

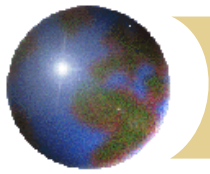
KENYA'S EXPERIENCE WITH USE OF IPPC TRAINING GUIDES AND MATERIALS

**By:
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**CPM 14 Side session on Plant Health and
Capacity Development on 1st April 2019
Rome, Italy, FAO HQ**

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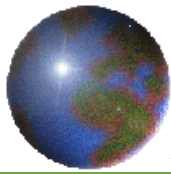




OUTLINE

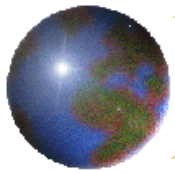
- ✚ Introduction including Kenya's geographical position and overview of agriculture
- ✚ Background of KEPHIS
- ✚ Kenya's Experience with use of IPPC training guides and materials including COPE.
- ✚ Examples on the use of guides and materials
- ✚ Training outcomes
- ✚ Observations/suggestions





Geo Location of Kenya on the world map

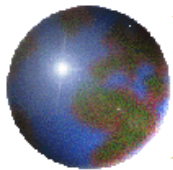




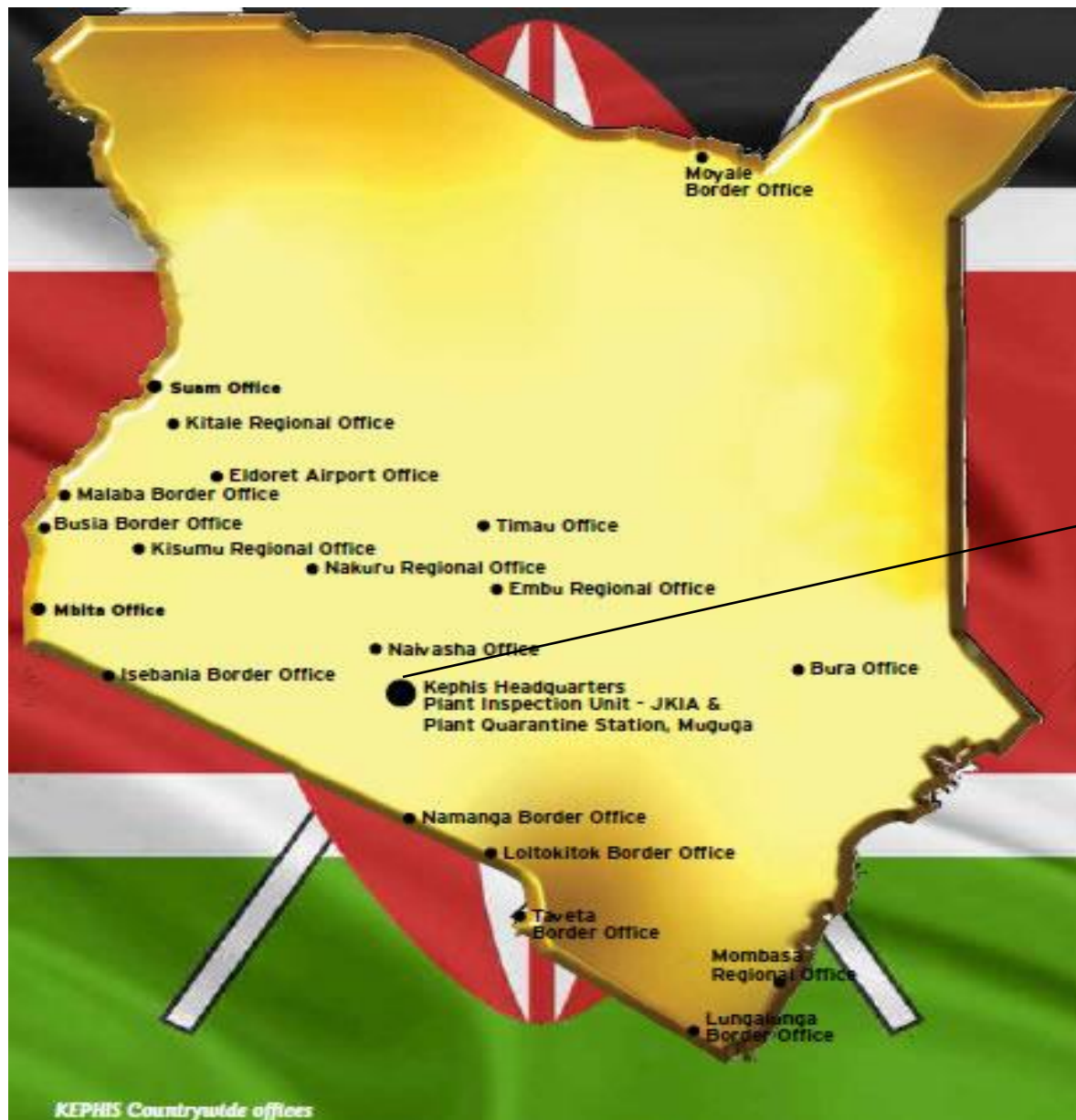
An Overview of Agriculture in Kenya

- ✿ The sector contributes 30 percent of GDP and supports an estimated 75% of the population either directly or indirectly; note that Kenya's agriculture is largely rain-fed.
- ✿ Agriculture sector accounts for 65 per cent of Kenya's total exports from mainly Tea, Coffee and Horticulture (Horticulture is 33 % of agricultural GDP).
- ✿ Kenya is a major exporter of horticultural produce especially to the EU (80 % of exports) with over 1 billion Euros earned mainly from the export of fruit (avocadoes), vegetables (French beans, runner beans, snow peas and Asian vegetables), flowers (roses), Spices and nuts.
- ✿ Kenya is expected to meet market requirements linked to SPS like issues of MRLs, Pests, Documentation and others.

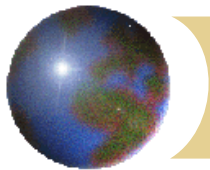




Location of KEPHIS- Kenya's NPPO



**Headquarter is
in Nairobi**

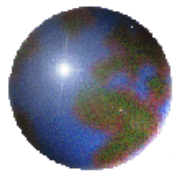


OVERVIEW OF KEPHIS

INTRODUCTION

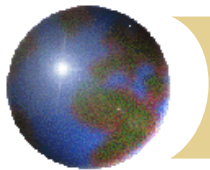
- ✿ Kenya Plant Health Inspectorate Service (KEPHIS) is a state corporation in the Ministry of Agriculture, Livestock, Fisheries and Irrigation mandated to offer regulatory services in the agricultural sector. KEPHIS is Kenya's NPPO.
