



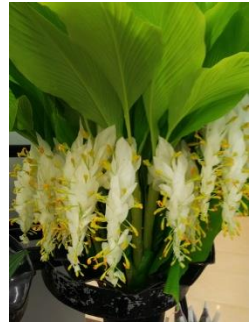
Current saturation of PVP system in Myanmar



Myat Thaint Ko and Moe Moe Hlaing



Contents



- **New variety development in Myanmar**
- **Current saturation of Plant Variety Protection in Myanmar**
- **Future Plan**



Ministry of Agriculture and Irrigation



1. Department of Agricultural Planning

2. Department of Agriculture(DOA)

3. Department of Agricultural Research (DAR)

4. Settlement and Land Records Department

5. Irrigation Department

6. Agricultural Mechanization Department

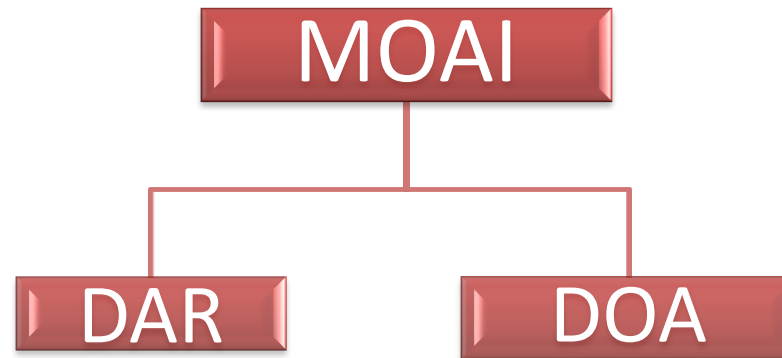
7. Water Resources Utilization Department

8. Myanmar Agricultural Development Bank

9. Yezin Agricultural University

10. Survey Department

Departments for Development of New Varieties and Seed Program



(Released 200 new varieties of different crops, multiplication of breeder seeds)

(Extension Division and Seed Division which are directly involved in the implementation of the seed program.)

Procedure for New Varieties Development in Myanmar

Hybridization and selection

Introduction

Indigenous selection

Mutation Breeding

Molecular Breeding

Observation on stable lines

Yield trial (at least 3 times)

Adaptability test (at least 2 times)

Farmers' field testing

Promising varieties by Technical subcommittee

National Seed Committee (NSC)

Nomination new varieties and producing

Seed multiplication

Genetic Resources in Myanmar



- **Seed Bank was established in 1990**
- **Collected accessions - 483**
- **Characterization, Evaluation (Rice) - 1095**
- **and Data management (Landrace) - 137**
- **(other) - 230**
- **Short term storage (10°C) - 12370**
- **Medium long term (-5°C) - 12130**

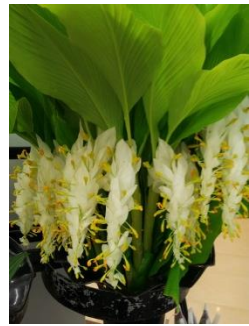


Current Status of PVP System in Myanmar



- Member of the East Asia PVP forum
- Not yet UPOV Membership
- PVP law was now submitted to Parliament for enactment in August 2015.
- The issue of PVP law in ASEAN member countries was discussed in Special Senior Officials Meeting of the 36th AMAF Meeting, Myanmar
- The meeting agreed that PVP harmonization process is still premature stage in ASEAN region.
- Myanmar has raised on the Seed Industry Development in Special SOM 36th AMAF meeting

Activities on Awareness of PVP system



- **Became a party to the Convention of Biodiversity in 1994**
- **Became a member of WTO in 1995**
- **Became aware of Intellectual Property Rights**
- **2004 – Participated to the UPOV-INGER Workshop**
- **2006 – Participated to conduct DUS test (INGER)**
- **2003 – at present – PVP related Trainings, Workshops, Seminars**

PVP System Establishment



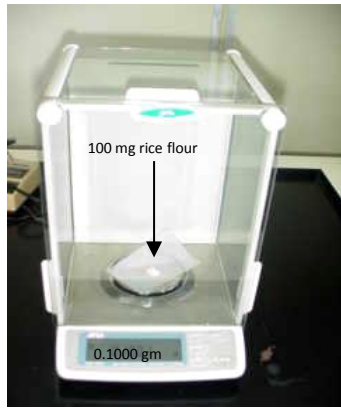
- preparation for PVP rules and regulation
- (Published the PVP law (draft) in the News Paper to get the suggestion from public at 11/7/2015)
- collection of reference varieties
- grow-out test of known varieties for reference varieties for data base
- making the DUS test guidelines

Development of National Test Guideline



- | | |
|---|--|
| Experimental site | - Biotechnology lab and field, DAR |
| Tested season | - Pre/ Post - monsoon seasons, 2015 |
| Tested varieties | - Rice, Sesame and Greengram |
| No. of tested varieties for each crops | - about 100-180 varieties |
| Collected data | - UPOV & EAPVP harmonized TG |

Testing Amylose content in Rice



95% Ethanol (1ml)
1N NaOH (9ml)

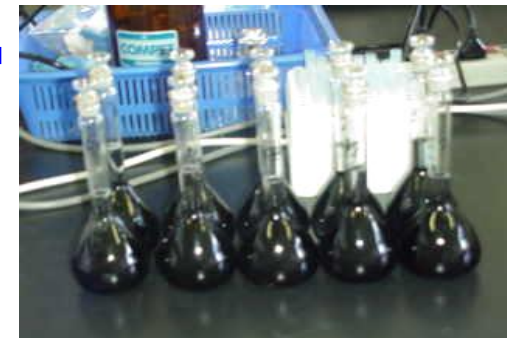


100ml volume
makeup



5ml+1NCH₃COOH
1ml+(I₂ KI) 2ml

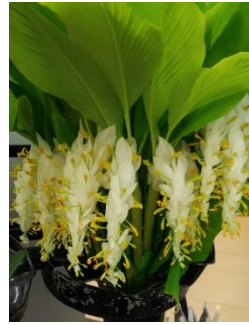
100ml volume
makeup



620 nm Spectrophotometer



Constraints



- **PVP system development**
- **Collection of reference varieties for main crop**
- **Trained person for DUS test**
- **Technical skills of PVP Administrative knowledge**

Future needs

- Infrastructure for PVP system development
 - - Technology
 - - Laboratory

Proposed plan

- Training (in-country, abroad)
- Technical and Administrative activities for development and harmonization of the PVP system
- TG harmonization for one new crop (Globba)

