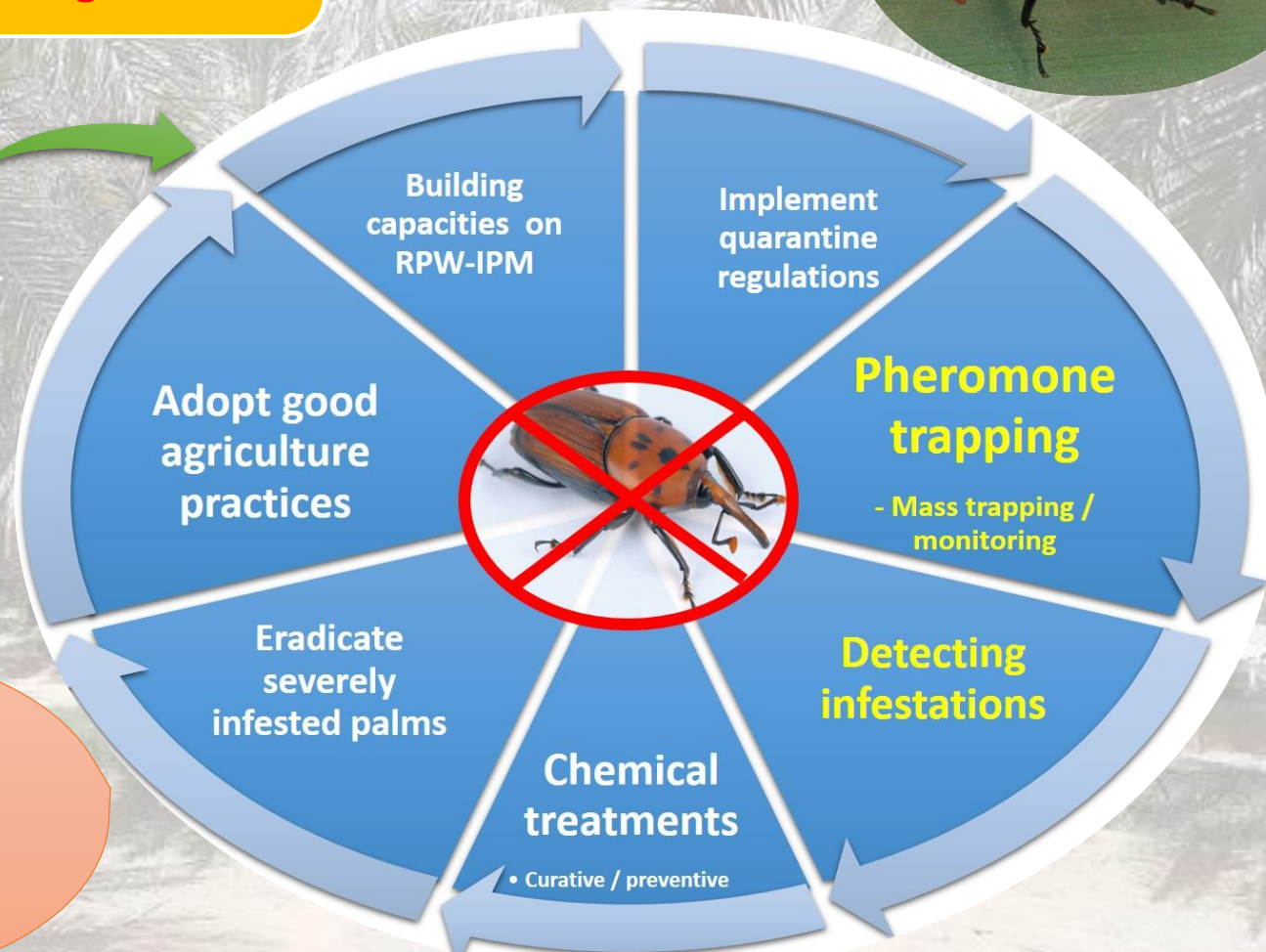


Red Palm Weevil

Rhynchophorus ferrugineus



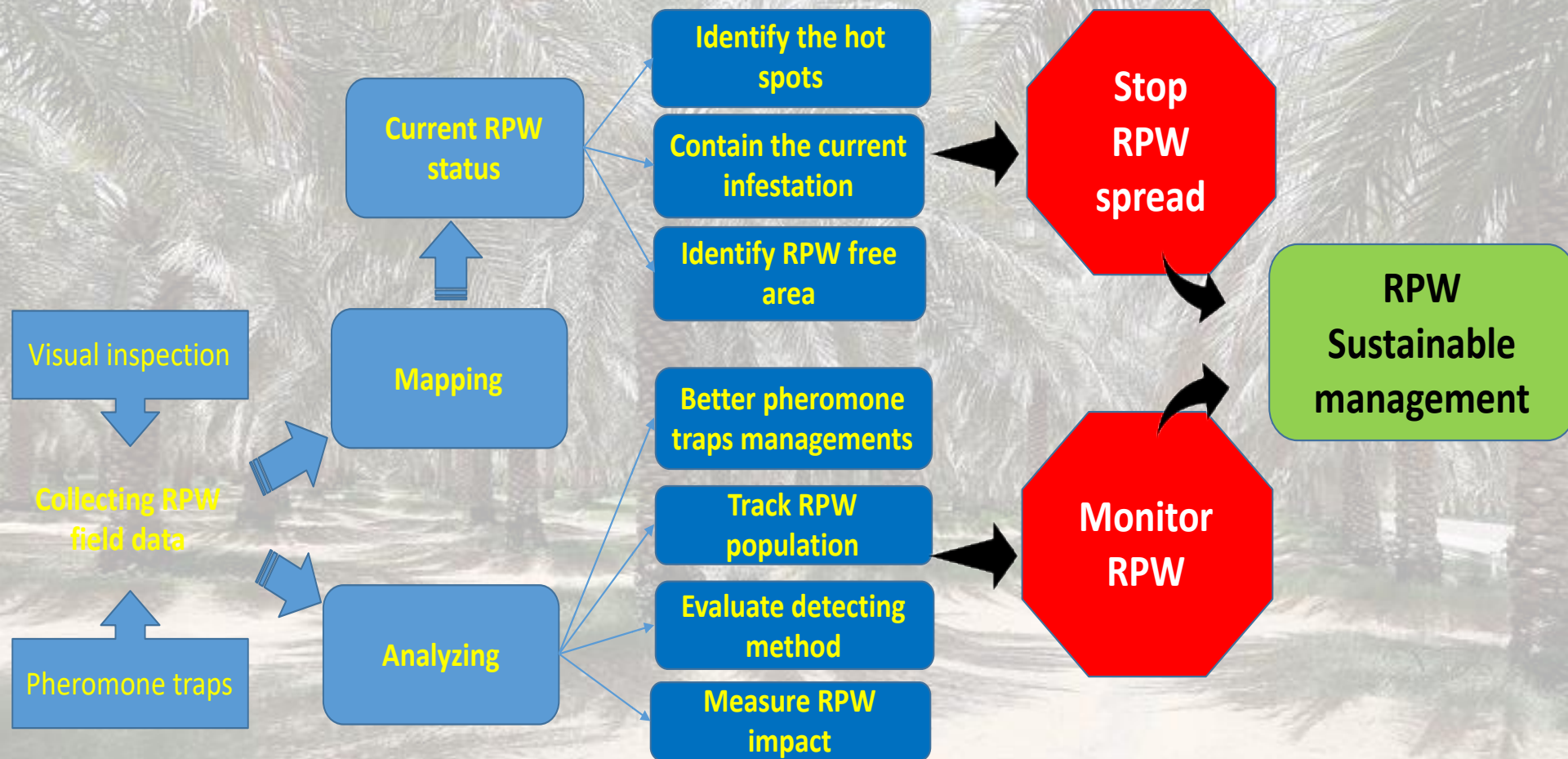
**Red Palm Weevil
IPM strategy**



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Why collecting and sharing RPW data ?



SusaHamra

for mobiles

سوسة النخيل الحمراء

Food and Agriculture Organization of the United Nations

Welcome to Visual inspection

Report new infestation

- infestation:

Is it a new infestation?

Infestation spot count:

Infestation spot direction:

How the infestation detected?

