

Global Minor Uses Summit

Efficacy and Crop Safety Data Development Issues

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Content

- Efficacy – why efficacy?
- Working to common standards
- Initiatives
 - Climate paper
 - EPPO guideline on Extrapolation
 - Databases

Why efficacy

- Need a GAP
 - For effective control
 - Minimises risk of resistance
 - Absence of phytotoxic effects
 - Avoids unnecessary use
 - Common GAP for sharing of data
- Efficacy is an integral part of EU registration process
 - ‘off label’ or ‘own use’ option for minor uses

Irish potato famine

- 1845 – start of potato blight outbreak
- C 0.5m died of starvation and disease
- C 1m emigrated



A European experiment in crop protection?

- Started with 954 actives substances
- 546 active substances not supported in the EU review
- Oct 07 – 53 non inclusions
- 262 decisions pending
- 93 inclusions + 75 new actives
- So Lost 599, 'won' 168, pending 262
- And this is before the revision of 91 414!

So we need more solutions -
and make more use of existing data/authorisations

Pollen beetle - 06

Pyrethroid resistance problems across Europe

2006 – Germany

– 200k ha oil seed rape with serious crop losses

- 30k ha destroyed (value 22-25m Euros)

- only 2 non pyrethroid MoA's

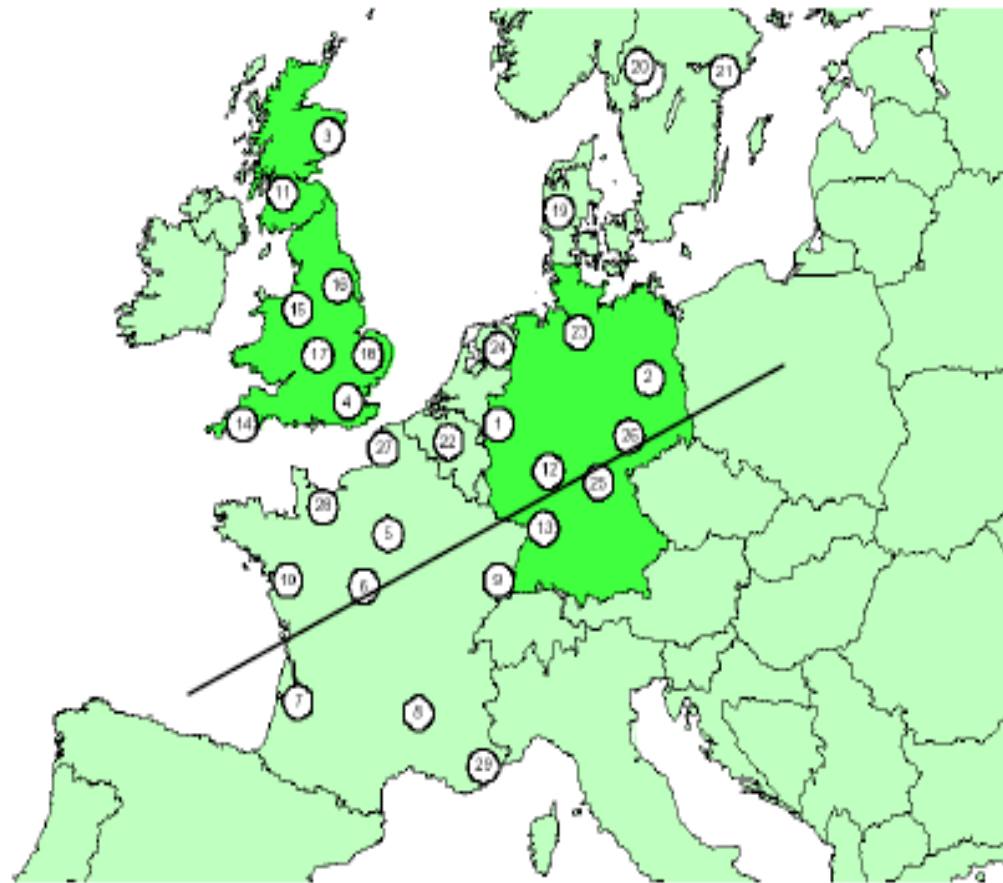


Working to common standards

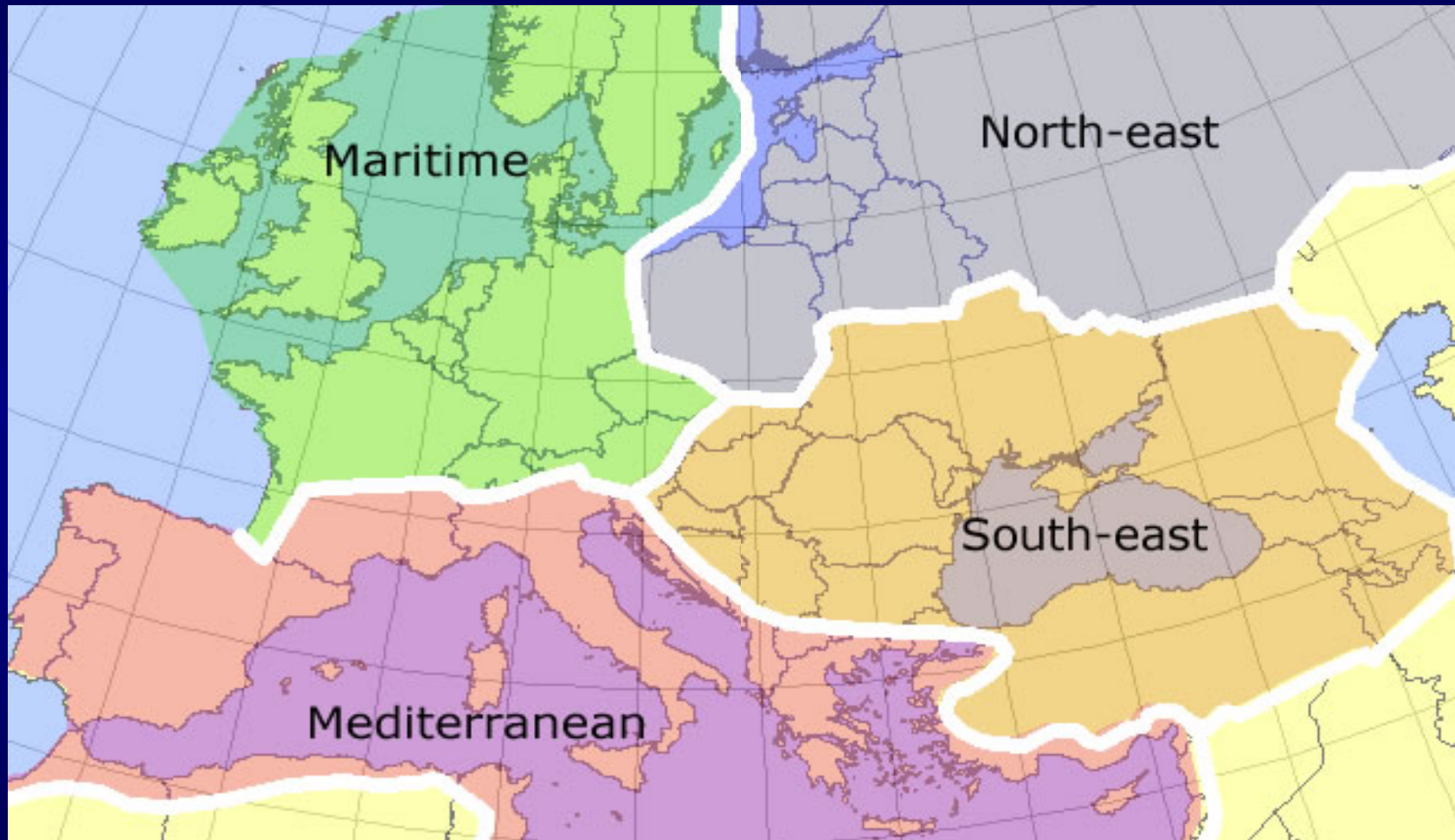
- Enables wider acceptance of data
- Trust
- More use of existing trials data
 - Standards regarding extent of data & trials methodology (EPPO)
 - Scientific rather than administrative approach
 - Knowledge about relevance of conditions