- ✿ KEPHIS undertakes science-based **quality assurance services** of Agricultural Inputs and products in order to promote food security, Safe trade and sustainable development.
- ✿ KEPHIS was established in 1996 (Legal Notice No. 305 of 18th October 1996); it commenced operations in 1997 and currently operates under the KEPHIS Act No.54 of 2012.





KEPHIS CAMPUS AND LABS

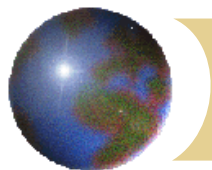




KEPHIS MANDATES

- ⦿ Regulate matters relating to **plant protection**.
- ⦿ Administer and enforce **sanitary and phytosanitary measures and plant quarantine control**.
- ⦿ **Inspection and grading** of plants and plant produce.
- ⦿ Support the administration and enforcement of **food safety measures** through KEPHIS ACL.
- ⦿ Implement and enforce **national biosafety regulations on the introduction and use of genetically modified organisms**.
- ⦿ Regulate the commercial exploitation of naturally occurring plants and plant-related **micro-organisms**.
- ⦿ Liaison office for international Plant protection conventions, plant variety protection and plant protection

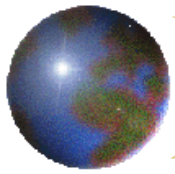




KENYA'S EXPERIENCE WITH IPPC

- As a big exporter of horticultural products and other products Kenya has incorporated ISPMs in its operations; ensuring Kenya's products are able to access various international markets.
- Many developing countries face difficulties in the implementation of the IPPC and associated standards leading to need for phytosanitary capacity building which Kenya has taken lead



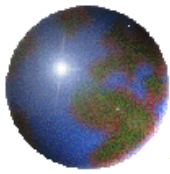


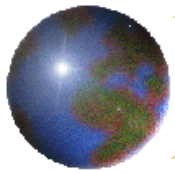
Use Of IPPC Training Guides And Materials

KEPHIS has used the IPPC training Guides for capacity building as follows:-

1. Development of COPE training curricula.
2. During COPE trainings in the following areas.
 - ❑ Pest risk analysis,
 - ❑ Diagnostic capacity and Certification.
3. Preparation of regional PRA
4. Phytosanitary capacity evaluation (PCE) .



