Helping the Hungry Feed Themselves Well

# Vigna radiata

# Common name(s)

Green gram bean, (Mung bean),

# **Edible portion:**

Root, Seeds, Pods, Leaves, Vegetable,



## **Distribution**

A tropical and subtropical plant. The plant will grow from sea level up to probably 1,600 m in the tropics. It is drought resistant but can't stand water-logging. Plants are damaged by frost. They cannot stand salinity. Rainfall at flowering is detrimental. It requires a deep soil. Both short day and long day kinds occur. It can grow where annual temperatures are from 8°C to 28°C. It can also grow at high temperatures of 30-36°C. It can tolerate a pH from 4.3-8.1. In Nepal it grows up to 1000 m altitude. It suits a drier climate. It can grow in arid places. It suits hardiness zones 10-11. In Yunnan.

# **Description**

A herb. It is an upright hairy bean plant which can be 1 m tall. It has many branches. The leaves have 3 leaflets and are dark green. The leaves are on long leaf stalks. There are oval stipules at the base of the leaf. Flowers are pale yellow and small. They occur in bunches of 10-20 on the ends of long hairy flower stalks. Pods are black and straight. They do not have a beak. Pods contain 10-20 seeds which are usually green or golden yellow. They are smaller than black gram. The beans can be black. They have a flat white hilum. There are 2,000 varieties.

### Use

Seeds are eaten ripe. They are eaten raw or roasted. They are added to soups and stews. They are also fermented.

Young pods can be eaten.

Young leaves can be eaten.

The seeds can be germinated for sprouts. These are used in salads and stir-fried dishes.

The seeds are ground and also used for starch to make noodles.

## Cultivation

Plants are grown from seed. In some areas these are broadcast while for small plots often 2-3 seeds are sown in holes 50-60 cm apart. Seeding rates of 6 to 22 kg per ha are used in different locations. It normally requires phosphorus fertiliser for adequate growth. Seeds germinate in 3-5 days.

### **Production**

Green pods are ready after about 2 months and ripe pods may take another 1-2 months. For ripe beans the whole plant is harvested and dried before threshing. Yields of 450-560 kg/ha of seeds are common.

# **Nutritional values**

Edible Part	Moisture %	Energy kJ	Energy kcal	<b>Protein</b> g (per 100 grad	<b>Provit A</b> μg ms of edible p	Vit C mg	<b>lron</b> mg	<b>Zinc</b> mg
Seeds	11.0	1432	343	22.9	55	4	7.1	
Seed cooked		439	105	7.0	2.4RE	1.0	1.4	
Seed sprouted raw	90.4	126	30	3.0	2	13.2	0.9	0.4









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### Synonyms

Adzukia radiata (L.) Ohwi.; Phaseolus abyssinicus Savi; Phaseolus aureus Roxb.; Phaseolus hirtus Retz.; Phaseolus radiatus L.; Phaseolus radiatus L. var. aurea (Roxb.) Phaseolus radiatus L. var. typicus Prain; Rudua aurea (Roxb.) Maek.; Vigna radiata (L.) R. Wilczek var. sublobata (Roxb.) Verdc.; Vigna aureus (Roxb.) Hepper;

#### Other common names

Bechin, Borao, Cherupayaru, Dau-tam, Dau-xanh, Fore-mungu, Hesaru, Imposo, Kakhoma, Look dow, Mag, Mbweso, Ming bean, Moog, Mphodza, Mposo, Mudga, Mug, Mun, Mun-eta, Mung, Namurovo, Ndengu, Pasi-payaru, Passara, Passippayaru, Patchapesalu, Pe-di, Pe-di-sein, Pe-di-wa, Pe-nauk, Putcha-payaru, Sbaiha, Suna, To-pi-si, Uthulu,





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