the attendees, and experts from multinational corporations and Chinese leading formulators brought various solutions at the technical level.

There were 827 representatives from 433 enterprises attending the Seminar, and both numbers hit a historical high. Most attendees spoke highly of the Seminar for its high-practical reports, and some even planned to take the reports as companies’ training materials.

The Third Session of the Ninth Council Meeting of CCPIA Successfully Held in Xiamen

At the Council Meeting, Chairman of CCPIA, Dr. Sun Shubao, reported to the members of the Ninth Council. In the work report, Dr. Sun shared what CCPIA did to promote pesticide industry in the past year and deployed some major tasks that will be carried out in 2014.

The secretariat of the council meeting also invited leaders from MOA, and experts from main enterprises to give some reports on policies and technologies.

Four proposals were passed at the Standing Council Meeting. 1. Adding new council members; 2. Adding new Standing Council Members; 3. Changing vice chairman of the council; 4. Establishing ten branches of CCPIA (details refer to the article CCPIA to Set up Ten Branches). What’s worth to mention is that Dow AgroSciences (China) Co., Ltd. was added as a new council member of CCPIA. Now there are four multinational corporations’ branch companies in China listed in the council members or standing council members: Syngenta (China) Investment Co., Ltd., Dupont Agrochemical (Shanghai) Co., Ltd., FMC (Suzhou) Plant Protection Co., Ltd. and Dow AgroSciences (China) Co., Ltd.
Communication on Cooperation Conducted between CCPIA and Bayer CropScience

Recently, Mr. Robert Hulme, Bayer CropScience Country Head of Greater China and Cynthia Wei, General Manager of Bayer Greater China visited China Crop Protection Industry Association (“CCPIA”), and met with Sun Shubao, Chairman of CCPIA, and Li Zhonghua, Secretary-general of CCPIA. In 2013, CCPIA organized some 20 domestic business representatives to visit Bayer's headquarters in Germany, through which the two parties had in-depth communication. Dr. Sun Shubao said he was greatly impressed by Bayer's research and development and production system and he expressed thanks to Bayer again for their warm reception and thoughtful arrangement.

Mr. Robert Hulme introduced the operation of Bayer in 2013. He mentioned that Bayer had a global celebration for its 150th anniversary last year, and its annual turnover achieved EUR 40 billion, the best year ever for Bayer since its establishment; he also said that the crop protection business of Bayer CropScience (China) also had a double-digit growth, which is the third growth of Bayer in three consecutive years.

Dr. Sun Shubao introduced the operation of the Chinese pesticide industry and said that 2013 was the best year for the China pesticide industry. With an increase of 1.6% in production, the revenue of main business increased by nearly 20%, and the profit by an exciting 30%. Though the industry showed great performance, problem of polarization still exists: large enterprises have steady performance growth while small enterprises experienced difficulties in business operation.

For a long time the society has prejudice to the pesticide industry, plus some of the industry haven't done their own obligations, which led the industry into a more and more severe environment. For that, CCPIA has actively carried out relevant work, including introducing HSE concept from multinational corporations to improve the HSE level of the industry; to reduce and eliminate pesticide abuse, CCPIA has established the Committee for Using Pesticide Safely and Scientifically this year, hoping to guide enterprises to provide not only pesticide products but also crop protection services and solutions to help farmers form a good pesticide use habit.

Mr. Robert Hulme agreed with and praised CCPIA’s work in recent years. He suggested the two parties establishing a cooperation framework to maintain communication and cooperation on information, scientific research on products including neonicotinoids and the study of policies and regulations. Dr. Sun Shubao agreed and the parties will have a further discussion on the cooperation framework.


