

[pza.sanbi.org](http://pza.sanbi.org)

# Calpurnia aurea | Plantz Africa

## Introduction

With decorative foliage, showy yellow flowers and a graceful habit, *Calpurnia aurea* is an asset in any garden.



## Description

### Description

A multi-stemmed shrub or a small graceful slender evergreen tree 2 - 4 m tall with a light, open crown.

The leaves are compound, up to 20cm long, each having 5-15 pairs of leaflets and a terminal one. The leaflets are oblong 2.5-5cm long with a lopsided base and a rounded or notched apex. They are a fresh light green, graceful and drooping.



The flowers are bright yellow, each about 2.5 cm long, in showy hanging bunches of 8 to 30 flowers. They

appear irregularly throughout the year. In summer-rainfall areas the peak flowering period is mid- to late summer (Dec-Feb), but in the winter-rainfall Western Cape, particularly during hot dry summers, they don't flower well in summer but start up again in the autumn. They are typical pea flowers with the banner/standard, keel and wing petals characteristic of the family.

The fruit is a thin pod drying light brown with a papery texture, 5-12 cm long and 0.8-1.9 cm wide, narrowly winged on one side, and containing up to 8 brownish seeds. The pods are indehiscent (do not split open when mature).



## Distribution and habitat

### Distribution description

*Calpurnia* is a small genus of approximately 16 species, 8 of which occur in southern Africa where they are found in the eastern and north-eastern parts of the country. The other species are: *C. capensis*, *C. floribunda*, *C. glabrata*, *C. intrusa*, *C. reflexa*, *C. sericea* and *C. woodii*.

*Calpurnia aurea* is the most widespread of the genus. In southern Africa it occurs from the Eastern Cape through KwaZulu-Natal and Swaziland to Mpumalanga, Gauteng and Limpopo. It also occurs northwards into tropical Africa as far as Ethiopia, and in southern India.

It is found growing in forest, on forest margins and in clearings, on hill sides or on the edge of woody kloofs and in bushveld. In forests it can be a 9 to 15 m tree while in the open it is more often a shrub or small tree 2 - 4 m tall.

Three subspecies were recognized: *Calpurnia aurea* ssp. *aurea*, *C. aurea* ssp. *sylvatica* and *C. aurea* ssp. *indica*. *C. aurea* ssp. *sylvatica* is now sunk into *C. aurea* ssp. *aurea*.

- The ssp. *sylvatica* was distinguished by being confined to the Eastern Cape, occurring from Uitenhage to the Stutterheim district, and having a hairless ovary and hairless lower leaflet-surfaces.
- *C. aurea* ssp. *aurea* extends from the Eastern Cape northwards and it has silky hairs on the lower

leaflet surfaces and the ovaries. Intermediate forms were found in Zimbabwe, the former Transvaal and in the Eastern Cape.

- *C. aurea* ssp. *indica* is confined to India and is the same as ssp. *aurea* except for having smaller calyces and petals.

## Derivation of name and historical aspects

### History

The genus *Calpurnia* is named after the Roman poet Calpurnius. He is thought to be an imitator of the poet Virgil, and since this genus resembles the genus *Virgilia* named after Virgil, it's poetically just that it be named after Calpurnius. The name *aurea* means golden (Latin), *sylvatica* means growing amongst trees (Latin).

It was first described in 1789 from a plant growing in the Royal Botanic Gardens, Kew, that was said to have been introduced from Ethiopia in 1777.

It has attracted the common name wild/Natal/Cape laburnum because its flowers resemble those of the European laburnum (*Laburnum anagroides*). *Crotalaria capensis* is also sometimes called wild/Cape laburnum which can cause confusion. The Zulu name umkhiphampethu means 'maggot-extractor'.

### Ecology

### Ecology

Flowers are visited by carpenter bees and many other insects. Dassies eat the flower buds and young flowers.

### Uses

### Use

In South Africa, calpurnia leaves and powdered roots are used to destroy lice and to relieve itches. Unspecified parts are used to destroy maggots and the leaves are used to treat allergic rashes, particularly those caused by caterpillars.

In East Africa, leaf sap is used to destroy maggots in wounds. In Nigeria, the seeds are used to treat abscesses. In Ethiopia it is used to treat stomach complaints, headache, eye diseases, amoebic dysentery, scabies and as an insecticide.

The wood is yellowish with a dark brown heartwood that is heavy and hard but not much used.





## Growing *Calpurnia aurea*

### Grow

Calpurnia is very easy to grow. It's fast-growing and flowers when young, an excellent shrub or small tree for the garden. It does best in fertile, well-drained soil with plenty of water in summer, but is tolerant of summer drought and should withstand a climate with a winter minimum of  $-5\text{ }^{\circ}\text{C}$  (zone 9). Grow it in sun or semi-shade, although a plant in full sun will produce more flowers. To keep it small and/or bushy and more floriferous, prune lightly to shape after flowering.

Calpurnia is an ideal small tree for a small suburban garden, or for a tub in an urban courtyard. It can also be planted as a specimen plant on its own in the lawn or a rockery. In time and left to its own devices it can form an interestingly-shaped focal point. Grow it as the backdrop for a herbaceous border, in groups for a mass display.

Calpurnia is easily raised from seed sown in spring or early summer. Soaking in hand-hot water and treating with a fungicide that combats pre-and post-emergence damping off, although not essential for germination, will increase the number of successful seedlings. Seed germinates in 10-14 days. Prick out soon after the first pair of true leaves have developed - taking care not to damage the taproot. Protect young plants from frost.

### References

- Coates Palgrave, Keith 2002 Trees of Southern Africa, Third edition. Struik Publishers, Cape Town.
- Flowering Plants of Africa, Volume 44, Plate 1759.
- Germishuizen, G. & Meyer, N.L. (eds) 2003 Plants of southern Africa: an annotated checklist. Strelitzia 14. National Botanical Institute, Pretoria
- Hutchings, Anne 1996 Zulu Medicinal Plants, an inventory. University of Natal Press, Pietermaritzburg.

- K. Asres, F. Bucar, T. Kartnig, M. Witvrouw, C. Pannecouque and E. De Clercq 2001 Antiviral Activity Against Human Immunodeficiency Virus Type 1 (HIV-1) and Type 2 (HIV-2) of Ethnobotanically Selected Ethiopian Medicinal Plants *Phytotherapy Research* 15, 62-69
- Leistner, O.A. (ed.) 2000 Seed plants of southern Africa: families and genera, *Strelitzia* 10. National Botanical Institute, Pretoria
- Palmer, E. and Pitman, N. 1972 *Trees of Southern Africa*. A.A. Balkema, Cape Town
- Pooley, E. 1993 *The Complete Field Guide to Trees of Natal, Zululand and Transkei*. Natal Flora Publications Trust, Durban

## Credits

***Alice Notten***

***Kirstenbosch National Botanical Garden***

***May 2005***