

Issue 16

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About This Issue

The IRAC eConnection continues to be very popular so we have decided to improve the format and send it out by email attachment and website link rather than the previous html email format. I hope you all like the new look.

In this issue we focus on news from the 43rd IRAC International Meeting held in Washington DC in April at CropLife America headquarters. This was the biggest ever IRAC International meeting with a combination of IRAC Executive, International, Working Group and Country Group sessions with over 40 global participants. Significant progress and successes on IRM strategies over the last year were reviewed and key objectives established for 2008/09.



43rd IRAC International Meeting, April 2008, Washington DC

Some of the participants attending the recent meeting taking a break for a quick photo opportunity.

Photograph courtesy N. Armes

New IRAC Executive Elected Officers

Ralf Nauen (BCS) was unanimously elected as the new Chairman for the upcoming two year term along with Jonathan Hemen (Makhteshim Agan) as Vice Chairman and Nigel Armes (BASF) as Treasurer. Other members volunteered to lead the various teams and working groups and act as country group liaison officers.

Goodbye "Big Mac"

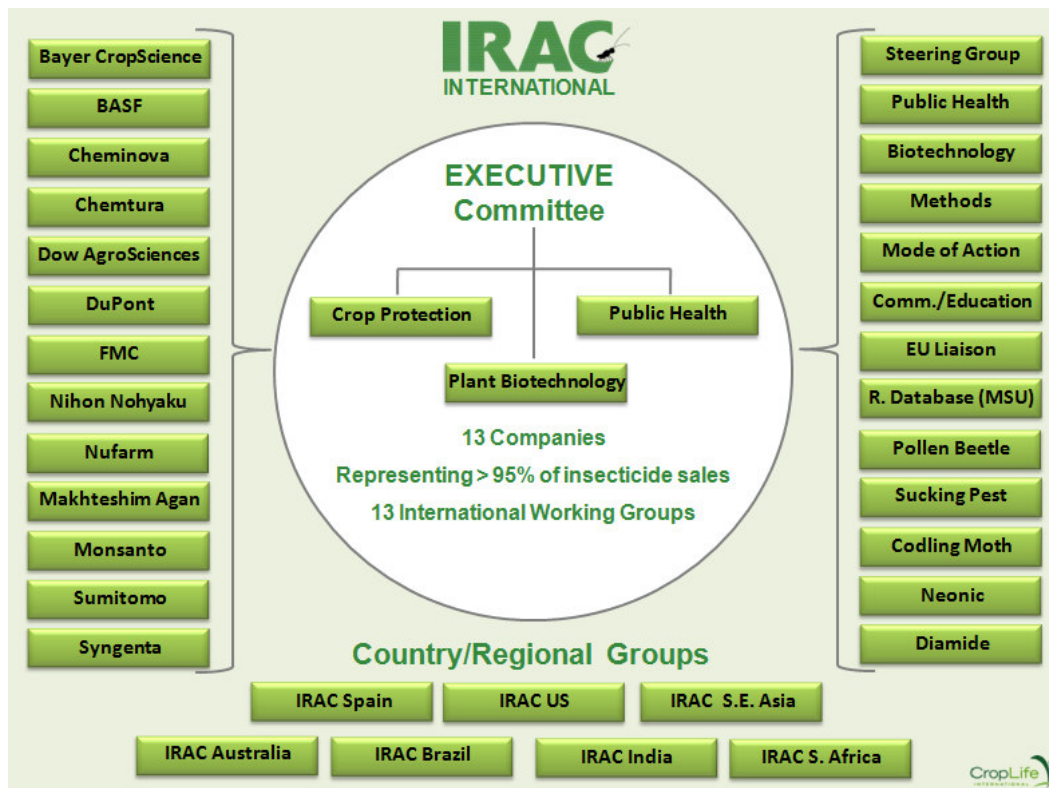
Alan McCaffery (affectionately known to his IRAC friends as "Big Mac"), stepped down from the IRAC Chairman position following his retirement from Syngenta. Alan had been an active member of IRAC International for many years and held the Chairman position for 3 years. IRAC made big advances during Alan's tenure and he will be dearly missed. IRAC wholeheartedly thanks Alan for his outstanding contribution to IRAC's mission and wish him all the very best in his retirement.

Focus on developing more practical IRM advice

A recurring theme of the discussions during the meeting was the need for IRAC to develop more practical advice and guidelines on insecticide resistance management principles and strategies. To this end IRAC will build on the already formed working groups focused on specific pest groups and chemical classes of insecticides where resistance is a key concern. In the Crop Protection arena key pest areas where IRAC agreed needed more focus included: brown planthopper in Asia, Colorado potato beetle, Q-type whitefly and codling moth. A newly established working group will explore further issues with special regard to sucking pests such as aphids and thrips. Furthermore, members of the Crop Protection working groups are in the process of developing a draft IRAC position paper and presentation on the use of insecticide mixtures as a component of insecticide resistance management. Highlights of the discussions in the Crop Protection, Biotechnology and Public Health working groups follow below.

New IRAC structure

IRAC now includes 13 member companies accounting for more than 95% of total global insecticide sales and working together to provide sustainable pest control through guidance on tactics to monitor and manage insecticide (and acaricide) resistance. IRAC Executive agreed at the meeting on the new IRAC structure as shown below.

