BEST FARMER PRACTICES

BEANS/BIJANJAALO/EBIHIMBA/OSU

Inputi

04 BEANS

REQUIREMENTS

Beans thrive more in fertile well drained soils with moderate to light rains during the latter part of the growing season.

1. LAND PREPARATION

It involves bush clearing, removal of tree stumps, termite mounds and ploughing.

It should begin at least three weeks before planting to allow breakdown of organic matter

Compost or manure should be applied at a rate of 2 to 4 tons per acre during the first cultivation to allow for adequate decomposition.

2. PLANTING

It should be done at the onset of rains

Spacing is dependent on the varieties. For bush beans like Nabe 4, Nabe 15, use a spacing 50 by 10cm with one seed per hole or a spacing of 50cm by 20cm with two seeds per hole. For climbing beans, use a spacing

The ideal plant depth for beans is 5cm and the seed rate is 25-30 kg of seed per acre.

DAP can be applied during planting at a rate of 50kg per acre. One bottle cup should be applied per hole.

3. WEED CONTROL

Early control of weeds at **2-3 weeks** after planting is recommended since the root system of the beans develops at this stage

4. STAKING

Climbing beans grow vertically and thus need support which helps the plants to grow faster and healthier. It is thus key to stake the beans 2 weeks after planting when the tendrils start forming.

PESTS

CUT WORMS

MANAGEMENT

- Early planting
- Hand pick and destroy larvae
- During primary tillage, dig the soil to expose the larvae to predators
- Apply recommended insecticides like ***Striker***

PESTS

APHIDS

MANAGEMENT

- Early planting
- Use azadirachtin containing bio pesticides like neem extracts from seeds, leaves
- Constant monitoring for easy management.
- Spray with synthetic pesticides like ***Striker***

PESTS

FLOWER THRIPS

MANAGEMENT

Early planting

Fertility management to improve plant vigor

Use insecticides like ***Striker.***

DISEASE

COMMON BLIGHT

It survives in the seed but may also be carried over in diseased debris

MANAGEMENT

Use healthy seeds from credible sources
Practice crop rotation
Spray with mancozeb fungicides like ***Indofil***, ***Oshothane*** among others
Remove infected plants from the field as soon as they are detected

DISEASES

DISEASE

BEAN COMMON MOSAIC VIRUS

The virus may be transmitted by insects like aphids or through the seed

MANAGEMENT

Use certified seeds

Rogue any infected plants with the virus

Practice crop rotation

DISEASE

BEAN RUST

It spreads mainly by wind and to a less extend by farm animals, insects and implements

MANAGEMENT

Pant tolerant varieties

Practice crop rotation

Destroy infected plants

Timely application of fungicides

HARVESTING & POST HARVEST HANDLING

- Harvesting

  Beans attain physiological maturity after 58 - 120 days after planting depending on the variety grown

- Post harvest handling
  - The activities here happen after harvesting and they include transportation, drying, threshing, cleaning packaging and storage.
  - Stores should regularly be checked for signs of water leakage, floor cracks and crevices, signs of damage on bags, leakage of grains on the floor, presence of live insects and any forms of contamination.
  - Storage pests like pyralid moths can be managed through the use of fumigants like phosphine, iodoform among others.

Photo Credit: Fred Springborn, MSU Extension