# Afrocarpus falcatus, Yellow Wood

**Afrocarpus falcatus** Yellow wood, African fern pine, Weeping yew, Outeniqua

**Family**: Podocarpaceae: Ancient gymnosperm – 18 genera and 173 species of mainly southern hemisphere conifer species of trees and shrubs.

**Derivation of name**: Afro-of Africa, Karpos-fruit (Greek), falcatus-sickle shaped alluding to the leaves

Studies in 2000 & 2002 provided evidence to support splitting the genus *Podocarpus* into *Podocarpus* and *Afrocarpus*. The genus Afrocarpus contains 5 accepted species

Afrocarpus falcatus is native to the montane forests of Southern Africa – Malawi, Mozambique and Eastern South Africa.

## **Description**

An evergreen conifer reaching 45m. It has been known to reach 60m. Coastal habitat or higher exposed conditions may limit its growth. It may grow as a solitary tree or in small clusters often with *Juniperus procera* African juniper. It is vulnerable to logging but not considered threatened. It is a protected tree in South Africa.

Trunk can be 2-3 m wide. Grey brown to reddish bark, smooth and ridged in young trunks, increasingly flaky on older trunks.

Leaves arranged in spirals on branches up to 4.5 cm long and 6 mm wide, green, hairless, leathery and somewhat waxy

A **dioecious species**, male and female structures on separate plants.

Afrocarpus falcatus are the tallest native trees in South Africa. Tall, old trees grow in high rainfall areas at the southern tip of Africa. Photos: Top: Tony Rebelon, spain.inaturalist.org CC BY-SA; Bottom: Craig Peter, inaturalist.org CC BY-NC





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Left: Male cones. Right: Female cones. Photos: Left: christaleroux, inaturalist.org CC BY-NC. Right: Forest and Kim Starr, Wikimedia Commons CC BY 3.0 US

The male cone is brown with spiralling scales, measures 5-15 mm long and 6 mm wide and grows from the leaf axils. Female cone has 1 scale bearing seed about 1-2 cm long. The grey-green seed is drupe-like with a woody coat covered in a fleshy resinous skin. Female trees bear their fruit irregularly only every few years.

The fleshy epimatium (a scale partly or completely surrounding the ovule or developing seed, in Podocarpaceae) of the cone ripens to a yellow colour when it acquires a soft jelly like consistency. The main agents of seed dispersal are fruit bats which eat the fleshy covering but discard the hard woody seeds. Many birds feed on the seeds as well as animals and rodents.

#### **Uses**

Wood often traded as 'pado' or yellow wood. Highly valued for shipbuilding; also used for poles, panelling, furniture, boxes, veneer and plywood. Suitable for construction, flooring, joinery, vehicle bodies, railway sleepers, agricultural implements and musical instruments.

The ripe seed is edible but resinous. Edible oil is extracted from the seeds in Ethiopia. Bark and seed used in traditional medicine. Pulverised seeds are applied to treat tubercular meningitis and sunburn.

Planted as an ornamental and roadside tree, useful for soil protection against erosion and as a windbreak.

### Geelong Botanic Gardens (See photos page 3 and maps page 4)

Afrocarpus falcatus at the GBG is a large conifer on the southern side of the 21st Century Garden. It was relocated to its current position in November 2001 when it was transplanted with a large root ball by a tree spade excavator from its original position alongside the Hansen Gates in the 20th Century Garden. A young Afrocarpus has been planted in the Pacific Rim Garden.

The GBG displays many species of the Podocarpaceae family including two trees on the National Trust list of Significant Trees. *Podocarpus elatus* from the remnant East Coast Rainforest and *Prumnopitys andina* from Chile

The new Pacific Rim Garden includes many genera of the large southern hemisphere family of Podocarpaceae:

Afrocarpus usambaensis, Dacrycarpus dacryoides, Dacrycarpus imbricatus, Dacridium balansae, Dacrydium nausoriense, Phyllocladus alpines, Phyllocladus hypophyllus 17 species of podocarpus, P affinus, P brassii, P coriaeus, P dispermus, Pelatus, P elongatus, P lambertii, P latifolius, P lucienii, macrophyllus, P nerifolius, P nivaliss, P novae-caledoniae, P polystachys, P salignus, P smithii, P spinulosus. 3 species of the genus Prumnopitys – Prumnopitys taxifolia, Prumnopitys furruginoides, Prumnopitys montana

## References

Gymnosperm Data Base, Wikipedia, GBG Plant list, 'Chronological Pictorial History GBG & EP', Ian Rogers



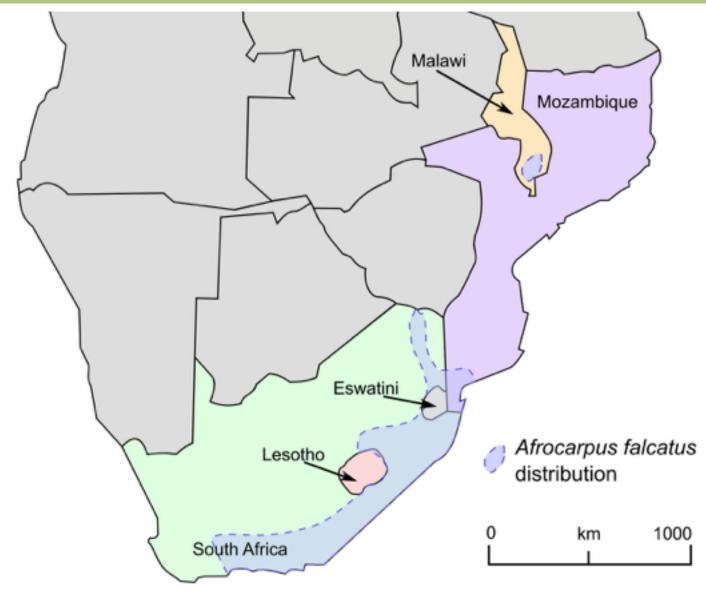


Above: A. falcatus flaking bark and leaves. Photo: JMK Wikimedia Commons CC BY-SA 3.0

Left: *A. falcatus* being moved from near the Hansen Gate to it current home in the C21 Garden, 2001. Photo: GBG Colletion..

Below: The C21 Garden approaching the end of the construction phase. The *A. falcatus,* in its new position near the centre of the photo, is to the right of the Bunya Bunya *Araucaria bidwilli*.





Above: *Afrocarpus falcatus* native distribution. South-eastern distribution: After Palgrave, 2002, 'Trees Of Southern Africa'. Malawi distribution after H. Adie and M. J. Lawes, 2010', Podocarps in Africa: Temperate Zone Relicts or Rainforest Survivors?', although wild presence in Malawi is uncertain. Base map of Africa: Andreas 06 Wikimedia commons, Public domain.

Below: Location of Afrocarpu falcatus in Geelong Botanic Gardens.

