



THE ROLE OF PVP IN PROMOTING DEVELOPMENT OF CROP VARIETIES THAT ADAPT TO, AND MITIGATE, CLIMATE CHANGE – EXAMPLE OF KENYA”



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Introduction

- The Kenyan economy is largely dependent on agriculture for raw materials, food security, employment and general livelihoods.
- Climate change has resulted in increased temperatures, changes in seasonal trends and patterns.
- In recent years, Kenya has witnessed extended dry periods and rainfall outside the normal seasons.
- With the changing climatic conditions, the country has witnessed emergence of new pests and diseases such as maize Lethal Necrosis (MLN), Fall Army Worm (FAW) among others.
- It is therefore very important for breeders to develop varieties that are resilient to harsh agro-ecological conditions.



Plant Variety Protection in Kenya

- The office to administer the PVP was established in 1997 and has functioned under KEPHIS since 1998
- Kenya acceded to UPOV under the 1978 Convention in **13th May 1999**
- The Seeds and Plant Varieties Act was amended in **2012** to incorporate aspects of the 1991 Act of the UPOV.
- In **May 2016**, Kenya acceded to the 1991 Act of the UPOV Convention.
- Kenya grants PBRs for all plant genera and species

UPOV



Plant Variety Protection in Kenya

- Establishment of a PVP office and subsequent membership to UPOV, conferred the following advantages:
 - Readily available UPOV test guidelines for most of the Agricultural crops
 - Trained personnel through cooperation with UPOV and UPOV members on development of national test guidelines.
 - Collaboration and co operation between the breeders and the testing authority on variety description.
- KEPHIS engaged in sensitization of breeders to develop new varieties and benefit from the PVP system.
- This led to increased introduction of crop varieties



