



## IAPPS NEWSLETTER

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### INTERIM REPORT ON THE 15TH IPPC

The 15th International Plant Protection Congress (IPPC) will be held in Beijing, China from 6 to 11 July 2003. This Congress is sponsored by the International Association for the Plant Protection Sciences (IAPPS) and organized by the China Society of Plant Protection (CSPP)

#### ORGANIZING COMMITTEE

Chairman: Zhou Darong

Vice Chairmen: Cheng Zhuomin, Zhang Zhili, Yan Yuhua, and Piao Yongfan

Secretary General: Zhang Zhili

Vice Secretaries General: Ni Hanxiang, CaoYazhong, Cheng Dengfa, Song Huadu, and Cai Wanzhi

Chief Secretariat Coordinator: Wen Liping

#### SCIENTIFIC PROGRAM COMMITTEE

Chairman: Guo Yuyuan

Vice Chairmen: Huang Dafang, Zhang Zhongning, Zhang Chaoxian , and Yang Huaiwen

#### THEME AND SCIENTIFIC PROGRAM

The 15th IPPC will focus on the current progress in the plant protection sciences and technology, and its foreseeable development in the new millennium. To meet the new challenge facing plant protection in the new millennium, the tentative theme is *"The First Great Gathering for Plant Protection in 21st Century."* The researchers, crop protection consultants, practitioners, extension workers, representatives of regulatory agencies (quarantine, pesticides, biotechnology), administrators, and representatives of industry (chemicals, biologicals, genetic modification, diagnostics, monitoring equipment, software, etc.) are cordially invited to participate in the Congress. The scientific program will include opening & closing lectures, plenary lectures, symposia, workshops and poster sessions on the following topics:

1. Extension of IPM Strategy in 21st Century
2. Resistance of Crops to Pests
3. Bio-control
4. Chemical Pesticides (new products, application techniques, resistance, pesticide management, etc.)
5. Bio-technology for Plant Protection
6. Plant Protection and Bio-safety
7. Information Technology in Plant Protection and Pest Prediction
8. Ecological Regulation and Control of Farmland Pests
9. Plant Quarantine
10. Relationship and Co-evolution of Crop, Pests and Natural Enemies
11. Non-chemical Pest Control Techniques

12. Grain Crop Pest Management
13. Commercial Crop Pest Management
14. Orchard Pest Management
15. Forest Pest Management
16. Vegetable Crop Pest Management
17. Grassland Pest Management
18. Flower and Lawn Pest Management
19. Farmland and Weed Management
20. Farmland Rodent Management
21. Pest Management for Pre-growing and Post-harvesting

In addition, professional tours offered will include: The Bio-technology Research Centre, Biological Control Institute, Plant Protection Institute, Beijing Botanical Garden, Beijing Glorious Land Agriculture Co. LTD, Beijing Bio-control Research Centre and Miyun Trichogramma Factory, etc.

#### SUGGESTED SOCIAL AND TOUR PROGRAM

1. Local tours will be offered during the Congress: The Great Wall & Ming Tombs, Forbidden City & The Temple of Heaven, Beijing Zoo & The Summer Palace, etc.
2. Special recreation program---an informal concert for music lovers.

The Organizing Committee is planning an Informal Concert for music lovers attending the Congress. All the performers/competitors will be pre-selected volunteer amateur music lovers who are registered participants and/or their accompanying persons. Well-known Chinese professional musicians will be invited as Referees to evaluate and select the top ten performers as the prize winners. All other performers will receive a beautiful souvenir representative of the Chinese Arts & Crafts. We are expecting a large group of very enthusiastic participants! For more detailed information please see the Second Announcement.

