

Sesbania sesban (*S. aculeata*)

Papilionoideae

Indigenous

English: River bean
Kunda: Jelejele, soyo
Nyanja: Jelejele, msalasese, chigoma, soyo

Ecology: One of the many African *Sesbania* spp. which can grow in shallow water and also fix nitrogen, 100–2,000 m. It is widely distributed in Zambia, conspicuous on the flood plains of the Kafue flats, Bangweulu and Chambeshi swamps and in most river valleys. In Eastern Province, it grows around dams and dambos; very common in Luangwa Valley together with *S. macrantha*. Found in acid and saline soils, it tolerates both seasonal and permanent waterlogging.

Uses: Firewood, fodder (leaves, pods), **nitrogen fixation, soil improvement** (fallows).

Description: A semi-deciduous shrub or small tree to 8 m, branching and giving light shade. BARK: red-brown; young shoots and leaf stalks white hairy. LEAVES: **compound**, stalk narrow, blue-green, about 2 cm, **tip rounded or notched**. FLOWERS: in **few-flowered sprays**, to 15 cm, each flower **pale yellow, the largest petal spotted with purple**. FRUIT: **thin pods hang in clusters**, each pod to 30 cm, twisting open to set free many dark brown seeds which lie in sections.

Propagation: Direct seeding, seedlings.

Seed: The species is a prolific seeder with a high germination rate. No. of seeds per kg: ±80–110,000.

treatment: Not necessary, but hot-water treatment may hasten germination..

storage: Seed can be stored for long periods.

Management: Coppices well only when young. *Sesbania sesban* has been extensively tested by researchers for use in improved fallows and farmers in Eastern Province have started to adopt the technology.

Remarks: Very fast growing. Shoots are, however, often attacked by beetles (*Mesoplatus ochroptera* and *Oothecca* spp.) and the roots by nematodes. The nematode population may increase with *Sesbania* (especially in sandy soils). This tree has a short life span, often only a few years.