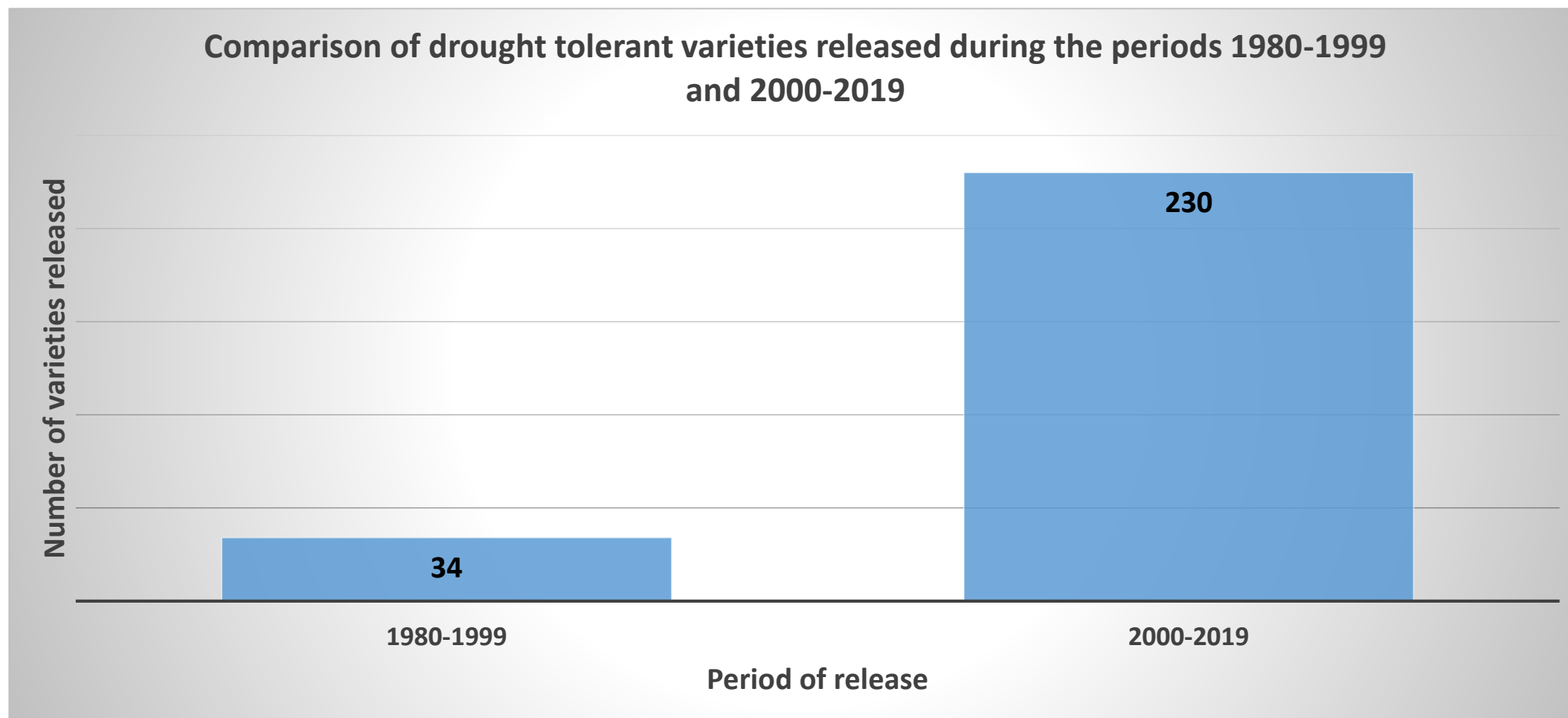
Development of Climate Smart Varieties

- During the last 10 years, breeders have embarked on development of drought tolerant varieties of maize, sweetpotato, cassava, sorghum, pigeon peas, amaranth, rangeland grasses among others.
- There are also efforts to release pest and disease tolerant varieties to counter emerging pests as a result of climate change.
- Sixteen (16) varieties tolerant to Maize Lethal Necrosis Disease (MLND) have been released,
- Varieties of Fall Army Worm (FAW) tolerant maize are under evaluation.





Development of Climate Smart Varieties

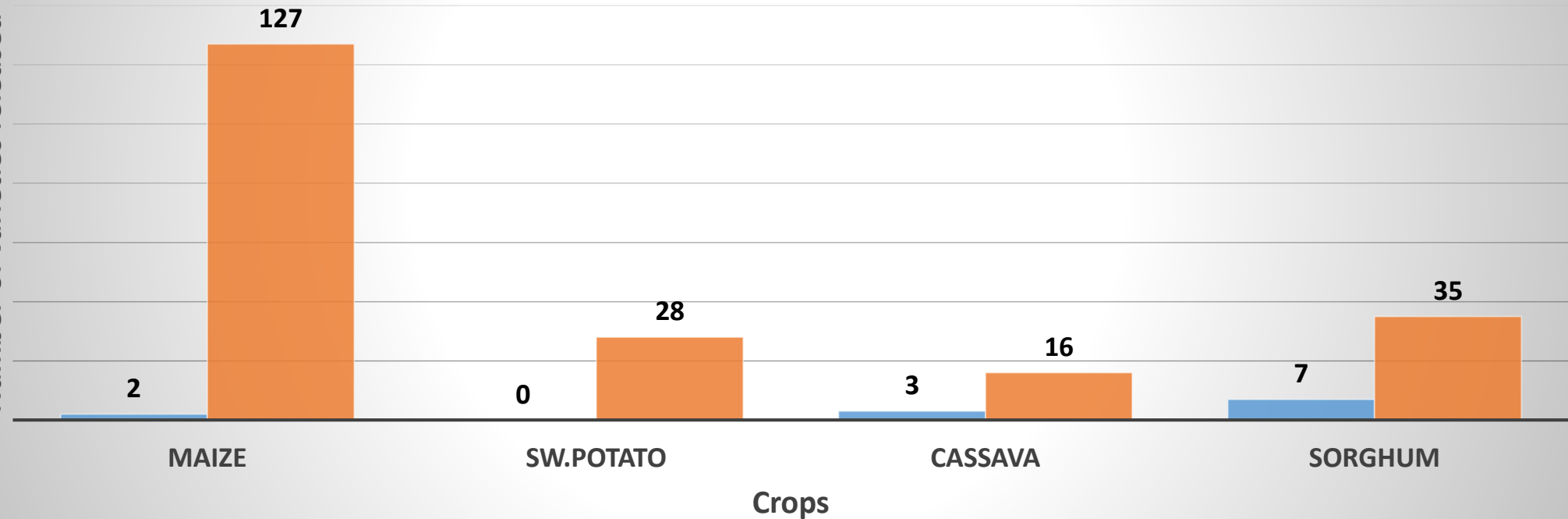




Development of Climate Smart Varieties

Comparison of drought tolerant varieties released during the periods 1980-1999 and 2000-2019

