Dichrostachys cinerea

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Dichrostachys cinerea, known as **sicklebush**, **Bell mimosa**, **Chinese lantern tree** or **Kalahari Christmas tree** (South Africa), is a legume of the genus *Dichrostachys* in the Fabaceae family.[1]

Other common names include **acacia Saint Domingue** (French), **el marabu** (Cuba), " Mpangara" (Shona), **Kalahari-Weihnachtsbaum** (German of former South West Africa), **kéké** or **mimosa clochette** (Réunion).

Contents

Sicklebush

Scientific classification
Kingdom: Plantae
(unranked): Angiosperms
(unranked): Eudicots
(unranked): Rosids
Order: Fabales
Family: Fabaceae
Genus: *Dichrostachys*
Species: ***D. cinerea***
Binomial name
Dichrostachys cinerea Wight et Arn.
Synonyms
Cailliea dichrostachys Guill. et Perrot. *Dichrostachys glomerata* Chiov. *Dichrostachys nutans* (Pers.) Benth. *Dichrostachys nyassana* Taub *Mimosa cinerea* L.

Etymology

The generic name *Dichrostachys* means 'two-colored spike', referring to its two-colored inflorescence, from the Ancient Greek *δί-* (*di-*, 'twice'), *χροός* (*khroos*, 'color'), and *στάχυς* (*stakhus*, 'ear of grain'). The specific name *cinerea* refers to the greyish hairs of the typical subspecies, from the Latin *cinereus* ('ashes').

Distribution

It is native to Africa, Indian subcontinent and North Australia[2] and introduced to the Caribbean and parts of Southeast Asia. In Ethiopia, the species is common in the Nechisar National Park.[3]

The tree was brought to the Caribbean in the 19th century.[4] In Cuba, where it is known as El Marabú or Marabou weed, it has become a serious invasive species problem, occupying close to five million acres (20,000 km²) of agricultural land. Plans are underway to exploit it as a source of biomass for renewable power generation.[5][6]

Description and ecology

Dichrostachys cinerea is a semi-deciduous to deciduous tree characterized by bark on young branches, dark grey-brown fissures on older branches and stems and smooth on the spines. They typically grow up to 7 metres (23 ft) in height and have strong alternate thorns, generally up to 8 cm (3.1 in) long. Flowers of the *Dichrostachys cinerea* are characteristically in bicoloured cylindrical spikes that resemble Chinese lanterns and are 6–8 cm long and fragrant.[7] Upper flowers of a hanging spike are sterile, and are of a lilac or pale purple. Pods are usually a mustard brown and are generally twisted or spiralled and may be up to 100 × 15 mm. The

Flowering

species can be subcategorized with two slight variations that have been recognised: *D. cinerea* ssp. *africana* and *D. cinerea* ssp. *nyassana*, the latter which is typically larger and less hairy in its foliage.[1]

The species tends to grow in rainforest zones that are clearly defined and in altitudes up to 2,000 metres (6,600 ft). It often occurs in areas with a strong seasonal climate with a wide ranging mean annual temperature and with a mean annual rainfall ranging from 200 to 400 mm. It occurs in brushwood, thickets, hedges, teak forest and grassland and generally takes to poorer quality clay soils or deep and sandy soils with a wide ph scale range.[1]

In India, it can occur in dry deciduous forest.

In southern Africa, *Dichrostachys cinerea* generally flowers from October to February with fruiting from May to September. In Indonesia, however, the species has been found flowering from September to June and fruiting from March to May. The tree generally grows at a medium to slow rate, 6–8 cm per year.

Dichrostachys cinerea inBhopal, India

Uses

The pods are rich in nutrients

Fruit and seeds that grow on *Dichrostachys cinerea* are edible. Cattle, camels and game such as giraffe, buffalo, kudu, hartebeest, nyala, red forest duiker and Damara dik-dik feed on the juicy pods that fall to the ground. Such animals also feed on the immature twigs and leaves of the tree which are rich in protein (11–15%) and minerals. The flowers can be a valuable source of honey. The wood is of a dense nature and burns slowly with no toxicity, so it is often used for fuelwood. The species yields a medium to heavy, durable hardwood and is often used in smaller domestic items as walking sticks, handles, spears and tool handles, particularly in central Africa.

Dichrostachys cinerea seeds

Dichrostachys cinerea - MHNT

In traditional medicine, the bark is used for headache, toothache, dysentery, elephantiasis, root infusions are used for leprosy, syphilis, coughs, as an anthelmintic, purgative and strong diuretic, leaves are used for epilepsy and also as a diuretic and laxative, and a powdered form is massaged on limbs with bone fractures.[1] The roots are also sometimes used for bites or stings. In Siddha medicine of the Tamils in southern India, *Dichrostachys cinerea* is called *vidathther* and used for gonorrhea, syphilis and eczema.[8]

As they are rich in nutrients, the plants are often used as fertiliser, particularly in the Sahel region of Africa along riverbanks.[9] The plant is widely used for soil conservation, particularly in India, for shallow soils, and in arid western and subhumid alluvial plains.

It is also cultivated as an indoor bonsai specimen.[10]

Despite its various uses, it is generally regarded a threat to agricultural production and is listed on the Global Invasive Species Database.[4]

References

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External links

- *Dichrostachys cinerea* in West African plants – A Photo Guide.