

Potato

Intercultural Operations

Weed Control

The potato crop develops canopy in about 4 weeks after planting and weeds must be controlled by this time to gain competitive advantage for the crop. If the weeds are large, they should be removed before the ridging operations begin. After earthing up the weeds between the growing plants and at the top of the ridge should be removed by mechanical or herbicide application. Weeding can be done manually however it is expensive. Hence, animal drawn three-tine cultivator is used which can cover one hectare per day. Alternatively pre-emergence spraying of weedicides such as Fluchloralin (0.70-1.0 kg a.i./ha) or Pendimethalin (0.50 kg/ha) is recommended for controlling annual grass weeds and broad leaf weeds.

Earthing up

The main object of earthing up is to keep the soil loose and destroy weeds. Two or three earthing up should be done at an interval of 15-20 days. The first earthing-up should be done when the plants are about 15-25 cm high. The second earthing up is often done to cover up the tubers properly. Use of double mould board plough ridger or 3 and 5 row tractor drawn culti-ridger can accomplish the earthing up operation very well.

Crop rotation

The cropping sequence recommended is as follows-

| Area | Crop rotation sequence |
|-------------------------|--|
| Bihar | Potato-Mung- Paddy Potato-Mung-Groundnut |
| Punjab | Potato-Wheat-Maize Potato-Wheat-Paddy Potato-Wheat-Green manure crop |
| Assam | Potato-Mung-Paddy(Transplanted) |
| Gujarat & Uttar Pradesh | Potato-Bajra-Groundnut |
| Madhya Pradesh | Potato-Okra-Soybean |

Intercropping

Potato being a short duration and fast growing crop is an ideal for intercropping with other crops. It can be successfully intercropped with sugarcane, as the cultural operations and resources used in both the crops are mutually complimentary. The potato-fennel and potato-onion intercropping in Haryana; potato-mustard and potato-linseed in Uttar Pradesh; and potato-wheat intercropping in Bihar are some of the profitable crop combinations.