**IRAC Crop Working Groups****Diamide WG**

This is the newest WG, formed in 2008 and led by Paula Marcon (DuPont). This is the first time that IRAC has been able to make the proactive step of developing a resistance management plan for a MoA before resistance issues have arisen. With several companies with products and mixtures based on the Group 28 ryanadine receptor MoA due to enter the market there is the opportunity to start with good IRM practice right from the outset. The WG will convene to agree on strategies for high risk situations and emerging pest issues which will be targeted by the diamides chlorantraniliprole and flubendiamide and respective mixtures with compounds from other MoA classes.

Neonicotinoid WG

Led by Jonathan Henen (Makhteshim Agan) the group has developed guidelines for resistance management of the neonicotinoids. These are currently in draft and will be submitted to IRAC Executive for approval and dissemination shortly.

Pollen Beetle WG

Led by Russell Slater (Syngenta) the group has been successful in developing IRAC guidelines for oil-seed rape pests (in particular pyrethroid resistant pollen beetles) and has last year co-ordinated the monitoring of pyrethroid susceptibility in pollen beetle populations throughout Europe across the member companies using the IRAC Method No 11. It was the biggest monitoring programme ever conducted by an IRAC WG with more than 600 populations tested. Future work includes continuation of monitoring and extending this to eastern European countries as well as developing standardised methods for monitoring susceptibility to organophosphate and neonicotinoid insecticides which require different methods to pyrethroids.

Sucking Pests WG

This is a newly formed group led by Ralf Nauen (BCS) and the first objective was to develop a priority pest list based on risk of resistance. This exercise identified that the key pests to focus on are whiteflies, thrips, aphids, planthoppers and mites. The WG will refine the priorities at the next meeting with the objective of focusing on global priorities and the pest/chemistry situations with the highest resistance risk where IRAC can maximize its impact.

Codling Moth WG

The Codling Moth group which has been quiet for a while but has now been reformed under the leadership of Andrea Bassi (DuPont). A key activity has been the development and agreement on a suitable susceptibility test method based on diet incorporation. In addition the group is reviewing previous IRAC materials and resistance survey results with the objective of developing updated tools and information for dissemination and additions to the IRAC website.

Plant Biotechnology

The group led by Nick Storer (Dow) has been working to become a single industry face with country governments regarding insect biotech regulations and registration needs. Biotech creates different IRM challenges to chemical insecticides and the group is currently developing IRM principles and the science behind these to provide communication and education materials for dissemination by IRAC to support the global growth of Bt corn and cotton.

Public Health

Led by Mark Hoppé (Syngenta) the group has been very active in providing a co-ordinated industry voice particularly on mosquito resistance. Representatives from the Bill & Melinda Gates Foundation and WHO participate as observers. During 2007 posters were developed on resistance issues with a range of public health and urban pests including mosquitoes, house flies, cockroaches and bedbugs. The group actively liaises with known organization active in the field of disease vector control and management such as the WHO, ANVR, IVCC and others. The group recently published the IRAC Vector Manual especially dealing with all aspects of mosquito resistance, monitoring, mechanisms and its management. The group is actively participating in congresses and conferences to raise its profile and to provide educational material on resistance and its management.



Photograph courtesy Syngenta

Other Executive Working Groups

Other Executive Working Groups such as Methods, Mode of Action, Resistance Database, EU Liaison and Communication & Education reviewed status and progress on their various initiatives at the Washington Meetings. Details from these groups will be reported in future eConnection issues.

IRAC Country Groups

During the Washington Meetings there were good contributions from the IRAC Country Groups. IRAC US held their normal Spring Meeting reviewing ongoing projects and in particular the programme and speakers for the IRAC sponsored symposium at the ESA meeting in November. Fabio Schmidt, the previous IRAC Brazil Chairman and now Vice-Chairman attended the International sessions and reported on the ongoing research projects with *Spodoptera frugiperda* in cotton and corn, work on apple pests and a Stink Bug project as well as the extensive programme of educational workshops that are carried out throughout Brazil. Other country groups were unable to attend in person but the Executive Liaison Officers reported progress on their behalf.

Conferences & Symposia

- 60th International Symposium on Crop Protection, Gent, Belgium, May 20th, 2008
- 4th Pan Pacific Conference on Pesticide Science, Honolulu, HI, June 1-5th 2008
- 9th Int. Symposium on Cytochrome P450 Biodiversity & Biotechnology, Nice, France, June 8-12, 2008
- International Congress of Entomology, Durban S. Africa, 6th-12th July 2008
- 6th International Conference of Urban Pests (ICUP), Budapest, Hungary, 13th-16th July 2008
- 22nd Congresso Brasileiro De Entomologia Uberlandia, MG, Brazil, August 24-29th, 2008
- ENDURE Intl. Conference 2008, Diversifying Crop Protection, Montpellier, France, Oct. 13-15th, 2008
- NPMA, PestWorld, Washington DC, USA, October 22-25th, 2008
- VII IOBC International Conference: Integrated Fruit Production, Avignon, France, 27th-30th Oct. 2008
- 2008 British Crop Protection Council (BCPC) Conference, Glasgow, Scotland, November 3-5th, 2008
- Entomological Society of America, Annual Meeting, Reno. NV, USA, November 16-19, 2008

Links to the conference websites can be found on the Events Page of the IRAC website www.irac-online.org/Events.asp

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