



## Snake Bean

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**Name:** Snake bean, long bean, yard-long bean, asparagus bean *Vigna unguiculata* ssp. *Sesquipedalis* (Leguminosae)

**Origin:** While native to East and South-east Asia the snake bean probably originated in South China.

**Distribution:** The snake bean is found throughout Asia being one of the most important vegetables in this region. It can now be found throughout the tropical and sub-tropical world. Its importance in the Caribbean is increasing.

**Australian Distribution:** Snake beans are mainly grown around Darwin in the NT and central and north Queensland.

**Preferred Climate and Soil Types:** Snake beans enjoy warmer climates and are not frost tolerant. Humid climates are preferred especially those with consistent rainfall. Snake beans need to be irrigated during dry spells and can grow during a monsoon season as long as the soil is well drained. If heavy rainfall or waterlogging is not an issue then a range of soil types from sands to heavy clays are suitable for production. Snake beans prefer a soil pH between 5.5 and 7.5 but can tolerate slightly acid soils.

**Description:** A tall climbing annual. The stems are square, usually smooth and often twine about with the nodes usually violet in colour. The fruit is long (30-120 cm) and thin and becomes constricted and bent at maturity.

**Varieties:** There are many varieties available for planting. They are usually differentiated by the colour of the seed but can also be named for pod (fruit) character. Some varieties have been selected for their suitability to slightly warmer, wetter climates or for slightly cooler, drier climates.

**Culture:** In the Northern Territory snake beans are planted as seed into slightly damp and warm soil with 1-2 seeds in each planting hole or "hill". After sowing, water should be withheld until germination has occurred (3-5 days). The planting bed should be mounded if waterlogging during the season is expected. The planting is usually into single rows about 3 m apart with 30-60 cm between "hills". The plants are encouraged onto trellises.

In the Northern Territory snake beans will benefit from extra organic matter added before planting via either a green manure crop or an application of animal manure. This organic matter should be well broken down before planting. An application of NPK fertiliser and calcium just before planting can also be used as well as further applications of fertiliser (either urea or NPK) during the season. However care must be taken to not over-supply nitrogen as that can lead to excessive growth and reduced yields.

Snake bean yields also decline if water is under-supplied so care must be taken to keep soil moisture high.

**Pests and Diseases:** Rusts, mildews and some viruses can seriously affect snake beans though in the main they are only mildly susceptible to most fungal diseases. However in the Northern Territory fusarium wilt is becoming a very major problem, as are root-knot nematodes. The vectors for most viral diseases (aphids and white flies) can also cause problems.

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The major insect problems for snake beans apart from those mentioned above are cutworms, bean flies and mites.

**Fruiting Season:** Seed germination occurs within 3-5 days of planting with flowering starting in the fifth week after sowing. Fruit can be harvested two weeks after first flowering. Depending on crop health and harvest intensity, plant senescence starts 6-8 weeks after sowing with plant death usually within four months of sowing.

**Harvesting:** This can start within seven weeks of planting. The best harvest stage depends on variety and market requirements however the fruit are normally picked when the outline of the seeds is just visible on the outside of the pods. When picking, all suitable pods should be removed as pods that are allowed to fully mature (ie: pods are hardened and seed swollen) will exhaust the plant. Picking should be done at least twice a week though in hotter climates picking may be required more frequently.

**Storage Conditions:** If stored between 2-4°C at high humidity they can last up to four weeks.

**Culinary Use:** The young pods are a staple vegetable in many South-East Asian countries. They can be cooked with rice, added to soup or used fresh in salads.