



50th Meeting IRAC International 5-8th April 2016

Version 5.1, 13-Apr-16

Meeting Arrangements & Agenda

Meeting Dates: 5-8 April 2016

Venue/location: The Gibson Hotel
Point Village
Dublin 1
Eircode: D01 X2P2
Tel: +353 (0)1 681 5000
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Notes on Hotel & Transport:

- The IRAC Meeting Group Rate at The Gibson is 165 Euro/night (B&B, single occupancy).
- Participants are responsible for their own accommodation costs and any change or cancellations charges.
- Meeting rooms have been booked at the hotel as indicated in the following pages.
- The hotel is located in the NE of Dublin at Point Village on the north bank of the River Liffey.
- Dublin International Airport is 8 miles from the hotel with connections by taxi or bus (Airlink 747) to the city.
- The hotel is beside the last stop on the LUAS Light Rail, Red Line (The Point) with stops around the city.

Notes on Refreshments, Meals & Evening Events:

- Please let me know if there are any participants with specific dietary needs.
- Refreshments will be supplied morning and afternoon. Sandwich lunches will be provided at the hotel.
- Monday, Wednesday and Thursday evenings are free for WGs meals etc.
- The Group Dinner is on Tuesday evening at 7:30pm in a nearby moored boat/restaurant, the MV Cill Airne.
- It's assumed all participants will join the Group Dinner unless they advise otherwise prior to the meeting.

Notes on Agenda:

- Sessions are open to all IRAC company members and invited guests/observers except for the Steering Team and Executive Meeting. To help with team planning, leaders may request only members attend certain parts of their sessions.
- The meeting starts at 8am on each day so participants should plan to arrive on Monday evening.
- Brief IRAC WG & Country Group overviews will be presented on Tuesday followed by updates on Task Teams and various discussion topics. The group dinner is on Tuesday evening as described above.
- On Wednesday and Thursday there will be further discussion topics as well as concurrent IRAC WG planning sessions for 2016/17.
- The Executive Meeting will take place during the last 2-hours on Wednesday afternoon and there will be a joint Steering/Outreach debrief and planning session on the Friday morning.
- Conference phones can be hired but team leaders need to let me know as soon as possible if this is required and they will also need to use their own conference call provider and call-in numbers.

For further information please contact:

Alan Porter, IRAC International Coordinator, aporter.apa@gmail.com

Russell Slater, IRAC Chairman, Syngenta, russell.slater@syngenta.com

Alison Flanagan, The Gibson Accommodation Manager, aflanagan@thegibsonhotel.ie

Participants:

Name	Email Address	Country
Alan Porter		UK
Andrea Bassi		Italy
Andrew Crossthwaite		UK
Atsuo Mizuguchi (guest)		Japan
Brad Hopkins		US
Brian Duggan		Australia
Clint Pilcher		US
Dan Cordova		US
Diane Silcox Reynolds		US
Dilwyn Harris		UK
Eric Andersen		Denmark
Fabio Andrade		Brazil
Graham Head		US
Imre Mezei		Hungary
Jan Elias		Switzerland
John Andalaro		US
John Invest		UK
John Lucas		UK
Lixin Mao		US
Luis Teixeira		US
Maria Torne		Spain
Mark Hoppe		Switzerland
Michael Klueken		Germany
Nick Storer		US
Niels Jacob Jakobsen		Netherlands
Nigel Godley		Germany
Ralf Nauen		Germany
Robert Senn		Switzerland
Russell Slater		Switzerland
Sebastian Horstmann		Germany
Shigeru Saito		Japan
Tamar Danon		Israel
Tim Dennehy		US
Tom Sparks		US
Tony Burd		US
Ulrich Ebbinghaus-Kintscher		Germany

Outline Agenda:

Session 1: Tuesday, April 5th - IRAC International Review

Introduction, brief International Team, WG & CG overviews
 Discussion Topics: Task Teams & Integrated IRM