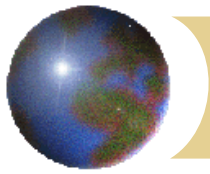




COPE

- The Centre of Phytosanitary Excellence (COPE) was launched in October 2010 and since then has trained 2,418 from Kenya, Malawi, Uganda, Tanzania, DRC, Rwanda, Burundi, Zambia, South Africa, Ethiopia, Swaziland, Zimbabwe, Ghana, Botswana, Nigeria, Lesotho, Somali and others.
- The objective of COPE is to
 - ❖ Enhance capacity of Africa's national Sanitary and Phytosanitary systems.
 - ❖ To protect national agriculture
 - ❖ Increase ability to compete in international markets by meeting market requirements.
- COPE is positioned to serve as a sub-regional virtual centre and is already recognized AU-IAPSC and COMESA having run specialized courses on their behalf.

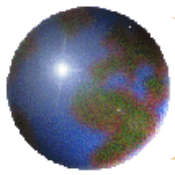




1. COPE CURRICULA

- ✚ COPE curricula has been reviewed in January 2019 (first developed in 2012) and offers courses including:
 - ▣ Introduction to international treaties, standards and regulations in phytosanitary systems.
 - ▣ Phytosanitary import and export certification Pest Risk Analysis.
 - ▣ Pest surveillance and diagnosis in phytosanitary systems.





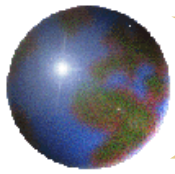
2. COPE TRAININGS

☙ Training of Botswana staff on pest and disease diagnostics and laboratory management from 6th -24th march 2017



☙ KEPHIS inspector demonstrating inspection of consignments at the border and also how to take moisture content on grain during Risk-Based Inspection and Other Phytosanitary Port Activities





EXAMPLES OF USE OF GUIDES

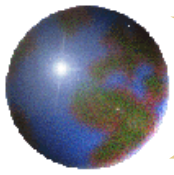
Use of **Training material on pest risk analysis based on IPPC standards.**

- PRA training presentations; Adoption of some slides during the side session at 1st phytosanitary conference held at KEPHIS headquarters on 12th September, 2016 among other trainings

Use of **Guide to Delivering Phytosanitary Diagnostic Services**

- Training and practice utilize different identification mechanisms including morphological, molecular, LAMP

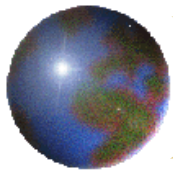




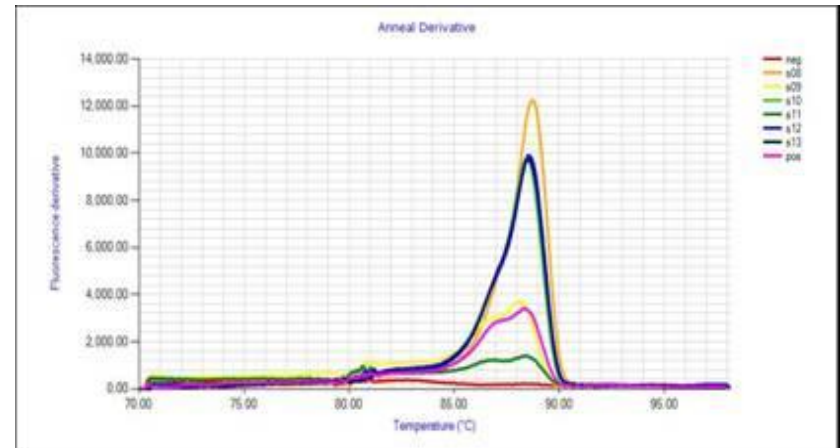
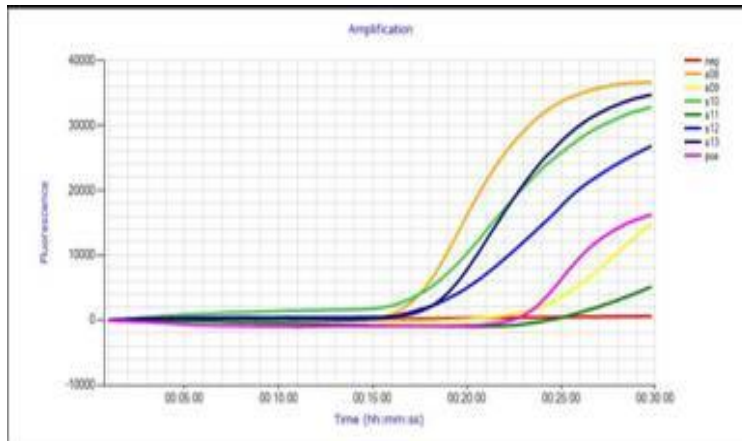
Diagnostics: Morphological identification during training on pest Identification

