

EU Coordinated Control and National Monitoring Programmes



The Food and Environment
Research Agency



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Scope of presentation

- Roles of European Food Safety Authority (EFSA) and the European Commission
- Structure of EU coordinated control programme and national monitoring programme (UK)
- Findings from the programme

European Food Safety Authority

- EFSA is an independent European agency funded by the EU budget that operates separately from the European Commission, European Parliament and EU Member States
- **EFSA Science**
EFSA's Scientific Committee and Panels are composed of highly qualified experts in scientific risk assessment
Supported by the Risk Assessment directorate, EFSA's Scientific Panels carry out risk assessment work in their respective specialised fields

European Commission

The European Commission (DG SANCO) has the task of managing risk by setting regulations regarding:

- MRLs - Regulation (EC) No 396/2005
- A multi-annual co-ordinated control programme – Regulation (EC) No 915/2010
- A network of EU RLs, NRLs, OFLs – Regulation (EC) No 882/2004
- AQC guidance - Document No. SANCO/10684/2009

The FVO ensures implementation of legislation is enforced through a series of inspection programmes

Harmonised EU MRLs

- Since 1st Sept 2008 no national MRLs
- Only EU MRLs are now in force
- MRLs are set for about 400 food items (raw commodities) for each pesticide
- If no MRL has been set for a pesticide commodity combination then a default value of 0.01 mg/kg applies

Commission Regulation (EU) No 915/2010

Sets out:

‘A coordinated multiannual control programme of the Union for 2011, 2012 and 2013 to ensure compliance with maximum residue levels of, and to assess, consumer exposure to pesticide residues in and on food of plant and animal origin’

Commission Regulation (EU) No 915/2010

- 30-40 foodstuffs constitute the major components of the diets in the EU
- Pesticides should be monitored in those 30-40 foodstuffs in three year cycles to allow consumer exposure and application of EU legislation to be assessed
- 642 samples are to be taken in total (if assumed 1% of products contain residues above LOD taking 642 samples there should be a 99% chance of taking a sample with a residue above LOD)
- Samples numbers are allotted to Member States according to population numbers (minimum 12 samples per commodity per year)

Products to be monitored

- 2010 Beans with pod, carrots, cucumbers, oranges and mandarins, pears, potatoes, spinach, rice, wheat flour, butter, hens eggs
- 2011 Aubergines, bananas, cauliflower, table grapes, orange juice, peas with pods, peppers (sweet), olive oil, wheat, cows milk, swine meat
- 2012 Apples, head cabbage, leeks, lettuce, tomatoes, peaches and nectarines, strawberries, wine grapes, rye or oats, poultry meat, liver

Pesticides to be monitored

- A list of more than 150 pesticides for 2011
 - i. The majority are amenable to multiresidue analysis
 - ii. Some require single residue methods
 - iii. Some have complex residue definitions

Numbers of samples to be analysed annually

Member State	Minimum numbers of samples
Germany	93
France, UK	66
Poland, Spain	45
Netherlands, Romania	17
All other MSs	12
Additionally, 10 samples of infant food	

National Monitoring Programme (UK)

- £2.2M (approx 2.5M Euros) annually
- Majority of costs are analytical
- Remainder, sampling administrative and PRC
- Funded 60% levy on the agrochemicals industry & 40% from Government

Combined programmes (EU & UK)

- 4,000 samples analysed annually
- Over 1,000,000 pesticide/commodity combinations
- Rolling programme of commodities (35 – 45 surveys per year)
- Fruits, vegetables, cereals & cereal products, products of animal origin, fish and fish products

What commodities are sampled?

