



PLANT FACT SHEET

Phaseolus vulgaris L.

GENUS *Phaseolus* FAMILY Fabaceae

COMMON NAMES Common bean, Kidney bean

EDIBLE PARTS AND USES

Edible parts: Pods, Seeds, Leaves, Vegetable

The young pods, leaves and mature seeds are edible. The pods are eaten raw in salads and also boiled, steamed, marinated and pickled.

The young seeds are boiled and served as a vegetable.

The dry seeds are soaked in water and boiled until soft. They are also baked and used in soups, dips, casseroles and salads.

The flowers are sauteed and added to dishes. Sprouted seeds are also eaten.

The leaves are used for sarma in Turkey. They are rolled around a filling of rice or minced meat.

DESCRIPTION

This bean has very many varieties and varies a lot in details. Both short and climbing cultivated varieties of this bean occur. It has a long taproot. Climbing forms can be 2-3 m tall. Bush types are 20-60 cm tall. The leaves are carried one after another along the stem and the leaves have 3 leaflets. The leaf stalk has a groove on the top. The side leaflets are asymmetrical in shape. The leaflets can be 8-15 cm by 5-10 cm. The flowers are in the axils of leaves and have few flowers in a loose form. Flowers are white to purple and pods smooth. Pods are slender and 8-20 cm long by 1-1.5 cm wide. The pods are straight or slightly curved and with a beak at the end. Pods often have 10-12 seeds which are kidney shaped and coloured. There are more than 500 cultivated varieties.

HABITAT

A temperate plant. It mostly grows from 700 m to 2000 m altitude in the tropics. In the lowlands it suffers from pest and disease but it can be grown to sea level. It is not suited to the wet tropics. It is shallow rooted and therefore damaged by excess moisture near the roots. About 350 mm of water is enough for a crop life cycle. It is sensitive to frost and to high temperatures. Flowers will not form below 9.5°C and night temperatures above 37°C cause flowers to drop. The best temperature is 15-21°C. It does not suit very acid soils. In Nepal it grows up to 1200 m altitude. It suits hardiness zones 8-11.

PRODUCTION

Cultivation

Plants are grown from seed. Seed should preferably be planted on raised beds. Climbing types need stakes. Plants are self fertilised. Seeds remain viable for 2 years. Germination is normally good if seed have been well stored. In many places these beans are inter-cropped with other plants. If they are grown on their own, bush

types can be spaced at 25 cm by 25 cm. Or they can be put closer together in rows wider apart to make weeding and harvesting easier. For dried beans, once the pods are mature and turning yellow, the whole plants are pulled, then dried and threshed. About 50-75 kg of seed will sow a hectare. Most French bean varieties are daylength neutral so day length does not affect flowering.

Harvesting and Seed Production

Dwarf kinds take 6-8 weeks to mature and climbing types take 10-12 weeks. Picking starts 2 weeks after flowering. Yields of dried beans of 1,200 kg per hectare are possible. Dried leaves can be stored for later use.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

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