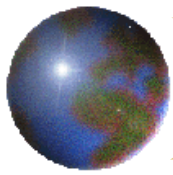


Fall army worm

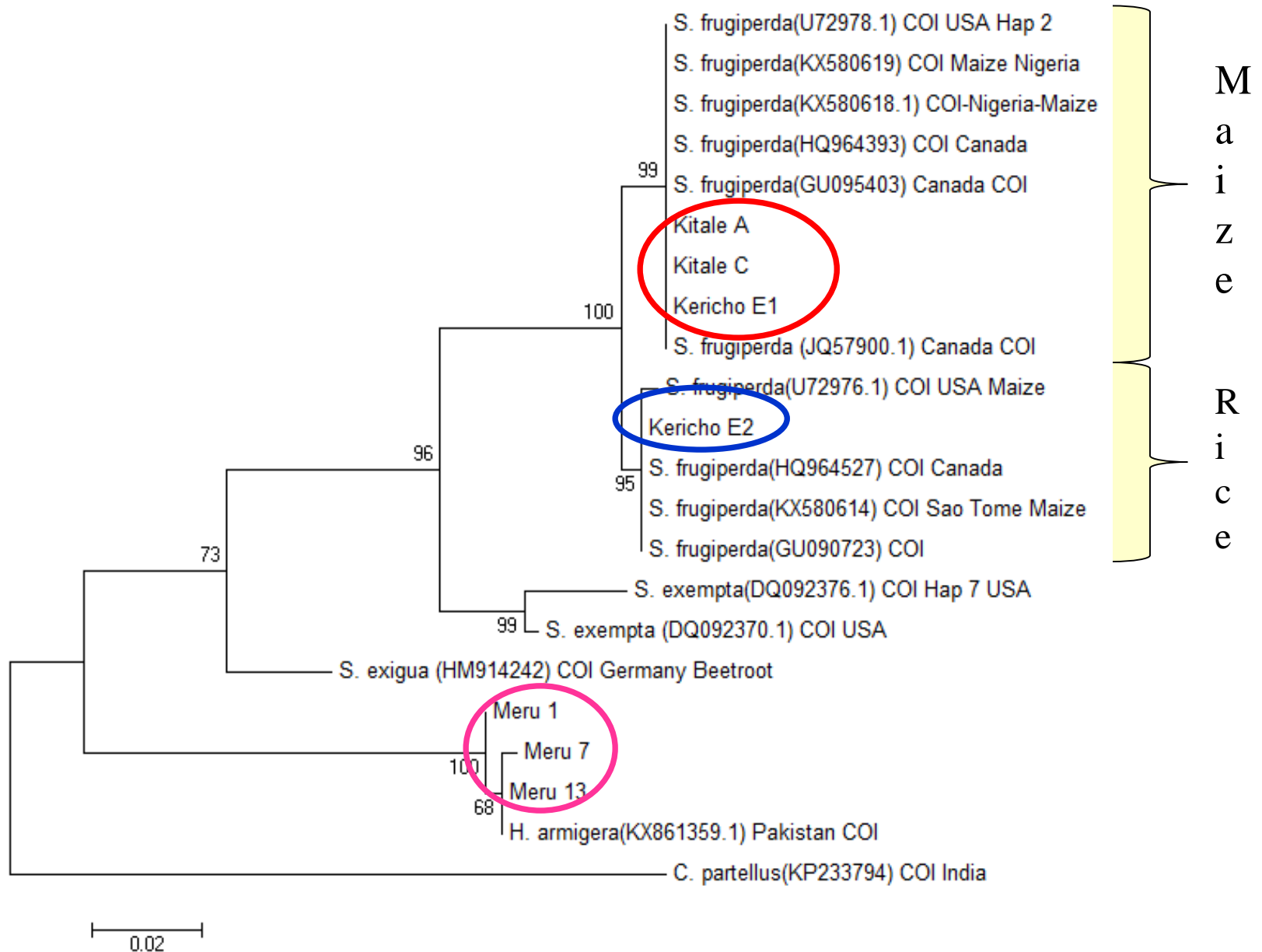


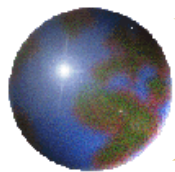
Use of Loop-mediated isothermal amplification (LAMP)



