

## **Celery (*Apium graveolens L. var dulce (Mill.) Pers.*)**

French: Céleri à côtes; Spanish: Apio blanco; Italian: Sedano da coste; German: Sellerie

### **Under Temperate Conditions**

#### **Crop data**

Annual. Harvested part: petioles of the leaves. Variety "rapaceum" cropped for the roots.

Cultivation cycle three to five months in early and late varieties.

Plant density: Transplanting - top plants - in rows 50-80 cm apart and every 20-30 cm within the rows. Root spreading rather shallow within 25-30 cm of upper soil; does not tolerate drought conditions.

Yields 20-40 t/ha.

Prefers moderately acid soil, (pH value near 6.0, but can also be grown with pH 7-7.2) with high field capacity and rich in organic matter. Requires relatively cool weather; for growth 7-24 °C, with an optimum near 15 °C.

#### **Nutrient demand/uptake/removal**

Heavy feeder on nutrients; on average in kg per t of yield: N = 2.5-6.5 (for 90 and 20 t/ha yielding level respectively); P<sub>2</sub>O<sub>5</sub> = 2.0-2.5; K<sub>2</sub>O = 6.0-9.0; MgO = 0.2; CaO = 2.5-3.0.

For 81 t/ha of fresh epigeous parts Anstett indicates an uptake of (kg/ha) N = 206; P<sub>2</sub>O<sub>5</sub> = 154; K<sub>2</sub>O = 240; MgO = 24; CaO = 316 and NaO = 124. Best celery yields are obtained with high doses of N during last phase of growth cycle (100-300 kg/ha).

#### **Fertilizer recommendations**

30-40 t/ha of manure, in addition to (in kg/ha) N = 200-300 (1/3 at planting; 2/3 in two or three shares as side dressing); P<sub>2</sub>O<sub>5</sub> = 100-150 and K<sub>2</sub>O = 100-300 (according to soil analysis). For higher rates of K fertilization top dressing advisable.

Fertilizers containing Ca are to be avoided. KCl preferred in terms of product quality. Sensitive against Mg deficiency (leaf chlorosis, necrosis) and also B deficiency.