Crotalaria trichotoma

LOCAL NAMES
English (West Indian rattlebox, curare pea)

BOTANIC DESCRIPTION
Crotalaria trichotoma is an erect annual or short-lived perennial herb, up to 2.7 m tall, stem ribbed, appressed puberulous.

Leaves trifoliate, without stipules; petiole 2-5 cm long; leaflets lanceolate to elliptical-oblong, 4-14 cm x 1-4 cm, base acuminate, apex acute or rounded, glabrous or rarely puberulous above, appressed puberulous below.

Inflorescence a terminal raceme, 30-40 (-90) cm long, flowers many, closely arranged; pedicel 4-8 mm long; calyx becoming truncate at base and deflexed against the pedicel, 4-6 mm long, glabrous or thinly appressed puberulous, the 5 lobes reduced to small, widely spaced teeth.

Pod shortly stipicate, sub-cylindrical, inflated, (30-) 35-45 mm x 7-11 mm, black when ripe, appressed puberulous, 50-70-seeded.

Seed obliquely heart-shaped, 2-3 mm long, smooth, orange-buff or terracotta.

The genus name 'Crotalaria', meaning rattle, is indicative of the noise made by the seeds shaken in the mature pods. The specific epithet means having divisions always in threes in reference to the leaves.

BIOLOGY
C. trichotoma flowers are believed to be pollinated by insects before they open, suggesting cleistogamy and self-incompatibility.
ECOLOGY
C. trichotoma is a plant of the humid tropics. It grows on grassy sites in coastal forest clearings, bushland, Brachystegia woodland, grasslands, roadsides and cultivated fields. It is fairly tolerant to drought.

BIOPHYSICAL LIMITS
Altitude: 0-1 800 m

DOCUMENTED SPECIES DISTRIBUTION
Native: Mozambique, Tanzania
Exotic: Angola, Argentina, Sri Lanka, Taiwan, Province of China, Vietnam

The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.
**Crotalaria trichotoma**

**Bojer**

**Fabaceae - Papilionoideae**

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**PRODUCTS**

**Fodder:** Leaves and stems are very nutritious and are readily eaten by cattle and horses. They contain no alkaloids unlike many other species in the genus. It is grown for fodder often mixed with grasses.

**Fibre:** Bark contains fibre that can be used for cordage.

**SERVICES**

**Reclamation:** *C. trichotoma* performs better on degraded and compacted soils than other green manure crops and can be used for reclamation.

**Soil improver:** The plant is grown as green manure and cover crop in tea, coffee, rubber and citrus plantations.

**Intercropping:** It has been used as an intercrop with annual crops such as maize.
**Crotalaria trichotoma**

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**TREE MANAGEMENT**

Planting in strips 0.3-1 m apart is recommended. Weeding twice is generally required before the crop covers the ground, which occurs after 3-4 months. Once established, *C. trichotoma* propagates abundantly by self-seeding. It is short-lived and does not tolerate frequent heavy lopping. Cutting should be done at a height of 40-60 cm above the ground, always leaving a few leaves.

**PESTS AND DISEASES**

*C. trichotoma* is severely attacked by the fungus *Parodiella sp*egazzinii, which covers the upper surface of the leaves with a black soot-like layer causing them to curve upwards. It is occasionally ravaged by *Helopeltis antonii* and less severely by *Deiopelia pulchella*. 
Crotalaria trichotoma
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FURTHER READING


SUGGESTED CITATION