Evening: Group Dinner: MV Cill Airne
 Drinks at 7:15, sit down to dinner at 7:30

Session 2: Wednesday, April 6th - IRAC Team & WGs

Discussion Topics: EU supermarket residue restrictions & MoA labelling
 WG Planning: Lepidoptera, MoA, Biotech & Public Health

Session 3: Thursday, April 7th - IRAC Team & WGs & Executive

Discussion Topics: Joint Biotech, Lepidoptera, Sucking Pest & Coleoptera activities
 WG Planning: Coleoptera and Sucking Pests
 IRAC Executive Meeting

Session 4: Friday, April 8th (Morning) – Outreach & Steering Strategy Session

Meeting debrief and planning for 2016/17

Sess No.	Date	Time	Details	Rooms	Est. Nos.
1A	Tues 5th	08:00 – 15:00	IRAC International WG/CG Overviews	Stratocaster	35
1B		15:00 – 17:00	Task Teams & Integrated IRM	Stratocaster	35
2A	Wed 6th	08:00 – 09:30	EU Supermarket residue restrictions & MoA Labelling	Stratocaster	35
2B		10:00 – 17:15	Lepidoptera WG	Stratocaster	20
2C		10:00 – 17:15	Public Health WG (Skype call-in available)	Broadcaster	5
2D		10:00 – 14:15	MoA WG (Conference call-in available)	Rickenbacker	10
2E		14:45– 17:15	Biotech WG (Conference call-in available)	Rickenbacker	10
3A	Thur 7th	08:00 – 09:30	Joint Biotech, Lepidoptera, Sucking Pest and Coleoptera session	Stratocaster	32
3B		10:00 – 12:00	Joint session Biotech & Lepidoptera WGs	Stratocaster	16
3C		13:00 – 15:00	Coleoptera WG	Broadcaster	8
3D		10:00 – 12:00	Sucking Pest WG (Conf. call-in available)	Rickenbacker	8
3E		15:30 - 17:15	IRAC Executive Meeting	Stratocaster	15
4A	Fri 8th	08:00 – 12:00	Outreach/Steering Working Session	Rickenbacker	12

Detailed Agenda – Tuesday, 5th April
Session 1A - Stratocaster
IRAC International WGs & Country Group Overviews

Session Chair: Russell Slater

Agenda:

0800 Welcome, antitrust reminder, housekeeping & meeting objectives - R. Slater

0820 Public Health overview - M. Hoppé

0840 Biotech overview - C. Pilcher

0900 Methods overview - J. Elias

0920 Coleoptera overview - R. Nauen

0940 Coffee/Tea

1010 Sucking Pest Overview - M. Klueken

1030 Lepidoptera Overview (incl. Country WGs) – L. Teixeira

1115 MoA Overview – D. Cordova

1135 Outreach Overview & MSU Database – A. Porter/B. Hopkins

1150 Group Photograph

1200 Lunch

1300 IRAC Country Group Updates (Team Representatives/Liaison Officers)

Brief overview of 2015 (Max. 4 slides) and objectives for 2016 (1 slide).
Limited questions to be taken during session, but must be time conscious.

- Introduction (1') – R. Slater
- IRAC Brazil (5') – F. A. Silva
- IRAC Argentina (5') -
- IRAC Spain (5') - M. Torne
- IRAC Philippines (5') -
- IRAC South Africa (5') – R. Slater
- IRAC Australia (5') – B. Duggan
- IRAC India (5') -
- IRAC USA (5') - Graham Head

1345 Continue to Session 1B (Same room)

Detailed Agenda – Tuesday, 5th April
Session 1B - Stratocaster
IRAC Task Teams & Integrated IRM

Session Chair: Russell Slater

Agenda:

1345 IRAC Task Team 1: Brazil. Summary of activities – R. Slater

A Brief overview of 2015 activities including the Brasilia workshop, the process for developing IRM recommendations & communication. Follow up with Good, Difficult, Different (GDD) review as an open discussion.