Survey type	Commodities sampled	Frequency of sampling
Dietary staples	Bread, milk, potatoes	Annually
Main food groups	Fruit & vegetables Cereals – rice, pasta, nuts Animal products – fresh & processed meats Fish – fresh & processed	Commodities change annually
EU Co-ordinated	11 commodities – 7 fruits or vegetables, 2 animal products, 2 cereal products	Commodities change annually
Miscellaneous	Baby foods, Animal feeds	Baby foods annually

Pesticides

- Well over 1,000 compounds could be sought
- UK targets around 360 compounds using multi-residue methods (MRMs)
- Some have to be sought using Single/Selective methods (SRMs)
- The use of SRMs significantly increases costs
- Have to decide on the importance of SRM compounds

Sampling

24 different UK centres

- Major supermarkets
- Local shops & market stalls
- Farm shops
- Wholesale
- Ports



UK Laboratories

- Fera, York
- LGC, London
- SASA, Edinburgh
- Eurofins, Wolverhampton
- AFBINI, Belfast

QC Checks by Analytical sub-group

- Members from all contributing labs
- Staff from CRD
- Meet quarterly
- Review results from all surveys for quality
- Review labs performance in PTs
- Discuss EURL issues

Follow-up actions for MRL exceedances or non-approved use

- UK—produce

Brand owners notified and asked to investigate the cause and possible enforcement action

- Imports

Authorities in exporting countries notified

- Notification through the EU RASFF

Publication of national (UK) results 2010

- Quarterly and annual reports

<http://www.pesticides.gov.uk/prc.asp?id=2937>

2008 EU Annual Report

- Published on 12 July 2010
- Annual report 2008 published on EFSA website:
<http://www.efsa.europa.eu/en/scdocs/scdoc/1646.htm>
- Coordinated control programme:
A total number of 11,610 samples of nine different commodities (oranges, mandarins, pears, potatoes, carrots, cucumbers, spinach, beans without pods, and rice) were taken in the 2008 EU coordinated pesticide monitoring programme
The samples should be analysed for 78 pesticides

2008 EU Annual Report

Fruit, Vegetables and Cereals

Sample origin	Number of samples	Samples with MRL exceedances	%
EU	48,138	1,177	2.6
Imported	12,527	953	7.7
Unknown	2,050	31	2.1
Totals	62,715	2,161	3.4

2008 EU Annual Report

Commodity	Number of samples	Samples at or <MRL	%	Samples >MRL	%
Fruit & Vegetables	58,784	56,631	96.3	2,153	3.7
Cereals	3,931	3,874	98.5	57	1.5
Processed Foods	3,110	3,083	99.1	27	0.9
Baby Food	2,062	2,057	99.8	5	0.2
Totals	67,887	65,645		2,242	

