

# PROGRESS ON SWEETPOTATO BREEDING IN MOZAMBIQUE

By  
Jose Ricardo, Maria  
Andrade & Wolfgang  
Gruneberg



# Objectives



- To breed sweetpotato (SP) tolerant to drought with good levels of Beta-carotene and good culinary qualities
- To test/evaluate, select, release and disseminate improved drought tolerant SP varieties for farmers in drought prone areas of Mozambique

# Most important landraces in Mozambique



Country/ Name of landrace	Root yield t/ha	Flesh color	Dry matter (%)	Earl	SPVD	Alt	Remarks
<b>Mozambique</b>							
Xipone	5.42	W	31.25	L	R	N/A	Parental CB
Xitsekele	6.85	Y	33.25	L	R	N/A	Parental CB
Mwamazambane	7.71	W	31.71	L	R	N/A	
Nhacutse4	5.21	W	30.05	L	R	N/A	
Canassumana	6.67	Y	31.95	L	R	N/A	
cincominutos	6.65	Y	33.12	E	R	N/A	
Ligodo	11.91	C	32.76	L	R	N/A	
Manhissane	5.99	W	32.34	L	R	N/A	
Xiadlaxakau	12.6	Y	32.04	L	R	N/A	Parental CB
Chulamete	7.04	Y	32.69	L	R	N/A	

Flesh color: White (w), cream (cr), yellow (y), light orange (lo), orange (o), deep

Earl (Earliness: Early (E) (about 4 months), late (L) about 5 or more months

SPVD resistance (r: resistant, s:susceptible)

Alt (Altenaria blight resistance, r: resistant, s: susceptible)

# Type of sweetpotato trials 2012/13



Type of trial		Details	2009	2012/13
<b>Crossing block</b>				
	1	No. of parents in crossing block	38	112
	2	No. of seed collected from OP	143,046	119,758
		a. Total no. of families of OP seed	258	116
	3	No. of seed collected from crosses	3,758	32,226
		a. Total no. of families of controlled crosses	72	352
<b>Seedling nursery</b>				
	1	No of seeds planted	24,694	19,500
	2	No of seedlings established	20,989	16,575
	3	Total no. of families planted	140	142

# Type of sweetpotato trials

## 2012/13



Type of trial		Details	2009	2012/13
<b>Observation trial</b>				
<b>(OT)</b>	1	No of clones planted	4558	5912
	2	No of checks (check clones) planted	3	3
	3	No. of locations	4	3
<b>Preliminary yield (PT)</b>				
	1	No of clones planted	1016	891
	2	No of checks (check clones) planted	3	3
	3	No. of locations	4	3

# Type of sweetpotato trials 2012/13



Type of trial	Details	2009	2012/13
<b>Advanced yield trial (AT)</b>			
	1 No of clones planted	254	509
	2 No of checks (check clones) planted	3	3
	3 No. of locations	4	3
<b>Multication trials (UNT)</b>			
	1 No of clones planted	128	108
	2 No of checks (check clones) planted	3	3
	3 No. of locations	4	3

# Type of sweetpotato trials 2012/13



Type of trial	Details	2009	2012/13
<b>On-farm trials</b>			
1	No of farms/farmers/region/district / province	16	0
2	Total no. of trials whole country	64	0
<b>No of varieties released</b>		0	0
<b>No. of clones in pipeline for realease by e.g. Oct. 2013</b>			96

# Other Project Information



## 1. Fund Source/\$/duration

- SASHA
- AGRA, \$185.000 3 years

## 2. Number of personal= 9

## Constraints

- Floods, Drought, Supplies

## 3. Proposed Future Activities

- Re-establishment of trials in Chokwe, establishment of multi-location & on-farm trials for variety release in 2014





Thanks for listening