AVRDC

International Cooperators'

Fact Sheet

# Spider Plant

## Introduction

Spider plant *(Cleome gynandra)* is also known as *mwangani* and *cleome*. It is commonly found throughout East and Southern Africa during the rainy season. 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.

## Seeds and sowing

Seeds can be extracted when the pods are fully ripe (yellow or black), but before they open naturally. Seeds should be kept in a dry, closed container for at least three months to reduce dormancy. Seeds can be obtained from AVRDC-Regional Center for Africa at the address listed below.

Some farmers mix the seeds with sand when broadcasting them. Farmers who grow the crop under irrigation prefer to sow spider plant in rows spaced 50-cm apart, thinning plants to about 15 cm within the row. Other commercial growers produce the crop in a mixture with African nightshades (mnavu) or amaranths (mchicha). These farmers first harvest the fast growing spider plants and later continue their harvest of mnavu or amaranths.

## Crop management

Spider plant responds well to well-decomposed manure. Flowering is delayed when adequate manure is available, allowing more, larger leaves to be harvested. Optimum yields could be obtained with an application of 20–30 tons of manure per hectare. When manure is not available, one could apply up to 120 kg of nitrogen/ha.

This crop grows rapidly and requires weeding only in the open space between the rows. Plants require water two or three times a week. Periods of drought will hasten development of flowers and lower the yields. Pests and diseases are not usually serious and spraying with insecticides is not recommended even when aphids appear to become problematic.

***Spider plant***

## Harvesting and postharvest

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 a mixed cultivation with amaranths or nightshades, spider plants are uprooted to make more space for the companion crop. 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. In the following morning, the shoots are dipped in water for 30 minutes. Sprinkle water on heaps of produce sparingly.

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