

Cocoa SPS: Linking Regulation with Research Needs and Farmer Practices in the 21st Century

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World Cocoa Conference
Abidjan, Côte d'Ivoire, 19-22 November 2012



<http://www.dropdata.org>



Panel Brief

- Harmonisation of non-tariff measures
 - 396/2005/EC, Japan MHLW 2006
- Risk assessment vs. precautionary approach
 - Reg. 91/414/EEC → EC 1107/2009
- **Raising awareness (of regulations)**
- **Capacity building in cocoa producing countries**



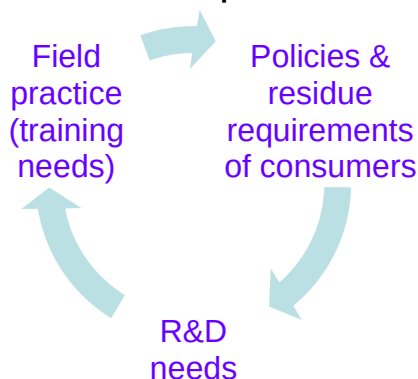
- Recommendations (5)



Overall objectives

- Sharing information on pesticide science

- Linking:

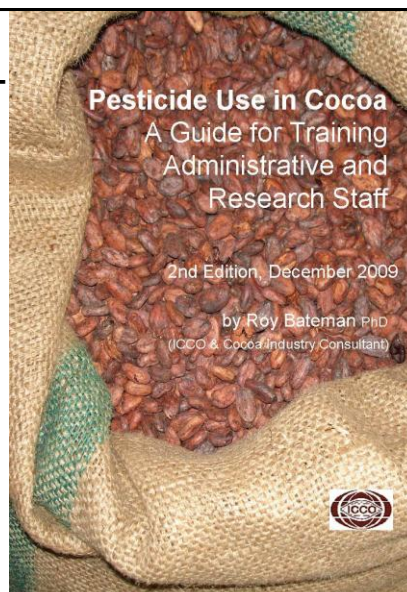


- Emphasising safety issues ...
... for producers as well as consumers



Complicated and inter-disciplinary, so...

- Specific advice requested from ICCO member countries
- Free to down-load on www.icco.org/SPS
- Responsible pesticide use and its role in:
 - Good Agricultural Practices
 - Good Warehouse Practices



Pesticide lists: Appendix 3 (1st Edition had 2 categories)

- A. 'Strategic list' for key pests: EU / Japanese / US import tolerances & evidence of efficacy
- B. Compounds to be used with great CAUTION (limited time remaining, etc)
- C. Lists of experimental and other potentially useful control agents
- D. Pesticides that **MUST NOT BE USED** for cocoa



Regular updates on:
http://www.dropdata.org/cocoa/cocoa_SPS_blog.htm

Project components of



- Create awareness on Sanitary and Phyto-Sanitary (SPS) standards website; regional, national workshops, etc.
- Enhance the capacity of relevant stakeholders to apply the responsible pesticide use component of GAP & GWP: for better access to markets.
- Enhance institutional capacity in-country to monitor and enforce adherence to SPS standards in cocoa
- Strengthen regional collaboration & capacity: combat counterfeit products, labels, protocols for efficacy, etc.



Standards and Trade Development Facility



Major field pests of cocoa

Pests and Diseases Potential Losses

* Black Pod	550 000 (tonnes*)
* Mirids (capsids)	250 000
* Cocoa Pod Borer	300 000
<i>Moniliophthora</i> spp., VSD	370 000
Swollen Shoot Virus	50 000

* ... spraying with pesticides remains a principal control option



Storage insects or residues?

- Possibly an important source of high residues?
- Phasing-out of methyl bromide → heavy reliance on phostoxin:
 - resistance issues?



Pesticides are risky, controversial, but apparently necessary in cocoa:

Recent trends (Global) for insecticides

- Near total elimination of most toxic AIs (I)
 - ... ☺ - but implication for IRM: ☹
 - A positive consequence of MRL regulation
- Rise esp. in pyrethroid & neonicotinoid insecticides
- Promotion of insecticide mixtures, formulated for OECD reg. standards (e.g. Pyrethroid – neonicotinoid mixtures by 2 CropLife companies)
- Ag-chem industry has now developed 28 modes of action (MoA) for insect control ... with an increasing interest in ‘biorationals’ ...



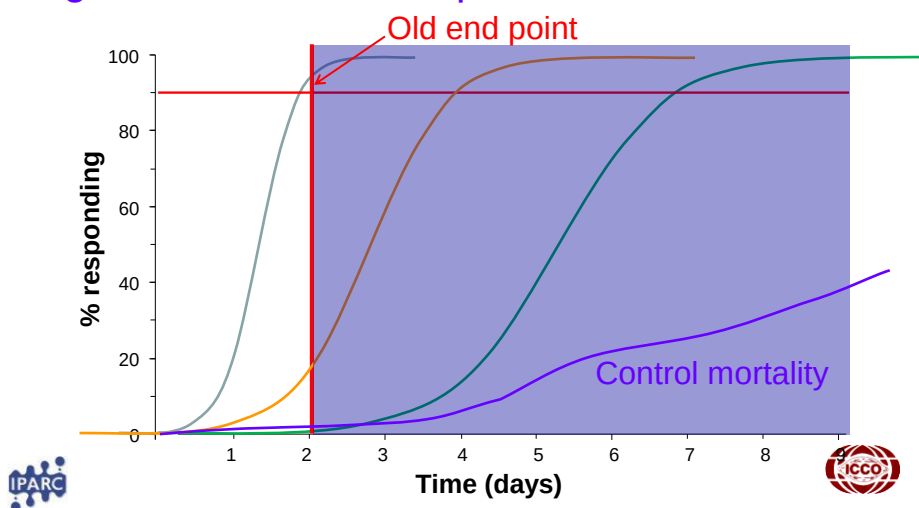
Example: mirid control

- ... only 4 major MoA have been widely used – starting with BHC in 1950s
 - fumigant action compensated for poor application
- Currently pyrethroids & neonicotinoids predominate
- How best to screen for new compounds?
- How best to apply (especially contact) insecticides?



Assay issues: moving-on from techniques for organochlorines / pyrethroids

Registration authorities please note!



Variable cone nozzles - locking-in bad practice?



19th century technology !

Cone nozzles being used to treat cocoa pods for black pod disease and insect pests



'jet' mode:
- very popular
- very inefficient!



courtesy J. Cooper, NRI

Summary

- Perverse consequences of ignoring pesticide issues
 - Continuing use by large proportion of farmers
 - Lack of skills; inappropriate application equipment
 - Research vacuum: little **impartial** pesticide science done on cocoa since early 1990s ...
- Pesticide product lists:
 - Fewer, less toxic compounds: improved safety; but products getting more expensive
 - farmers may only use 1-2 MoA against individual pests
 - Can efficacy of existing control practices be maintained?
 - Need for rigorous protocols for evaluating new AIs
- Development and enforcement of SPS standards:
see www.icco.org/SPS & www.dropdata.org