☐ [Visual symptoms](#)

☐ [RPW stages](#)

- Control:

☐ Removal and disposal

☐ [Curative treatment](#)

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Welcome to SusaHamra Home Page

[Visual Inspections](#)

[Trap Management](#)

[Reports](#)

[Information](#)

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Welcome to Trap management

[Register trap](#)

[Read trap](#)

[Maintain trap](#)

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Welcome to Visual inspection

Report new infestation

How the infestation detected?

☐ **Visual symptoms:**

☐ Fresh ooze

☐ Dry ooze

☐ Chewed fibers

☐ Dead or dried offshoots after transplanting

☐ Dead or dried offshoots attached to the palm

☐ Dead or dried aerial offshoots

☐ Dry leaves

☐ Damaged tissue (less than 30% or more than 30%)

☐ Tunnels or gaps

☐ Other symptoms (Define)

[Submit](#)

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Welcome to Visual inspection

Report new infestation

How the infestation detected?

☐ **RPW stages:**

☐ Larvae

☐ Pupae & cocoon

☐ Adults

[Submit](#)

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Welcome to Visual inspection

Report new infestation

☐ **Curative treatment:**

Used Pesticide: List

Concentration: ml/l

Dose per palm: ml

[Submit](#)

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[Register trap](#)

• GPS coordinates:

• Country: **list**

• Governorate: **list**

• State: **list**

• Village: **list**

• Trap code:

• Farm Owner: **Text**

• Trap position: **List**

[Submit](#)

[Read trap](#) [Maintain trap](#)

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[Read trap](#)

• GPS coordinates:

• Trap code: **slide list**

• Date & Time: Automatic filled

• Counts:

• Male: **Number**

• Female: **Number**

• Unknown: **Number**

• Other insects: **Number**

[Submit](#)

[Register trap](#) [Maintain trap](#)

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[Maintain trap](#)

• GPS coordinates:

• Trap code: **slide list**

• Date & Time: Automatic filled

• Maintenance:

☐ Change Pheromone

☐ Change Kermone

☐ Change food bait

☐ Adding water

☐ Report on a broken trap need to be replaced

[Submit](#)

[Register trap](#) [Read trap](#)



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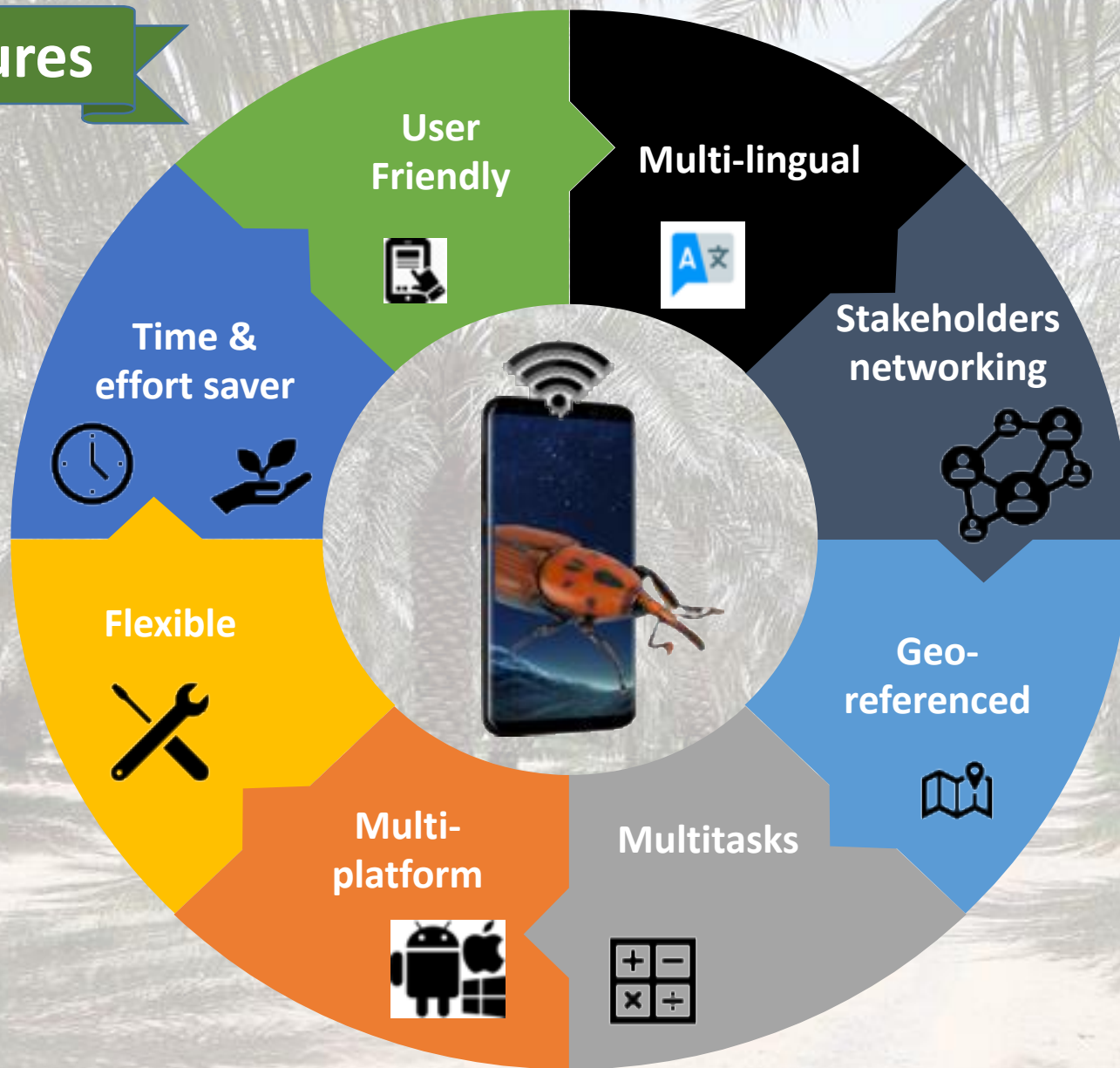
Functions



