Growing Snake Beans in the Top End

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TYPES
The snake bean is also known as the 'yard long bean'. It gets its name from the pods which are longer than those of French beans (30-50 cm in length) and generally thinner when ready for harvesting. There are dwarf (bush) and climbing types. The climbing types take longer to come into production, but then produce for a longer period than the bush type.

SOWING SEASON
Snake beans can be sown all year round. They are a valuable source of fresh beans for the wet when it is difficult to grow most other vegetable crops.

SOIL PREPARATION
An application of 200 g/m² of dolomite before digging the soil is beneficial. The soil should be worked to a fine even seed bed. The beds should be mounded up to facilitate drainage.

Beans should be planted after cover crops and added compost or manures have had several weeks to breakdown in the soil.

FERTILISER
Beans belong to the legume family and are capable of developing nodules on their roots which have the ability to fix nitrogen from the air and supply it to the plant. The nitrogen available to the plant in this way is limited and additional requirements need to be supplied in the form of a complete NPK mix.

Apply a high analysis fertiliser mix, such as 14N : 14P : 12K along the rows at the rate of 70 g/m². The fertiliser can be placed in a band, 50 mm from where the seed is to be sown and covered with a layer of soil (when banding fertiliser apply 15-20 g/m of row).

Snake beans can be supplied for a considerable period and will benefit from a side dressing of 50:50 urea and potassium sulphate mix at the rate of 5 g/m of row every four weeks.
PLANTING
Seeds are sown 2 cm deep direct into the rows. Climbing beans are planted 30-50 cm apart in the row, with 2-3 m between rows.

Seeds should be planted into damp soil and watering withheld for 3-4 days. Immediate watering can result in seed-rot developing due to water being taken up too fast.

IRRIGATION
Soil moisture must be maintained with regular watering. The frequency will depend on the soil (sandy soils dry out faster than heavy clays) and climatic conditions.

If plants are allowed to suffer from water stress, the yield potential will drop considerably, whereas over-watering can cause root-rots. Drip tape provides good control of water delivery

MANAGEMENT
A trellis should be erected before planting, or as soon as possible thereafter, to minimise possible root damage which can be caused if plants are in an advanced stage of growth.

Mulching around the plants (be sure to keep clear of the stem) keeps down weeds and helps maintain soil moisture.

Collect seeds from the higher yielding plants for future plantings.

DISEASE CONTROL
Snake beans in the Top End are susceptible to a soil fungal disease called Fusarium wilt. Growers should practise good farm hygiene to prevent the soil from being infected with this fungus. Grafting snake beans onto Fusarium-resistant cowpea rootstock can be used in infected areas (refer to Agnote I61 "Grafting Snake Beans to Control Fusarium wilt").

Green manure crops are recommended each year to prevent the build up of nematodes in the soil.

INSECT CONTROL
Bean fly is the major pest in the Top End. The adult fly is small and shiny black in appearance. The eggs are laid in the leaves, resulting in small yellow spots. The larvae do the damage by tunnelling through the leaf to the stem where they pupate. Young seedlings can suffer severely from bean fly attacks. When bean flies are known to be active, a regular spray program with insecticide should be carried out. The plants should be sprayed at emergence, three days later and every seven days thereafter till flowering commences.

Aphids can also be a pest. If numbers become excessive, spray with an appropriate insecticide. The two-spotted or red spider mite can be a problem, especially in hot dry weather. These are minute insects barely visible to the naked eye. They generally feed on the lower surface of leaves where the damage caused gives a speckled silvery appearance. They also produce a delicate web under which they feed. Heavy infestations cause wilting and leaf drop.

For information on insect control, please refer to the DPIFM Entomology website at http://pestinfo.nt.gov.au/
HARVESTING

The first beans will be ready for picking 8-10 weeks after sowing and will continue to produce prolifically for many weeks if harvested regularly. Beans are ready for picking when they have reached full length, but before the seeds begin to swell in the pods. Pods should be cut from the plant using scissors or secateurs to minimise damage to developing pods and flowers, and to prolong the cropping life of each flower stalk. Twisting the pod carefully near the stem end is reasonably effective.

Beans should be picked at least twice a week or pods will become too large and tough.

Beans will keep from seven to 10 days if sealed in a plastic bag to prevent wilting, and kept under refrigeration in the crisper section at 4-8 °C. At temperatures below 2°C pitting and russet occur. Beans can be stored for longer periods if blanched and frozen.

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