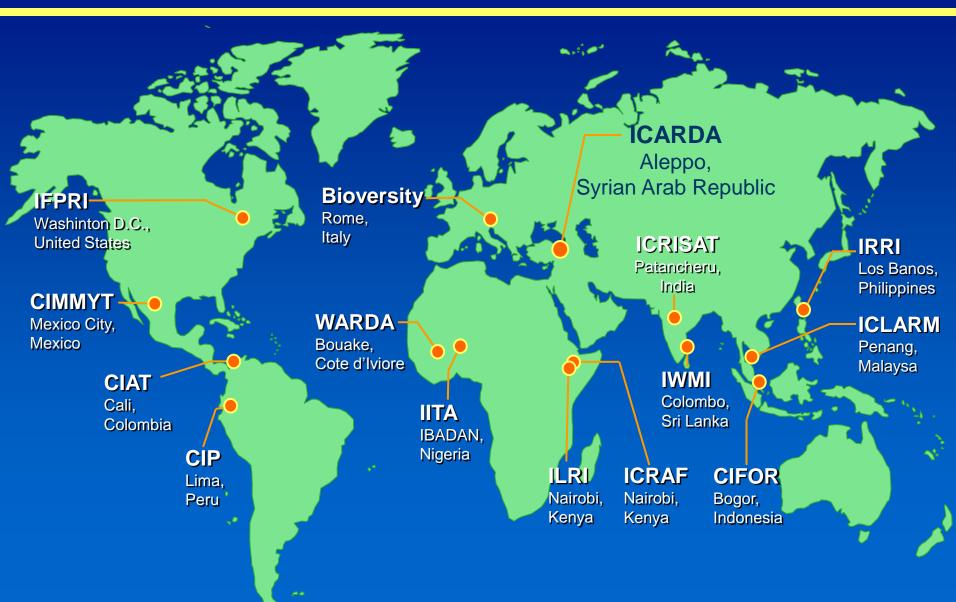


# International Perspectives on IPM: the CGIAR Experience

M. El Bouhssini and S. Lhaloui



#### The CGIAR Centers





#### IPM Sunn pest (ICARDA)

- National policies in West Asia changed: government-supported aerial sprays replaced with ground applications by farmers.
- · Revised ETs implemented, resulting in reduced pesticide use.







#### **Sunn pest IPM options**

- Cultural practices
- Hand collection of Sunn pest in overwintering sites



- Use of insect-killing fungi
- Enhancement and conservation of egg parasitoids







#### **IPM Hessian fly**

## In collaboration with INRA-Morocco, 3 bread wheat and 6 durum wheat Hessian fly resistant varieties released







#### IPM options for Hessian fly

- Early planting date
- Resistant varieties







#### Dissemination of IPM outputs

Working closely with extension services, NGO's, and farmers using participatory approaches such as Farmers Field Schools



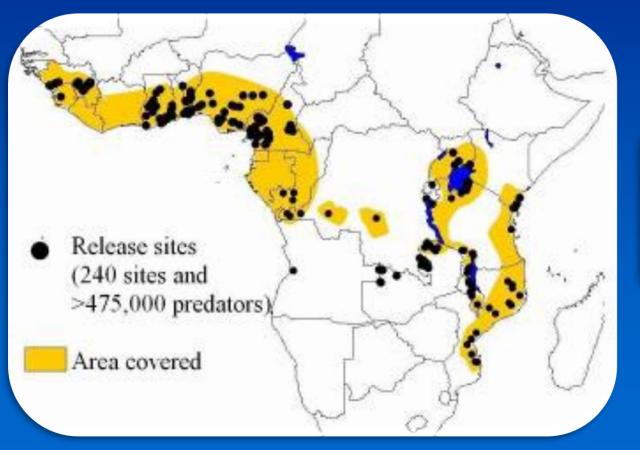




#### IPM at IITA

Biological control of Cassava mealy bug and cassava

green mite









#### Rice IPM (IRRI)

- Development of host plant resistance in high yielding varieties
- Economic threshold levels developed for all major rice pests
- Farmer education, farmer experimentation becomes cornerstone of IPM education







#### IPM Chickpea Pod borer (ICRISAT)

- Adult monitoring using pheromone traps
- Intercropping with coriander
- Use neem oil or neem seed extract
- NPV sprays
- Tolerant cultivars







#### Potato IPM (CIP)

Strategies	PTM complex		
	CPTM	APTM	GPTM
Cultural	++	++	+
<b>Biological control</b>			
<ul> <li>Inoculative (classical)</li> </ul>	++	-	++
- Bacteria ( <i>Bt</i> in storage)	+++	+++	+++
- Baculovirus (storage)	+++	-	++
Use of biorationals			
<ul><li>Pheromone (monitoring)</li></ul>	+++	+++	+++
Physical			
<ul> <li>Sticky traps</li> </ul>	-	-	-
Chemical	++	++	+

Efficacy:+++ high — not available; red = adoption reported



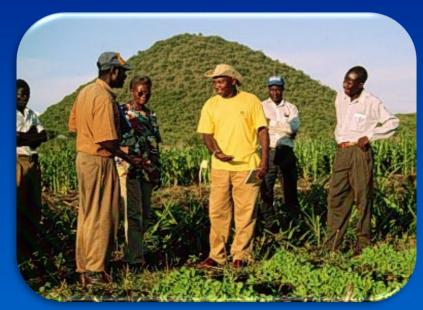
# CGIAR SP-IPM: Learning, application, dissemination

#### Field activities

- Pilot learning sites
- Mentored FPR/FPL exchanges for NARS/NGOs

#### www.spipm.cgiar.org

Technical innovation briefs
Research and field guides
Partnership news
Symposia/congresses (IAPPS/IPPC)
Project and expertise database



Remove disconnect between breakthrough and delivery



#### **Lessons Learned**

 Involve policy makers in priority setting and implementation

 ICPM: grow a healthy crop – most pest problems occur in fields with other problems (fertilizer imbalance, diseases, etc)

Support farmers to become IPM experts (FFS etc)









#### IPM hurdles

 Sustainability (little investment in agricultural R&D)





 Availability of IPM options (legislation for registering biopesticides, cost, seed systems)





#### IPM hurdles (Cont.)

 Illiteracy: difficult to increase awareness,
 IT-based methods ineffective

 Food safety regulations for local consumption: missing or not properly enforced







### Thank you