- Review of 2015 activities (10') – R. Slater
 - Objectives of Task Team
 - Workshop in Brasilia
 - Process to develop recommendations
 - IRM recommendations
 - Communication, next steps
- GDD Review (30-45') – R. Slater & F. A. Silva
 - Capture GDD on Flip charts.
 - What was good about process/outputs? – A. Porter (notes)
 - What was difficult?
 - What should we do differently when we work on Task Teams 2 & 3?

1430 Coffee/Tea

1500 IRAC Task Team 2: Mediterranean - *Tuta absoluta* (tomatoes)

Planning session taking into account learnings from Brazil. Objectives; what needs to be done; who will lead/participate; what resources required.

- Introduction & purpose of Task Teams (2') – R. Slater
- Introduction into problem of *Tuta absoluta* in Europe (15') – A. Bassi
- Summary of existing activities by IRAC & others (10') – L. Teixeira/J. Andaloro
- Define objectives of Task Team (10')
- Define project team & lead (5')
- Identify any IRAC/CropLife resources required (5')

1545 IRAC Task Team 3: Lepidoptera Management in Puerto Rico

IRAC US led Task Team addressing lepidopteran resistance risk in Puerto Rico including seed production areas. Main pest of concern is *Spodoptera frugiperda*, but other lepidoptera pests should also be considered. There is an intensive use of insecticide chemistry with low tolerance of pests.

- Introduction into problem in Puerto Rico (15') – G. Head
- Summary of existing activities by IRAC/Others (10')
- Objectives & Action Plan (15')
- Identify any IRAC Intl/CropLife resources required (5')

Detailed Agenda – Tuesday, 5th April
Session 1B – Stratocaster (Contd.)
IRAC Task Teams & Integrated IRM

1630 Integrated IRM, chemistry foliar & seed treatment/trait/biological

IRAC International has produced individual advice for GMO's (Biotech) and insecticide chemistry (Crop protection) and has started to provide advice of the integration of the two (Brazil IRM recommendations, statement on the use of chemistry/traits). Open discussion on what are the future needs/directions of IRAC in addressing integrated IRM (including biologicals).

Introduction (20') - C. Pilcher

Objective: To determine what level of agreement we have on Integrated IRM concepts and then explore key objectives & messaging to critical audiences that IRAC can facilitate.

Open discussion (25') – All

Outcomes and actions for IRAC International

1715 End of day

1900 Walk from hotel to MV Cill Airn for drinks at 7:15 and Group Dinner at 7:30

**Detailed Agenda – Wednesday 6th April
Session 2A - Stratocaster**

Discussions: EU supermarket residue restrictions & MoA labelling

Session Chair: Russell Slater

Agenda:

0800 IRAC Spain & IRAC International have been working with ECPA to scope out a European project to address concerns raised about the IRM impact of supermarket residue limitations (total number of residues allowed). ECPA have proposed a European funded project lead by Rothamsted Research and supported by ECPA, IRAC, FRAC, HRAC, CropLife and others.

- Anti-trust reminder (1') - R. Slater
- Introduction (2') - R. Slater
- Introduction to problem (20') – M. Torne
- Outline of project proposal by ECPA/Rothamsted (20') – M. Torne
- IRAC role in project and discussion (20') – R. Slater/All

0915 Mode of action labelling – how do we improve implementation

Current position

Group discussion

0930 Coffee/Tea

**Detailed Agenda – Wednesday 6th April
Session 2B - Stratocaster**

Lepidoptera WG

Session Chair: Luis Teixeira

Agenda:

