



# Crop Protection update for Speciality Crops

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Agriculture & Horticulture  
DEVELOPMENT BOARD

# Outline



- Introduction  
HDC & UK funding for speciality crops
- Fighting the crop protection battle  
Legislation, EAMUs and SCEPTRE project
- How can we work together?  
Funding, Database, knowledge, collaboration



# How does UK Horticultural Industry Fund Research?

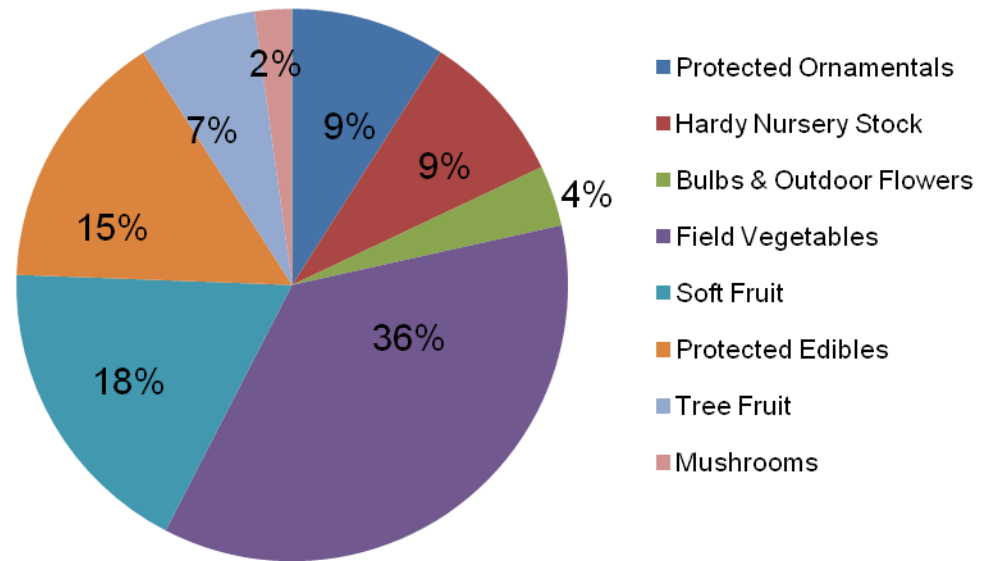
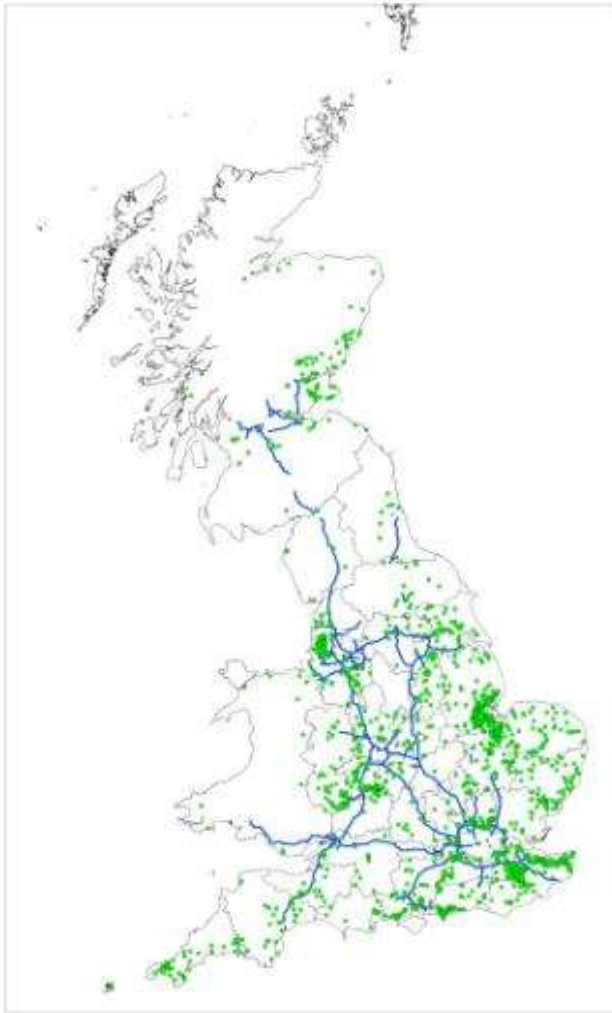


