

Mucuna sloanei

Fawc. & Rendle

Fabaceae

+ Synonyms

Dolichos urens Jacq.

Mucuna urens (Jacq.) DC.

Common Name:



Drawing of the leaves, flowers, fruits and seed

Photograph by: [Descourtilz, M.E., Flore médicale des Antilles, vol. 4: t. 233 \(1827\) \[J.T. Descourtilz\]](#)



General Information

Mucuna sloanei is a climbing shrub with twining stems that can be 6 - 8 metres long[

[299](#)

,
[328](#)

]. Other reports say that the stems can be 24 metres long and climb over tall trees[

[342](#)

,
[753](#)

].

The plant is often harvested from the wild for local use as a food, medicine and source of a dye and oil. The plant is also sometimes cultivated as a food crop, mainly in Nigeria[

[328](#)

].

Known Hazards

Mucuna species often possess irritant hairs on the seedpods and sometimes on the flowers and other parts. These hairs consist of 1-2 small basal cells and a large needle-like top cell. The top cell breaks off easily, piercing the skin and injecting chemical compounds that are present in the hairs. The proteolytic enzyme 'Mucunain' is said to be the active agent[

[1533](#)

].

The hairs can contaminate clothes or other objects, and remain active when dried, though they can be destroyed by heat[

[299](#)

,
[374](#)

,
[1309](#)

]. Intense itching, with reddening of the skin and small papules or urticaria occur a few minutes after contact with the hairy parts of the plant. There is no serious danger, unless the hairs get into the eye, in which case, in extreme situations, they have caused blindness. To remove the hairs from the skin, adhesive tape and washing with water and soap are considered useful. Dermatitis can be treated with corticosteroid ointment. See a doctor immediately if hairs go into the eyes[

[374](#)

].

Botanical References

[342](#)

Range


Tropical Africa - Guinea Bissau to Central African Republic, south to Angola and DR Congo;
Tropical America - Argentina to Mexico, Florida, Caribbean.

Habitat

Savannah woodland; deciduous forest; secondary jungle; often in damp sites; seasonally flooded forest; river banks with Alchornea; islands in rivers; gallery forest; at elevations up to 200 metres[[328](#)

].

Properties

Edibility Rating 

Medicinal Rating 

Other Uses Rating 

Habit Climber

Height 7.00 m

Cultivation Status Cultivated, Wild

Cultivation Details

Mucuna species generally grow best in a shady position in a humus-rich, moist but well-drained soil[

[974](#)

].

Cultivation of Mucuna sloanei is done using tall poles, as for climbing types of common bean[

[299](#)

].

There are conflicting reports on whether or not this species has a symbiotic relationship with certain soil bacteria, so it is unclear as to whether it fixes atmospheric nitrogen[

[755](#)

].

Edible Uses

Cooked young fruits are eaten as a vegetable[

[299](#)

].

Seed - cooked[

[299](#)

,

[411](#)

]. The ripe seed is eaten pounded and cooked, preferably in soups[

[299](#)

].

Medicinal

The Edo people in Nigeria use leaf sap to stop diarrhoea[

[299](#)

].

The seed is diuretic and purgative[

[299](#)

,

[411](#)

]. In both Gabon and tropical America a decoction of the seed is used as a soothing medicine to relieve the discomfort of haemorrhoids[

[299](#)

]. A hernia remedy is made by roasting, crushing and mixing the seeds in gin[

[348](#)

]. The seeds are ground into a powder, which is mixed with sweet oil, and applied to areas affected by filaria worms, or to a painful groin[

[348](#)

].

The irritant hairs on the seedpods, mixed with molasses, were at one time widely used as a means of destroying intestinal parasites. The hairs are softened by soaking in molasses, and are said to have no injurious effect upon the lining of the alimentary canal[

[411](#)

].

The dried seeds contain 3% of the amino acid L-dopa (levodopa), which stimulates the formation of the neurotransmitter dopamine in the brain[

[299](#)

,

[1533](#)

].

Other Uses

A black dye is obtained from all parts of the plant[

[299](#)

,

[411](#)

]. It is used in Nigeria to dye fibre and leather black[

[299](#)

].

The dye of *Mucuna sloanei* has not been studied, but tannins, cyanogenic glycosides and indolic alkaloids have been reported in various *Mucuna* species and may also be present in this species, contributing to the colouring effect of the sap and leaves[

[299](#)

].

Oil extracted from the seed can be used in the preparation of resin, paint, polish, wood varnish, skin

cream and liquid soap[

[299](#)

]. Total lipid content of dry matter of *Mucuna sloanei* seed is about 7% (a different source gives an oil content of dried seeds of about 23%)[

[299](#)

]. Of the fatty acids, 83% is palmitic acid, oleic acid or linoleic acid[

[299](#)

].

The seeds have been used in Jamaica for the manufacture of buttons and snuff-boxes[

[411](#)

]. In Mexico they are sometimes worn as amulets[

[411](#)

]. The seeds are also used for decoration and in games[

[299](#)

].