

## ALUGBATI



Scientific Names: *Basella alba* L., *B. rubra* L.  
Common Names: Ceylon Spinach, Indian spinach, Malabar nightshade  
Local Names: Alugbati, Dundula, Libato

### Botanical Description:

Alugbati is a succulent, branched, smooth, twining, herbaceous vine, reaching a length of several meters. The stems are green or purplish. The leaves are somewhat fleshy, ovate or heart-shaped, 5-12 centimeters (cm) in length, stalked, tapering to a pointed tip and heart shape at the base. The spikes are axillary, solitary and 5-29 cm in length. The flowers are pink and about 4 millimeters (mm) long. The fruit is fleshy, stalkless, ovoid or nearly spherical, 5-6 mm in length and purple when mature.

### Adaptability and Availability

Alugbati grows well in tropical lowlands at elevations near to 500-3,000 meters (m). It also grows in temperate regions. Alugbati thrives in many soils, but sandy loam appears to be most suitable. It is widely cultivated in all regions of the country particularly in Visayas.

### USES/IMPORTANCE

Alugbati is commonly grown for its young shoots which make an excellent succulent, slightly mucilaginous vegetable, used as a pot herb in stews or soup; consumed boiled, fried in oil or sometimes as a green salad. Its fruits seem to have been earlier used for dyeing purposes in China. The red fruit juice can be used as ink, cosmetic and for coloring foods. The young leaves can be used as laxative, the pulped leaves to poultice sores, red fruit juice as eye drops to treat conjunctivitis and the roots as rubefacient. The red forms are commonly planted as ornamentals and are, even becoming popular in Europe as pot plant.

### NUTRIENT VALUE

Shoots of alugbati per 100 grams (g) edible portion, contain water (91 g), protein (2.1 g), fat (0.3 g) carbohydrates (3.9 g) and fibre (1.3 g). The energy value is approximately 112 kJ/100 g. The protein content is relatively low compared to other greens. The vitamin and mineral contents vary widely as follows: vitamin A, 1686-6390

IU; vitamin C, 29-166 mg; calcium (Ca), 16-117 mg; and iron (Fe), 1.2-3.1 milligrams per 100 gram edible portion.

## **PROPAGATION**

There are several types of alugbati-the green stem, red stem, and variants of the green and red. These are propagated by cuttings or seeds. The leaves are usually removed before planting materials. In home gardens, alugbati is usually grown in slanting or horizontal trellises. For commercial production, densities of about 50,000 plants/hectare are recommended.

## **CULTURAL PRACTICES**

Three to four cuttings or seeds are planted per hill at a distance of 20 to 30 cm between hills in furrows spaced at 50 to 75 cm apart. If cuttings are abundant, 7 to 10 cuttings are planted in a hill with distance 40 to 50 cm between hills. Alugbati grows well even without fertilizer but yield will improve with a liberal amount of compost. Irrigation is done by watering or flooding the field.

## **PEST AND DISEASE MANAGEMENT**

Alugbati is very susceptible to root-knot nematodes, but is free of disease and pest problems due to its very thick leaf cuticle. Leaf spots caused by *Cercospora* and *Acrothecium* sometimes occur.

## **HARVESTING AND POSTHARVEST HANDLING**

Young shoots are first harvested at about 6-8 weeks after planting, subsequently at regular intervals for 4-6 months until flowering interferes with quality. Shoots, 15-25 cm long are cut, bunched and sold at nearby markets. If undamaged, leaves can be kept for about one week in the refrigerator.

## **FOOD PREPARATION**

Alugbati can be cooked with other vegetables such as in pinakbet. It is also blanched or cooked with egg and noodles.

## **PROSPECTS/OPPORTUNITIES**

Alugbati is a very productive leaf vegetable, suitable for both home and market gardens. An advantage of this leafy vegetable is its remarkable resistance to pests and diseases.