Kenya Agricultural & Livestock Research Organization

Katumbani 80 (K80) (straw coloured pods) (Cowpeas)

Climatic requirements
- K80 is a dual-purpose, M66 spontaneous mutant variety and may still mutate to other forms
- It is suitable for both grain and leaf production
- It has a semi-spreading habit and indeterminate flowering pattern
- Leaves are lancelate with a distinctive silvery midrib
- The flowers are purple blue and the corollas are pigmented ivory white
- Immature pods are green and turn white brown with interspersed faint red brown spots at maturity
- Seeds are smooth and creamy brown in colour with a small eye
- Potential yields range from 800-1800kg/ha or 320-720 kg/acre
- It is resistant to aphids, moderately tolerant to thrips, pod borers and leafhopper
- Moderately tolerant to foliar fungal diseases and mosaic virus
- K80 may mutate to various forms during the growing period

Recommended zones
Katumbani 80 is recommended for drier agro-ecological zones IV and V or areas below 1500m above sea level receiving an average of 200mm rainfall per season.

Management/Breeding Practices

Land preparation
The field should be well prepared without big soil clods and have a fine fitth. Hand, oxen plough, tractor can be used for ploughing.

Time of planting: Early planting is recommended but not before 30mm of rainfall is received. Spatial planting is also recommended.

Seed rate: 20-25kg/ha (8-10kg per acre)
Number of plant/hill: Sow 3-4 seeds/hill and thin 2 weeks after emergence to one seedling per hole.
Depth of planting: Seed should be placed between 4-5cm deep and covered properly.
Spacing: Machakos 66, Katumbani 80 and KVU 27-1: The distance between rows is 60cm and between plants 20cm. KVU 419: The distance between rows is 50cm and between plants 20cm.
Intercrop: Maize: 150cm X 30 cm, 2 rows, 120cm X 30cm, 1 row Sorghum: 150cm X 15cm, 2 rows

Fertilizer
Cowpeas require nitrogen and phosphate fertilizer application. However, where the soils are highly eroded and very deficient in these nutrients, a basal dose of 10-15kg/ha of nitrogen and 20-25kg/ha of single or triple super phosphate fertilizers may be broadcasted. Cowpeas not pod if a lot of nitrogen is applied and remains very leafy.

Weeding
The first weeding should be done two weeks after emergence and the second one must be done before flowering.

Crop Protection
Insect pests:
Before flowering aphids, thrips, leafhoppers
After flowering - aphids, pod borers, pod sucking bug, apion beetle
During storage - Bruchids.

Chemical control
Aphids: Thiodan, Duduthrin, Karate or Sherpa plus
Thrips: Sherpa plus, Karate, and Duduthrin
Leafhoppers: Thiodan
Pod borers: Thiodan, Sherpa plus, Decis, Thiodan
Pod sucking bugs: Dimethoate, Sherpa plus, and Karate
Apion beetle: Super Actellic

Harvesting and storage
Time of harvesting - harvest when all the pods have turned brown and are dropping. Weevils are major storage pests.
To store, dust the grain with super actellic (50g per bag) or with neem tree leaves or treat with wood-ash (4-6 kg of ash per bag). The grains should be well dried before being stored.