Leucaena leucocephala

PEA FAMILY

Fabaceae; Sub-family: Mimosaceae

COMMON NAMES

English: jumbie bean, lead tree, leucaena, wild tamarind; Cambodia: khtum tehs, krathum thet; Indonesia: petai cina; Lao PDR: kathin; kh'oonz, koong khaaw; Malaysia: lamtoro, petai belalang; Philippines: bayani, komkompitis, loyloy, palomaria; Thailand: kra thin, to-bao; Vietnam: cây keo dậu

DESCRIPTION

Evergreen thornless shrub or small tree [2–10 (15) m high]; young stems green and densely covered in greyish-coloured hairs.

Bark: Smooth, greyish-brown with numerous small raised spots.

Leaves: Dark green, twice-divided [0.7–15 (–35) cm long] with small raised structure (gland) usually on leaf stalk, 3–10 pairs of leaf branchlets, each 2–10 cm long and each bearing 5–22 pairs of leaflets that are somewhat elongated, almost parallel sided or sword-shaped (7–21 mm long and 1.5–5 mm wide).

Flowers: White or pale yellow in globular clusters (12–30 mm across), borne singly or in groups of 2–3 located at the juncture of the leaf and stem.

Fruits: Pods (several-seeded dry fruits that split open at maturity), green turning brown or reddish brown as they mature, elongated, almost straight (8–18 cm long and 2 cm wide), flattened but raised over the seeds, pointed tips; containing 10–25 hard seeds.

ORIGIN

Belize, Guatemala and Mexico.

REASON FOR INTRODUCTION

Fuelwood, fodder, tannins, nitrogen fixation, soil conservation, shade and ornament.

INVADES

Roadsides, disturbed land, urban open space, drainage ditches, forest edges/gaps, woodland edges/gaps, riparian vegetation, lowlands and coastal shrub.

IMPACTS

Forms large monocultures displacing native plant and animal species. In Hawaii, it is outcompeting open forest species (Cronk and Fuller, 1995), while on the Brazilian island of Fernando de Noronha, it impacts endemic flora. The invasion of leucaena has had a severe effect on the native plant community in the Ogasawara (Bonin) Islands, Japan, and may alter secondary succession, promoting the invasion and establishment of more aggressive alien plant species (Yoshida and Oka, 2004). In Guam, leucaena is preventing the establishment of indigenous species (B. Lawrence, *pers. comm.*, in Walton, 2003). In Vanuatu, it can form dense monospecific thickets, threatening native plant species and is 'very difficult to eradicate once established, rendering extensive areas unusable and inaccessible' (Bakeo and Qarani, 2005). In the Erap Valley of Papua New Guinea, it forms monospecific stands in river valleys, replacing native riparian vegetation (G. Werren, *pers. comm.*, in Walton, 2003).

Leucaena leucocephala (Lam.) de Wit