

6. Husbandry

Nightshade require large amounts of nutrients and therefore do well in soils that are rich in organic matter. They also grow well on land covered with ash from recently burned vegetation (AVRDC 2003). Apply organic manure where possible. Frequent irrigation is needed for good yields.

7. Harvesting and Post-harvest Management

The crop is ready for harvest from 5 weeks. The stems are cut approximately 15 cm above the ground. This allows new side shoots to develop. Picking is done at weekly intervals. If complete harvesting is practiced, spacing can be as close as 10 x 10 cm and plants are uprooted. This method is mainly used when there is less than 2 months before the main staple food crop will be planted. Roots of these crops can be kept in water to keep the plants fresh.

Picking should be done very early in the morning and the produce sold the same day. Alternatively, the crop can be harvested late in the afternoon and placed on plastic sheets or banana leaves. These should be tied in small bundles. The flowers should be removed before the crop is taken to the market. Water these bundles sparingly to retain freshness.

Preservation is done by sun-drying. The leaves may be dried and stored for up to one month though this practice greatly reduces the nutritive value and changes the texture. (See BvAT Guide on Vegetable drying).



8. Nutrition and cooking

The leaves are eaten as a cooked vegetable, often mixed with other vegetables. The raw leaves contain 4% protein, 6% carbohydrates and are moderately high in vitamin C. They are rich in iron.

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African Nightshade Growing Guide

Botanical name: *Solanum scarbrum*

Common names: Black nightshade or Garden huckleberry
Mnavu (Swahili), *Managu* (Kikuyu), *Lisutsa* (Luhya), and *Osuga* (Luo).

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1. Description

Narrow-leaved African nightshade is widely distributed throughout the tropics and can be found throughout East Africa. The plant is an erect, many-branched herb growing 0.5 to 1.0 m high. The plant bears thin, oval, slightly purplish leaves up to 15 cm in length, has numerous white flowers and usually purple to black, round berries about 0.75 cm in diameter containing many small, flattened, yellow seeds.

2. Uses and Benefits

- It plays an important role in traditional medicine in Africa.
- They have high demand in high end hotels thus a source of income to farmers.

3. Climatic, Soil and Water Requirements

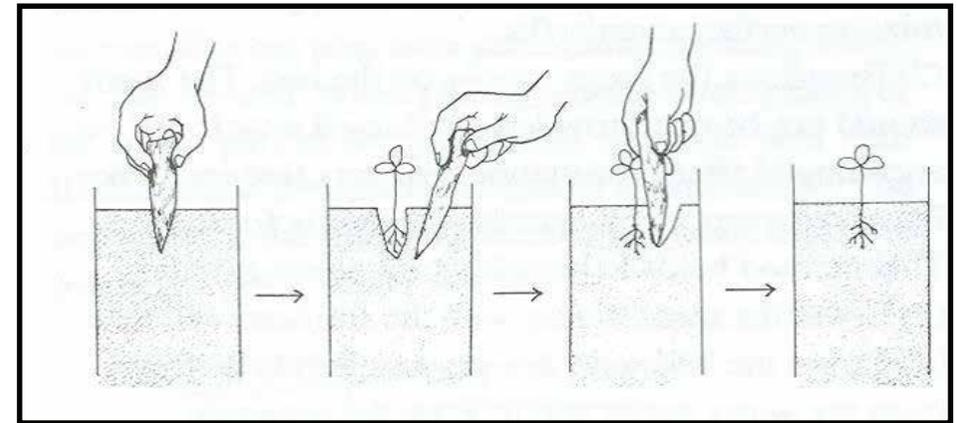
African nightshade can grow on a wide range of soil types but does not tolerate drought (AVRDC 2003). It does well in organic plots.

4. Propagation and planting

Plants are propagated from seeds. Seeds are marketed by Simlaw Seeds in Nairobi under the name "Black Nightshade" in 25 gram packets. They can also be purchased from farmers in open air markets.

Before planting, the soil should be loosened and enriched with decomposed manure. Seeds should be mixed

with sand and/or ash for uniform sowing. Sow the mixture thinly, either by broadcasting or in rows, 20 cm in the row by 40 cm between the rows. After sowing, the bed should be mulched with tall grass or a similar material to retain moisture. This mulch can be removed once the plants are 3 cm. Transplant when seedlings have 6 true leaves and are 10 - 15 cm tall. The spacing should be 20 cm in the row by 40 cm between the rows. It can also be grown directly and prunings harvested and sold.



5. Common Pests & Diseases and their control

Pests and diseases of African nightshade are similar to those of Solanaceae family and include aphids, spider mites, and early blight. Aphids feed by sucking plant sap, causing the leaves to curl, which is unattractive to customers, as well as a chance of drying out or death of the plant.

Regular monitoring and spot spraying with biopesticides, when necessary, can help reduce infestations. The feeding of spider mites may cause a decrease in plant growth, flowering, and number of berries and seeds. Avoiding particular pyrethroids may help reduce the occurrence of spider mite outbreaks. Overhead irrigation or strong jet wash plants can knock off spider mites and destroy their webs



Aphids



Spider mite



Spot spraying