#### 3. Pre-and post-congress tours

- Beijing-Chengde-Beijing
- Beijing-Hefei-Huangshan (Yellow Mountain) -Shanghai
- Beijing-Xi'an-Dunhuang-Xingjiang (silk road)
- Beijing-Xi'an-Guiling-Guangzhou
- Beijing-Hangzhou-Shanghai-Suzhou-Shanghai
- Beijing- Wuhan -Three Gorges -Chongqing -Chengdu -Guilin-Guangzhou
- Beijing-Chengdu-Lhasa(Tibet)-Chengdu-Guangzhou
- Beijing-Xi'an-Shanghai
- Beijing-Xi'an-Kunming-Guangzhou

#### COMMERCIAL EXHIBITION

A Commercial and Professional Exhibition will be held in conjunction with the Congress. For those interested in space at the Exhibition, please contact the Conference Secretariat for further details.

#### LANGUAGE

The official language of the Congress will be English.

#### REGISTRATION FEES

The regular registration fee for Congress participants will not be more than US\$400. The registration fee for students and accompanying persons will be one half of the regular registration fee. The regular registration fee will be reduced by 15% for members of the International Association for the Plant Protection Sciences (IAPPS).

## GENERAL INFORMATION

**China** is one of the greatest countries in the world with a series of beautiful mountains and rivers, more than 5,000 years of cultural history, a splendid civilization and 1.2 billion smart industrious people. With the upsurge of reform and openness, China has made great strides in developing economic and technological exchanges and cooperation with the outside world. Large amounts of foreign capital are being invested in China, and joint ventures are mushrooming in the coastal areas. China is also well known for her rich and high-quality tourism. The ancient historical relics in the north and the beautiful scenery in the south attract hundreds of thousands of tourists from abroad every year.

**Beijing**, the host city for the 15th IPPC, is the capital of the People's Republic of China, the country's political, economic, cultural, educational, scientific and international exchange center, and also one of the most well known cities of the world. As the ancient capital of five dynasties, it boasts numerous historical relics and beautiful scenery, such as the Great Wall, the magnificent imperial temples and tombs, the different religious buildings and beautiful gardens, etc., all of which attract hundreds and thousands of tourists from abroad every year. Many international congresses, exhibitions and trade fairs are held here because of its modern facilities. Your visit to Beijing will be a wonderful experience and give the opportunity to know both the old and the new China.

**The Beijing International Convention Center (BICC)**, the venue for IPPC 2003, is located in the north of the city and 20km from Beijing airport. It is an excellent place for the Congress and the Exhibition. The convention building has two general assembly convention halls capable of seating 3,000 and 700 people, respectively, 42 multifunction halls and meeting rooms adequate for symposia and workshops. The building also offers an area of 8,000sqm. for exhibitions and posters. The building is equipped with simultaneous translation systems; photocopiers; portable staging and fixed platforms/stages; overhead projectors; 35 mm slide projectors; TV monitors and VCRs; cordless and regular microphones. Many buses and taxis are available for transport to/from the BICC to city center and luxurious hotels. The Opening Ceremony and Welcoming Reception will be held in the Great Hall of the People, a huge building with a seating capacity 10 thousand participants.

**Hotel Accommodations.** A wide range from two-star to five-star hotels with room rates ranging from US\$40-200 are adjacent to BICC, and the youth hotel is also available.

**Weather.** Early July is summer in Beijing and daytime temperature averages 28 degrees Centigrade.

**Agriculture and IPM in China.** China is one of the largest agricultural countries, and the development of her grain production holds the balance of the global food security. It is now able to feed 22 percent of the world's population on about 7 percent of the world's cultivated land. Total grain output in 1995 was more than quadrupled the figure of 1949, in other words, an average increase of 3.1 percent per year was achieved. At present, China ranks first in total grain output in the world, with a per capita share of grain reaching the global average of approximately 380 kg (including legume and tuber crops). The per capita production of meat, aquatic products, eggs, fruit and vegetables has reached 41 kg, 21 kg, 14 kg, 35 kg and 198 kg, respectively, all higher than the world's average.

