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NEW CROP VARIETIES TO NOURISH THE SEMI-ARID ZONES OF CENTRAL TANZANIA

The issue

- Farmers in the semi-arid zone of central Tanzania face food shortages due to frequent droughts
- Lack of seed of improved and resilient crop varieties

Approach

- Advanced improved genetic materials were tested cross three sub agro-ecologies for adaptability from 2013-2018
- Both farmer and market preferred traits were validated in 2 districts of Dodoma, and one of Manyara regions

Achievements

Sorghum-IESV 23010-DL

- High yielding medium duration variety, tolerant to drought and Grey leaf spot, rust and head smut
- *Yield: >60% yield advantage over the local check (Lugugu)*
  -Kongwa: high potential:-2570kg/ha; Low potential zone-1750
  -Kiteto: 1750kg/ha

Groundnut-Kongwa 724

- Medium duration groundnut with yield potential and tolerant to Rosette Disease
- *Yield: >40% yield advantage over the local check*
  -Kongwa: 2250kg/ha; Kiteto: 1580kg/ha

Pigeon pea-Ilonga M2

- Medium duration variety tolerant to drought
- *Yield: >30% yield advantage over the local check*
  -Kongwa: high potential-1850kg/ha; low potential-1600kg/ha
  -Kiteto: 1560kg/ha

Pearl millet- IP 8774

- Early duration high yielding variety tolerant to drought
- *Yield: >80% yield advantage over the local check*
  -Low potential zone-Kongwa/Iringa-1900kg/ha

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