

# Status of Quality Assurance in Sweetpotato Seed Systems in Rwanda



## SWEETPOTATO SEED STANDARDS

The harmonization, standardization and validation of seeds policies and regulations is a long multi-stakeholders process. Most of roots and tubers crops in Rwanda have not yet developed formal quality seed standards for reference. Since 2015, Rwanda sweetpotato program has undertaken under SASHA-2 project in collaboration with Rwanda Standard Board (RSB) by involving national and external resource persons and sweetpotato growers the development of the sweetpotato quality standard (QDS) for a successful farmer-based sweetpotato vine multiplication which aims at promoting commercialization of vine production of sweetpotato crop.

## Field inspection requirements

Seed producers paid a modest sum to seed inspectors.

1. A minimum of two (2) field inspections are done for pre-basic, basic and certified seeds and one inspection for Quality Declared Seeds.
2. The first field inspections is conducted to coincide with the time when diseases are most conspicuous, such as a month after planting when SPVD may be clearly identified and the last one 2 weeks before harvesting.
3. For QDS the inspection should be done in two (2) weeks before harvesting

Table 1: Field standards for sweet potato seed crops

Requirements	Pre-basic and Basic seeds	Certified seeds		Quality Declared Seeds
		C1	C2	
Previous cropping, number of season, min isolation, m, min	3/20	3/10	3/10	2
Off-types, %, max	0	1	1	2
<b>Diseases</b>				
Alternaria, %	0	2	5	5
Sweet potato viruses				
Leaf curl, %, max	0	0	0	5
chlorotic stunt viruse, %, max	0	2	3	5
Feathery mottle viruse, %, max	0	2	3	5
Black rot, %, max	0	0.1	0.1	0.5
Root-knot Nematodes %, max	0	0.5	0.5	1
Scurf, %, max	0	0.1	0.1	0.5
Erinose, (%)	0.1	0.5	0.5	1
Wilt, %, max	0	0.1	0.1	0.5
SSR-Pox <sup>2</sup>	0	5	5	10
Storage rot	0	0	0	0
<b>Pests</b>				
Sweetpotato weevils, (%)	5	5	5	10
Wireworms, %, max	1	5	5	10

## CAPACITY BUILDING & ROLL OUT STRATEGY

- Build skills and entrepreneurial capacity of DVM to ensure sustainable vines production using QDS standard
- Train DVMs and districts agronomists on importance of clean planting material.
- Train “ sweetpotato seed sub-inspectors” in provinces on sweetpotato QDS

## END USERS AND BENEFITS

Sweetpotato growers and DVMs are the most beneficiaries for the QDS standard.

## LEVEL OF USE OF SWEETPOTATO SEED STANDARDS

The sweetpotato proposed QDS is being used by Rwanda Agriculture Board and MINAGRI to assess and certify sweetpotato seed quality for selling at DVMs. Different DVMs have been mapped and registered as sweetpotato seed suppliers for season 2017B. Our proposed sweetpotato seed standard has been referenced or used by MINAGRI to certify and deliver sweetpotato vines to Burundi.

6 seed inspectors were trained to implement the QDS and 45 sweetpotato seed producers in seed standards. 12 DVM were registered by RAB during season 2017B



Photo 1: Tissue culture and Sweetpotato initiation at Rubona



Photo 2: DVMs with seed inspectors during QDS training

## CRITICAL GAPS, CONCERNS AND NEXT STEPS

- Ensure availability of high quality pre-basic seed for a commercial oriented production that encompass both formal and informal sweetpotato systems
- Stimulate sweetpotato seed demand from farmers & DVMs through various stakeholders meetings and promotional approaches.
- Use sweetpotato QDS and quality control measures including community based seed quality schemes to ensure production and distribution of clean planting material
- Promotion of improved high yielding and disease resistant sweetpotato varieties to attract seed buyers

## KEY PARTNERS FOR QUALITY ASSURANCE

RSB will prepare seed standard in compliance with Annex 3 of the WTO/TBT agreement on the preparation, adoption and application of standards. It will ratify its publication and gazettment as Rwanda Standards.

Sweetpotato seed growers will ascertain that they are in possession of the latest edition of seed standard

RAB will implement the seeds policies and regulations in order to match with technological development .

