

PRODUCE YOUR OWN SEED POTATOES

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Annual import bill for seed potatoes exceeds Rs.50 million. A part of this money could be retained in the country, if you produce your own requirements of seed. Do not enrich farmers in other countries. We should enrich ourselves.

In cultivating potatoes, expenditure on seed is 60% of total cost of production or over Rs.10,000/= for an acre. Your seed cost could be reduced by 50% if you produce your own seed i.e. you will be saving Rs. 5,000/= an acre if you use your own seed.

It has become extremely difficult to import seed potatoes due to various reasons (very high prices, spoilage in transit, difficulties in obtaining popular varieties, non-availability of seed in other countries during certain periods etc.) Therefore it is imperative that you produce your own seed.

Advantages of producing your own seed potato:

Timely planting, better preparation of seed is possible when you produce your own seed potatoes.

Seed Potatoes:

Seed potatoes are disease free potatoes capable of germinating and producing a healthy crop. Seed potatoes can be of any size, chats, medium or large or even damaged ones, provided they are disease free.

How to produce seed potatoes:

1. Start with healthy basic planting materials.
2. Use well sprouted seed potatoes of uniform grade.
3. Raise the crop under complete protection from aphids by spraying systemic insecticides.
4. Always use good and fertile land not infested with diseases like Bacterial Wilt - for seed production.

5. Plant potatoes only once in two years on land utilised for seed production. Adopt a crop rotation practice.
6. Rogue off types and diseased plants, at least three times during the growing period - (i) after complete germination, (ii) after earthing up, (iii) when the crop is about 2½ months old.
7. Remove the haulms just before the aphid population reaches the critical level, i.e. 20 aphids for 100 compound leaves.
8. Lift the crop after 12-15 days of haulm - cutting.

Curing:

1. Dry and heap the potatoes for 5-8 days after harvesting for skin curing. Avoid extensive handling of tubers just after harvesting.

Grading:

1. Grade the potatoes. Remove all the diseased tubers, damaged tubers and tubers that are not normal. Do not discard small tubers but keep them separately. They can be planted for table crops.
2. Dust the seed with 5% B.H.C. dust or other suitable chemical and store in a place where there is a lot of ventilation and diffused light. Inspect occasionally for tuber rot etc. Store seed in wooden boxes or spread on floor. Always allow sufficient ventilation.
3. When the dormancy breaks (after 3-3½ months) transfer the seeds into trays so that the tubers could get enough light and ventilation. This enables them to produce green healthy sprouts. If the seed trays are kept in the dark after dormancy breaks, they produce weak thin, long sprouts that break easily. If seed trays are not available seed can be spread on the floor.

Transporting sprouted seed.

1. When transporting sprouted seed into the field for planting transport them in the trays to avoid breaking of sprouts. If the sprouts break it takes another 15-20 days for the tuber to develop new sprouts.

Control these diseases in the field:

1. Mild Mosaics, are transmitted by contact. Infected plants are stunted. Yield reductions upto 10% have been recorded. Rogue diseased plants.
2. Severe Mosaics: These mosaics are transmitted by aphids. Infected plants must be rogued. Yield depression upto 50% have been recorded in severely infected crops. Control aphids with systemic insecticides.
3. Yellow group of viruses: These are not very important to our country.

Diseases:

1. The most important fungal diseases attacking the potato crop are Late Blight, Rhizoctonia and Scab. Use recommended fungicides against Late Blight and early Blight. Disinfect seed against Rhizoctonia and Scab. Avoid heavy liming as it can increase the incident of scab.

2. Important Bacterial diseases affecting the potato crop are Bacterial Wilt and Black Leg. There is no cure for Bacterial Wilt.

Do not use infected tubers as seed. Good sanitation is very essential. Disinfect implements regularly. Follow a very good rotation.

The bacteria causing Black Leg disease cannot survive in the soil for a long period. This disease usually comes with the seed. Good rotation is sufficient to control this disease.

In conclusion:

1. If disease free potatoes can be produced by the farmers they are suitable as seed potatoes.
2. Disease free large potatoes can be cut and planted. Please see leaflets on preparation of cut seed potatoes.
3. Please contact the Agricultural Extension Officer of your area or the Division of Farms and Planting Materials, Department of Agriculture, Peradeniya, for further details.