SUNN HEMP

Matraca, Indian hemp, brown hemp

Crotalaria juncea Fabaceae

ECHO® PLANT INFORMATION SHEET

Description

Crotalaria juncea is an annual herbaceaous plant utilized for fiber, forage, and as a green manure cover crop. Reaching heights of 3.5 m, *C. juncea* bears long, slender, trifoliate leaves and typical, butterfly-shaped blooms similar to other legumes.

Uses

C. juncea is most often used for fiber (rope, fishing nets, paper, canvas, carpets, etc), or as a green manure cover crop. Grown in rotation with commodity crops, *C. juncea* fixes up to 135 kg nitrogen/ha As a forage crop, *C. juncea* is limited in scope, as most varieties have antinutritional characteristics, especially in their seeds and pods, and the stalks are too fibrous to digest.

Common Names

- Spanish
    - Crotolaria
    - Cáñamo De La India
    - Soñajuelas
    - Cáñamo indio
    - cáñamo marrón

Cultivation

- **Elevation –** up to 1500 m
- **Rainfall –** 200-4300 mm/year
- **Soil Types –** well-drained soils with pH 5-8.4
- **Temperature Range –** 4-40° C
- **Day Length Sensitivity –** not a significant factor for most varieties
- **Light –** full sun

In tropical settings, sunn hemp can be planted year-round; however, it is photoperiod sensitive and flowering occurs in response to short days. Long day-lengths favor vegetative growth and reduce seed-set, although day-length neutral varieties exist (Mannetje).

C. juncea seed should be planted 2-3 cm deep—or broadast—at a rate up to 55 kg/ha, depending on use. Germination and establishment success can be dependent on moisture conditions and sun exposure, as *C. juncea* does not tolerate water saturation or shaded conditions well. Upon establishment, *C. juncea* requires relatively little management.

Harvesting and Seed Production

If utilizing as forage, *C. juncea* should be harvested 6-8 weeks after planting. For green manure cover crop use, it is recommended to cut *C. juncea* 10-12 weeks after planting, before full bloom of the stand and before plants become too fibrous to incorporate. For use as fiber, higher stand densities lead to taller, straighter plants, which increases quality of fiber harvested, which can be done after flowering or seed production.

Pests and Diseases

Few major pests, but is sometimes affected by the same pests and diseases as cowpea (*Vigna unguicuilata*) and pigeon pea (*Cajanus cajan*). *C. juncea* has demonstrated ability to suppress some pestilent nematodes.

Cooking and Nutrition

Due to antinutritive properties, *C. juncea* is not for human consumption.

References

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