

## WINGED BEAN



The winged bean, also known as sigarillas, goa bean, four-angled bean, four-cornered bean, manila bean, princess bean, star bean, kamrangi bean, pea, dragon bean, is a tropical herbaceous legume plant.

*Ang winged bean, na kilala rin bilang sigarillas, goa bean, four-angled bean, four-cornered bean, manila bean, princess bean, star bean, kamrangi bean, pea, dragon bean, ay isang tropikal na halamang legume.*

Winged bean is widely recognized by consumers and farmers in South Asia and South East Asia for its variety of uses and disease resistance. Winged bean is nutrient-rich and all parts of the plant are edible. The leaves can be eaten like spinach, flowers can be used in salads, tubers can be eaten raw or cooked, and seeds can be used in similar ways as the soybean. The winged bean is an underutilised species but has the potential to become a major multi-use food crop in the tropics of Asia, Africa, and Latin America.

*Ang winged bean ay malawak na kinikilala ng mga mamimili at magsasaka sa Timog Asya at Timog Silangang Asya para sa iba't ibang gamit nito at panlaban sa sakit. Ang winged bean ay mayaman sa sustansya at lahat ng bahagi ng halaman ay nakakain. Ang mga dahon ay maaaring kainin tulad ng spinach, ang mga bulaklak ay maaaring gamitin sa mga salad, ang mga tubers ay maaaring kainin ng hilaw o luto, at ang mga buto ay maaaring gamitin sa mga katulad na paraan tulad ng soybean. Ang winged bean ay isang underutilized species ngunit may potensyal na maging isang pangunahing multi-use food crop sa tropiko ng Asia, Africa, at Latin America.*

### SOIL AND CLIMATIC REQUIREMENTS (LUPA AT KLIMATIKONG KINAKAILANGAN)

Winged beans are typically grown from seeds. They require a warm and humid climate, well-drained, fertile loamy soils. They can tolerate a range of soil types, including slightly acidic to neutral soils (pH 5.5 to 7.0). They can be grown as a climbing vine, so providing a trellis or support is important. Winged beans can be grown from either seeds or tubers, depending on local practices and availability.

*Ang mga winged bean ay karaniwang lumaki mula sa mga buto. Nangangailangan sila ng isang mainit at mahalumigmig na klima, mahusay na pinatuyo, mayabong mabuhangin na mga lupa. Maaari nilang tiisin ang isang hanay ng mga uri ng lupa, kabilang ang*

*bahagyang acidic hanggang neutral na mga lupa (pH 5.5 hanggang 7.0). Maaari silang lumaki bilang isang climbing vine, kaya ang pagbibigay ng trellis o suporta ay mahalaga. Ang mga winged bean ay maaaring itanim mula sa alinman sa mga buto o tubers, depende sa mga lokal na kasanayan at pagkakaroon.*

### **Land Preparation (Paghahanda ng Lupa)**

Start preparing the land 3 to 4 weeks before planting. Plow the field to a depth of at least 20 cm. For better plant growth and development, plow and harrow the field 2 to 3 times at one week interval.

*Simulan ang paghahanda ng lupa 3 hanggang 4 na linggo bago itanim. Araruhin ang bukid sa lalim na hindi bababa sa 20 cm. Para sa mas mahusay na paglaki at pag-unlad ng halaman, araruhin at gayusin ang bukid ng 2 hanggang 3 beses sa pagitan ng isang linggo.*

### **Soil and Fertilizer Management (Pamamahala ng Lupa at Pataba)**

Cultivate winged beans in well-drained, slightly acidic to neutral soil, incorporating organic matter for fertility. As nitrogen-fixing legumes, they require minimal nitrogen but benefit from phosphorus and potassium. Conduct regular soil tests, adjusting fertilizer applications based on nutrient levels, and consider organic options for sustainable cultivation.

*Linangin ang winged beans sa well-drained, bahagyang acidic hanggang neutral na lupa, na may kasamang organikong bagay para sa fertility. Bilang nitrogen-fixing legumes, nangangailangan sila ng kaunting nitrogen ngunit nakikinabang sa phosphorus at potassium. Magsagawa ng mga regular na pagsusuri sa lupa, pagsasaayos ng mga aplikasyon ng pataba batay sa mga antas ng sustansya, at isaalang-alang ang mga organikong opsyon para sa napapanatiling paglilinang.*

### **Common Pest in Winged Bean**

- Aphids and Whiteflies: Introduce natural predators like ladybugs or use insecticidal soaps to control aphids and whiteflies.
- Leafhoppers: Use neem oil or insecticidal soap to deter leafhoppers.

### **Cultural Practices:**

- Crop Rotation: Rotate winged beans with non-related crops to disrupt the life cycles of pests and pathogens.
- Sanitation: Remove and destroy infected plant material to prevent the spread of diseases.
- Weed Control: Keep the area around the winged bean plants free of weeds, which can harbor pests and diseases.

### **Monitoring:**

- Regularly inspect plants for signs of pests or diseases, including yellowing leaves, wilting, or unusual spots.
- Early detection allows for prompt intervention, minimizing the impact on plant health.

### **Harvesting stage**

Winged beans are typically harvested at different stages depending on the part of the plant you are interested in consuming. The entire plant, including leaves, flowers, and pods, is edible. Harvesting should be done regularly to encourage continuous production and to

ensure that the pods are picked at their peak tenderness. Overripe pods can become fibrous and less palatable. Always use clean, sharp tools to harvest to minimize damage to the plant and promote healthy growth.

*Ang winged beans ay karaniwang inaani sa iba't ibang yugto depende sa bahagi ng halaman na interesado kang kainin. Ang buong halaman, kabilang ang mga dahon, bulaklak, at mga pod, ay nakakain. Ang pag-aani ay dapat gawin nang regular upang hikayatin ang tuluy-tuloy na produksyon at upang matiyak na ang mga pods ay mapupulot sa kanilang pinakamataas na lambot. Ang mga sobrang hinog na pod ay maaaring maging mahibla at hindi gaanong kasiya-siya. Palaging gumamit ng malinis, matutulis na kasangkapan sa pag-aani upang mabawasan ang pinsala sa halaman at maisulong ang malusog na paglaki.*