

Report on testing *Panicum maximum* conditions in Kenya

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Introduction

From a wide range of *Panicum* accessions at CIAT genebank 17 accessions were selected based on literature and glasshouse physiological study in Colombia and sent to Kenya for further evaluation and validation. From the national research partner Kenya Agricultural and Livestock Research Organization (KALRO) 3 more accessions from their germplasm pool were added to the 17 to make 20 lines. Figure 1 summarizes the process to utilize *Panicum* accessions to broaden forage-scaling basket.

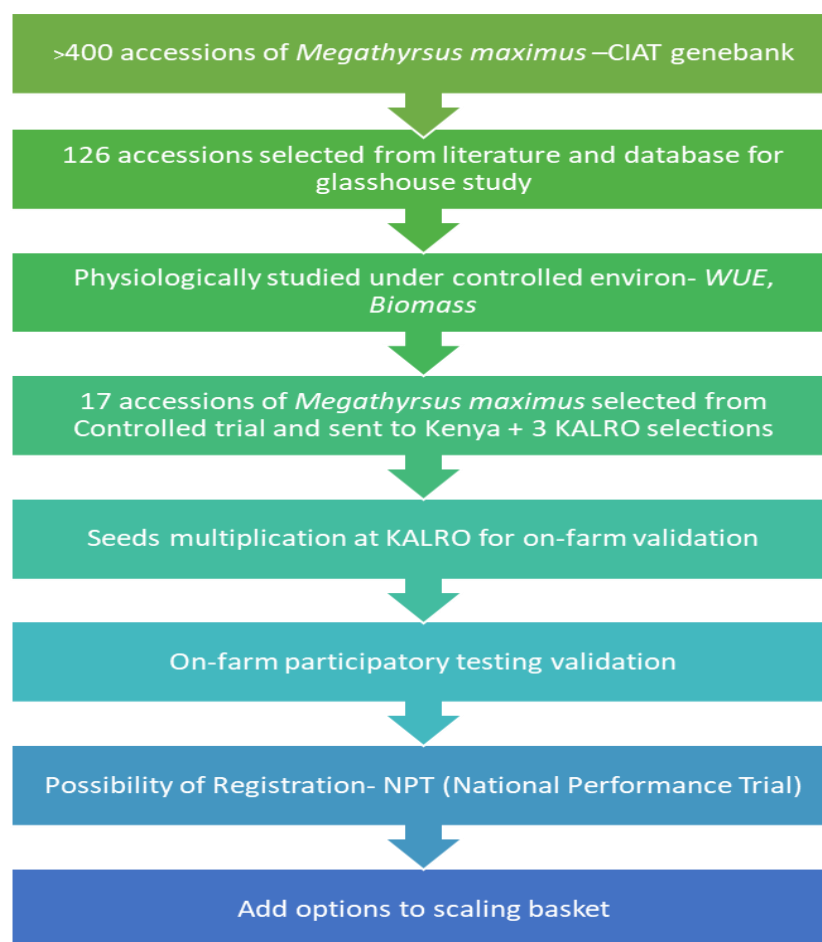


Figure 1. Chronology of *Panicum* selection and evaluation plan

Progress

The twenty selected are now part of scientist-led evaluation and of a replicated trial at KALRO-Kakamega. Just before harvest, farmers will perform participatory scoring to identify how well the accessions suit their criteria. We shall establish under on-farm conditions at farmers' farms in Siaya and Busia counties - contrasting environments (dry and wet). Three checks are included throughout the validation process namely Maasai, Tanzania and Mombasa. As performance of the Panicum grasses is outstanding, especially in terms of biomass production and upright growth, KALRO plans to subject the 2-3 most-preferred accessions to National Performance Trials and officially register them. This presents a plausible chance for private sector participation in Panicum seed production and sale, and expansion of the basket of forage varieties for widespread scaling.

Key data attributes

Relevant data related to the forages include; Plant Height, Number of leaves, leave size, number of tillers, Dry Matter yield, stem to leaf ratio. Laboratory quality parameters include; crude protein level, digestibility, neutral detergent fiber and Acid detergent Fiber

Next activities

- Plant second replicated trial in Busia and Siaya
- Continue data collection on station
- Participatory evaluation by farmers on station
- Advance 2 or 3 best accessions to National Performance Trail (NPT) and Distinct, Uniformity and Stability (DUS) evaluation



The panicums at KALRO Station- Kakamega



A promising accession



First line quite leafy and thus a promising and potential candidate for NPT



Harvesting seeds that enabled establishing replicated on station trial