1000 Welcome, introductions and reminder of antitrust guidelines (L. Teixeira)

1010 Review 2015/16 Lepidoptera WG activities (L. Teixeira)

1020 Country updates: The liaison to presents summary slides. (Liaisons/All)

- Group status, meetings, reports of resistance, label alignment, proposed IRM strategies
- Challenges/highlights, requests from country WGs to the Lepidoptera WG
- Guidance/communications to Country WGs
- Review liaison assignments

1200 Lunch

1300 Lepidoptera WG discussion (all)

- Label Review Compliance project (J. Andaloro)
- Review Brazil Task Team effort and key learnings (All/F. A. Silva)
- Discuss Lep WG contribution to new Tuta Task Team (form a group)
- Review current diamide guidelines and transition to Lep IRM guidelines (N. Godley/R. Senn/J. Andaloro)

1430 Coffee/Tea

1445 Lepidoptera WG discussion (Contd.)

- Review/Edit SMART objectives
- Finalize Lobesia and FAW posters
- Other topics? Research findings?

1730 Session closed

1830 Lepidoptera WG Dinner

Detailed Agenda – Wednesday 6th April
Session 2C - Broadcaster
Public Health WG

Session Chair: Mark Hoppé

Agenda:

1000 Welcome, introduction and reminder of antitrust guidelines - M. Hoppé

{Proposal taken from previous call – formatting & timings to be added}

1. Production and communication of a compelling case for the implementation of pro-active insecticide resistance management in vector control interventions.
2. Feedback from VCWG February 2016
3. Insecticide resistance monitoring in mosquito vectors of disease
 - a. Interest in addressing some of the issues that were raised ca. 7 years ago around production and storage of WHO tube assay papers has surfaced again
 - b. Discriminating doses, where do we stand with respect to the new a.i.s that are coming to market?
 - c. Insecticide resistance/susceptibility monitoring vs product evaluation, how can they be separated
4. Mode of Action classification numbers on PH insecticidal products, where do we stand?
5. Can we identify best practice activities when introducing a new PH insecticide? E.g. baseline data, IRM included on product label, etc. Leading to production of recommendations/guidelines
6. Educational material, activities supporting item 1
7. Effective communication, the VC IRM stakeholders are changing, WHOPES, PQ, I2I, etc., how can we improve links to promote implementation of best practice IRM?
8. AOB

1715 Session closed

Detailed Agenda – Wednesday 6th April
Session 2D - Rickenbacker
MoA WG

Session Chair: Dan Cordova

Agenda:

1000 Welcome, introduction and reminder of antitrust guidelines – D Cordova

- Completion of Resistance Mechanism slide deck
- Completion of key MoA reference document
 - Addition of reference links
- Enhancement of target site resistance table
 - Addition of reference links
- MoA Classification updates
 - CHS1 classification of etoxazole as chitin synthase inhibitor?
 - Classification discussion of Groups 10 and 15
- Follow-up on DIY classification
 - Ethyl formate (BOC Ltd)
- Communication of classification updates
 - Preparation of eConnection article on major classification changes (v8.1)
 - Chordotonal organ modulators, bifenthrin, GS-omega/kappa-HXTX-Hv1a
 - Etoxazole?
- Compilation of key influencers for update distribution
 - Establish eNotification link on website for automatic updates

1200 Lunch

1300 Afternoon Session

- Status of language poster updates
- Discussion of insect repellent classification (vector control)
 - Is there interest in adding these to classification scheme?
 - Evidence of DEET resistance – Stanczyk et al (2010) PNAS
- Development of MoA training slide deck
 - Modification of existing BASF slides
 - Identification of key targets for inclusion
- Standardizing sub-group nomenclature - currently a mix of technical/chemistry descriptors

1430 Session closed

Detailed Agenda – Wednesday 6th April
Session 2E - Rickenbacker
Biotech WG

Session Chair: Clint Pilcher

Agenda:

