

LABLAB

Lablab Bean, Bonavist, Egyptian Kidney Bean, Hyacinth Bean, Dolique, Dolique D'Égypte

Lablab purpureus

Fabaceae

ECHO® PLANT INFORMATION SHEET

Description

Lablab purpureus is capable of growing in a wide range of climatic conditions and soil types, depending upon the variety chosen. It is widely cultivated throughout the tropics and subtropics and occurs wild in tropical Africa (including Madagascar) and India. The palatability of lablab surpasses that of velvet beans or jack beans.

Uses

This bean may be grown as a vegetable or pulse for human consumption, or as animal forage or feed. The young pods, leaves and flowers are eaten as a cooked vegetable. The cooked, dried seeds, a good source of protein, are processed into bean cakes, fermented as tempeh or before cooking, sprouted and eaten fresh. Seed sprouts can be eaten like those from mung beans. Plants may be grazed by cattle, sheep, pigs, and goats. Young dried plant material may be used as animal feed. The foliage also can be made into silage. *L. purpureus* varieties such as Highworth, Rongai, and White have been used successfully as cover crops to suppress weed growth and retard soil erosion and as a green manure. *L. purpureus* retains some green growth during droughts, providing farmers with a source of fodder during dry seasons. *L. purpureus* is intercropped with cereals such as maize and sorghum.

Common Names

- French
 - lablab
 - pois boucoussou
 - pois antaque
 - pois indien
- Spanish
 - Frijol Lablab
 - Judía
 - Habichuela
 - Poroto De Egipto
 - Judía de Egipto
 - zarandaja
 - Frijol de Egipto

Cultivation

- **Elevation-** 0-2400 m
- **Rainfall-** 750-2500 mm/year; once established, is quite drought tolerant
- **Soil Types-** grows in a variety of soils
- **Temperature:** 22-35°C; light frost damages the leaves but does not kill the plants.
- **Light:** partial to full sun

If interplanted with cereals or other crops, adjust the spacing or planting time of *L. purpureus* to minimize competition between crops. In pure stands, plant seeds 30-50 cm apart with 80-120 cm between rows to allow space for the spreading vines to grow. *L. purpureus* can also be grown on a trellis, planted closer together.

As a green manure/cover crop, lablab is interplanted with field or orchard crops or grown in rotation (or relay cropped) with field crops, as well as grazed after the primary crop is harvested. It is effective for erosion control and soil protection during heavy rainfall, and offers good annual undercropping for tree crops (if areas are not too shady).

Field lablab can be planted at the start of the rainy season; however, it responds very well to late-rainy season establishment (two months prior to the end of the rains). Flowers appear after the rains stop and pods are produced during the dry season. As an annual field crop, lablab is drought-resistant and maintains luxurious growth into the dry season.

Harvesting and Seed Production

When planted early in the growing season, *L. purpureus* starts bearing pods in 60-70 days and continue for 90-100 days. For use as a pulse or to save seed for the following year, the *L. purpureus* seed should be allowed to mature approximately 150-210 days after planting.

Pests and Diseases

The effects of a bacterial blight disease (*Xanthomonas phaseoli*) that in humid weather conditions cause severe defoliation is lessened by

growing *L. purpureus* intermixed with another bean species, *Phaseolus trilobus*. The agent of anthracnose, *Colletotrichum lindemuthianum*, may cause crop damage in India. Pod boring larvae are reported pests in India. Strain HE-111 of *Bacillus cereus* var. *thuringensis* has been reported as an effective agent against some of the pod-boring larvae. In Puerto Rico, the bean leaf beetle, *Ceratoma ruficornis*, is reported as a serious pest. Bruchid beetle larvae, *Callosobruchus* spp. attack seeds in storage and in the field.

Cooking and Nutrition

Although the 'Red' and 'White' varieties reportedly are safely eaten as green pods, the mature seeds of lablabs generally are sources of trypsin inhibitor and cyanogenic glucoside toxins and these seeds need to be cooked thoroughly before eating them. Dry lablab beans generally can be substituted for other dry beans in recipes. Lablab beans are good sources of the amino acid, lysine, and as such complement the generally low lysine content of maize (corn) diets. The beans contain 20-28% crude protein. The green pods likewise are a good protein source as well as a valuable source of fiber.

References

Ecocrop. 1993-2007. *Lablab purpureus*. Food and Agriculture Organization, Rome, Italy. ecocrop.fao.org/ecocrop/srv/en/dataSheet?id=1311. Accessed 26 June 2019.

Heuzé V., Tran G., 2015. Lablab (*Lablab purpureus*). Feedipedia, a programme by INRA, CIRAD, AFZ and FAO. <https://www.feedipedia.org/node/297> Last updated on February 19, 2016