STATUS OF DATA GENERATION IN KENYA ON MINOR USES

GLOBAL MINOR USE SUMMIT,
3-7 DECEMBER 2007
ROME ITALY

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PRESENTATION OUTLINE

SECTION I:
Information on Existing data generation programs

SECTION II:
Information on FUTURE Initiatives

SECTION III:
Those NOT generating residue data
Kenya - Geographic Location and Agro ecological zones
KENYA
BACKGROUND INFORMATION

- Horticultural exports one of Kenya’s main source of foreign exchange. Equivalent to 14% of export earnings.

- In 2006, Kenya exported horticultural commodities worth KShs 49.3 billion (over $ 700 million), with over 96% going to the EU.

- There are 1.2 million people deriving income from the horticultural export industry and 4.8 million people if you consider dependants - 14% of the total population. 80% of all Horticultural production is by small holder growers.
DATA ON EXPORTED COMMODITIES FROM KENYA

Horticultural Exports from Kenya 2003 to Aug 2007

Source: HCDA website
EXPORT QUANTITIES - TOTALS VIS TYPE

Source of data: Horticultural Crops Development Agency (HCDA)
Section I:

INFORMATION ON EXISTING DATA GENERATION
INFORMATION ON EXISTING DATA GENERATION

Type of data generated:

1. Pesticide residue monitoring data
2. Data for application of import tolerance
1. **MONITORING DATA**

- **FUNDING FROM SPECIFIC PROGRAMS**

  - PESTICIDE RESIDUE “MONITORING DATA” - HORTICULTURE RESEARCH FUND – Funded by HCDA For the National Taskforce on Horticulture (NTH) and implemented by KEPHIS

- Data relate to three year work
  - Based on exported commodities –
    - Fresh fruits and vegetables
PESTICIDE RESIDUE MONITORING DATA SUMMARY
(Fruit and vegetables)

Trend of number of samples analysed for pesticide residues

Year
Number of samples 200 100 50
Non-compliance

NB: Data relating to “private” samples
PESTICIDE RESIDUE MONITORING DATA

- Detected residues below or at MRL of pesticides without registered use

- Support export
  - Private standards
  - Import country requirements

- Importance of food safety –
  - Monitoring of food in local markets – Public/private partnership
    - USAID - Kenya Horticultural Development Program

- Data available on website (www.kephis.org); Annual reports as part of routine activity
CONSTRAINTS/ CHALLENGES

i) Capacity of laboratory – through-put

- Current capacity about 400*/year
- Infrastructural needs

ii) Rapid change in demands – new active substance requests viz analytical capabilities

iii) Ruggedness/robustness of analytical methods used

*Not maximum capacity
2. IMPORT TOLERANCE

Import tolerances for minor crops of economic importance –

- Beans with pods (Kenyan beans)
- *Passiflora edulis* (passion fruit)
- mango
- papaya

Supported by the European-African-Caribbean-Pacific Liaison Committee Initiative – Pesticide Initiative Program (COLEACP/PIP)
PASSION FRUIT

- **Common name:** passion fruit, marcuya, grenadilla
- **Scientific name:** *Passiflora edulis*
- **Family:** Passifloraceae (Passionflower family)
- **Plant part used:** aril (fleshy seed covering)
BEANS IN PODS

GREEN BEANS

Common name: Kenyan beans, French beans, haricot beans

Scientific name: Phaseolus vulgaris

Plant part used: unripe pods
GENERAL CROP INFORMATION

- Passion fruit is a minor crop, of economic importance in Kenya; Kenyan bean issues relate to minor uses.

- Grown primarily by small holder farmers in Kenya. Pesticide use related to minor uses.

- Main pest problems on passion fruit:
  - Mealy bugs, brown spot, thrips, aphids, leafminer, fruit suckers, spider mites, mealy bugs

- Main pest problems on beans in pods (Kenyan beans):
  - Rusts, bean fly, spider mites, anthracnose, cutworms...

