Osyris compressa (P.J.Bergius) A.DC

Santalaceae

LOCAL NAMES

Afrikaans (pruimbas,pruimbos); English (msandali,African sandalwood,Bark Bosch,coastal tannin bush,Cape sumach); Xhosa (umbalanythi,inTekeza,mtekaaza); Zulu (inTshakasa,inGondotha-mpethe,umbulanyathi,mbulunyathi)

BOTANIC DESCRIPTION

Osyris compressa is a fast growing shrub to a small bushy tree of 1–5 m in height. It is a partial parasite (hemiparasitic) on the roots of other plants with a smooth greyish bark.

Leaves evergreen, opposite, elliptical, tough, leathery, erect and crowded up the stem; 10–50 x 10–27 mm, and blue-green with a grey bloom.

Flowers small, about 2 mm across, yellowish green, slightly scented, inconspicuous, borne in small terminal heads or panicles.

Fruits ellipsoid (elliptic in long section and circular in cross section), fleshy, about 15 x 10 mm, becoming bright, shiny red and then purplish black.

The generic name is from the Greek ozos and means branched, referring to the branching habit of the plant. The specific ephithet compressa means laterally flattened. The tree is closely related to an inland species namely Osyris quadripartita (Transvaal sumach), previously known as O. lanceolata but the latter can easily be recognized by the alternate leaves and the axillary flowers.

BIOLOGY

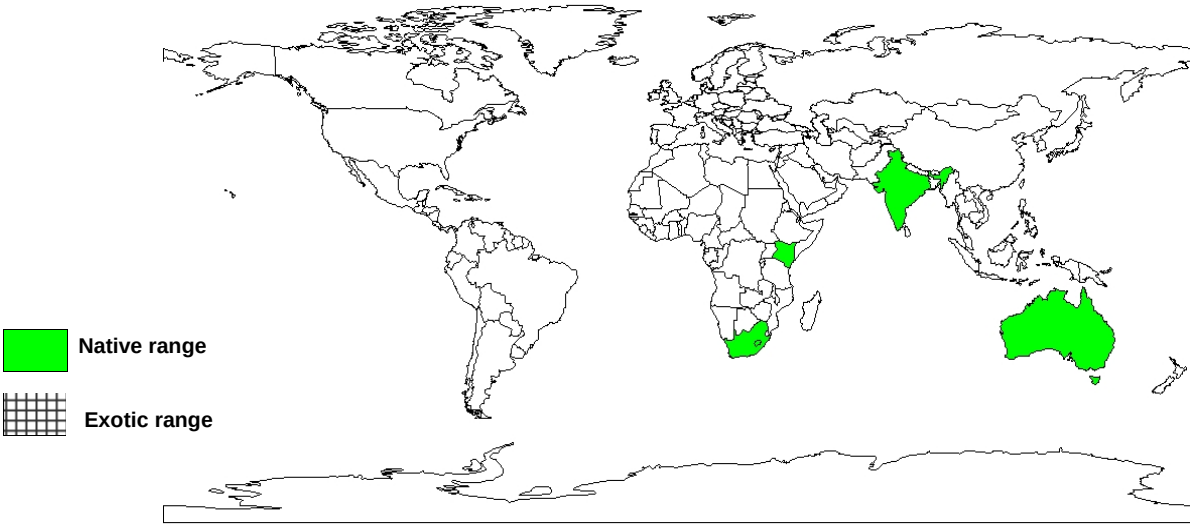
Osyris compressa is hermaphroditic and produces great number of viable seeds throughout the year, ensuring cross pollination thereby creating a stronger gene pool that enhances its survival in many vegetation types. Pollination is mainly by insects like bees, butterflies, flies and ants. The flowers and fruits are produced erratically throughout the year, but mainly from April to December. Seed dispersal is by several birds who fed on the berries.

ECOLOGY
Osyris compressa occurs on coastal dunes and lower mountain slopes as well as savanna habitats and are very tolerant of windy conditions. It thrives in sandy conditions and grows with other species of the genera Rhus, Coleonema, Maytenus, Leucadendron, Metalasia and Chrysanthemoides.