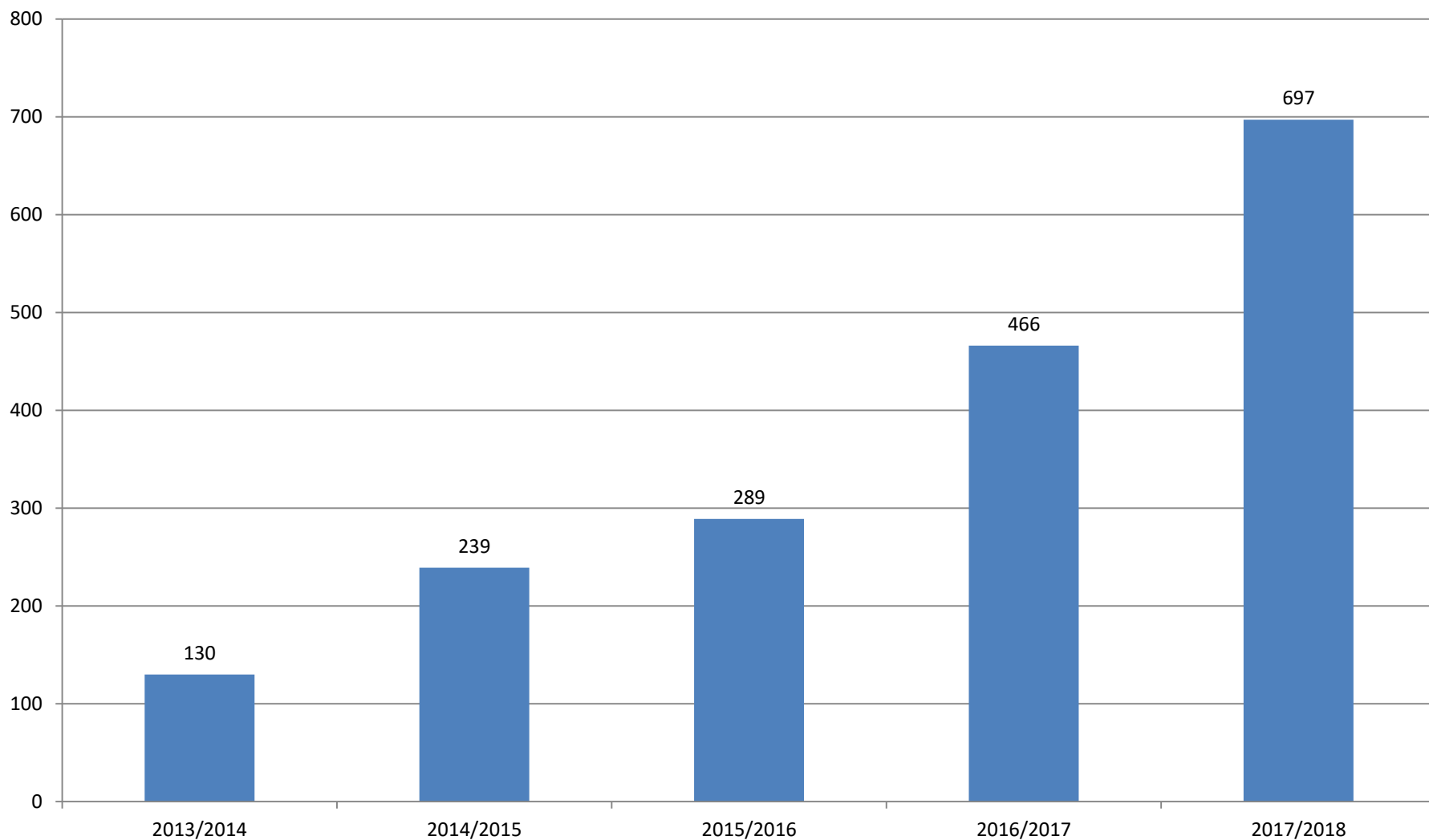


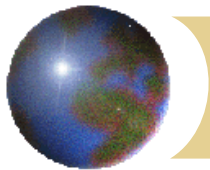
Molecular identification: Done using CO1 gene and sequencing





Trainees under COPE per year



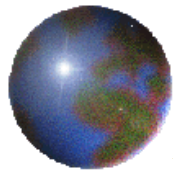


COPE TRAININGS

Over 87 courses offered to date on specific areas such as:

- ❖ Application of phytosanitary measures
- ❖ Capacity building on phytosanitary skills for increased regional trade
- ❖ Introduction to the IPPC and its international standards for phytosanitary measures (ISPMs)
- ❖ Phytosanitary inspection and certification systems
- ❖ Training on pest risk analysis (PRA) and pest surveillance in phytosanitary systems
- ❖ In-country training Burundi: " Training of Burundi NPPO on phytosanitary inspections and laboratory pest diagnosis"
- ❖ In-country training: "Training of Rwanda, Tanzania and Uganda NPPOs on phytosanitary inspections and compliance"
- ❖ Hands on training on Pest surveillance and Pest diagnostics for Burundi NPPO
- ❖ PRA training for Malawi, Zambia, Zimbabwe and Swaziland NPPOs.
- ❖ KEPHIS inspectors refresher course on pest identification and documentation
- ❖ Training on false codling moth identification for Kenya, Uganda and Tanzania inspectors
- ❖ Trainer of trainers training on COMESA seed systems, variety release system and phytosanitary issues in seed systems
- ❖ Training on risk based inspection and other phytosanitary port activities for EAC inspectors.
- ❖ Training for Botswana lab analysts on lab procedures and operations at KEPHIS Muguga

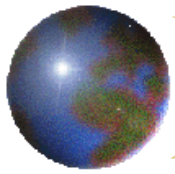