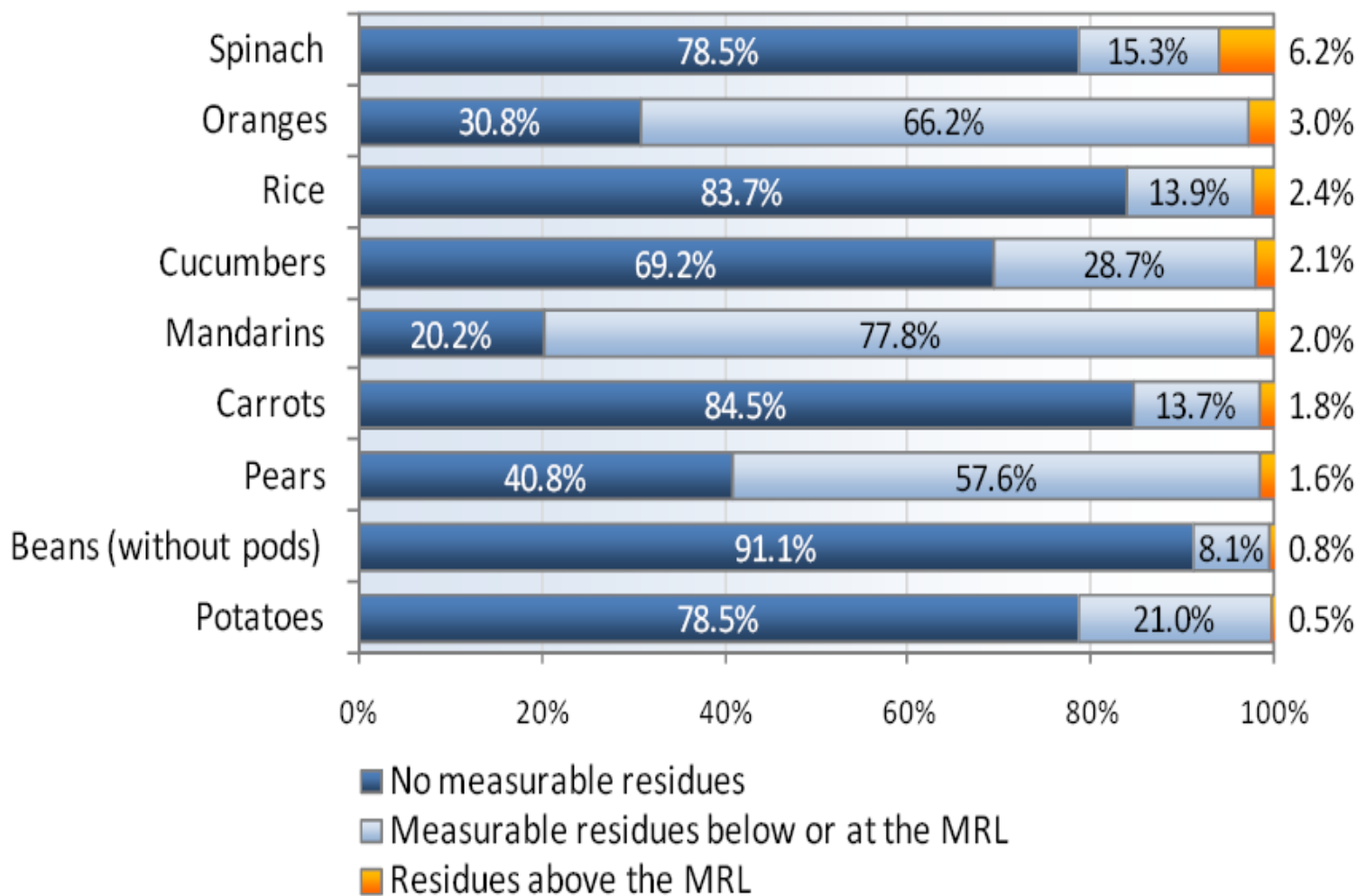
A higher incidence of MRL exceedances in samples imported from Non-EU Countries (7.6%) compared with EU (2.4%)

2008 EU Annual Report

Table 4.3-2: Imported food products most frequently exceeding the MRLs and countries of origin

Origin country	Number of EC MRL exceedances	Food products most frequently exceeding EC MRL
Thailand	206	Peppers, Beans (with pods), Basil
Turkey	92	Peppers, Table grapes, Pears
Colombia	56	Passion fruit, Physalis (Cape gooseberry), Sage
Egypt	55	Oranges, Strawberries, Pomegranate
India	52	Okra (lady's fingers), Peppers, Pomegranate
Brazil	43	Mangoes, Figs, Apples, Limes
Dominican Republic	43	Beans (with pods), Aubergines (egg plants), Cucurbits
Israel	41	Carrots, Herbs, Strawberries
Kenya	35	Beans (with pods), Passion fruit, Peas (with pods)
Morocco	34	Peppers, Beans (with pods), Tomatoes
China	29	Tea, Grapefruit, Beans (with pods)
Chile	20	Peaches, Table grapes, Apples
United States	20	Grapefruit, Apples
Argentina	18	Lemons, Apples, Pears
Costa Rica	16	Pineapples, Passion fruit, Mangoes
Vietnam	15	Tea, Lychee (Litchi), Celery, Herbs
South Africa	14	Oranges, Lemons, Passion fruit, Pineapples
Zimbabwe	14	Passion fruit, Peas (with pods), Peppers
Suriname	13	Peppers, Aubergines (egg plants), Celery leaves
Jordan	12	Peppers, Okra (lady's fingers), Cucumbers

