



Observe 1 cm depth and 30cm between rows



Ensure shallow planting

more, larger leaves to be harvested.

## 6. Common Pests & Diseases and their prevention

Weeding should be done regularly to minimize competition for nutrients from weeds also this is key in Pest and Disease Control and management. Pests and diseases are rare in spider plant. Aphids are the major pest. They cause the leaves to curl and are unattractive to customers. For low infestations, apply a strong jet of water to dislodge the aphids. Higher infestation can be controlled using biopesticides. Other pests include flea beetles, nematodes and cutworms.

## 7. Harvesting and Post-harvest Management

The first harvests consist of thinned plants. Plants are brought to the market with their roots attached; roots are removed just before selling to maintain freshness. Where possible, roots should be placed in water overnight to absorb moisture. In case of monocropping, which is more common,

the tops are removed 10 cm from the ground. This encourages the development of side shoots. Harvesting is repeated several times, depending on the soil fertility and moisture conditions. The harvested shoots are kept in a bag without water during the night. Following morning, the shoots are dipped in water for 30 minutes. Sprinkle water on heaps of produce sparingly. After several successive leaf harvestings, the plants are left to flower and produce seeds. Growers harvest the ripe capsules at the end of rainy season, to save seed for the next crop (AVRDC).

## 8. Nutrition and Cooking

The leaves are eaten as a cooked vegetable, often mixed with other vegetables. They are often mixed with milk to improve the flavor.

In some communities, the leaves are boiled and marinated in sour milk for two to three days and eaten as a nutritious meal. This is believed to improve eyesight, provide energy and cure marasmus.



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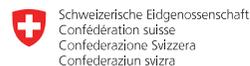
BvAT Practical Guide

# Spider Plant Growing Guide

**Botanical name:** *Cleome gynandra*

**Local names:** Mwangani (Swahili), *Thageti* (Kikuyu), *Tsisaka* (Luhya), *Alot-dek* (Luo), *Saget* (Kalenjin), *Chinsaga* (Kisii), *Mwianzo* (Kamba)

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### 1. Description

Spider plant is an erect herbaceous annual herb with hairy, often purple stems and many branches growing to a height of about one metre. The plant has edible leaves; each leaf has up to 7 leaflets spreading like fingers, which are usually 2-10 cm long and 2-4 cm wide. The flowers are rather showy, long and bearing many small white or pink flowers. The elongate fruit resembles a pod, but is referred to as a capsule, containing many small, dark seeds. Spider plant originated in Africa and Tropical Asia but now has a worldwide distribution.

### 2. Uses and Benefits

1. Studies have shown that spider plant is highly nutritious compared to most of the other vegetables.
2. It contains high levels of beta-carotene, Vitamin C, Vitamin A and moderate levels of calcium, magnesium and iron. It also has high level of crude protein, lipids and phenolic compounds.
3. The fresh leaves and shoots are harvested and cooked either alone or mixed with other vegetables. It is also used as a vegetable and herbal remedy for various ailments e.g. scurvy.
4. It is a highly recommended vegetable for pregnant and lactating women. Traditionally, eating the vegetable was used to reduce dizzy spells in pregnant women, the time taken in labour and help to regain normal health after childbirth.
5. Spider plant is also used to cure migraine, vomiting, diphtheria, vertigo, headache, pneumonia, septic ears, stomach ailments and is fed to boys after circumcision.

### 3. Climatic, Soil and Water Requirements

Spider plant is commonly found throughout East and Southern Africa during the rainy season. (AVRDC). In Kenya, it grows from sea level to 2400m (FORMAT). The crop grows well during the warm season under irrigation. Spider plant is sensitive to cold and does not grow well when temperatures drop below 15 °C. It thrives on sandy loam soils but does not perform well on wet, marshy and heavy clay soils. It requires exposure to sunlight and does not do well in the shade. Although the plants can tolerate short-term drought, periods of drought will hasten development of flowers and lower the yields (AVRDC).

### 4. Propagation and Planting

Seeds should be sown at the onset of rainfall. This ensures availability of adequate soil moisture throughout the growth period. When rainfall is inadequate, frequent watering is necessary during the vegetative growth period.

Seeds are sown directly in a well-prepared seedbed. It requires a well-prepared seedbed without weeds and dug to a depth of about 15 cm followed by a light

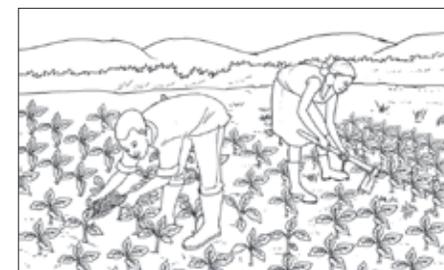


Sow seeds directly

harrowing. It may be planted on traditional raised or flat beds that are 1m wide. After digging, the soil is harrowed to a fine tilth. Organic manure is applied and worked into the soil. The seedbed is then levelled before planting. When raised beds are used, application of organic manure is delayed until the beds have been dug. Shallow planting at 1cm depth and with 30 cm between rows or broadcasting followed by raking on prepared seedbeds is recommended. Some farmers mix the seeds with sand when broadcasting them. About 4g of seed per m<sup>2</sup> or 40 kg per ha are required. Emergence is normally from 6 to 8 days after sowing. Thinning is done three weeks after emergence to leave 10 to 15 cm between plants (EcoPort).

### 5. Husbandry

Plants do not have dense foliage, and as such are unable to compete with weeds. It is therefore essential that seedbeds are kept weed-free at all times, but especially during the first six weeks. Shallow cultivation or hand-pulling of weeds should be practised (Chweya and Mnzava, 1997) Spider plant responds well to well-decomposed manure. Flowering is delayed when adequate manure is available, allowing



Weeding should be done regularly to minimise competition for nutrients