

# BAMBARA GROUNDNUT

*Vigna subterranea*

Fabaceae

ECHO® KARATASI YA MAELEZO YA KUPANDA

## Maelezo

*Vigna subterranea* is an annual, herbaceous, nitrogen-fixing legume of particular importance throughout semi-arid Africa. Leaves are trifoliate and are borne along creeping stems that extend along the ground surface. Flowers are yellow and butterfly-shaped, similar to other legumes. Upon fertilization, pods bearing 2-3 seeds each develop beneath the soil surface.

## matumizi

The third most important grain legume of semi-arid Africa, *V. subterranea* produces edible seeds high in carbohydrates and protein. Seeds can be dried and treated like other pulses: reconstituted in boiled dishes, milled into flour, or prepared as a paste. Seeds as well as leafy biomass also serve as livestock fodder. As a nitrogen-fixing legume, incorporation of above ground biomass introduces nitrogen and other nutrients to the soil for subsequent crops.

## Majina ya Kawaida

- English
  - Bambara bean
  - Earth pea
- Spanish
  - guisante de tierra
  - Guandsú
  - maní congo

## kilimo

- Elevation – 200-1400 m
- Rainfall – 300-3000 mm
- Soil Types – Well-drained, loose, medium textured; pH 4.3-7
- Temperature Range – 16-38°C
- Day Length Sensitivity – none
- Light – prefers full sun

*V. subterranea* can be broadcast at seeding rates between 25-160 kg/ha or planted in rows. Spacing should be 20-100 cm within row and 20-100 cm between rows. Seedbeds should be prepared flat or with a wide ridge to accommodate flower tunneling. Sowing is best done after the first rains of the season.

## uvunaji na uzalishaji wa mbegu

*V. subterranea* can be harvested continuously, if fresh seeds are desired. For mature seed, harvest generally occurs 90-180 days after planting. Yellowing leaves and leaf drop are indicators of mature seed. After harvest, mature pods should be further dried until a moisture content of 10-12% is reached and seeds rattle when shaken. When shelled, the fibrous husks can be integrated into livestock feed.

## wadudu na magonjwa

*V. subterranea* is relatively resilient against pest and disease. Cercospora leaf spot, powdery mildew, and Fusarium wilt are common fungal infections. Several viruses, such as cowpea mottle virus, cowpea aphid-borne mosaic virus, and peanut mottle virus, as well as root-knot nematodes can also inflict *V. subterranea*.

## mapishi na lishe

The high protein, high carbohydrate seeds can be eaten fresh, reconstituted in boiled dishes, milled into flour, or prepared as a paste. *V. subterranea* seeds are also frequently used to produce vegetable milks or fermented products. They are also common extenders, incorporated into maize, plantain, or other dishes to provide bulk to the dish.

## Marejeleo

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