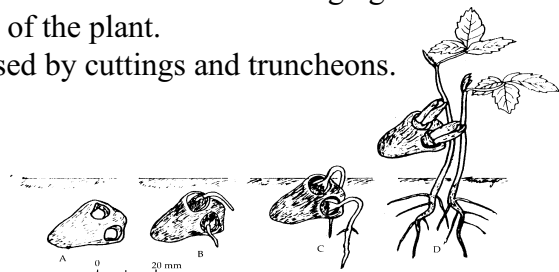


Propagation

Marula is very easy to grow from seeds, if they are treated in the right way. Often more than one plant emerges from the same nut, but all except one plant should be removed. Marula is best sown directly on the ground where you want the tree. If raised in a nursery or taken as wildling the transplanting should be while the plant is still small. A good size is when the small plant has only two real leaves. Transplanting of bigger seedlings is difficult without damaging the roots and slowing down the growth of the plant.

It can also be raised by cuttings and truncheons.



Seed and cutting collection period

Seeds are collected during the fruit harvest from January to April. The fruit pulp must be removed from the nuts.

Truncheons and cuttings are collected and planted in early spring from September to October.

Storage

The seeds can be stored more than three years if kept dry.

Seed treatment

In the thick end of the seed two or three small circles can usually be seen. These circles are perforations in the seed coat. If they are removed with a pointed knife the seed will germinate within two weeks from sowing.



Marula



Oshiwambo name:

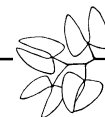
Omugongo

Scientific name:

Sclerocarya birrea

Family:

Anacardiaceae



Produced by Forest Awareness and Tree Planting Project

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Description

Marula is a deciduous tree up to 18 m tall with a round to spreading crown. Flowers arranged in a bunch, 5 to 8 cm long. Female and male flowers are separate, on the same tree or on different trees. The flowers appear before the new leaves from August to September and the fruits are ripe from January to April. The marula is widespread from Natal through Swaziland into the Transvaal, Mozambique, Zimbabwe, large areas of Botswana and the northern areas of Namibia. It grows in various types of woodland on sand to sandy loam.



The black area shows the natural distribution of marula. After K.C. Palgrave: Trees of Southern Africa.

Uses

The tree is traditionally left standing in cropland because of its many uses. The tree is respected in the community, and will never be cut down unless it is already damaged by natural causes. Some marula trees

have names such as *Nameya* meaning Watery or *Namesho* meaning Big Eyes, named after characteristics in taste or appearance of i.e.. juice or nuts.

The fruit is especially popular as an alcoholic beverage, *Omagongo*, can be made from it. The high content of vitamin C in the fruit makes it an important contribution to the diet of many people.

The marula has a truly delicious nut which is rich in protein and contains about 50% oil. The well tasting oil, *ozowe*, is used for cooking. Research is currently being conducted on its



Woman cracking marula nuts with an axe, before the oil is extracted in a mortar.

marketability as a sunblock - an oil applied to skin in order to avoid sun burn. It is claimed that meat can be successfully preserved by steaming it slightly and dripping the oil over it, thus keeping it edible for many months. The oil can also be used to preserve leather clothing.

Cattle and wildlife eat the fruits and the leaves on the trees as well as on the ground. The leaves are nutritious and will contribute to a healthy diet for livestock. In extended periods of drought the marula leaves will serve as a fodderbank, meaning that when no grass is found, the livestock can live from the leaves. The wood is used for furniture and to a lesser extent panelling. It is also a popular wood for carvings and household articles. The marula gives excellent shade.

Medicinal uses. A decoction of the bark is taken to treat dysentery and diarrhoea. Take one cup of bark to three litres of water and boil it for three hours. The infusion should be drunk at regular intervals. Blisters caused by hairy worms can be effectively treated by placing the fresh, juicy, mashed inner bark on it. The first, fresh marula juice extracted in the season is believed to cure malaria.

Superstitions. An interesting belief exists according to which the sex of a child can be predetermined by giving an infusion of the bark of a male or a female tree to a pregnant woman, depending on which sex is preferred.

Plant marula

It must be highly recommended to plant marula in Owamboland. It is an indigenous tree adapted to the poor soils and dry and hot climate of this area. It is one of the fastest growing trees here, and it will survive without watering if planted at the onset of the rains. Marula can survive the extreme temperature of the soil in the burning sun, and eventually after some years it will be big enough to cast a shade in which other trees or crops will grow very well.

The soil under marula trees usually becomes very fertile due to a high content in organic matter.