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Features



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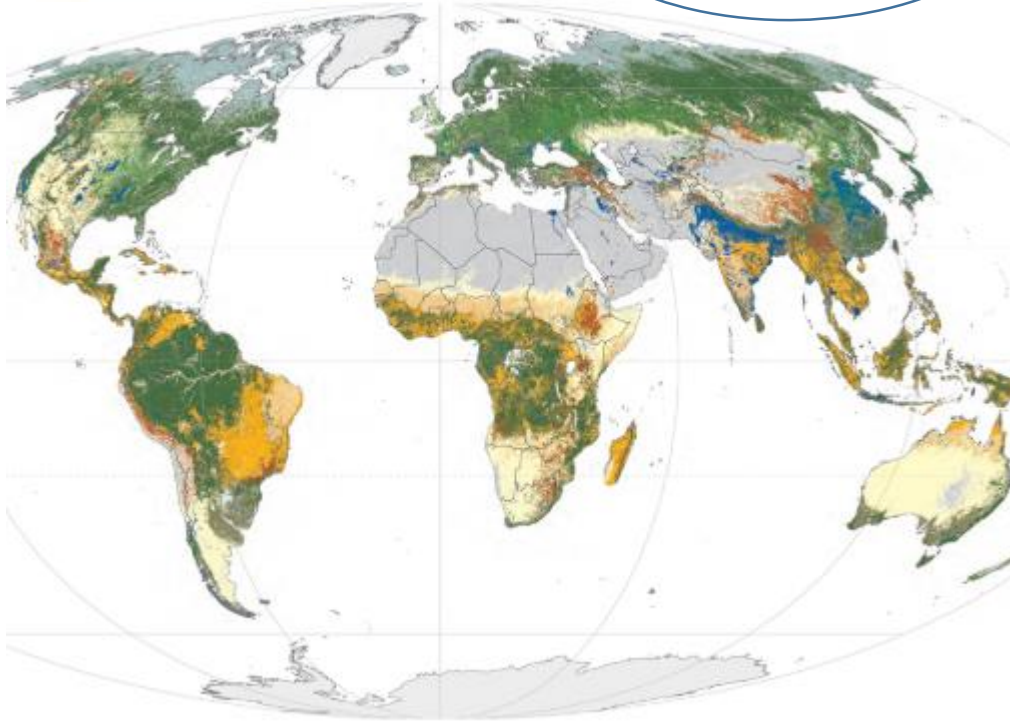
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Wheat Rust Diseases: *(Stem, Yellow and leaf rust)*

