

## BACKGROUND

### Origin

Swiss chard has been cultivated since 300 BC and roots of the wild chard were used as medicine. The wild form is found in the Canary Islands, entire Mediterranean region, and east to southern Asia. The first records of Swiss chard cultivation suggest the Mediterranean area, possibly Italy as the centre of origin.

### Climatic and soil requirements

Swiss chard is a cool season crop that grows best at temperatures ranging from 7 to 24 °C. It is semihardy and can withstand light frosts. Swiss chard is able to grow in any soil, provided it is well drained and well supplied with organic manure. However, sandy loams or loams are ideal. The optimum soil pH is between 6 and 7.

The plant requires fairly frequent irrigation to ensure that the soil does not dry out to less than 50% available water.

### Uses

The leaves are cooked and served like spinach and the petioles can be cooked and served like asparagus.

## CULTURAL PRACTICES

### Planting

In warmer, frost-free areas, Swiss chard is generally sown from February to August. In very cold regions it is sown in August or September until February. In most other parts of

the country, Swiss chard is sown from January to April or from July to September.

### Fertilisation

The crop responds well to organic manuring. Swiss chard will also respond well to periodic side-dressings of nitrogen to ensure continuous, rapid growth. Apply 500 kg/ha of 2:3:2 (30) at planting on fertile soil but 1 000 kg/ha on infertile soil. At 4 and 8 weeks, apply 225 kg/ha of LAN on fertile soil and 175 to 225 kg/ha on infertile soil.

### Weed control

Weeds can be controlled chemically or mechanically. Chemical weed control can be achieved by applying registered chemicals. Mechanical cultivation should be shallow and not too close to the plant to prevent damage to the plants.

### Pest and disease control

#### Cutworms

Seedlings are the most significantly affected by cutworm attacks. The cutworm attacks Swiss chard by severing the



stem at, or just below the soil surface. When cutworms have been active, one might observe several wilted or cut-off plants in a row. Control could be achieved chemically by applying registered chemicals. It is important to control weeds that could act as hosts to cutworms, in the field and surrounding the field. The field should be plowed a minimum of 2 weeks prior to planting, in order to kill cutworms, hosts and food sources.

#### *Aphids*

Aphids are green or black soft-bodied insects that feed on the underside of leaves. Affected leaves become crinkled and curled. Use insecticidal soaps, appropriate insecticides, or strong water stream to dislodge insects.

#### *Leaf spot*

Symptoms appear as brown spots in the initial stage, turning grey with reddish- purple borders at a later stage. Affected plants should be sprayed with a registered chemical.

#### *Curly top*

Infection is characterised by clearing of veins in the leaves and leaf curl with sharp protuberances from the veins on the leaf undersides. Leaves may be thickened and somewhat brittle. Rotating the crop from one location to another in subsequent years and using other good cultural practices such as proper watering and good fertility will assist in controlling this disease. Planting resistant varieties is another option.

### CONTACT DETAILS

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## • SWISS CHARD •



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