<table>
<thead>
<tr>
<th>Before the Merger</th>
<th>After the Merger</th>
<th>Registered Capital (Million Yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ganzhou Weinong Pesticide Co., Ltd.</td>
<td>Ganzhou Weinong Pesticide Co., Ltd.</td>
<td>30.08</td>
</tr>
<tr>
<td>Jiangxi Suifeng Pesticide Co., Ltd.</td>
<td>Anyang Quanfeng Biotech Co., Ltd.</td>
<td>50</td>
</tr>
<tr>
<td>Anyang Quanfeng Biotech Co., Ltd.</td>
<td>Anyang Chemical Experiment Plant</td>
<td>5</td>
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<tr>
<td>Hebei Shenghe Chemical Co., Ltd.</td>
<td>Hebei Shenghe Chemical Co., Ltd.</td>
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<tr>
<td>Chemical Plant of Hebei Normal University</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Shenyang Research Institute of Chemical Industry (Nantong) Chemical Science and Technology Development Co., Ltd.</td>
<td>Shenyang Research Institute of Chemical Industry (Nantong) Chemical Science and Technology Development Co., Ltd.</td>
<td>5.10</td>
</tr>
<tr>
<td>Jiangsu Huanong Seed Coating Co., Ltd.</td>
<td>Jiangsu Huanong Seed Coating Co., Ltd.</td>
<td>5</td>
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<tr>
<td>Shenyang Aiwei Technology Development Co., Ltd.</td>
<td>Shenyang Aiwei Technology Development Co., Ltd.</td>
<td>5</td>
</tr>
<tr>
<td>Shenyang Xinglong Chemical Co., Ltd.</td>
<td>Shenyang Xinglong Chemical Co., Ltd.</td>
<td>5</td>
</tr>
<tr>
<td>Shanxi Guanda Chemical Co., Ltd.</td>
<td>Shanxi Guanda Chemical Co., Ltd.</td>
<td>5.10</td>
</tr>
<tr>
<td>Fujian Haolun Bioengineering Technology Co., Ltd.</td>
<td>Fujian Haolun Bioengineering Technology Co., Ltd.</td>
<td>5</td>
</tr>
<tr>
<td>Zhangzhou Longwen Agrochemical Co., Ltd.</td>
<td>Shanghai Longwen Agrochemical Co., Ltd.</td>
<td>5</td>
</tr>
<tr>
<td>Fujian Kefeng Pesticide Co., Ltd.</td>
<td>Fujian Kefeng Pesticide Co., Ltd.</td>
<td>5</td>
</tr>
</tbody>
</table>

Since the release of Pesticide Industry Policy in 2010 and Specialized Planning for Development of Pesticide Industry during the 12th Five-Year Plan in 2011, the pesticide industry develops towards increased industrial concentration with a faster merger and restructuring pace. During the first half of 2014, there are fourteen pesticide enterprises which have merged their assets for pesticide production. The details are listed as above.

Furthermore, a number of pesticide enterprises have frequently made business transfers and acquisitions. Hubei Xingfa Chemicals Group Co., Ltd. made a purchase of 51% of Taisheng Chemicals’ shares originally held by Jinfanda Biochemical, becoming the absolute controlling shareholder of Taisheng Chemicals, which further completed its phosphorus chemical industry chain. Huifeng Agrochemical invested 125 million yuan in Jiangsu Jialong Chemical Co., Ltd., purchasing 53.2% of its total shares. Jialong Chemical’s 20,000 tons of phosgene production capacity per year provides key raw material for Huifeng Agrochemical's various product production, which will optimize Huifeng Agrochemical's production level and expand the domestic market. Recently, Jiangsu Yangnong Chemical Group announced that after Jinmao Group transferred 100,000 of its shares of Yangnong Group to Sinochem Group gratis, the latter became the actual controller over Yangnong Chemical Group for it held a total of 40.59% of Yangnong Group’s shares. Yangnong Group was the original controlling shareholder of Yangnong Chemical Group. This share transfer will undoubtedly promote the integration of glyphosate industry.
Patent Portfolio of Chinese Pesticide Enterprises in China Pesticide Market

The amount and value of the intangible assets owned by a company betokens the company’s technological level and its competitive capability. Under the influence of the integration of the world economic and the globalization of the intellectual property protection, a number of pesticide enterprises in China’s agrochemical market have realized the importance of intellectual property protection and began to attach great attention to it. The below table lists Chinese companies which have relatively more patent applications.