- 1445 Welcome, introduction and reminder of antitrust guidelines – C. Pilcher
- 1455 Latin America status and future 2016 plans
- a. Brazil compliance information and Task Force Update – F. A. Silva
 - Current & future gaps & opportunities – All
 - b. Argentina framework
 - Consultant role – needed actions or new initiatives - All
 - c. IRAC-Biotech visit to Brazil/Argentina
 - Responses/suggestions from ABRASEM, AGRIBIO, MOA, Grower groups - Clint
 - Layout schedule and plans
- 1545 Stewardship and Excellence Through Stewardship (ETS)
- a. Implementing “Best Practices” Globally
 - Budget needs (consultant?)
 - b. ETS
 - Review 2015 - All
 - Needed changes – All
 - c. Other country needs
 - Asia (specifically Vietnam)
 - S. Africa
- 1615 2016 Goal Review
- a. New initiative discussion – All
 - b. White papers
 - Regulatory white paper – N. Storer
 - Continual use of traits following resistance confirmation – All
- 1645 Final preparation for Joint WG discussions
- a. Integrated IRM, ETS, implementing sound IPM best practices
 - b. Lepidoptera WG Joint session
 - Integrated opportunities
 - Insecticide/Biotech statement; BMP discussions; ETS; Future task teams
- 1715 Session closed

**Detailed Agenda – Thursday 7th April
Session 3A - Stratocaster**

Discussions: Joint Biotech & Crop WGs

Session Chair: Russell Slater/Clint Pilcher

Agenda:

0800 Welcome, introduction and reminder of antitrust guidelines - R. Slater
Joint session of the Biotech, Lepidoptera, Sucking Pest & Coleoptera WGs
Group discussion

- Excellence Through Stewardship (ETS)
- Potential Future Initiatives
 - Messaging
 - Alignment on best practices
 - Incentives?
- Other topics?

0930 **Coffee/Tea**

Detailed Agenda – Thursday 7th April
Session 3B - Stratocaster
Joint Session Biotech & Lepidoptera WGs

Session Chair: Clint Pilcher/Luis Teixeira

Agenda:

1000 Welcome, introduction and reminder of antitrust guidelines – C. Pilcher/L. Teixeira

1. Insecticide/Biotech integrated opportunities

- Insecticide/Biotech statement – discuss revisions (potential inclusion of seed treatments)
- BMP discussions – opportunity for future interactions (revisit Brazil efforts, discuss expansion to needs across Latin America, Asia, India, China, S. Africa)
 - Future opportunities for harmonized IPM recommendations

2. Excellence Through Stewardship (ETS) – brief history on the IRM efforts; discuss potential for expansion needs from chemistry efforts

3. Any further opportunity/need for Task Team efforts?

- Puerto Rico opportunity will be driven by IRAC-US
- Others?

1200 Session closed

Detailed Agenda – Thursday 7th April
Session 3C - Broadcaster
Coleoptera WG

Session Chair: Ralf Nauen

Agenda:

1300 Welcome, introduction and reminder of antitrust guidelines – R. Nauen

- Review minutes of last F2F meeting at Rothamsted Research
- Coleopteran OSR pests
 - Pollen beetle resistance monitoring poster 2015
 - Status of pyrethroid resistance in CSFB in EU
 - Other coleopteran pests of OSR
 - Method changes
 - Status - IRM trifold
 - Scientific paper on CSFB kdr monitoring still interesting?
 - Other
- CPB IRM poster (review and approve final version)
- WCR larvae testing method
- Future directions and objectives 2016
- AOB

1500 Session closed

Detailed Agenda – Thursday 7th April
Session 3D - Rickenbacker
Sucking Pest WG

Session Chair: Michael Klueken

Agenda:

