

ECHO Asia Seed Fact Sheet

Scientific name – *Lablab purpureus*

English common name – Vegetable lablab bean

Asian common names –

- Bengali: rajashimbi
- Chinese: 扁豆 *bian dou*
- Hindi: सेम *sem*
- Japanese : フジマメ *fuji mame*
- Malay: kacang kara; komak (Indonesia)
- Nepalese: राज सिमी *raaj simii*
- Tagalog: bátau
- Tamil: avarai
- Thai: ถั่วพุ่ม *thua paep*
- Vietnamese: đậu van



Photo: ECHO Asia staff

Variety – **Chiang Dao**

General description and special characteristics – A climbing, perennial (or semi-perennial) legume; grown in gardens for edible purple pods.

Crop uses (culinary) – Young pods and tender beans are popular vegetables throughout Asia and beyond, prepared and consumed in a variety of ways (e.g., included in curries and used to dip chili sauce and curries). According to Gowda, in India, young leaves are eaten raw in salads and older leaves are cooked like spinach (2009). Additionally, flowers are eaten raw or steamed, whereas the large starchy root tubers can be boiled and baked. The immature seeds can be boiled and eaten, with mature seeds made into tofu, fermented for tempeh, or used to make bean sprouts.

Gowda recommends that dried seeds be boiled in two changes of water before eating since they contain toxins (cyanogenic glucosides) (2009). He also warns that raw dry seeds are poisonous and can cause vomiting and even convulsions and unconsciousness.

Crop uses (soil improvement) – Lablab is a nitrogen fixer. However, the annual field varieties of lablab are mainly used as green manure cover crops for soil improvement.

Crops uses (livestock production) – Although vegetable lablab is primarily for vegetable production, the vines can possibly be used as livestock fodder.

Seasons of production – Vegetable lablab is often planted during the early to late rainy season. In Thailand, the plants begin flowering indeterminately in November with green pods harvested from December to March.

Length of production and harvest period – Lablab plants can be kept for a second year, beginning to yield again the following July with production lasting through March.

Production methods – Garden varieties require better conditions than the field varieties of lablab; in India they are manured heavily, irrigated frequently, and provided supports for climbing. Although lablab is drought-resistant, the crop requires good soil moisture when being established. Along supports (e.g., garden fences), establish lablab at least 1 meter (3 ft.) apart.

Pollination – Lablab is self-fertilized but cross-pollination is known to occur. *Seed to Seed* recommends isolation or bagging to ensure seed purity.

Environmental conditions for production – Lablab is remarkably adaptable, growing in various climates and regions with annual rainfall ranging from 200 to 2,500 mm (8–98 in) and elevations ranging from sea level to 2,133 m (7,000 ft). Ideal temperatures for vegetable lablab production range from 22° to 35°C (72–95°F). It can tolerate light shade.

Soil requirements – Vegetable lablab can grow in many types of soils with the pH varying from 4.4 to 7.8.

Pests and diseases – *Tropical Forages* (Cook et al., 2005) states that the pod-boring insects, *Adisura atkinsoni*, *Exelastis atomosa* and *Maruca testulalis*, can reduce lablab seed yields. Other lablab insect pests include Bruchid beetles (*Callosobruchus* spp.) which damage seed during growth and storage, as well as the caterpillar *Heliothis armigera*. Additionally, lablab roots are attacked by several nematodes: *Helicotylenchus dihystra*, *Meloidogyne hapla* and *M. incognita*. Anthracnose (caused by *Colletotrichum lindemuthianum*), leaf-spot (caused by *Cercospora dolichii*) and powdery mildew (caused by *Leveillula taurica* var. *macrospora*) have been reported.

Seed saving – *Seed to Seed* describes lablab as difficult to shell. Farmers in northern Thailand shell large amounts of lablab seeds by placing the mature, dry pods in sacks and beating them with sticks until the seeds fall away from the broken pods. Such threshing is followed by hand cleaning of the seeds and winnowing. Bruchid insects must be controlled during storage. Under cool, dry conditions the seeds will remain viable for at least two years.

References –

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