- Horticultural Development Company
- Established in 1986 - Since April 2008 part of
- Agricultural and Horticultural Development Board
- Other sector companies include: Cereals, potatoes, milk, meat and livestock



- All growers with an annual turnover in excess of £60k pa pay 0.5% of that turnover to the Horticultural Development Company (HDC)
- The total amount collected each year is currently in excess of £4 million
- Levies collected are used to fund research on issues which are important to UK growers
- By working together growers can solve problems that individually they would not have been able to fund
- Over 300 crops Artichokes to Zucchini

# Growers in UK & HDC panels





# Serving UK horticulture



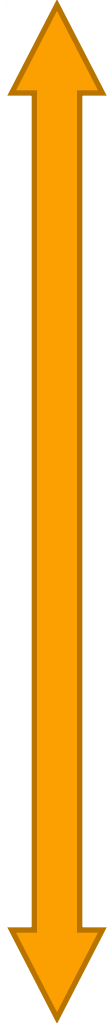
**Grower Associations**



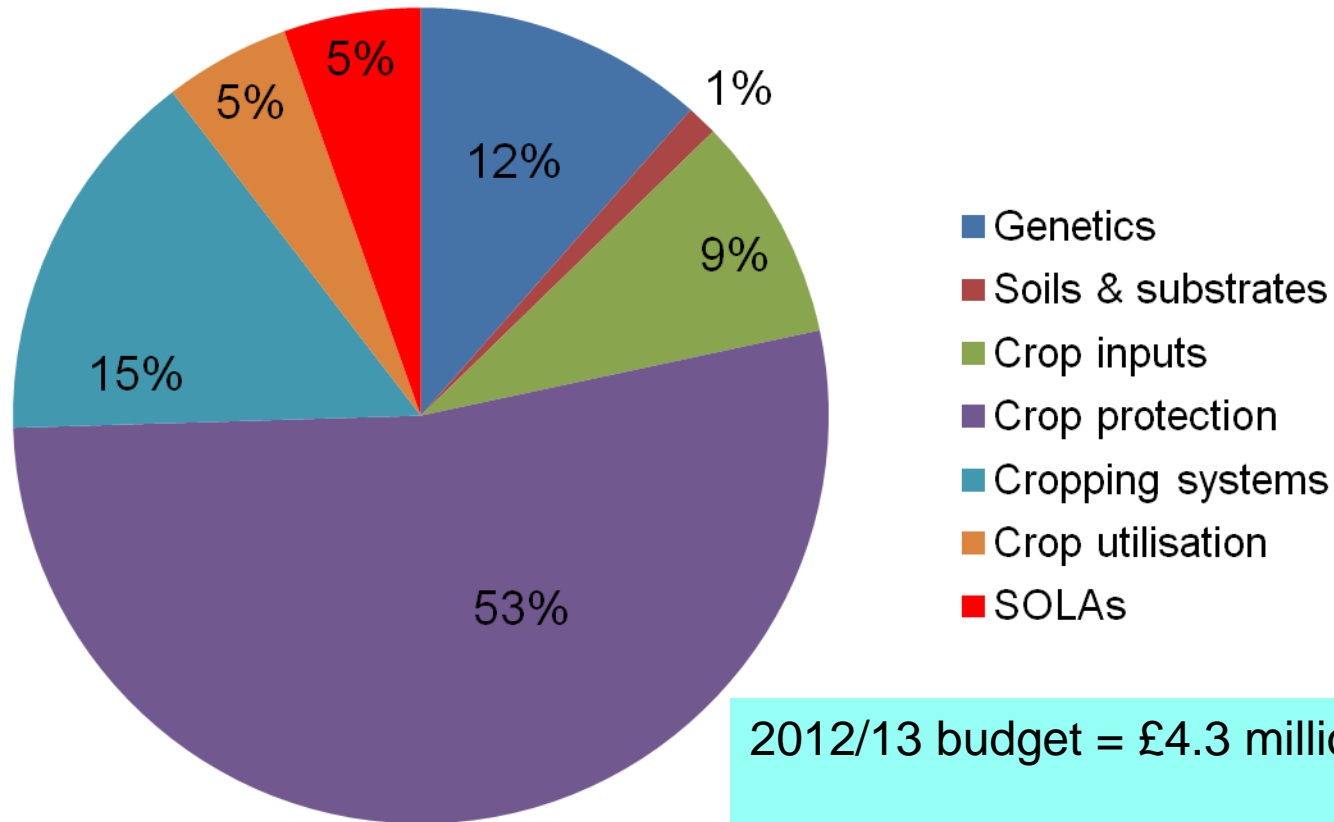
**HDC Panels & consultants**



**HDC staff & researchers**



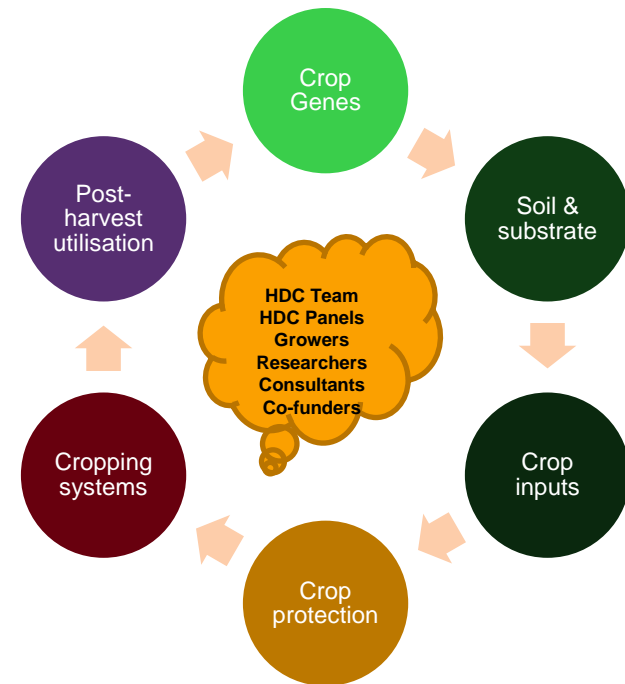
# Committed Research Spend by Topic 2012/13



# Helping industry to look ahead



- **Introduce a 'Strategy Development Framework' (SDF)**
  - Builds knowledge base to define technical strategic direction for HDC
  - Will define future research needs for horticulture
  - Involves HDC staff, growers, researchers etc
- **Make Cross Panel coordination a key remit of the HDC Board**
  - Have strong industry representation (co-opted members)
  - Ensure co-ordination between crop sector Panels
  - Assimilate SDF outputs & set overall strategy
  - Developing tenders for projects arising from SDF



Whilst continuing to work on  
Other important issues  
And communicating outputs to  
members



# European legislation



- June 14 2011 – the new European regulation for pesticide authorisation, 1107/2009, came into force. Replaces directive EEC91/414 – This new legislation is based on hazard based cut-off criteria
- Under 91/414 there was no category for ‘low risk’ products – any product that may have potential to be classified as low risk cannot at present be re-classified until re-registered – could be 10 years. New actives registered under 1107/2009 will be evaluated with consideration to be classed as ‘low risk’ or not.
- Under new regulation (1107/2009) Adjuvants and safeners will also be covered
- It is intended there will be improved opportunities for zonal authorisations – but Member states will still consider risk assessments under national legislation eg drainflow
- As a result of zonal authorisations - Mutual recognition should be facilitated 120 days suggested to obtain authorisations already authorised in other Member States

# The legislation – UK



- SOLAs will now officially be called ‘Extensions of authorisations of minor uses’ or “EAMU’s”
- Extensions of authorisations of minor uses approved under 1107/2009 can be included on the product label (not obligatory)
- Manufacturers can now apply for extensions of uses (they have to fulfil a number of requirements – and they will need to address the need and importance to industry so grower support will be needed)
- Data submitted to support extensions of uses will receive 10 years data protection. There are also other changes to data protection
- CRD will have to make their assessments of applications available for comments by other member states (6 weeks for data stream and 2 weeks for no data applications). This will extend the time it takes for CRD to evaluate our applications.  
CRD are aware of implications for emergency applications and will address accordingly



