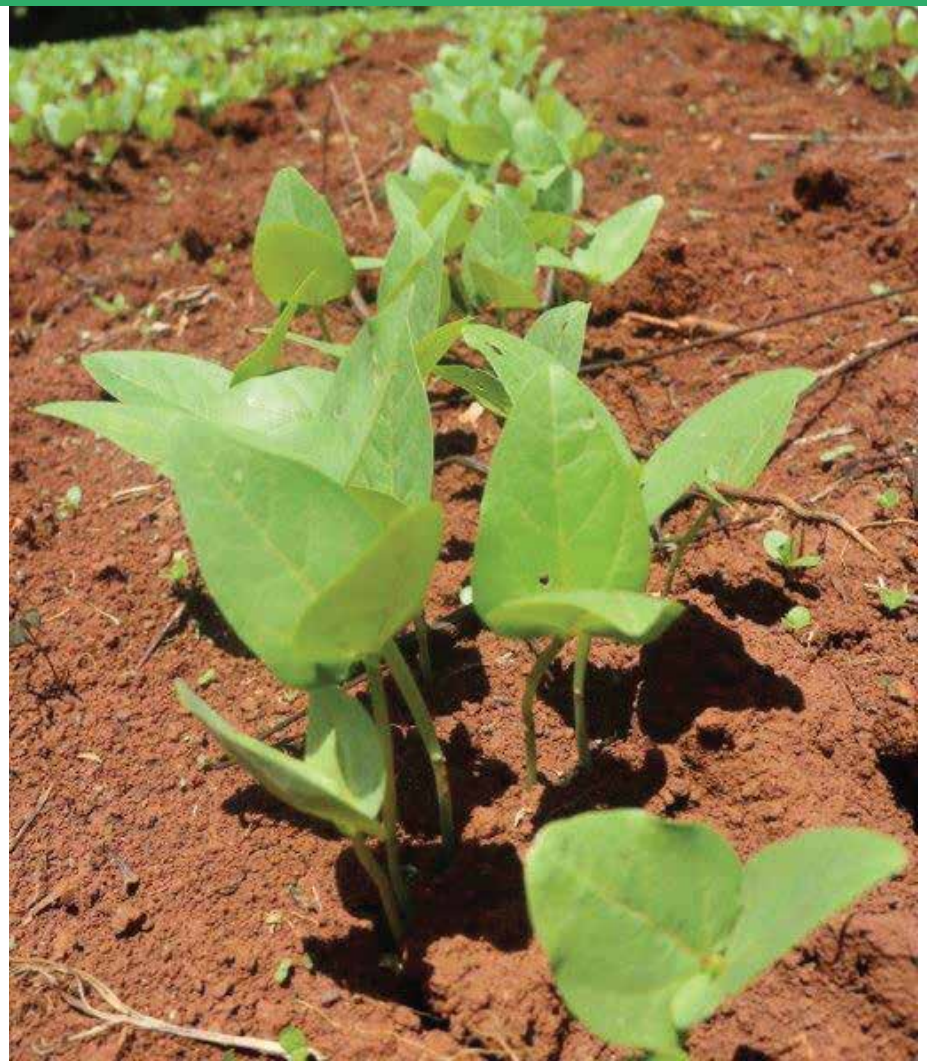

6. Nutrition and Cooking

The leaves are eaten as a cooked vegetable, often mixed with other vegetables and the fresh fruit is also consumed. The raw leaves contain Vitamin B9 89.00%, Iron 53.63%, Copper 50.89%, Phosphorus 38.14% and Tryptophan 36.82%.

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EOA ECOLOGICAL ORGANIC AGRICULTURE

A Collaborative Work of BvAT and The Ecological Organic Agriculture Initiative

BvAT Practical Guide

Cowpea Growing Guide

Botanical name: *Vigna unguiculata*

Local names: Cowpea, *Kunde, Thoroko* (Kikuyu), *Likhuvi* (Luhya), *a lot-bo* (Luo), *Nthooko* (Kamba), *Egesare* (Kisii)

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1. Description

Cowpeas are leguminous crops that can be used to provide vegetable and grain for food. The crop can withstand drought, short growing period and its multi-purpose use makes it an attractive alternative for farmers in marginal, drought-prone areas with low rainfall. It is suitable for a variety of intercropping system.

2. Uses and Benefits

- They have high demand in high end hotels thus a source of income to farmers.
- Digestive Health; helps in relieving constipation or diarrhea, due to its high fibre.
- Heart Protection due to presence of Vitamin B1 (thiamine) has recently gotten some great attention for its role in protecting heart health.

3. Climatic, Soil and Water Requirements

Cowpeas are generally tolerant to drought and low light conditions, but are very susceptible to a variety of insects and diseases and do not do well in poorly drained and cool areas. Cowpea can grow in a wide range of soils, well adapted to light sandy soils where most other crops produce poorly and they do well on acid soils. On heavy fertile soils they show a vigorous vegetative growth, but not necessarily a good grain yield. Most varieties need a minimum rainfall of 200 mm during a growing season. The optimum temperature for their growth and development is 20 to 35°C.

4. Propagation and Planting

Cowpeas seeds are planted about 20 to 40 cm apart and are often grown as an intercrop with pearl millet, sorghum or maize at wide spacings (total plant population 10,000-20,000 plants per ha). When produced as a green vegetable, they are commonly grown as a monocrop in rows 30 to 40 cm apart with 8 to 12 cm between plants. Some very drought resistant types may grow for two seasons in the farm. Tillage normally follows the crop with which cowpeas are interplanted. When sown in rows the seed-rate is 10-40 kg/ha.

Heavy fertile soil

Cover the seed lightly

Vigorous growth

5. Harvesting and Post-harvest Management

Systems commonly used in harvesting of cowpea as a leafy vegetable include;

- Uprooting the entire plant at the 3-5 true leaf stage before the leaves become too mature and fibrous or dual-purpose production where sequential leaf harvests are made during the vegetative phase of plant growth, followed by seed production at the end of the season.
- Harvesting cowpea at 7-days interval give higher leaf vegetable yields but higher grain yields are obtained when no leaf harvesting is done to the crop at its vegetative phase.

The leaves may be dried and stored for later use. 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*)