

Safe Fertilisers – Crop Info

ΡΟΤΑΤΟ

Solanum tuberosum Origin: Peru and Mexico Edible Portion: Tuberous root

SOWING AND PLANTING

Climatic Requirements: Cool growing season, plentiful moisture supply and cool nights of 15.0°C and below for tuber initiation. Vegetative parts are frost-tender.

Preferred Soil Type: Well structured, well drained, fertile, friable loam.

Seed Required: 30g seed approx. 900kg/ha, 50g seed approx. 1,500kg/ha.

Optimum Monthly Average Air Temperature Range for Growth: 15.5-18.5°C.

Emergence Time: Optimum 12 days.

Plant Spacing: In-row 25.0-30.0cm, between rows 90.0-105.0cm.

Planting Depth: 12.5-15.0cm.

Plants per Hectare: 31,700-44,400.

Method of Propagation: Tubers are set out in situ with commercial potato planters. Tubers can be sprouted prior to planting but caution is advised as some potato planters are unable to handle long sprouts without removing them.

Planting Dates: Early crops (frost-free areas) – June to August. Main crops – Late October to early November.

Other Sowing and Planting Information: A storage temperature of 15.5°C for 10-14 days prior to planting will help to initiate sprouting and encourage faster emergence.

FERTILISER

Optimum Soil Test Levels: N = 100-150, P = 35-65, K = 12-20, Mg = 20-30, Ca = 8-15, Na = 1-10. **Base Dressing (kg/ha):** Early crops N = 55.0, P = 45.0, K = 45.0. Main crops N = 75.0, P = 40.0, K = 45.0. The base dressing is applied at planting as a banded application to one side and below the seed tubers.

Side Dressing (kg/ha): Early crops N = 55.0. Main crops N = 40.0. Side dressing are applied prior to the final moulding of the crop. If pre-emergence weed control is used and a full moulding is given soon after planting the side dressing nitrogen should be included with the base dressing.

Foliar Feed: This can be useful for the stimulation of tuber growth.

Optimum pH Range: 5.0-6.0.

Lime Requirement: Lime is seldom required for potato crops. Potatoes are acid tolerant and potato scab disease thrives at higher soil pH levels. To reduce the potential of scab infection, on lighter soils the pH should be between 5.0-5.2 and on heavier soils where scab is a lesser problem a pH of 5.5-6.0 can be tolerated. Potatoes grown for market can be grown at the lower pH levels whereas potatoes grown for chipping should be grown on soils at the higher end of the pH scale.

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PESTS AND DISEASES

Important Pests and Their Control:

<u>Alphids</u> – acephate, demeton-S-methyl, dimethoate, disulfoton, endosulfan, methamidophos, parathion-methyl, phorate, pirimicarb <u>Potato cyst nematode</u> – fenamiphos <u>Potato tuber moth</u> – acephate, azinphos-methyl, carbaryl, cyfluthrin, deltamethrin, endosulfan, lambdacypermethrin, methamidophos, parathion-methyl <u>Wireworm</u> – phorate

Important Diseases and Their Control:

<u>Black scurf</u> – fenpiclonil, imazalil/pencycuron, pencycuron, tolclofos-methyl <u>Dry rot</u> – thiabendazole <u>Early blight</u> – benalaxyl/mancozeb, captan, chlorothalonil, copper oxychloride, cupric hydroxide, dimethomorph/mancozeb, mancozeb, mancozeb/metalaxyl, propineb <u>Gangrene</u> – thiabendazole <u>Late blight</u> – benalazyl/mancozeb, captan, chlorothalonil, chlorothalonil/thiophanate-methyl, copper oxychloride, cuprous hydroxide, dimethomorph/mancozeb, fluazinam, mancozeb, mancozeb/metalaxyl, propineb <u>Powdery scab</u> – fluazinam <u>Sclerotinia rot</u> – fluazinam <u>Silver scurf</u> – fenpiclonil <u>Stem canker</u> – imazalil/pencycuron, pencycuron, tolclofos-methyl Viruses – clean seed, control of aphids





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Ground preparation:

Apply; 1 tonne/ha Lime **or** Liquid Lime @ 40lt/ha in 300lt/water (**Optional**;8m³ Feedlot Manure/ ha) Or Alroc No 3 @ 200kg/ha

Pre Plant

Apply 60 Kg/Ha Safe Coated Urea (optional this can be fitted in as Side dressing) Apply 350 Kg/Ha NPK Supablend Apply 10lt /ha Vital Activator(This is to lift the carbon level in soil, the energy)

Liquid Injection; Apply 20lt/ ha Vital Phos in suitable water application at planting

InCrop Fertiliser requirements:

Weekly topup;

4lt Vital Mix mixed into 200lt water/ha sprayed weekly

Side dressing

Nitrogen & Potassium Apply 60 Kg/Ha Safe Coated Urea with potassium being checked regularly.

Multi Nutrients:

5lt/ Ha Vital K Blast in 200lt water as flowering starts 5Lt/Ha Vital Calcium. (As Flowering Finishes)

The above mentioned application rates can be adjusted to what is economical. These adjustments may not provide the ideal nutrient ratios but should replace some of the nutrients that are removed by the crop. A Program should always be followed with soil and leaf testing and adjusted to suit your soil

Neville Janke

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Disclaimer

The above program will be affected by soil variation, testing errors, seasonal factors and management skills. Any recommendation should be acted upon as part of an ongoing fertiliser program. No responsibility can be accepted for any of the above matters or other matters that are beyond our control.

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