Trees from the prehistoric Waterberg region

An anthracological study of wood charcoal by the University of Johannesburg

UNIVERSITY OF JOHANNESBURG

KAINGO Game Reserve

Firewood gathered by prehistoric societies was deposited inside three rock shelters as wood charcoal. From 2018 these remains were recovered and dated byarchaeologists working under the directorship of Prof. Lyn Wadley (University of the Witwatersrand). Charcoal samples were sent to the Universityof Johannesburg to be analysed by Dr Bongekile Zwane following the anthracology method. Woody species were thus reconstructed by studying the wood anatomy under high powered microscopes to reveal the set of trees that were selected by people for fuel at various stages of pre history.



1 Kaingo Sheep Rock Shelter

Acacia (Senegalia) sp. 1
Acacia (Senegalia) sp. 2
Brachylaena discolor
Brachylaena huilensis
c.f. Colophospermum mopane
Diospyros lycioides
Grewia sp.
Lannea discolor
Olea europaea africana
Protea sp.
Sclerocarya birrea
Searsia leptodictya
Searsia sp.



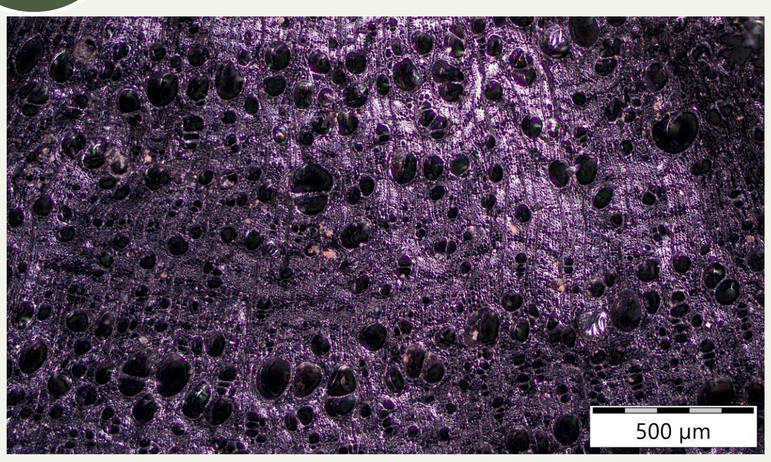
The wood cross section of archaeological cf. *Colophospermum mopane* (B. Zwane)



The leaves and wood of *Colophospermum mopane* (plantbook.co.za)

This tree set is dated between 4400 and 200 years ago
Wadley et al. 2022

2 Welgevonden Rock Shelter



The wood cross section of archaeological *Pterocarpus* cf. *rotundifolius* (B. Zwane)



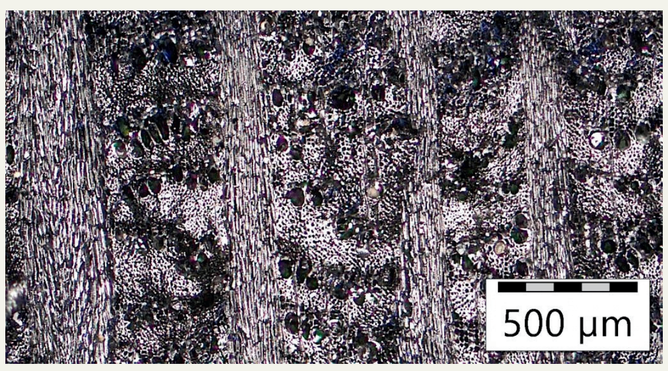
The leaves and flowers of *Pterocarpus rotundifolius* (randomharvest.co.za)

This tree set is dated from the Middle Stone Age to 270 years BP
Wadley at al. 2026

Combretum
Ficus sp. 1 sp.
Ficus sp. 2
Kirkia sp.
Pterocarpus cf. rotundifolius
Rhoicissus revoilii
Senegalia/Vachellia 1
Senegalia/Vachellia 2
Senegalia/Vachellia 3
Senegalia/Vachellia 4
Senegalia/Vachellia 5
Senegalia/Vachellia 6

3 Dwaalhoek 11 Rock Shelter

Combretum sp.
Dichrostachys cinerea
Diospyros whyteana
Englerophytum magaliesmontanum
Faurea saligna
Grewia sp.
Mimusops sp.
Sclerocarya birrea
Senegalia sp.
Strychnos sp.
Terminalia sp.
Vachellia sp.
Vangueria sp.



The wood cross section of *Faurea saligna*



The leaves and flowers of *Faurea saligna* (treesa.org)

This tree set is dated in the last 2000 years ago
Wadley et al. in preparation