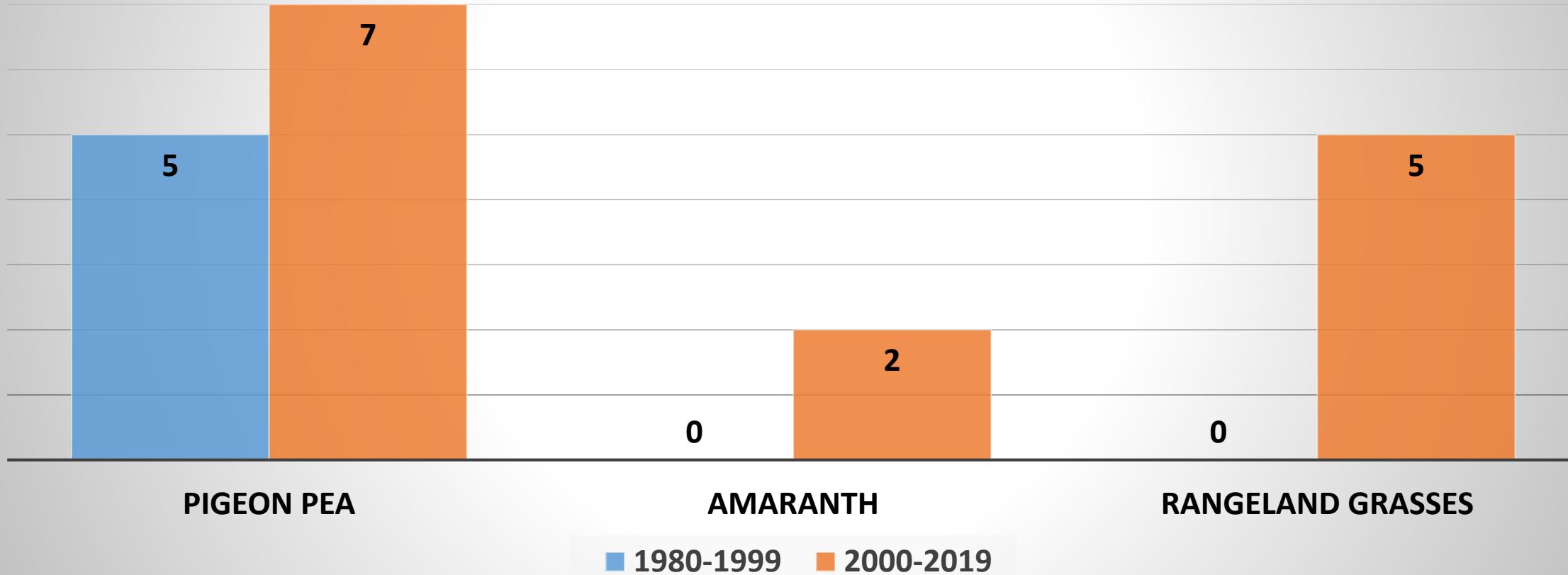
Number of varieties released





Development of Climate Smart Varieties

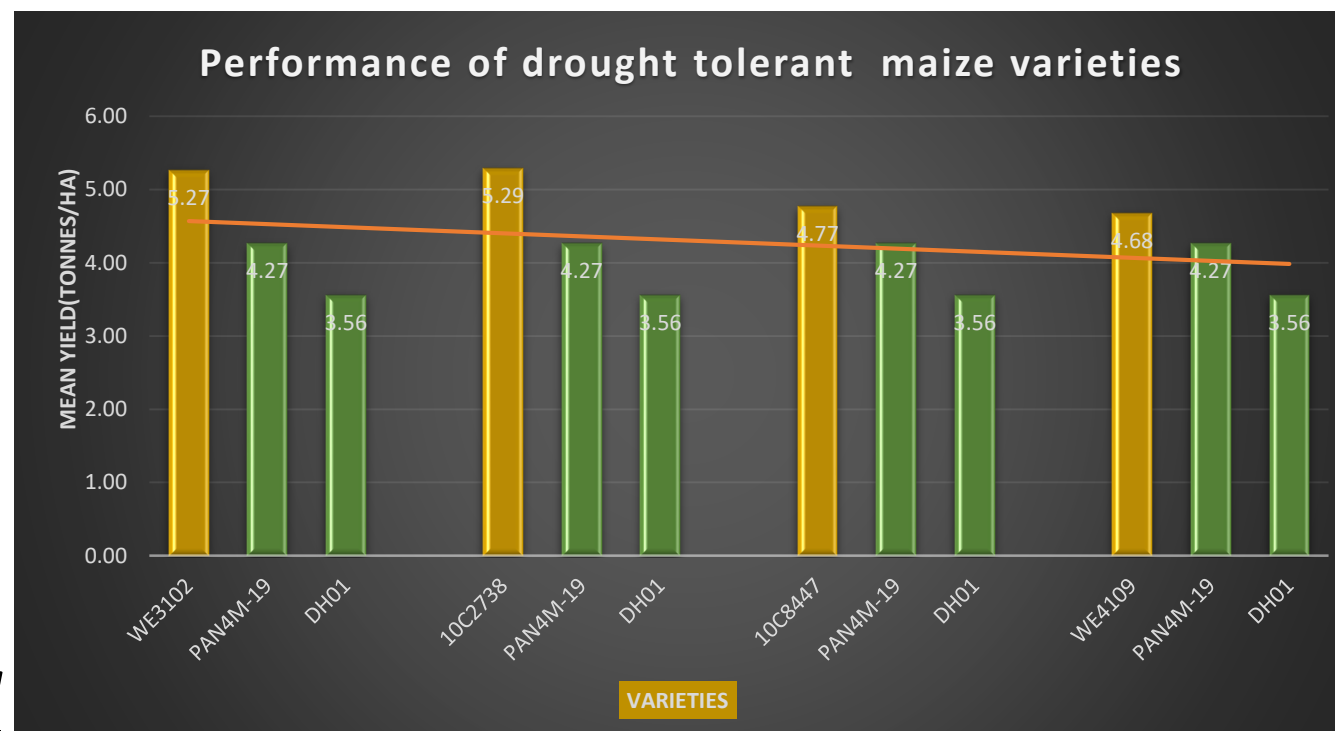
Comparison drought tolerant varieties released during the periods 1980-1999 and 2000-2019