A common threat to wheat in all regions



Feste di
Robigalia
25th April



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Integrated Management of wheat rusts:

- **Prevention and Management**

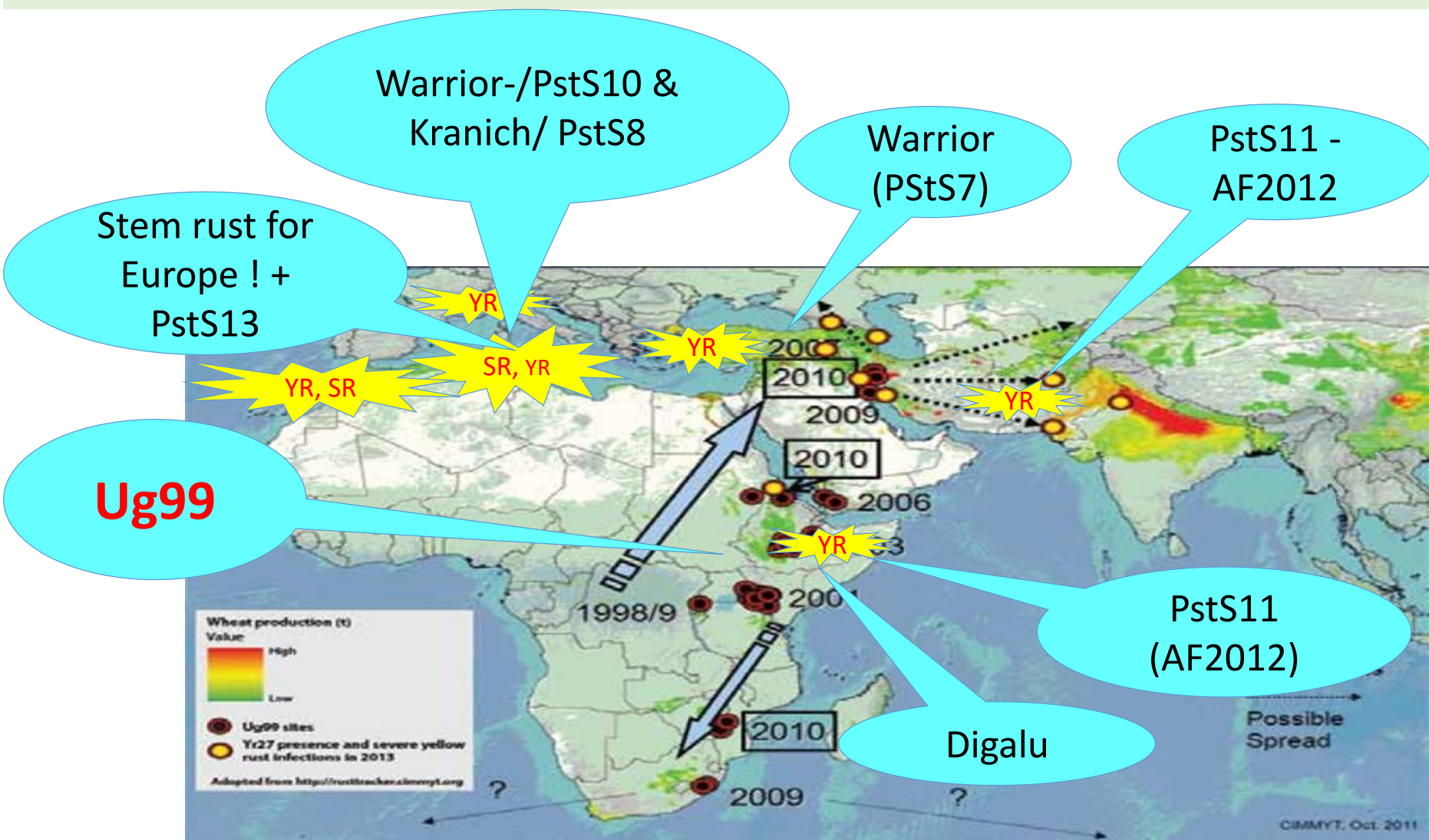
- Deploying resistant varieties
- Preparedness – awareness
- Monitoring / early warning (Occurrence / races)