China is also well known for her long history of agriculture. The earliest plant protection practices in China were recorded in ancient literatures tracing back to 300 BC, the first anti-locust decree was issued by Wudi, the Emperor of Han Dynasty (29AD). However, development of modern plant protection science and technology in China had its beginning in the early 20th Century. The rapid development of IPM principles and their implementation during the past 20 years parallels the rapid development of national economy. At the 'National Conference on Plant Protection', held in 1975, plant protection policy for China was defined as 'integrated control with prevention being put first'. With integrated control, cultural techniques are used as a foundation and chemical, biological and physical control techniques are used according to local conditions. The aim is to control pests with minimum expense, without causing serious toxic hazards. The major research areas include the causes and mechanisms of pest outbreaks, plant resistances to pests, insect behavior, effective pest forecast, biological control, advanced plant breeding techniques and pesticide resistance management, etc. Fruitful achievements on integrated pest management of crops have been achieved.

1. The IPM systems are developed for wheat, rice, corn and cotton in different ecological regions. A large scale demonstration of more than 200,000 ha. of crop fields were established with an efficacious range was over 7 million ha. A training schedule for qualified technical personnel was developed on a nationwide basis.
2. Improvement of key control techniques. Single and complex dynamic action thresholds of main crop pests were determined and utilized in demonstration regions. Good control resulted with reduced chemical usage and environmental pollution and with enhanced biological. Hundreds of new pesticides and/or formulations with high effect, low toxicity and residue were selected. The rational use of pesticides was enhanced. Pest-resistant varieties were screened and applied for the main crops.
3. Establishment of the monitoring and forecasting systems. Hundreds forecast stations have been set up at national, provincial and local levels. Certain modernized equipment such as radar and remote sensing are used for monitoring long distance migration behavior of some insect species, especially the Oriental armyworm *Mythimna, Separata*.

4. Management of pesticide resistance of crop pests. The developmental tendency of pesticide resistance to main crop pests was regularly monitored. Tactics and technology for delaying the development of pesticide resistance were studied. A number of mixed pesticides were developed to slow selectivity of resistant types and to enhance pesticide effectiveness.

5. New advances in the researches of biological control. The parasitic and predatory natural enemies were successfully used in fields and greenhouses. Among them, the registration standard, 92-8, a complex virus insecticide for cotton bollworm, was developed. Both solid and liquid medium methods for culturing *Beauveria brongniartii* Macleod are utilized in pilot production. High content Bt powder was commercially produced. An automated production line for the production of synthetic *Trichogrammatid* eggs has been established.

6. IPM techniques utilizing special preparations of herbicidal mixtures have been developed to integrate agricultural, mechanical, hand-weeding, etc. for controlling weeds in rice, wheat and cotton fields.

7. Improvement of forecast and control techniques for farmland rodents. The dominant species are identified in the major crop production area. The rodent population dynamics and medium-term forecast models are developed. The reliable forecasting and efficient control techniques for the farmland rodents increased significantly crop yields.

8. Outstanding achievements have been obtained through research on insect hibernation, long-distance migratory behavior and prevalent air borne disease patterns. Based on studies of the route of migration and hibernation of the oriental armyworm, a network for inter-regional population forecasting was developed with high reliability. Similar successes were also achieved in many other important insect species such as the black cutworm and brown plant-hopper, aphids, cotton bollworm, white backed rice plant-hopper, rice leaf roller, etc.

The prevalent patterns of the wheat stripe rust are put forward after more than 30 years of research. The main influencing factors for outbreak are the production of a new virulent race (and thus the loss of varietal resistance to the pest) and favorable weather conditions. The disease was brought under control after a series of emergency measures such as preparation of a specific fungicide (triadimefon), development of appropriate fungicide application procedures, and the adaptation of remedial cultivated management, etc.

9. Plant quarantine stations have been established under the leadership of the National Agro-technical Extension and Service Centre, and a national plant quarantine system is being perfected. Dangerous 'quarantined' pests are prevented from spreading into other areas of China through the application of this system.

10. Biotechnology is applied for the improvement for biological control. In the last decade, the new methodologies of molecular biology have offered new approaches for the development of genetically improved strains having superior efficacy properties. A number of genetically modified bio-pesticides have been developed commercially and applied to control plant disease and insect pests with excellent results.

**FOR FURTHER INFORMATION, CONTACT**

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