Safe Fertilisers – Crop Info

CARROT

Daucus carota* var. *sativus
Origin: Mediterranean area
Edible Portion: Whole root

SOWING AND PLANTING

Climatic Requirements: Carrots prefer cool season growing conditions with optimum growing temperatures of 15-20°C. Plant foliage can be injured by frosts >-1.5°C but not the roots.
Preferred Soil Type: Well structured, free draining alluvial soils, sands, peats and heavier volcanic soils with good moisture holding capacity.
Seed Required: Precision seeding (coated seed) – 1.0-1.5kg/ha. Conventional seeding (uncoated seed) – 2.0-5.0kg/ha. Baby carrots (precision seeding) – 2.5-5.0kg/ha.
Optimum Soil Temperature Range for Germination: 7.0-20.0°C.
Emergence Time: 6-17 days, optimum – 8 days.
Plant Spacing: Conventional seeding – In-row 2.5-7.5cm, between rows 15.0-30.0cm, rows per bed 4-8, bed spacing 1.2-1.5m. Baby carrots – In-row 2.0-3.0cm, between rows 10.0-12.0cm, rows per bed 8-12, bed spacing 1.2-1.5m.
Plants per Hectare: Conventional seeding – Approx 800,000. Baby carrots – Approx 3,000,000.
Method of Propagation: Sown directly in situ with gang seeders, either standard or precision. The seeding rate adjusted to eliminate any need for later thinning of the crop.
Sowing Dates: All types – Early spring harvest March to May; main crop August to November; late crop December to January.

FERTILISER

Optimum Soil Test Levels: N = 100-150, P = 45-75, K = 12-15, Mg = 20-30, Ca = 10-15, Na = 1-10.
Base Dressing (kg/ha): All soils except alluvial – N = 100.0, P = 45.0, K = 135.0. Alluvial soils – N = 75.0, P = 75.0, K = 75.0. Base fertiliser applications are made prior to sowing and well mixed into the soil to avoid forking the roots.
Note: Higher rates of phosphorus may be required on high phosphate fixing soils.
Side Dressing (kg/ha): Not normally applied.
Optimum pH Range: 5.8-6.8
Lime Requirement: Better crops are produced from the higher pH levels and lime may be required to raise the pH.
Micronutrient Requirements: Copper and boron deficiency can occur on mineral soils. Copper deficiency can result in a poor orange colour and skin discolouration of the roots. Copper deficiency can be corrected by applying copper sulphate at 50kg/ha and boron with an application of borax at 20kg/ha. Boron, copper and molybdenum can be deficient on peat soils. Always identify the deficiency before making micro-nutrient applications.

PESTS AND DISEASES

Important Pests and Their Control:
Aphids – dimethoate, disulfoton, phorate.
Carrot rust fly – diazinon, disulfoton, phorate, furathiocarb, oxamyl.
Manuka beetle larvae – isazophos.
Root knot nematodes – fenamiphos.

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Carrot Program

Ground preparation:
Apply; 1 tonne/ha Lime **or** Liquid Lime @ 20lt/ha in 300lt/water

Pre Plant
Apply 100 Kg/Ha Alroc Extra Phos
Apply 10lt/ha Vital Phos, Boom spray with 200lt/ha water

At Planting
Option 1; Apply 350 Kg/Ha NPK 9.5.7 Supablend
With 8lt Vital Phos in 200lt water Boom sprayed onto soil before planting
Option 2; Apply 300kg/ha NPK 15.3.8 Supablend
With 8lt Vital phos in 200lt water Boom sprayed onto soil before planting

In Crop Fertiliser requirements:

Nitrogen:
Safe Coated Urea @ 80kg/ha
Alroc CBM @ 150kg/ha side dressed

Multi Nutrients:
2 x applications of Vital Mix@ 8lt/ha in 200lt water
This can be folia sprayed, aerial applied or put through an irrigation system.

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.

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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.