# EAMUs or Extension of Use (formerly SOLAs)



- HDC SOLA (now EAMU) programme was established in 1993
- EAMU (extension of use/off label approval)
- Scheme permits grower or grower group to apply for use of a product on a specific crop/crop group (now including manufacturers with specific additional information and support)
- Use of product is entirely at growers risk
- Edible crops needs safety data, e.g residues
- Opportunity for 'emergency' status
- At first manufacturers uncertain – but increasing level of trust



# EAMU programme



- Requests come from – research, growers, grower associations
- Is it approved elsewhere in Europe?

source – Homologa, manufacturer, grower contacts, EU minor use groups (MUGs)

- *obtain an EAMU via mutual recognition*

- Is data available?

source – Manufacturer and MUGs

- *access data if relevant & obtain EAMU using data*

- If appropriate data is not available

- *discuss and agree funding for data generation with grower associations and panels*



# Data generation



- *Blackcurrant*



White currant, blueberry, etc

Warnings: Growers are advised to test a small area of crop prior to wider commercial use



# New & In the pipeline



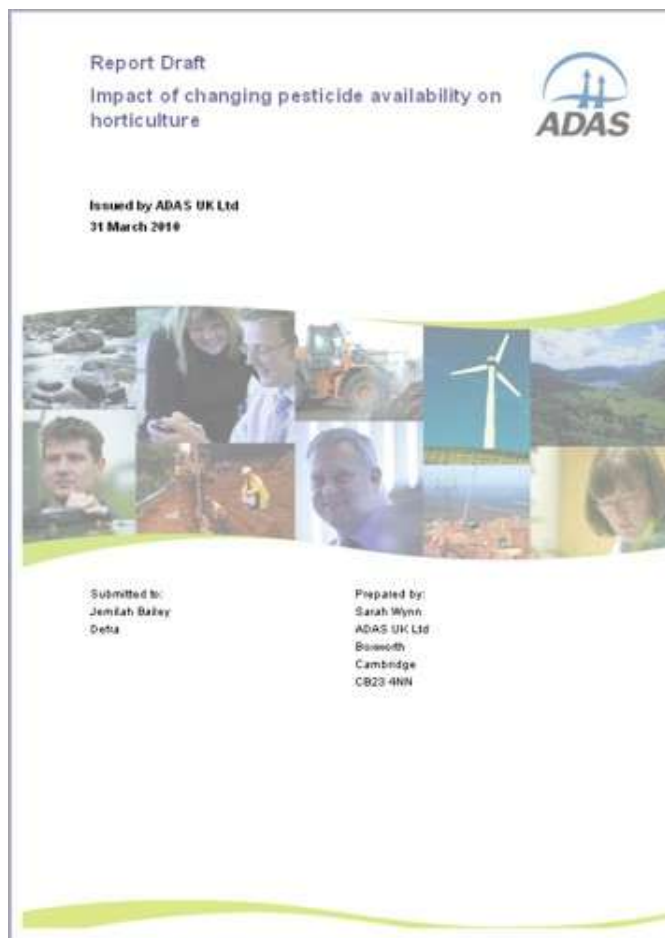
- ‘Tracer’ (spinosad) for the control of winter moth & sawfly on black, red & white currant – HDC data
- Fungicide for control of botrytis, leaf spot & Stem diseases
- Insecticide for control of Blackcurrant leaf midge, *Dasineura tetensi* and aphid
- Herbicide for control of weeds (*thistle etc*)



Details of UK on label and minor use approvals can be found at

[www.pesticides.gov.uk](http://www.pesticides.gov.uk)

# Fighting the crop protection battle!



- Impact of changing pesticide availability on horticulture and an assessment of all impacts and priorities on a range of arable, horticultural and forage crops. - IF01100
- <http://randd.defra.gov.uk>
- Report Published 16<sup>th</sup> May 2011