- 1000 1. Welcome, introduction, reminder of antitrust guidelines, minutes of last telecom
2. Team structure 2016, selection of new leader, scheduling telecoms during 2016
3. *Sitobion avenae* – Pyrethroid resistance in EU
4. Olive Fly resistance to pyrethroids suspected in Greece & further fruit fly species
- 1030 5. *Myzus persicae* – Group 4 resistance in the EU
○ Updates on resistance monitoring
○ Renewal of poster
○ New version of Guideline: “*Myzus persicae* neonicotinoid resistance management guidelines for Stone Fruits in Southern Europe, IRAC SPWG, 2014”
6. *Aphis gossypii*, Korea
7. *Bemisia tabaci*, new Poster
8. *Bemisia tabaci*, IRM recommendations Brazil
- 1100 9. *Euschistus heros*, Brazil Monitoring program, method discussions
10. RSA – Stinkbugs – PYR resistance
11. *Diaphorina citri*, Asian Citrus Psyllid – Methodology validation
12. Tomato-potato *psyllid*, *Bactericera cockerelli*
- 1130 13. Review of IRAC-web pages
14. Objectives 2016
15. AOB, spider mites?, *Lygus*?, rice plant hoppers?
- 1200 **Lunch**
- 1300 Option to continue discussion after lunch for those available

Detailed Agenda – Thursday, 7th April
Session 3E - Stratocaster
IRAC Executive Committee
(Company Executive Representatives or Deputies)

Session Chair: Russell Slater

Agenda:

- 1530 Welcome & introduction – R. Slater
- Anti-Trust Reminder (1') – R. Slater
 - Election of IRAC officials (10') - R. Slater
 - IRAC Chairman (RS)
 - Vice Chairs (RN&NS)
 - Treasurer (LM)
 - Coordinator (AP)
 - Any changes to IRAC Executive membership? (5') – R. Slater
 - Budget status (15') – L. Mao
 - IRAC Executive objectives 2015-16 (30') – R. Slater
 - 1st Task Team: Brazil (Complete)
 - IRM Leaflet & Video (Complete)
 - IRAC/CropLife Slides (Pending)
 - Soil & Seed Treatment recommendations (Drafted)
 - IRAC Executive objectives for 2016-17 (30') – R. Slater
 - Grower Training workshops?
 - In country communication programs?
 - Resistance database?
 - Other objectives?
 - Projects requiring funding (10') – R. Slater
 - 2nd SimpleShow video on MoA?
 - Other projects?
 - New items identified in WG sessions (15') - All
 - Excellence Through Stewardship (ETS)?
 - Task Teams
 - ECPA/Rothamsted consortium
 - 2017 Annual meeting location (2')
 - AOB
- 1715 Session closed

Detailed Agenda – Friday, 8th April
Session 4A - Rickenbacker
Outreach & Steering Working Session

Session Chair: Russell Slater

Agenda

0800 Introduction & Welcome (2') – R. Slater

- Anti-Trust Reminder (1') - R. Slater
- IRAC 3 year strategy (60') - R. Slater
 - What are major barriers/issues related to IRM implementation?
 - What should IRAC be addressing over next 3 years?
 - What are the relationships that are needed to achieve goals?
 - Does current IRAC structure/funds allow for aims to be achieved?

0900 Coffee/Tea

0930 Resistance database discussion

0945 IRAC Task teams/WG activities (60')- R. Slater

- What are most critical individual INS resistance issues that need to be addressed?
- How can we ensure spread of resources to ensure continued participation?

1030 Focus for outreach activity 2016/17 and beyond (60') A. Porter/R. Slater

- Target audience – move to generate more grower-orientated information?
- Website – does it meet our current needs?
- Development of social media (Twitter) and an insecticide resistance community
- eConnection – do we continue in its current form?
- IRAC presence & activity at upcoming meetings & conferences e.g. ICE/ESA 2016

1130 Other outstanding issues raised during the meeting requiring further discussion?

- Clarification on the IRAC Country Groups (CGs) and the Country Resistance Action Groups (CRAGs). The CRAGs have evolved from the Diamide Country Teams.
- Communication with the IRAC CGs and the role of the CG Liaison Officers
- Other issues?

1200 Session closed

1200 Lunch