

Package and Practices



Potato

Diseases

Early/Late blight

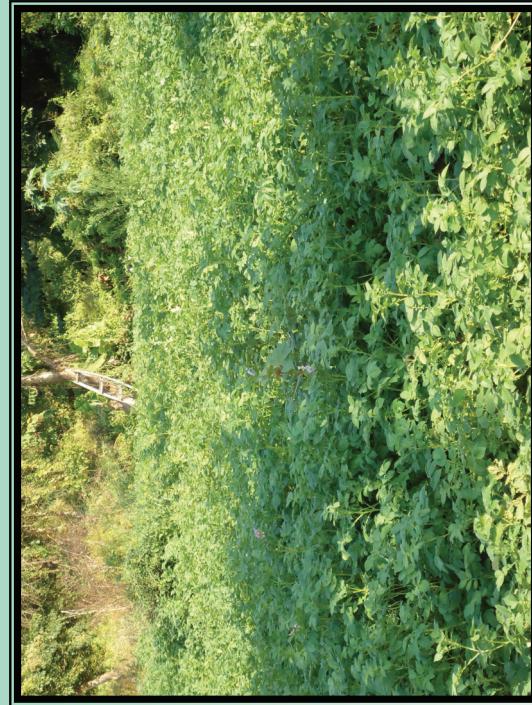
Symptoms: Decaying leaves often emit an offensive odour. Under ground tubers decay before harvesting.

Management:

- i. Plant disease free whole tubers
- ii. Follow crop rotation with non solanaceous crop like Mustard, cabbage, cauliflower etc.
- iii. Seed treatment with Mancozeb for 20 minutes before storages for soil and tuber borne diseases.
- iv. Grow resistant varieties For late blight: Kufri Jyoti, Kufri Megha, Kufri Giriraj, Kufri Kanchan
- v. Sort out late blight infected tubers damage tubers to avoid secondary infection in the store



- ii. Plant disease free whole tubers
- iii. Prepare high ridges to avoid exposure of seed tubers
- iv. Collect and destroy larvae, pupae and adults of white grubs.



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Potato is the most important tuber crop grown in Arunachal Pradesh

Virus free, healthy, medium sized sprouted tubers are to be selected for planting. Ideal size is about 2.5 cm in diameter (25-40 g).

| Name | Dura-tion (days) | Yield (q/ha) Rainfed | Plant characters | Tuber Character | Tolerance to disease |
|---------------------|------------------|----------------------|-------------------|---|------------------------------------|
| Kufri Chandra Mukhi | 80-100 | 85 - 100 | Medium tall erect | Oval shaped slightly curved, skin colour white, eyes flat | Leaf roll and virus |
| Kufri Jyoti | 110-120 | 85-100 | Tall erect | Oval shaped, Flat skin white, eyes flat, flesh dull white | Late blight tolerant |
| Kufri Sindhuri | 110-120 | 120-150 | | Round shaped, skin light, red eyes, flesh pale yellow and sticky. | Moderately tolerant to Late blight |
| Kufri Megha | 100-120 | 175 - 200 | | White round oval tubers of medium size, good keeping quality | Late blight resistant |

Soil Type: Well drained sandy loam and loam soils, rich in organic matters are suitable.

Field Preparation: Field should be thoroughly ploughed to obtain a good tilth. The furrows should be prepared at 50 cm apart.

Time of planting: The optimum time for planting is mid October to Mid November. In case of Kufri Sindhuri planting may be extended upto middle of December.

Method of planting: The sprouted tubers should be planted in furrows with sprouts facing upward. In handling the tubers, care should be taken to avoid sprout damage.

Seed Selection:

- Summer deep ploughing

Seed Treatment:

In case of cut seeds, the pieces are to be dipped in Mancozeb (Dithane M 45) @ 5 g in 1 Litre of water for about 10 minutes. After treatment seeds are to be spread thinly and dried under shade for 48 hours.

Seed Rate:

The seed requirement is 22.5-25 q/ha. Tubers are to be placed at 15 cm apart.

Fertility Management:

The tones or 5 truck loads or 20 cart loads of well decomposed FYM/ha should be applied in the furrows before planting.

| | Nutrient requirement (kg/ha) | From | Fertilizer (kg/ha) | Requirement (kg/bigha) |
|-------------------------------|------------------------------|------|--------------------|------------------------|
| N | 60 | Urea | 133 | 19 |
| P ₂ O ₅ | 50 | SSP | 312 | 45 |
| K ₂ O | 50 | MOP | 83 | 12 |

Entire quantity of mixed fertilizers should be applied in furrows as basal application and be covered with a thin layer of soils so that tubers do not come into direct contact with the fertilizers.

Insect Pests

Aphid

Symptoms: Yellowish and black mould appear in leaves.

Management: Apply phorate @ 1 kg/ha as application/earthing up followed by one spray of Rogor 750ml/ha/750lit. of water.

Cut worm

Symptoms: Cutting young plants, holes in tubers

Management:

- Sort out cut worm damage tubers to avoid secondary infection in the stores.
- Use Chlorpyrifos 20 EC @ 500g/ha against cut worms.

White grubs

Symptoms: Feeding on roots, stems and tubers of potato, resulting drying and death of plant

Management:

- Summer deep ploughing