# SCEPTRE

## Sustainable Crop & Environment Protection – Targeted Research for Edibles



### NEED

- Loss of actives - 91/414/EEC
- Future threats to actives - 09/1107/EEC, SUD, WFD
- Food security



# SCEPTRE

## Sustainable Crop & Environment Protection – Targeted Research for Edibles



- Four-year HortLINK project
- Securing pesticides and biopesticides for sustainable production
- Applied research on high priority disease, pest and weed problems in fruit and vegetable crops
- Support approvals of new products and devise integrated pest management (IPM) programmes

# Consortium members



H & H Duncalfe





# SCEPTRE

## Sustainable Crop & Environment Protection – Targeted Research for Edibles



- Decide targets of importance to industry and products to be tested
- Determine efficacy and crop-safety of disease and pest control products
- Develop IPM systems for diseases and pests
- Determine crop-safety and efficacy of herbicides
- Develop alternative methods of weed control

# Example: Electrical weed control

(Lynn Tatnell, ADAS)

- **Blackcurrant crop, high natural weed population**
- **Dock, thistle, & nettle plants treated**
- **Visual assessments 2, 4, & 10 weeks post treatment**
- **4 blackcurrant plants electrocuted for 1 or 5 seconds on main stem or side branch**



Treatment list		
	Voltage (kV)	Speed
<b>1</b>	<b>Untreated control</b>	
<b>2</b>	<b>3.5</b>	<b>3km/h (slow)</b>
<b>3</b>	<b>3.5</b>	<b>5km/h (medium)</b>
<b>4</b>	<b>5.0</b>	<b>3km/h (slow)</b>
<b>5</b>	<b>5.0</b>	<b>5km/h (medium)</b>

# SCEPTRE

## Work programme for year 1- 2011



	Pests	Diseases	Weeds
Brassicas	Cabbage root fly, caterpillars, whitefly, aphids	Downy mildew, Alternaria	Annual broad leaf
Lettuce	Aphids		Annual broad leaf
Alliums	Thrips		
Tomato	Spider mite, whitefly	Botrytis	
Cucumber		Powdery mildew	
Pepper	Thrips		
Strawberry	Capsid	Soft rots	Annual broad leaf
Raspberry	Aphids	Blight	Perennials
Apple		Powdery mildew	
Pear		Botrytis	

# SCEPTRE in 2012



Total of 30 experiments:

- 14 on FV, 9 on SF, 5 on PE, 2 on TF
- 11 on disease, 10 on pest, 9 on weeds
- 23 on evaluation, 3 on programmes, 4 on novel technology (band spray, weed seed germination enhancer; electrical x2)

# Global Minor Use Summit



- Rome 2007 and 2012
- Key messages
- Speciality crops are important
- Need for databases and exchange of information
- Examples of how to work together -
- USDA Global studies to look at similarities in residues outdoor tomatoes
- IR4 - Global studies to look at similarities in residues (blueberry)



# Global Minor Use Summit



- HDC EU Residues database
  - To establish what alternatives are available elsewhere, supported by residues data
  - To reduce duplication of effort by encouraging data sharing and exchange
- Participants – UK, De, NL, Be, Dk, Fr (more are needed)
  - Potential for EU funding to extend the database was explored and is still considered ESSENTIAL to facilitate wider co-operation and knowledge
- Potential to use as this database as a template to extend and include IR4 data and other worldwide information is under discussion



HDC EU Database - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Shop Stop

### Search the HDC EU Database

Crop (All Crops) ▾

Target (All Targets) ▾

Product (All Products) ▾

Chemical Group (All Chemical Groups) ▾

Contact (All Contacts) ▾

European Location (Both Locations) ▾

Situation (Both Situations) ▾

Then click Search to run your query or Clear to select different criteria

Search Clear

[\[Main Menu\]](#) | [\[Search Residues\]](#) | [\[Search Contacts\]](#) | [\[Enter new Residues\]](#) | [\[Enter new Contacts\]](#)