UK – area of comparable climate; 2003

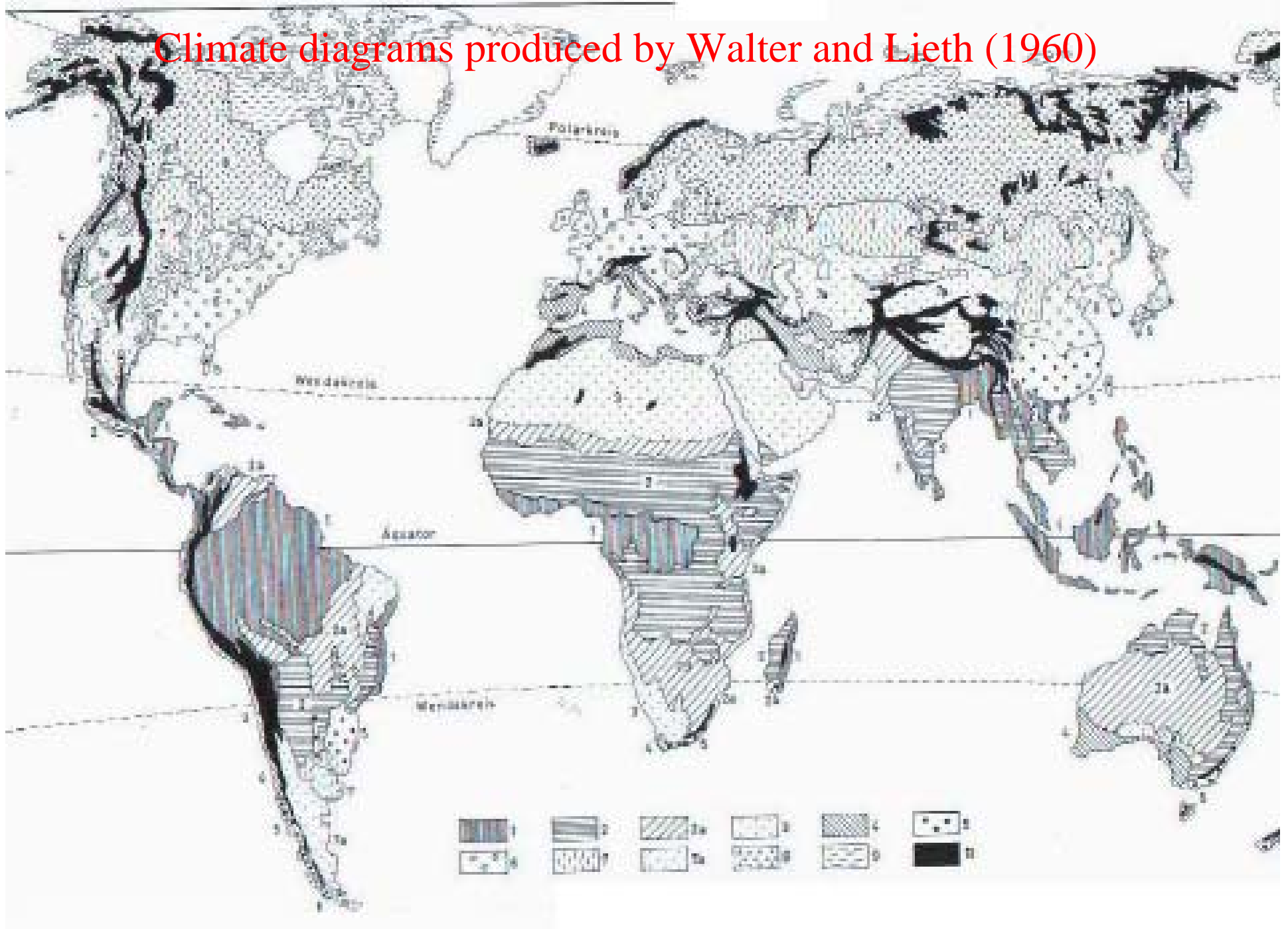
Proposed Region for Extrapolation



EPPO Guidance on comparable climates, 2006



Climate diagrams produced by Walter and Lieth (1960)



Extrapolation of efficacy data

- At EU level, some extrapolation of data and some country guidance
- 2005, EU Project: to explore the scope to broaden existing extrapolations without compromise to safety and efficacy

<http://www.pesticides.gov.uk/approvals.asp?id=733&link=%2Fuploadedfiles%2FWeb%5FAssets%2FPSD%2FSANCO%5FD3%5FS12%2D395857%2Epdf>

Extrapolation of efficacy data

- EPPO guideline: Efficacy and crop safety extrapolations for minor uses PP1/257(1).
 - Principles
 - Specific extrapolations
 - Temporarily retained ‘PSD extrapolations’