- **Timely response**

- Mobilizing teams and fungicides



Rusts beyond Ug99 - Emerging threats

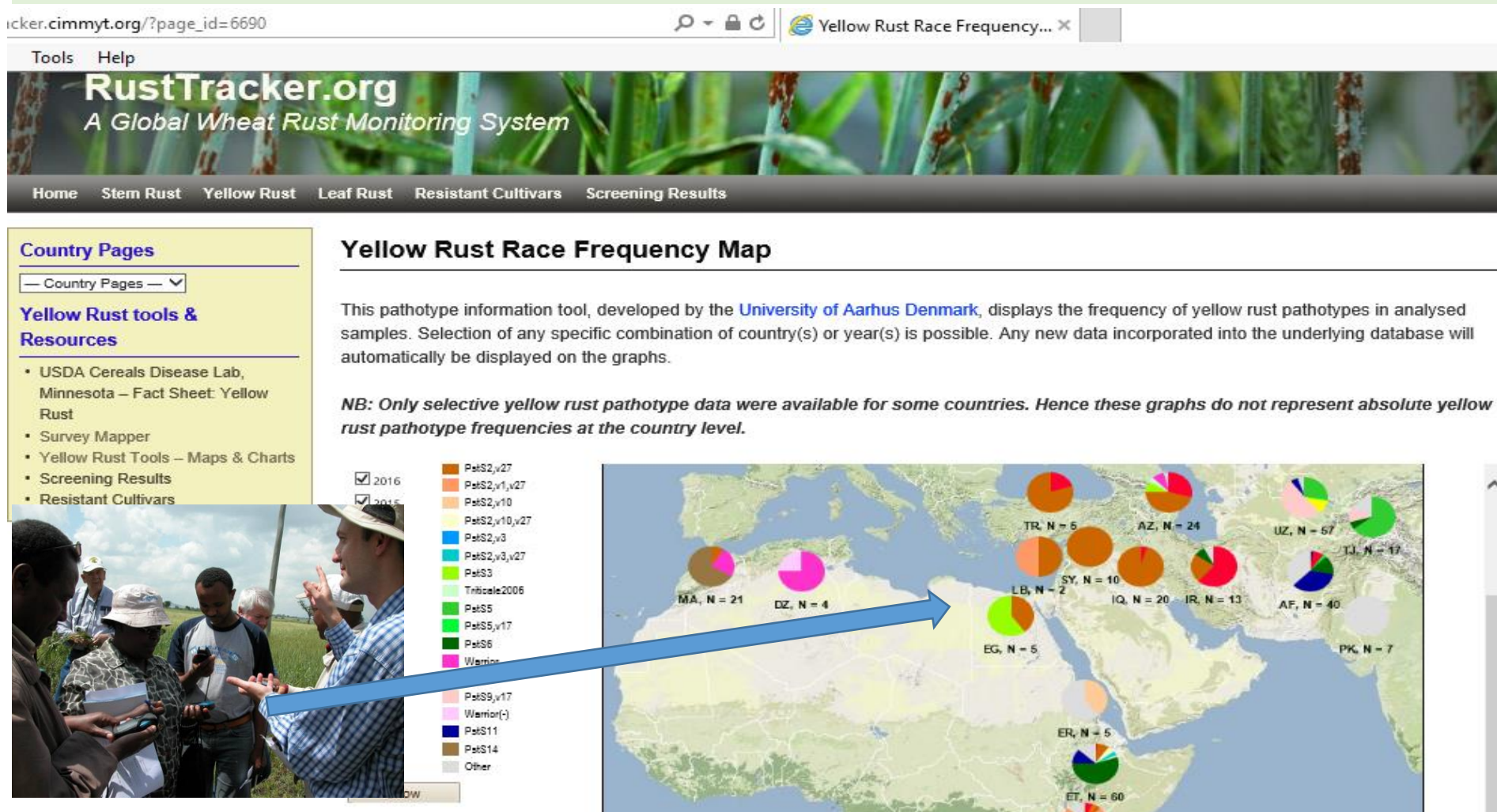


Global Programme on Wheat Rusts

- Regional **collaboration** & info sharing
 - **Monitoring** & race tracking
 - Support for **Resistant** varieties
 - Contingency **plans** & IPM
 - **Capacity** building (Training etc.)
-
- **Recent initiative for central and west Asia and North Africa (Supported by the FAO-Turkey Partnership Programme by USD 1.067 million)**
 - **Partners:** Turkey, ICARDA, CIMMYT, Aarhus Un., BGRI, countries