Document: Done

Start | HDC EU Database - Net... | 10:46





### HDC EU Search Results

Country where data generated	European Location	Ownership of Data	Contact	Crop	Product	Active Substance	Target	Chemical Group	Update	Delete
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	Aphox (06633)	Pirimicarb (50 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	BASF Dimethoate 40	Dimethoate (40 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	Campbell's DSM	Demeton-S-methyl (58 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	Dicofen (00693)	Fenitrothion (50 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	Hallmark	Lambda-cyhalothrin (5 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	Mavrik Aquaflow	Tau-fluvalinate (24 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcom</a>	Sovereign 400 SC	Pendimethalin (40 %)		Herbicide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
Germany	Northern Europe	MZ1	<a href="#">Dr Mario Wick</a>	<a href="#">Sweet.com</a>	Fastac	Alpha-cypermethrin (10 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
Germany	Northern Europe	MZ1	<a href="#">Dr Mario Wick</a>	<a href="#">Sweet.com</a>	Karate	Lambda-cyhalothrin (5 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>
Germany	Northern Europe	MZ1	<a href="#">Dr Mario Wick</a>	<a href="#">Sweet.com</a>	Plenum	Pymetrozine (25 %)		Insecticide	<a href="#">Update this row</a>	<a href="#">Delete this row</a>

### [New Search](#)

[\[Main Menu\]](#) | [\[Search Residues\]](#) | [\[Search Contacts\]](#) | [\[Enter new Residues\]](#) | [\[Enter new Contacts\]](#)



### HDC EU Search Results

Country where data generated	European Location	Ownership of Data	Contact	Crop
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcorn</a>
United Kingdom	Northern Europe	HDC	<a href="#">Mrs Vivian Powell</a>	<a href="#">Sweetcorn</a>
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Germany	Northern Europe	MZ1	<a href="#">Dr Mario Wick</a>	<a href="#">Sweet corn</a>

**Residues Data - Netscape**

File Edit View Go Communicator Help

#### HDC EU Residues Data

<b>Crop</b>	Sweetcorn
<b>Situation</b>	
<b>Number of trials</b>	4 (2 x 2)
<b>Formulation</b>	Emulsifiable concentrate
<b>Rate of use in trials</b>	100 ml product/hectare g ai/ha
<b>Number of applications per crop</b>	300 ml product/hecta
<b>PHI supported</b>	7d + decline days
<b>Residue decline data</b>	
<b>Approval Status</b>	
<b>MRL position</b>	mg/kg
<b>Spray interval</b>	7d
<b>HDC Reference</b>	OL 112a
<b>SOLA Status</b>	<a href="#">1320/99</a>
<b>Protocol start date</b>	1997/98

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# EUROPEAN FUNDING



- Results of Study to the commission awaited
- In the meantime.....



# Exchange and Collaborate



## European Minor Use Working Groups

- Fruit, vegetables, salads and ornamentals
- Work with other EU MS (data exchange)
- Collaborative projects
  - Spinosad on raspberry Be, UK, CH & DAS
  - Spinosad on blueberry – Be, NL, UK & DAS underway in 2012

## What potential for IBA to work together?

- Dieback? – problems in discussion in UK and EU on bush fruit
- Other examples ?



# MESSAGES



## MINOR USES & SPECIALITY CROPS ARE IMPORTANT

Crop protection solutions will be lost

- New solutions are urgently required
- Conventional chemistry and biopesticides

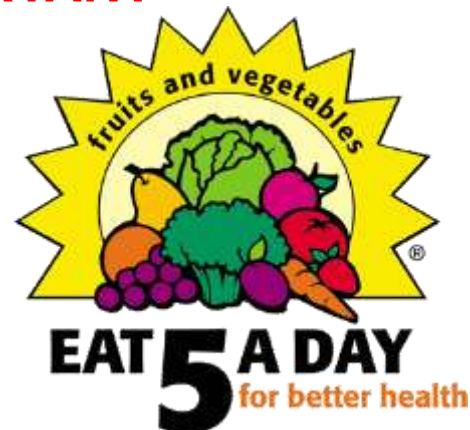
The way forward is:  
TEAMWORK  
& COLLABORATION



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The Goal is:

FILL the TOOLBOX





# THANK YOU

