Safe Fertilisers – Crop Info



CELERY

Apium graveolens var. *dulce* Origin: England and Temperate Europe Edible Portion: Leaves and stalks

SOWING AND PLANTING

Climatic Requirements: Celery requires a long cool growing season with a good and uniform supply of rainfall or irrigation. The crop is frost hardy to light frosts only.

Preferred Soil Type: Well drained, deep, high in organic matter and well cultivated soil. The crop grows well in peat soils provided there is adequate water supply.

Seed Required: 150-250g/ha for raising transplants.

Optimum Soil Temperature Range for Germination: 15.5-21.0°C.

Emergence Time: 9-26 days, optimum 14 days.

Plant Spacing: In-row 20.0-30.0cm, between rows 20.0-30.0cm, rows per bed 6-7, between bed centres 1.5-2.0m. Normally grown in beds.

Plants per Hectare: 75,000-150,000.

Method of Propagation: Transplants are normally raised from seed under glass and set out in the field when 15-20cm in height. In some cases open frames outdoor are used for transplant production. The transplants should be grown on in the nursery using a temperature range of 18-24°C. Night temperatures should be kept above 13°C to minimise the production of bolting plants.

Sowing Dates: September to January.

Planting Out Dates: Late October to March.

Other Sowing and Planting Information: Seed used should be either hot-water of fungicide treated to prevent the transfer of septoria leaf spot.

FERTILISER

Suitable Soil Nutrient Conditions: Celery has a high nitrogen requirement throughout its growing season. Adequate calcium is required in the soil to avoid the deficiency problem of "black heart". Added organic matter will increase crop yields.

Optimum Soil Test Levels: N = 100-150, P = 55-90, K = 12-15, Mg = 20-30, Ca = 8-15, Na = 1-10. **Base Dressing (kg/ha):** N = 45.0, P = 70.0, K = 45.0. The base dressing is applied broadcast prior to planting and well worked into the top 15cm of soil.

Side Dressing (kg/ha): N = 75.0. This side dressing is normally applied in three equal split

applications. Often sheep manure is used as a mulch over the beds and is applied after transplanting. Extra nitrogen may be required where crops are growing under cold conditions.

Trace Elements: Calcium – Calcium deficiency in the soil can be corrected by applications of either lime or gypsum to avoid the "black heart" condition.

Boron – Stem cracking which is a symptom of boron deficiency can be corrected by adding 0.2 per cent boron in the base dressing. Always identify a need for boron applications as excessive levels of boron can be phytotoxic to crops for a number of years.

Foliar Feed: Calcium nitrate and soluble boron can be applied during the growing season to prevent deficiency symptons being expressed.

Optimum pH Range: 6.0-6.8.

Lime Requirement: For the correction of pH and the addition of calcium to prevent a deficiency.

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PESTS AND DISEASES

General: Septoria leaf spot is the most serious disease problem associated with the field management of the crop. This disease, if not adequately controlled, can cause the total loss of a maturing crop. It is essential that growers are aware of the conditions required for the establishment of this disease and ensure that an adequate fungicide cover of the plants is in place during periods of humid, cool weather.

Important Pests and Their Control:

<u>Aphids</u> – dichlorvos, maldison, parathion-methyl.

<u>Catepillars</u> – dichlorvos, parathion-methyl.

Important Diseases and Their Control:

<u>Septoria leaf spot</u> – captan, chlorothalonil, copper, oxychloride, cupric hydroxide, mancozeb, sulphur, hot water seed treatment at 48-49°C for 30minutes.

Western celery mosaic virus - resistant varieties.





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Celery Program

Biology Kick start; Apply 10 lt /ha Vital Activator

Ground preparation:

Apply 1 tonne/ha Lime **or** Safe Organic Liquid Lime @ 40lt/ha in 300lt/water Apply 400kg/ha Alroc DAP Supablend

Pre Plant

Apply 60 Kg/Ha Safe Coated Urea (optional this can be fitted in as required) Apply 200 Kg/Ha Alroc 15.3.8 Supablend Apply 10lt /ha Vital Activator (This is to lift the carbon level in soil, the energy)

Top up Fertiliser requirements:

Weekly topup; Vital Mix @ 5lt/ha mixed into 200lt water/ha

Nitrogen: Apply 60 Kg/Ha Safe Coated Urea

Multi Nutrients:

8Lt/Ha Vital K Blast to finish the crop off (only if required)

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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<u>Disclaimer</u>

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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