Certainly, compared with multinationals which have a mature IPR system, intangible assets occupy a quite low position in the total assets of China’s enterprises. Furthermore, the proportion of technological assets is particularly low in the intangible assets. The Chinese pesticide enterprises still have a long way to go in order to stand out among its competitive foreign counterparts.

Part of Pesticide Companies with over 50 Patent Applications in China

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Total Applications</th>
<th>Invention</th>
<th>Utility Model</th>
<th>Product Design</th>
</tr>
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<tbody>
<tr>
<td>Syngenta (China) Investment Co., Ltd.</td>
<td>633</td>
<td>496</td>
<td>0</td>
<td>137</td>
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<tr>
<td>Institute of Plant Protection of Chinese Academy of Agricultural Sciences</td>
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<td>386</td>
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<tr>
<td>Jiangsu Rotam Chemistry Co., Ltd.</td>
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<tr>
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<tr>
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<td>Beijing Yanhua Yoleo Pesticide Co., Ltd.</td>
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<tr>
<td>Hainan Zhengye Zhongnong High-tech Co., Ltd.</td>
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<tr>
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<td>106</td>
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<tr>
<td>Anhui Guangxin Agrochemical Co., Ltd.</td>
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<tr>
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<tr>
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<td>Beijing Green Nonghua Crop Protection Science and Technology Co., Ltd.</td>
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<td>Jiangsu Changjiang Agrochemical Co., Ltd.</td>
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<td>52</td>
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</table>

The above data were collected before 30th March, 2014.

Rotam Independently Drafted some 8 International Standards

As the 13th FAO/WHO Joint Meeting on Pesticide Specifications (JMPS) to be held in Belgium this June is drawing near, the R & D Department of Rotam CropSciences Ltd. is busy making supplementary experiments and data. At this FAO/WHO JMPS, the company will submit three pesticide standards including 250g/kg Deltamethrin WDG, Chlorothalonil TC and 720g/L Chlorothalonil SC for evaluation. So far, Rotam has submitted eight international pesticide standards to FAO and WHO, of which two were officially published by the FAO this February and one was approved by the WTO and is going to be published soon. The company is way ahead of other domestic companies in the industry.

“The FAO and the WHO are the most authoritative organizations in the world. To formulate international standards approved by the FAO and the WHO and manufacture products meeting such standards means a global sales pass. Rotam is keeping up with well-known international companies such as Syngenta and Bayer to gain a bigger say in the international market,” said Garth Drury, Head of Global Regulatory and Government Affairs of Rotam CropSciences Ltd., who had worked for Bayer for 15 years. According to Mr. Drury, before the last FAO/WHO JMPS, only one Chinese enterprise had participated in the formation of two international standards organized by the FAO, and Rotam is obviously by far the only domestic enterprise that has done so.

Rotam, which is gradually consolidating its international and domestic position with the formation and issuance of a series of international standards, is current busy with product registration and sales around the globe. In recent years, Rotam’s sales has grown at an annual average of 25%, and its total operating revenue in 2013 was 181.7 million dollars.
BASF Further Develops China’s Crop Protection Market

Although severely affected by unfavorable exchange rates, BASF’s agricultural sector still made gratifying performance in 2013, with full-year sales growing steadily by 13.7%, and sales volume and prices in all regions rising. BASF is one of the multinationals which made the first step to the Chinese market in the agrochemical industry, while China has also gradually become one of BASF’s important market of great performance growth in the global market. In a recent interview, BASF revealed its development plan in 2014 in China.

