Living with Tuta absoluta

Proposed Management Strategy

Dr Shakir Al-Zaidi
Russell IPM Ltd
2008 Morocco
2009 Libya
Crete – Greece
2009
Potato
Sudan
Aubergine
Sudan
Suitability of EU Climate in field for establishment of Tuta absoluta
On the Move
Next stop
Why so fast?
Where to go from here?
Key Challenges

- Weather Pattern fluctuation:
  - Drop in population leads to complacency.
  - Scaling back of government support.

- Market fluctuation:
  - Farmers abandon fields when return drops.
  - Abandoning monitoring and treatment.

- Political football:
  - Acting and reacting to political pressure
  - Short term versus long term.
Empowering the Farmer

- **Communication:**
  - Transparency and confidence building.
  - At all levels to avoid political backlash.

- **Education:**
  - Training the trainers.
  - Practical farm schools.

- **Integration:**
  - Engaging farmers organisations.
National Objectives

- To contain the economical damage to an acceptable level.
- Prevention of Resistance development to insecticides.
- Prevention of increased residue level in food chain.
- Ceasing the moment; to introduce modern agricultural practices.
Elements of IPM Strategy

Farmer

Prevention

Detection

Intervention
Early detection is key to reducing damage. (Monitoring & inspection).

Understanding the pest behaviour and life cycle.

Treating ALL life stages to break the cycle.

Complaisance and ignorance are the insect’s best friend.
Early Detection
Percentage of dead larvae per 60 leaflets after five days of spraying

Courtesy Dr Marwan Abed el-Wali - Jordan
**Levels of Intervention**

- **Early Stages**
  - Trap catch with no damage
  - Repellents (Neem, Sulphur) & BT

- **Medium level**
  - Leaf damage
  - Translamine Larvicides

- **Advance stages**
  - Fruit damage
  - Remove & Destroy damaged fruit
  - Larvicides & Adulticides
Widening the Mix

- Delay the development of resistance.
- A better chance of management.
- Smart affordable range of insecticides.
- Discourage mixing insecticides.
- Relaxing registration procedures to ensure availability of a wide range.
- **Strict rotation** (Private Sector’s Cooperation)
They are just as active as synthetics.
Reduce the risk of pesticide residue in the food chain.
Provides multi modes of action reducing chance of resistance.
It can be integrated with synthetics in a balanced programme.
Natural enemies

- Search should begin to identify local natural enemies.
- In the meantime, Nesidiocorous tinius was successfully released.
- Bottle gourd (Lagenaria siceraria) is grown on the edges of the field to provide a bank of insects.
Wining the Farmers

- Education & more education.
- Communicate alerts and advise through mobile phones.
- Set up a hot line to reach you.
- Be on the ground.
Thank You