Pest		Indicator crops	Data from other crops (or crop groups) that enables reduced data on the indicator crops (or no data *)	Extrapolation to other crops	Data on indicator crops that permits extrapolation to other crops (or crop groups) with reduced data (or no data *)
Pest group	Pest		Crop		
--	<i>Delia radicum</i> HYLERA (soil)	Cauliflower		Leafy and flower head and head brassicas	OSR (if a pest problem)
		Turnip <u>or</u> swede		Root brassicas	
--	<i>Delia radicum</i> HYLERA (leaves)	Chinese cabbage and Brussels sprouts			
Aphids	<i>Brevicoryne brassicae</i> BRVCBR <i>Myzus persicae</i> MYZUPE	Savoy cabbage and Brussels sprouts	OSR	Leafy and flower head and head and root brassicas	OSR
White fly	<i>Aleyrodes proletella</i> ALEUPR	Savoy cabbage and Brussels sprouts		Leafy and flower head and head and root brassicas	
Flea beetles	<i>Phyllotreta</i> spp. PHYESP	Any		Leafy and flower head and head and root brassicas	OSR (<i>Phyllotreta</i> only)

Additional points

- Need common nomenclature - EPPO codes for crops and targets
- UK accept relevant non EU data to support an authorisation – provided it is scientifically robust.

What next?

- Develop the detailed extrapolation tables
 - ongoing
- Consider other schemes (or vice versa?)

Data: Does it exist, and where is it?

- Finding 'relevant' data avoids duplication

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HDC EU RESIDUES DATABASE

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SEARCH THE HDC EU DATABASE

Proposed or completed trial: Completed ▾
Crop: (All Crops) ▾
Crop EPPO Code: (All Crop EPPO Codes) ▾ Search by Species or by Genus
Target: (All Targets) ▾
Chemical Group: (All Chemical Groups) ▾
Product: (All Products) ▾
Active(s): (All Actives) ▾
Contact: (All Contacts) ▾
European Location: (Both Locations) ▾
Situation: (Both Situations) ▾

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SEARCH

Proposed or completed trial:

Crop:

Crop EPPO Code:

Target:

Chemical Group:

Product:

Active(s):

Contact:

European Location:

Situation:

- alternaria
- american gooseberry mildew
- american serpentine leaf miner
- annual dicotyledons
- annual grasses
- annual meadow grass
- annual weeds
- anthracnose of currant
- Aphid
- aphids
- apple canker
- apple core rot
- apple sawfly
- apple scab
- asparagus beetle
- bean seed fly
- bean seed fly
- beet cyst nematode
- beet leaf miner
- bindweed, field
- black bean aphid
- blackcurrant gall mite
- blackspot of rose
- blister rust of white pine
- blossom blight
- blossom blight
- botrytis
- botrytis
- broad-leaved weeds

(Both Locations) ▾

(Both Situations) ▾

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DATABASE

by Species or by Genus

▾

▾

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HDC EU SEARCH RESULTS

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Country where data generated	European Location	Ownership of Data	Contact	Crop (Click for trial details)	EPPO Code (Click for translations)	Protocol Start Date	Product	Active Substance	Target
United Kingdom	Northern Europe	HDC	Mrs Vivian Powell	Leek	ALLPO	1995/98	Force ST	Tefluthrin (20)	Click Here
United Kingdom	Northern Europe	HDC	Mrs Vivian Powell	Onion (salad)	ALLCE	1995/98	Force ST	Tefluthrin (20)	Click Here
United Kingdom	Northern Europe	HDC	Mrs Vivian Powell	Spinach	SPQOL	1998	Force ST (06665)	Tefluthrin (20)	Click Here

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HDC EU SEARCH RESULTS

Search for thiacloprid
residue data on lettuce

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Country where data generated	European Location	Ownership of Data	Contact	Crop (Click for trial details)	EPPO Code (Click for translations)	Protocol Start Date	Product	Active Substance	Target
United Kingdom	Northern Europe	HDC	Mrs Vivian Powell	Lettuce	LACSS	2002	Calypso (10342)	Thiacloprid (480 g/l)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2005	Calypso	Thiacloprid (480 g/l, 0982)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2005	Calypso	Thiacloprid (480 g/l, 0982)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2004	Calypso	Thiacloprid (480 g/l, 0982)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2004	Calypso	Thiacloprid (480 g/l, 0982)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2003	Calypso	Thiacloprid (480 g/l, 0982)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2003	Calypso	Thiacloprid (480 g/l, 0982)	
Germany	Northern Europe	MZ1	Dr Lutz Gündel	Salat, Lollo-	LACIC	2003	Calypso	Thiacloprid (480 g/l, 0982)	

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The future.....

- Need to broaden its application
 - Residues, efficacy
- Existing and proposed trials
- Need more countries to buy in to it

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Conclusions

- Lot of work ongoing in efficacy arena
- Need to be working to common standards
- But expert judgement always relevant

- 'Trust' enables acceptance of 'other' data/authorisations

- Need effective tools for both efficacy and residues to permit extrapolation and to avoid duplication of data

Thank you