BIOPHYSICAL LIMITS
Altitude: 1500-2960
Temperature: 14-32ºC
Rainfall: 300-2120 mm
Soil type: O. compressa prefers sandy soils

DOCUMENTED SPECIES DISTRIBUTION

Native: Australia, India, Kenya, Lesotho, South Africa
Exotic:



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS
Tannin or dyestuff: The fresh leaves of Osyris compressa were used to tan leather a light brown colour, while the bark was used to tan leather dark brown. A decoction of fresh leaves was used to tan cotton, fishing lines and nets to make them more durable in the days before nylon.

Essential oils: The bark, stem, seeds and roots are used in the manufacture of aromatic oils that are used in making expensive perfumes, quality lotions, rare soaps and sweet-smelling candles. The wood yields between four and 10 per cent oil when distilled.

Medicine: A boiled concoction of the bark together with other herbs is reputed to be useful in improving blood circulation, digestive, respiratory and nervous systems. The boiled product is given to women after giving birth to boost their appetite. The oils and paste derived from the bark is used to treat skin diseases such as infectious sores, ulcers, acne and rashes. The tree is also known to be disinfectant and a sedative. It is reputed to be effective against the killer hepatitis B.

Timber: The wood is heavy and fine-grained, suitable for curving ornaments and small utensils like pestles.

Fuel: The wood has also been utilized as firewood.

Food: The fruits are edible and were an important food of the early inhabitants of the South African Cape. The fleshy part could also be compressed and stored for lean times. The bark when boiled produces a dark coloured solution which was used to flavour tea.

Other products: The heartwood scent is used in sacred ceremonies and to purify holy places. Incense sticks from the wood are burned in temples and houses.

SERVICES
Ornamental: The fruits are highly decorative on the plant. Fruits don't ripen all at once hence the plant can be very attractive for long periods throughout the year. They also attract birds and insects to the garden, wherever planted.

Erosion control: Plants thrive in sandy conditions and together with other species of plants forms an important soil stabilizer in coastal dune systems.

Boundary or barrier: Cape sumach is recommended as a seaside subject and plants form very effective small windbreaks provided there are enough host plants.

PESTS AND DISEASES
The larvae of the Common Dotted Border (Mylothris agathina), a yellowish, medium-sized butterfly that occurs along the coast, uses O. compressa as an important food plant.

FURTHER READNG

Coates Palgrave M. 2002. Keith Coates Palgrave Trees of southern Africa (edn.3). Struik, Cape Town.

Fox FW & Norwood Young ME. 1982. Food from the veld - edible wild plants of Southern Africa. Delta Books, South Africa. p.157

Germishuizen G & Meyer N. (eds). 2003. Plants of southern Africa: an annotated checklist. Strelitzia 14. National Botanical Institute, Pretoria.

http://fernkloof.com/species.mv?401

http://www.plantzafrica.com/plantnop/osyriscomp.htm

Jackson WPU. 1990. Origins and meanings of South African plant genera. University of Cape Town Ecolab.

Leistner OA. 2005. Seed plants of southern tropical Africa: families and genera. Southern African Botanical Network Report No. 26. SABONET, Pretoria.

Mason H. 1972. Western Cape Sandveld flowers. Struik, Cape Town .

Smith CA. 1966. Common names of South African plants. Memoirs of the Botanical Survey of South Africa No. 35. Department of Agricultural Technical Services, Pretoria.

Van Rooyen H & Steyn H. 1999. Cederberg. South African Wildflower Guide 10. Botanical Society of South Africa, Cape Town.

Van Wyk, B-E. & Gericke, N. 2000. People's plants. A guide to useful plants of southern Africa. Briza Publications, Pretoria.

SUGGESTED CITATION

Orwa C, Mutua A , Kindt R , Jamnadass R, Simons A. 2009. Agroforestree Database:a tree reference and selection guide version 4.0 (http://www.worldagroforestry.org/af/treedb/)