2008 EU Annual Report



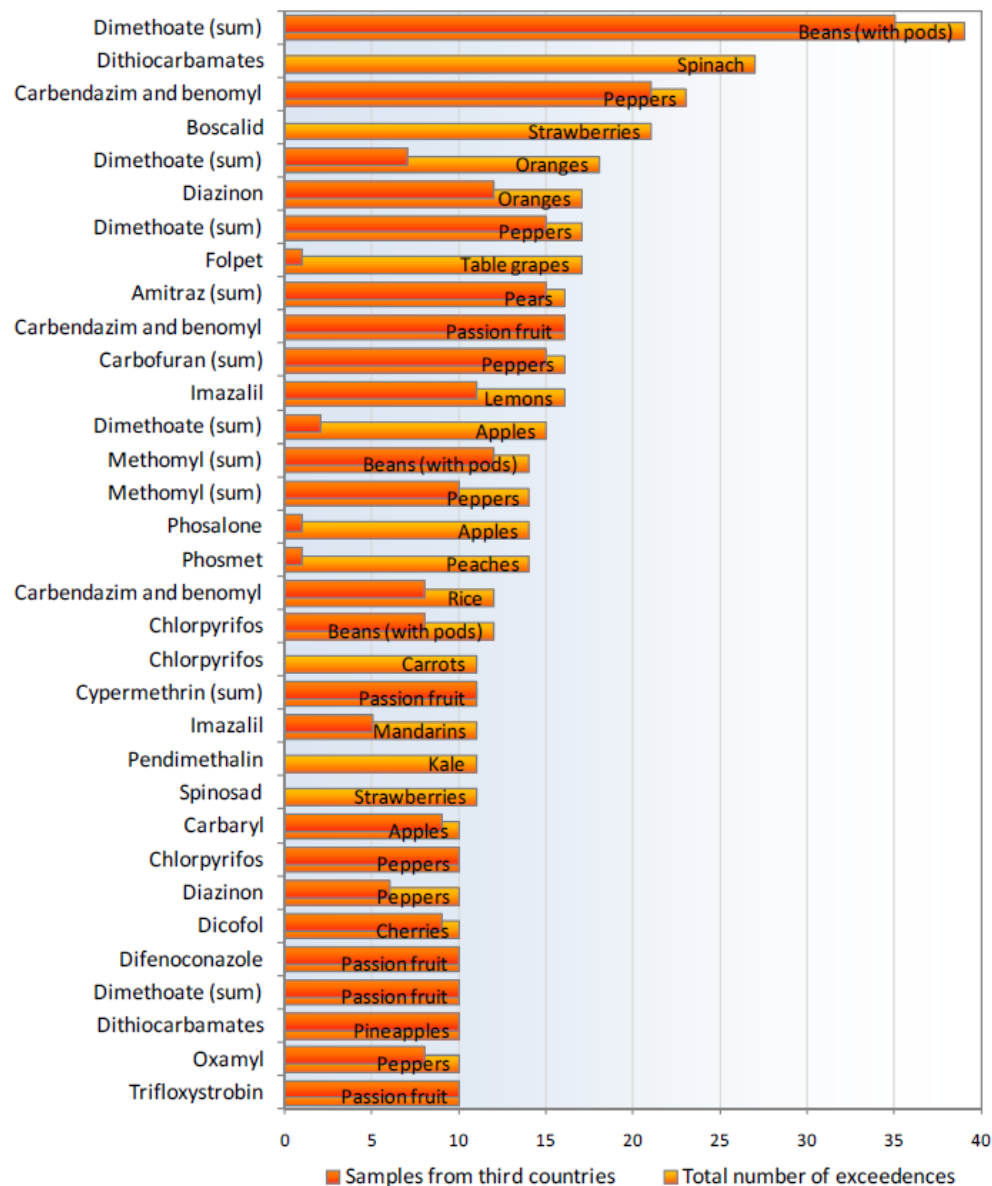
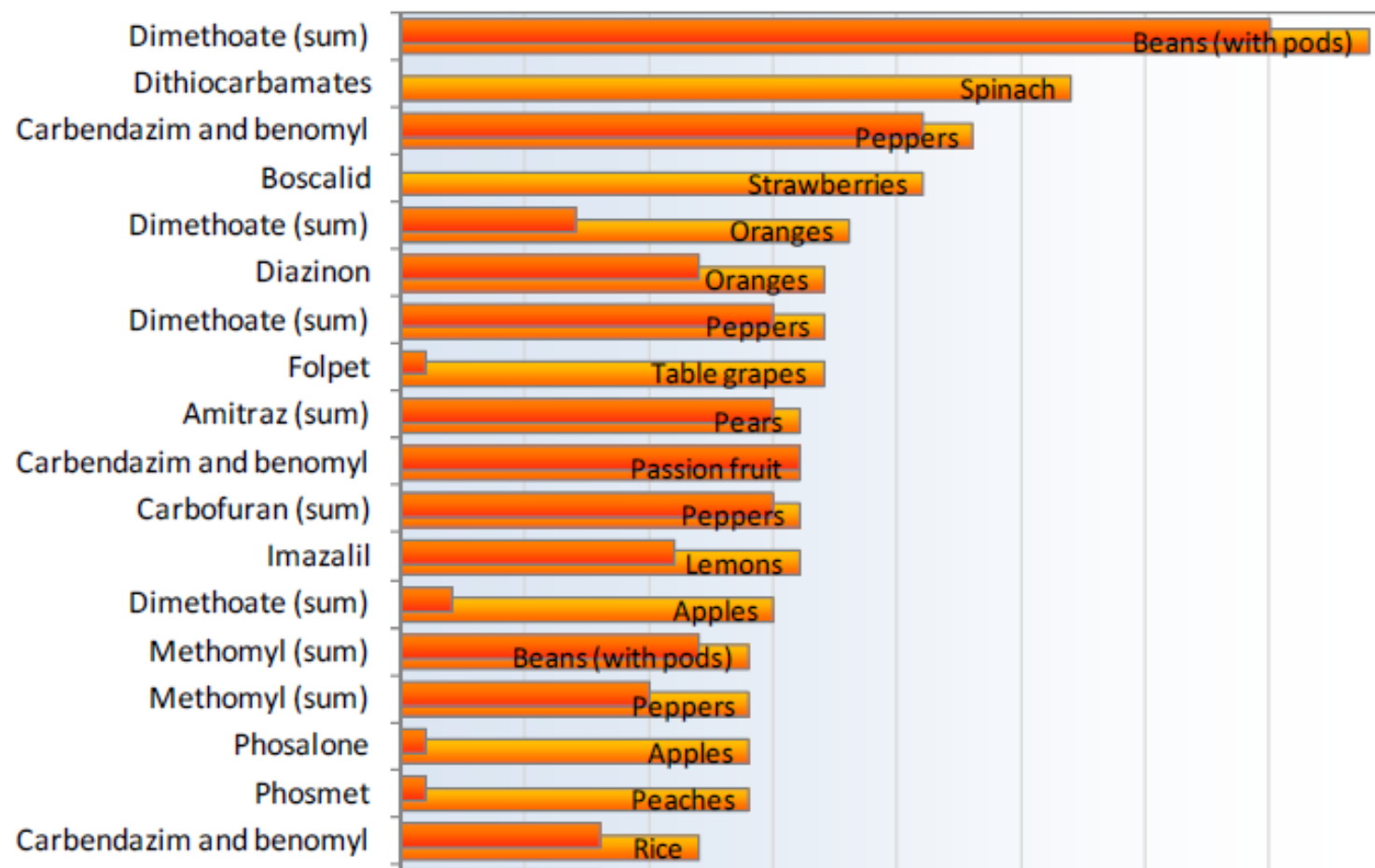


Figure 4.5-1: Pesticide/crop combinations exceeding the EC MRLs (national and EU pesticide monitoring coordinated programmes 2008 (surveillance samples only)). Proportion of samples originating from third countries is shown besides the total number of samples.



2008 EU Annual Report

- In 2008 the number of pesticides sought by each country varied from 39 to 679
- The total number of substances covered by all reporting countries was 862
- residues of 365 different pesticides were found in measurable quantities in fruit and vegetables
- in cereals residues of 76 different pesticides were observed
- In 2008, residues of two or more pesticides were found in 27% of the analysed samples of fruits, vegetables and cereals (this number is increasing)

Summary & Conclusions

- EFSA coordinates, collates and reports data
- All MRLs are now harmonised within EU
- MSs must have national control programmes and participate in the EU coordinated control programme
- About 4,000 samples of food products are analysed each year in the UK
- Control of up to 862 pesticides
- Still problems with some complex residue definitions