Contribution to the Global Rust Monitoring System (coordinated by CIMMYT)



Fusarium Wilt Disease TR4

- Tropical race 4



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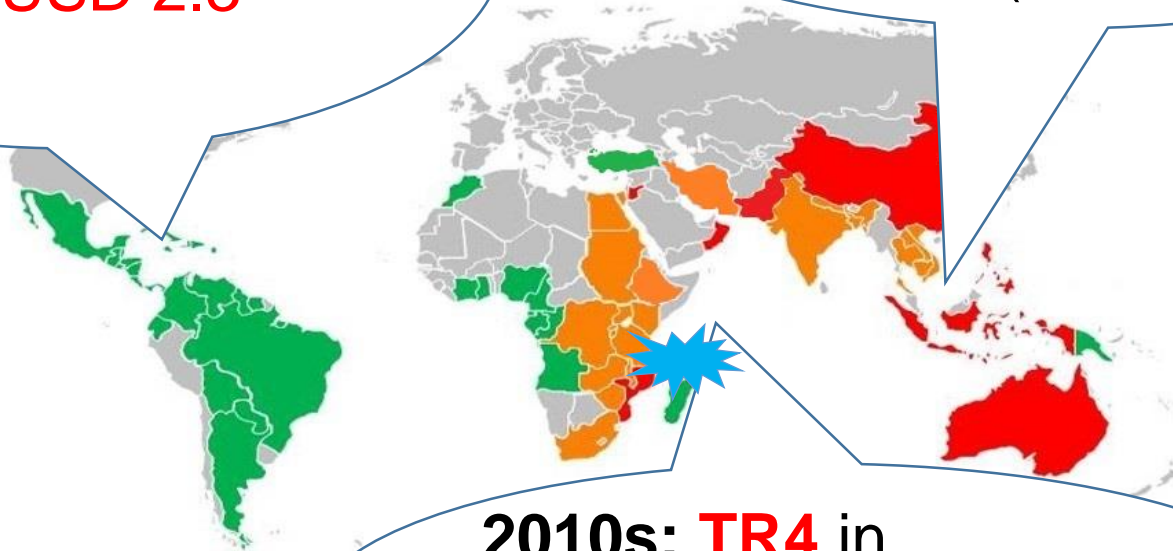
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Fusarium Wilt Disease – Past & current History and current status

Past lessons: Race 1 on Gros Michel costed **USD 2.3 billion**

1990s: TR4 in SE Asia: **100 000 ha** infested (Cavendish)

2010s: TR4 in Near East, South Asia & Mozambique



Banana Fusarium wilt (*F. oxysporum* f.sp. *cubense*)

- **Spread:**
 - Infected plant materials
 - **Soil** particles: Shoes, Vehicles, Tools etc.
 - **Water**: Irrigation, Drainage, Floods
- **Challenges:**
 - Cavendish most susceptible
 - **No resistant variety**
 - **No chemical control**



Banana Fusarium wilt (*F. oxysporum* f.sp. *cubense*)

- **How to stop ?**
 - **Prevention** of spread
 - Rigorous surveillance
 - Rapid containment
- **Awareness** at all levels
- Capacity strengthening, collaborations
- Information **sharing**.



Global Programme on Banana Fusarium Wilt

A multi disciplinary partnership

Governance,
policies,
national and
farmer linkages



Linkages with
producers, NGOs
and industry

Research,
Knowledge, IPM
and biodiversity



Research in
Africa and
breeding
resistant varieties

**Prevention and
containment**

**Int. Collaboration &
capacity building**

**Disease
management**



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Activities carried out

- Awareness raising (global, local)
- Capacity building (LAC, Asia, Africa)
- Emergency support (Mozambique)
- Surveys (Mozambique, Asia, Africa)
- International collaboration, dialogue
- Technology and information sharing: molecular, digital



What to do ?

Prevention easy !

- *Do not carry the risk*
- *Do not allow it in !*
- *Awareness and planning*
- *Clean planting materials*
- *Quarantine regulations*
- *Check on the borders, ports*

