Proper hilling to improve potato yields

Importance of hilling

- Proper hilling is key for good yields, along with quality seed
- To get most out of investment in seed, proper hilling is required

Potato tubers form from stems which grow underground (called stolons). When these stolons remain covered with soil, they develop into tubers. Stolons not well-covered with soil will develop into stems, meaning reduced yield as they will not form tubers.

What is hilling

Hilling is mounding earth around potato plants when they are young to ensure stolons produce tubers rather than more above-ground stems.

Advantages of hilling

Hilling is one of the crucial agronomic practices for good yield in terms of tuber quantity and quality.

- Hilling loosens the soil allowing plants to produce many tubers of good size and shape
- Hilling reduces exposure of tubers to sunlight which turns the tubers green. Green tubers are NOT to be eaten because they are poisonous.
- Hilling reduces exposure of tubers to pests such as potato tuber moth that can cause damage to potato tubers in storage.
- Hilling assists to manage weeds and provides good time to apply fertilizer top-dressing.
When to do hilling

Two hillings are recommended for a potato crop in a season.

• First hilling should take place 2 weeks after germination or when the plant has 3-5 leaves, about 10-15 cm high.
• Second hilling to take place 2-3 weeks after the first hilling when plants have grown another 10-15 cm.
• It is important to do good land preparation to ensure enough soil is available to hill properly.
• Land preparation should target ploughing to a depth of 30 cm deep to have enough loose soil to be used later for hilling.
• When hilling, take care to avoid damaging the roots and stolons.

How to do hilling

Proper spacing at planting is key for good hilling later on. Plant rows 70-75 cm apart and place tubers 30 cm apart within a row.

Hilling should be done by loosening the soil around the potato plants. Pile the soil around the plants to almost cover the plant.

• The height of the ridges after the first hilling up should be around 15 cm – just covering the plant.
• For the second hilling, remove soil from between the ridges and pile it up around the plants.
• The height of the ridges after the second hilling should be about 30 cm.
• The width of the ridge that forms after hilling should be 30-35 cm.

Contact

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