- Residues detected in Europe are mainly of fungicides
IMPORT TOLERANCE - PROGRAM OUTLINE

- Proposed value of MRL for shortest useful Pre-harvest interval (PHI)
- The Pre-harvest Interval (PHI) comparison
- Comparison with existing MRL of *commonly* used pesticide
- Value of PHI in country/proposition of new PHI
# Residue Data for Propineb

<table>
<thead>
<tr>
<th>DALA</th>
<th>Matrix</th>
<th>Residues found (mg/kg) in treated plots</th>
<th>Average</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Whole fruit</td>
<td>0.703</td>
<td>0.061</td>
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<tr>
<td>14</td>
<td>Whole fruit</td>
<td>0.406</td>
<td>0.728</td>
</tr>
<tr>
<td>21</td>
<td>Whole fruit</td>
<td>0.352</td>
<td>0.463</td>
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</tbody>
</table>
## SUMMARY OF DATA

<table>
<thead>
<tr>
<th>Active substance</th>
<th>BEANS WITH PODS</th>
<th>PASSIFLORA EDULIS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Residue observed</td>
<td>Current MRL</td>
</tr>
<tr>
<td>Abamectin</td>
<td>0.020</td>
<td>0.01</td>
</tr>
<tr>
<td>Chlorothalonil</td>
<td>2.600</td>
<td>0.01</td>
</tr>
<tr>
<td>Cyromazine</td>
<td>1.300</td>
<td>0.05</td>
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<tr>
<td>Difenconazole</td>
<td>0.210</td>
<td>0.05</td>
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<tr>
<td>Myclobutanil</td>
<td>0.180</td>
<td>0.02</td>
</tr>
<tr>
<td>Azoystrobin</td>
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<td>-</td>
</tr>
<tr>
<td>Spinosad</td>
<td>0.180</td>
<td>-</td>
</tr>
<tr>
<td>Spiromesifen</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>0.080</td>
<td>-</td>
</tr>
<tr>
<td>Thiamethoxam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trifloxystrobin</td>
<td>0.360</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*Figures in italics represent data where import tolerance granted - indicates where data not submitted

*MRL relates to National MRL of some EU member country
COMMENT ON DATA FOR IMPORT TOLERANCES

- MRL data granted for supported pesticides - not all requested MRLs were granted
- Alternative GAP/re-submission follow-up required
- Data gaps for older molecules
- Other pesticides commonly used not supported e.g. Dithiocarbamates, chlorothalonil on *Passiflora edulis*
- Lengthy process
SECTION II - INFORMATION ON FUTURE INITIATIVES
Horticultural industry to be supported by EU – HORTI CAP – *(Aid for trade)*

- Issues linked to capacity building – laboratory recognition (GLP compliance)
- Infrastructural upgrading
- Training of personnel
- Stakeholder awareness on market access issues
- Estimated role-out plan – 3 years
SECTION III - 

CONSIDERATIONS FOR THOSE NOT GENERATING DATA
GENERAL CONSIDERATIONS

- Food safety concerns – need for monitoring data

- National MRLs –
  - Use of data international recommendations from JMPR (Joint Meeting Pesticide Residues) and Codex MRLs

- Limitations:
  - Minor crop data not included
  - Cost implication of import tolerance data requirements
  - Consideration of country capacity

- Current data needs:
  - Residue data on minor crops for MRL setting - particularly on older active substances still in use
  - MRLs for uses on minor crops
  - Harmonization of existing data/ data requirements
CHALLENGES IN OWN RESIDUE DATA GENERATION

Technology/ data sharing issues:

- Rigorous data requirements for MRL setting
  - Clearer communication in data requirements
- Many pesticide uses relating to minor uses
- Limited capacities especially in developing countries
  - Regional initiatives?
  - Support from manufacturers?
- Differences in requirements for import tolerances
  - Harmonization of data requirements
- Funding/resource constraints
- Technological capacity gaps
  - Expansion of crop groups to include minor crops
THANK YOU FOR YOUR ATTENTION

Special Thanks to the Summit Organizing Committee