

# Cultivating Cowpeas

Cowpeas is indigenous to Africa.

It is also known as **dinawe** (Ndebele), **dinaba** (Shangaan), **imbumba** (Zulu), **monawa** or **nawa** (Pedi) and **dinawa** (Tswana)



It is a protein-rich bean crop which leaves nitrogen in the soil and therefore has a beneficial effect on the follow-up crop. Cowpeas can be planted as an intercrop or in rotation and can tolerate drought.

### Uses

#### For the home

- ❖ The leaves and growth points can be picked and used as a vegetable dish.
- The leaves can be dried and used as a meat substitute. About 1 kg cowpeas is a full meal.
- The green seeds are sometimes roasted like peanuts and these are then used as a substitute for coffee.
- Ground dried seeds mixed with onions and spices can be fried in oil. The seeds can also be cooked.
- It can be used as green manure.
- It can be planted for hay production.

#### As a cash crop

- Silage can be made by mixing the green leaves with sorghum or maize.
- Cowpeas can be planted for hay production and the hay can be sold.

### Soil and climatic requirements

- Cowpeas are indigenous to Africa and can, therefore, be cultivated on various soil types producing a relatively poor crop on marginal soils.
- ❖ It is a summer crop which grows best when the minimum temperature is above 10 °C.
- Cowpeas should not be planted at the start of the rainy season (beginning of October) or late in January because it can result in low yields and frost damage. Some insects are also more active late in the growing season.

### Planting

### Planting time

- The best time to plant cowpeas in cooler areas is the middle of November.
- In warmer areas the crop can be planted during the middle of December.
- Cowpeas can be planted early in October provided the minimum temperature is above 10 °C and in January in areas where early frost does not occur.
- The planting date of cowpeas determines the use of the crop. For instance, if it is going to be used as grazing, it can be planted in October.

#### Cultivar

There are basically two types of cowpeas, namely runner and upright types and various cultivars of each. Dr Saunders is an example of an upright type, while Bechuana White is a runner type.

#### Preparing the seedbed

To get a good stand, the seedbed should be well cultivated, fine, firm and free of weeds.

#### Fertilising

- Compost and manure should be applied 3 to 4 weeks before planting.
- Cowpeas have low fertiliser requirements and grow well using fertiliser left in the soil by the previous crop (residual fertiliser).

#### Plant spacing

- A wide variety of interrow spacings can be used, depending on the ultimate use of the crop.
- ❖ Commercial row spacing: 2,25 m, 1,5 m and 0,9 m.
- In vegetable gardens the spacing may be closer, depending on the size of the area planted.
- Spacing between plants in the row: 10 cm and a planting depth of 4 cm (width of a matchbox).

#### Planting method

- Cowpeas can be planted mechanically or by hand. A hand hoe or spade can be used when planting by hand.
- Do not compact the soil after planting, but firm it down to ensure good soil/seed contact.

#### Pests and diseases

- Less pest control will be necessary if cowpeas are planted early in the season rather than late.
- Aphids and bollworm may be problems and can be controlled chemically.
- Diseases seldom occur.
- It is, however, important not to plant cowpeas successively on the same land because they are susceptible to nematodes.



A bollworm

### Harvesting

- When cowpeas are harvested for grain, the harvesting stage is reached when 90 % of the pods have dried off. The whole plant is pulled up.
- Harvesting for hay can be done as soon as the pods start to discolour.
- When cowpeas are used as a vegetable the leaves and young pods can be picked by hand.
- Cowpea hay can be stored in bales or haystacks.

## Threshing

- Commercial machinery can be used to thresh cowpeas.
- The pods can be thrown into a maize bag and then trampled or beaten with a stick.

### Marketing

Cowpeas can be sold as hay or grain on formal as well as informal markets.

#### Where to market cowpeas

- Grain cooperatives
- Seed merchants
- Fellow farmers
- Animal feedlots.

For further information contact the Division Crop Science at the North West Agricultural Development Institute, Potchefstroom Tel: (0148) 299 6532

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