SIRATRO

Atro, Surple Bean, Conchito

Macroptilium atropurpureum Fabaceae

ECHO® PLANT INFORMATION SHEET

Description

The exact origin of this crop is not known but it is commonly grown from southern Texas south to Peru. It was named “Siratro” and first hybridized in the early 1960’s.

Uses

Because of its long taproot, this long-lived perennial can withstand heat and drought. It produces more fodder in early spring than other legumes that normally grow best in mid-summer. It fixes nitrogen sufficiently to boost growth of other grasses when companion planted.

While best suited to grazing, it can also be used for cut-and-carry or conserved as hay (usually with an associated grass), although the twining habit can make harvesting difficult. It is also used for soil conservation (re-vegetation/stabilization of earthworks in cuttings and on embankments), and as a cover crop, fallow crop (including after lowland rice), or as a forage crop sown with upland rice. Its value as a protein bank for dry season feeding is reduced by its tendency to drop leaf under very dry conditions.
When used as a short-term legume in sorghum crops, the nitrogen benefit can persist for up to three crops of sorghum. However, large populations of the twining legume can regenerate from hard seed in the soil, creating difficulties in grain harvest.

Common Names

- Spanish
    - haba púrpura
    - jícama silvestre

Cultivation

- **Elevation**: 0-2000 m
- **Light:** fairly intolerant of shade, and is best grown in full sunlight
- **Rainfall:** 700-1,500 mm
- **Temperature**: day/night temperatures of 27-30/22-25ºC
- **Soil**: prefers well-drained soils with moderate fertility

Siratro can continue to produce a crop for up to four years in areas where there are no deep freezes and the water table is at least 30 cm below the surface of the ground. Because of its aggressive, fast growth of twining stems, it shades out weeds and stabilizes soil on sloping land. It is planted along with other tropical grasses, such as pangolagrass for higher protein in the total mass of foliage.

Harvesting and Seed Production

Siratro makes very good fodder for sheep and cattle early in spring but should not be heavily grazed over long periods. Six to eight weeks between grazings should allow enough time for some seed production. The seeds that fall to the ground germinate readily and can remain viable for up to 5 years. Some seed can even be produced the first season. Since the seedpods tend to shatter when mature, the plants or the pods alone should be harvested within one month following flowering when the seeds are slightly immature. Plants can be cut, dried in the field or under cover, and then threshed to separate the pods.

Pests and Diseases

The bean leaf roller, rust, nematodes and mildew are all enemies of siratro but usually only in dense stands in areas of heavy rainfall and high humidity. The crop is not substantially affected by an attack from any of the above.

Cooking and Nutrition

This is a crop for livestock feeding only. When the crude protein levels of tropical grasses are studied, siratro has 16% more protein than most and a higher degree of digestibility.

ECHO® 17391 Durrance Rd, N. Fort Myers FL 33917 USA
Tel: (239) 543-3246 | Email: echo@echonet.org | Website: ECHOcommunity.org