



## **DROUGHT TOLERANT BEAN**

### **KAT B1**

It has a determinate plant with an average height of 35-40cm

Has light pink flowers

Flowers within 30-31 days - Matures in 60-65 days

Seeds are round, have a black hilum and greenish pericarp, which changes to cream/straw with age.

Potential yield ranges from 1400-1900 kg/ha or 7-9 bags/acre

Grains taste sweet and less flatulence

Tolerant to rust (*Uromyces* sp.), common bean mosaic virus (CBMV), angular leaf spot and bacterial blight

Highly tolerant to heat and grows well under tree/banana shades

### **TARGET AREAS OF PRODUCTION**

KAT B 1 performs well in areas between 900-1600m above sea level, but at elevations higher than 1600m above sea level, angular leaf spot and halo blight may seriously affect its yields. KAT B1 does not do well in areas with high rainfall. .

### **Crop Management**

#### **Land preparation**

The field should be well prepared without big soil clods and have a fine filth. Hoes, oxen plough and tractors can be used for ploughing.

**Time of planting:** Sow at the onset of the rains after a minimum of 30mm of rainfall has been received.

**Method of planting:** When using oxen plough for planting, place the seed at the side of the furrow.

**Seed rate:** 10-15kg/ha (4-6kg/acre)

**Number of plants per hill:** Sow at least 2 seeds per hill

**Depth of planting:** Plant at a depth of 4-5cm

**Sole cropping spacing:** The distance between rows is 45cm and 20cm between plants.

**Fertilizer**

DAP fertilizer should be applied at the rate of 1 bag/ha (50kg/ha) or about half a bag (25kg) per acre during planting. If applied in furrows or planting holes, mix the fertilizer and the soil thoroughly before covering the seed.

**Weeding**

The first weeding should be done within 10 days after emergence and the second one by 21<sup>st</sup> day. You can also use BEAN CLEAN HERBICIDE when beans are at 3 leaf stage.

**Foliar Feed**

10 days after germination- Macro mix eg WUXAL

20 days after germination- Macro mix eg WUXAL

30 days after germination/ flowering stage- To reduce flower abortion use a Boron rich foliar feed eg Vitabo, Tecamin.

**Crop Protection**

Insect pests include:

- i). Bean fly - usually observed at seedling stage
- ii). Black ban aphid - common during cool dry periods
- iii). Bean leafhopper - found during vegetative stages
- iv). Bean weevil - common during storage
- v). Pod borers

**Diseases**

Diseases include powdery mildew and yellow mosaic virus.

Powdery mildew is prevalent during the long rains whereas yellow mosaic occurs in both seasons.

Major diseases include: i). Anthracnose ii). Angular leaf spot iii). Charcoal rot iv). Bean common mosaic virus v). Halo blight vi). Rust

**Control**

Use copper oxychloride as recommended by manufacturer.

Rotating bean fields with cereals is recommended.

**Insect Pests**

Include beanfly, black aphid and leafhopper.

**Control**

Being early maturing, KAT B1 escapes attack by these insects.

Use insecticides for control.

Rogue affected plants early.

Do not use the same insecticide all the time repeatedly to avoid creating resistance in insects.

**Harvesting**

Harvest when all pods turn brown and hard.

**Storage**

Weevils are major storage pests.

The grain should be dried well before storage because grains that are not well dried are prone to weevil attack.

To store, use Hermetic bags or dust the grain with any recommended chemical grain dust or with neem tree leaves or treat with wood-ash (4-6 kg of ash per bag).

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**15<sup>th</sup> April 2020.**