Faced with China’s growing demand for new fungicide products, BASF Crop Protection Section in China launched a new fungicide product for rice — Zun Bao™ in 2013. Zun Bao™ is a mixed formulation with epoxiconazole and kresoxim-methyl as active ingredients, possessing features of both triazole and strobilurin fungicides. As a new effective product for comprehensive disease treatment and resistance management, Zun Bao™ has a unique mechanism of action. After a number of field tests, it is showed that Zun Bao™ can boost rice growth, and bring higher yields and good-quality product while effectively controlling rice diseases.

In June 2013, to address the problem that there isn’t a pesticide formulation production base in China or even in the whole Asia Pacific region, BASF Crop Protection Section invested in building a plant of an annual output of 10,000 tons for crop protection product manufacturing and packaging in Rudong. This production base will help BASF better and faster meet needs of growers in China and Southeast Asia.

Since the beginning of 2014, BASF has successively launched new products Jian Da and Jian Wu in Guangzhou, Beijing, Nanning, etc., declaring the latest active ingredient developed by BASF made the step to Chinese market. Fluxapyroxad belongs to succinate dehydrogenase inhibitor fungicides. China is one of the first countries where this newly developed ingredient was launched across the world. According to BASF, fungicide products Jian Da and Jian Wu will be greatly promoted in China.

It’s revealed in an interview that in the next few years BASF will maintain an average annual expense of 300 million euros in further increasing its global production capacity for its product line targeted at providing agricultural solutions.

From 2008 to 2012, BASF Crop Protection Section’s expenditure in R&D has risen from 325 million euros to 430 million, an average annual growth rate of 7%. BASF said it will maintain its efforts in carrying out the R&D work.

Bayer to Further Promote the Agricultural Modernization Project under Land Transfer Situation with Tianhe-CITIC

Recently, Bayer CropScience (China) Co., Ltd. (referred to as “Bayer CropScience” hereinafter) and Anhui Tianhe-CITIC Agricultural Services Co., Ltd. (referred to as Tianhe-CITIC hereinafter) signed a strategic cooperation memorandum, starting the full-scale bilateral strategic cooperation in the field of food production. This is further implementation of a specific project under the land transfer situation since the signing of “Modern Agricultural Science and Technology Innovation and Development Cooperation Agreement under Land Transfer Situation” (“Framework Agreement”) between Bayer and Tianhe-CITIC in this February.

Through strategic cooperation with Tianhe-CITIC, Bayer CropScience will provide overall crop protection solutions from growing to harvesting for high-yield field projects undertaken by Tianhe-CITIC based on local production modes. Through the introduction of advanced technology and professional agricultural service, Bayer CropScience will be dedicated to increasing Tianhe-CITIC’s rice output on transferred land in rice producing areas in Anhui Province, improving rice quality and raising local farmers’ income. Bayer’s crop protection solutions cover seed treatment, new crop protection technology, application techniques, equipment, food storage options, demonstration fields and management services based on customers’ needs.

The bilateral cooperation will expand to include “CITIC-Tianhe Business School for New Professional Agricultural Managers,” which provides grain farmers with training on modern agricultural concept, modern crop protection technology, safety pesticide application, secure administration, etc. The cooperation provides future modern agriculture entrepreneurs and farmers with related service and support and advocates sustainable agricultural development.

Rob Hulme, Head of Bayer CropScience (Greater China), expressed at the launching ceremony that “Bayer CropScience has been consistently committed to promoting sustainable agricultural development advocated by Chinese government. Our cooperation with Tianhe-CITIC also represents our further commitments to CITIC’s land trust projects. I believe our cooperation will be able to raise the level of agricultural services, improve food production efficiency and increase farmers’ income.”