Development of Climate Smart Varieties

Increased production through breeding of better yielding and drought tolerant varieties



Legend

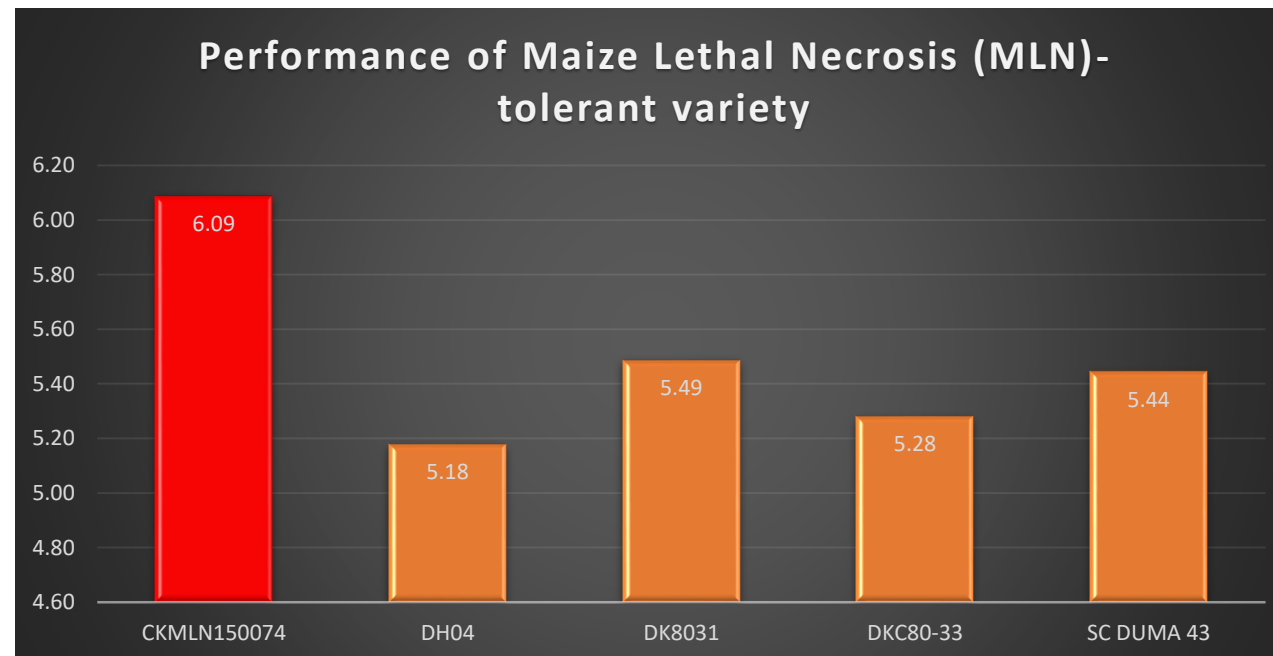
- New drought tolerant varieties
- Check Varieties

Source: KEPHIS VCU Data - 2017

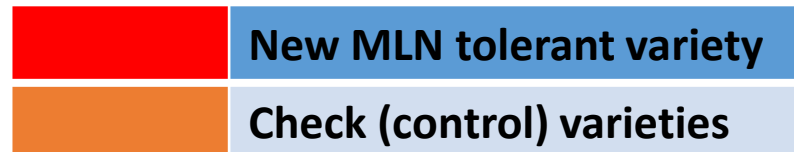


Development of Disease Tolerant Varieties: Food Security

- Development and release of MLN tolerant varieties thus improved yields



Legend:



Source: KEPHIS VCU Data;2015



Conclusion

- There is considerable development of climate resilient varieties following introduction of plant variety protection in Kenya.
- This has come as a result of:
 - Breeders having assurance on return of investment following development of new varieties.
 - Enhanced capacity for testing of new varieties through cooperation with UPOV and UPOV members.
 - Collaboration and co operation between the breeders and the testing authority on variety testing.



Thank you for your kind attention!



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