Training outcomes

- Networking
- Improved capacity to carry out pest surveillance, diagnostics, PRA, export certification and import controls.
- Understand risk and risk based application of phytosanitary measures.
- Understand concepts and procedure for undertaking PRA and implications for import regulation.
- Be able to use relevant software to strengthen decision making in PRA such as CLIMEX



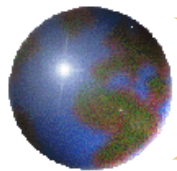


3. REGIONAL PRA

✚ Regional PRA for the following products have been done:-

- ✚ Maize
- ✚ Beans
- ✚ Rice

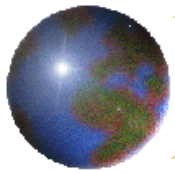




4. PHYTOSANITARY CAPACITY EVALUATION (PCE)

- ✚ Kenya has carried out the Phytosanitary capacity evaluation (PCE) with the assistance of the IPPC twice.
- ✚ This helped to identify gaps in the legal and operational framework within the institution.
- ✚ The process of implementation of the areas identified is on going.

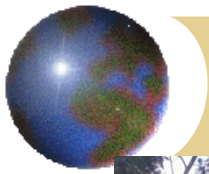




OBSERVATIONS/SUGGESTIONS

- ✿ The guides/presentations are very detailed and useful; adoption to suit various audiences is ideal.
- ✿ There may be need to undertake sensitization forums of all the NPPOs about the documents and their usage, for ensuring that the documents are widely utilized.
- ✿ Promotional messages to NPPO's on what is available
- ✿ There is need to create a process of ownership of these documents by all NPPOs.
- ✿ There is need for more contribution of resources to ensure sharing of practices which can be incorporated in the guides;





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