Wang Shi, President of Anhui Tianhe Agricultural Group, pointed out in his speech that “Today, through cooperation with Bayer, we will have a large-scale agriculture of steady, high and quality output. We will bring modernization, scale management, mechanization, ecologicization and sustainable development into agriculture. We will work together for the benefits on the tongue of China’s 1.3 billion people and for all the people in the world.”
Recently, Dow AgroSciences has received temporary registration approval for its 93% of halauxifen-methyl TC from ICAMA. The registration number is LS20140138. In the meantime, Dow AgroSciences also received temporary registration approval for its halauxifen-methyl+florasulam WDG (10% halauxifen-methyl+10% florasulam). The registration number is LS20140136. This product is used to control broadleaf weeds in winter wheat field. The registration will be valid from 10 April 2014 to 10 April 2015. Dow AgroSciences became the first enterprise which registered halauxifen-methyl TC in China.

Halauxifen is an active ingredient developed by Dow AgroSciences which is used as picolinic acid herbicide. The ISO name for this active ingredient was approved in November 2012. Dow AgroSciences has developed market for the compound product methyl ester-halauxifen-methyl and launched it into Canada’s grain market where the product is used as a postemergence herbicide for controlling broadleaf weeds.

On May 16, 2014, Beijing Yanhua Yoloo Biotechnology Co., Ltd. and Citibank held a grand signing ceremony at the Beijing center of Citibank for establishing strategic cooperation to jointly develop the rural market through the new mobile payment model.

Yanhua Yoloo is a forerunner of crop protection in China, providing cutting-edge bio-pesticides and highly efficient and environmentally friendly chemical pesticides. Dedicated to food and environmental safety, Yanhua Yoloo’s vision “share the joy of the harvest” struck a responsive chord with Citibank. From 2009 Yanhua Yoloo began to explore agricultural e-commerce and set up a special e-commerce company. In 2010, it issued the first co-branded credit card specifically for agricultural materials. Through six years’ operation, Yanhua Yoloo has accumulated a wealth of experience. The cooperation between Citibank’s payment innovation based on mobile Internet and Yanhua Yoloo’s new marketing model will certainly provide Chinese farmers with more high-quality and convenient products and service. This is a significant innovative step in leading the Chinese rural market moving forward.

It is reported the cooperation between Yanhua Yoloo and Citibank from the U.S. began in 2007. Through cooperation with Yanhua Yoloo, Citibank has been providing more and more service to Chinese farmers; and through cooperation with Citibank, Yanhua Yoloo has operations in five continents. The strategic cooperation on mobile payment services between these two powerful companies not only created a pioneer of mobile payment in the agricultural field, but also marks the official launch of Yanhua Yoloo’s innovative marketing model in the rural mobile Internet era.

According to Sichuan Environmental Protection Bureau, the technical improvement project for the wastewater treatment supporting system of 33% glyphosate ammonium AS of Fuhua Tong-da Agro-chemical Technology Co., Ltd. (hereinafter referred to as the project) was approved. The investment for the environmental protection of the project has achieved RMB 2 million.

According to the data released by Sichuan Environmental Protection Bureau, the project will be carried out in the existing plant of Fuhua in Qiaogou Town, Wutongqiao District, Leshan and Fuhua Agrochemical Park. The main construction content includes stopping establishing the original AS sub-packaging production line, stopping using the glyphosate mother liquor treatment section, transforming the 33% glyphosate ammonium AS workshop, and building a 2000t/d glyphosate mother liquor treatment unit, including high-temperature oxidation devices, normal-temperature oxidation devices and salt evaporation and concentration devices and so on, with existing public and supporting facilities and equipments such as hydrogen peroxide tanks, ammonia tank and boilers.

The Bureau says of the project as follows: no new land is needed and the site selection meets the relevant local planning requirements. After implementing the environmental protection measures specified in the report, the pollutants can be discharged meeting the standard and the local total quantity control requirements, the impact on ambient air, water environment and acoustic environment can be controlled and meet the relevant standard for environmental functional zones.

As the company with the largest production capacity of glyphosate (120,000t/a) in the industry, Fuhua, with a large investment in environmental protection construction, will undoubtedly exert positive influence on the industry, said the Bureau.
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