

## molecular purity test of seed

**Project Title:** P1263 - Design and implement participatory methods in breeding in SSA

**Description of the innovation:** The method is based on preparation of a seed extract containing particular seed isoenzymes in a suitable extraction fluid and separation of the so extracted seed isoenzymes using isoelectric focusing at a suitable pH gradient formed by ampholytes, where after the so separated isoenzymes are conventionally colored and visually detected. The so obtained electrophoretic pattern is used to assess the genetic purity of maize hybrid varieties.

**New Innovation:** No

**Stage of innovation:** Stage 3: available/ ready for uptake (AV)

**Innovation type:** Research and Communication Methodologies and Tools

**Geographic Scope:** Regional

**Number of individual improved lines/varieties:** <Not Applicable>

**Region:**

- Eastern Africa

**Description of Stage reached:** The objective of introducing molecular seed quality test to the seed companies is to increase the awareness about the importance of quality seed for seed business and increasing productivity of maize in Africa.

**Name of lead organization/entity to take innovation to this stage:** <Not Defined>

**Names of top five contributing organizations/entities to this stage:**

- KALRO - Kenya Agricultural and Livestock Research Organization
- NARO - National Agricultural Research Organisation (Uganda)

**Milestones:** No milestones associated

**Sub-IDs:**

**Contributing Centers/PPA partners:**

**Evidence link:**

- www.not available

**Deliverables associated:**

- D6769 - Increased uptake of improved maize varieties for deployment by seed companies (**Not disseminated**)
- D6662 - test of Two separate on-farm trials, early-intermediate (12 entries) and intermediate-late (24 entries) (**Not disseminated**)

**Contributing CRPs/Platforms:**

- Maize - Maize