



EXTINCT FOREST SPECIES

FOREST SPECIES THREATENED IN THE

SALOUMAUCENTREDUBASSI NARACHIDIEDUS É N É GAL

CASDURHIZOPHORAMANGLE ETRHIZOPHORARACEMOSA

VERNACULAR NAME: SANAR, MAGO, MAGI (WOLOF), DIAS (SERER), MANGO TREES (FRENCH),

SCIENTIFIC NAME: RHIZOPHORA MANGLE AND RHIZOPHORA RACEMOSA

SPECIES DESCRIPTION

This species is a small, green-leaved tree (or tree), which can reach 25m in height in some regions. Its most striking characteristic is a set of aerial stilt roots (props) that grow from the main trunk at a height of 2 to 4.5 meters. Its bark is grey-brown and smooth when it is young, becoming more furrowed with age. Numerous respiratory pores, called lenticels, are visible on the surface of the roots. The leaves are thick and leathery. The leaves are oblong and elliptical, obtuse at the apex and wedge-shaped at the base. They are alternate and dark green. The flowers are bell-shaped and colored yellow-green. Yellow-green flowers emerge from the leaf axils. They are wind-pollinated or self-pollinating. The fruit is a reddish-brown berry about 25 cm long. spindle.



Photos of Rhizophora mangle (Sanar)

1 | Ethnobotany and Origin of Rhizophora mangle

This plant, characteristic of the mangrove, is one of the most important evergreens, which colonize tropical coasts, forming forests and thickets. These particular trees and shrubs, known as mangrove trees, known as mangroves, form a unique and adapted ecosystem. They grow in muddy and waterlogged soils; to variable salinity. In its area of natural distribution, from West Africa to the Pacific coast of America Tropical red mangrove (*R. racemosa*) often grows alongside white mangroves (*Laguncularia racemosa*), buttonwood (*Conocarpus erectus*), of the black mangrove (*Avicennia germinans*), and this in the places further inland, where the water is brackish, *Rhizophora* forms pure stands called "belons" (or Bolongs) in Senegal, from Saint-Louis to Guinea. The plant has aerial roots, which not only anchor and stabilize the plant in shifting saline areas, but also play a role in gas exchange. They constitute areas of natural fry rearing for the reproduction of many species of fish and marine animals.

2 | Ecosystems and climatic factors favorable to Sanar

- Central zone of the Groundnut Basin of Senegal

Climate: Senegal, a West African country, has a tropical climate characterized by two seasons: a dry season – which tends to accelerate the desertification of the northern regions extending to the center of the country – and a season of rainfall – which tends to increase humidity in the southern regions of the country. *Rhizophora*, however, is better adapted to tropical and subtropical climates which prevail in the northern and southern parts of the country with temperatures relatively high and high rainfall.

The vegetation : consists of mangrove forests.

Rainfall: Sanar prefers abundant rainfall, generally greater than 1000mm per year with a regular distribution of rainfall.

Humidity: Sanar requires high humidity, typical of coastal areas and estuaries.

Salinity: *Rhizophora mangle* is adapted to the brackish waters of estuaries and mangroves where salinity varies according to the tides and seasons. It can tolerate a wide range of salinity.

Water : It requires a regular supply of water, especially in areas where the tides are important. It is well adapted to flooded soils and can survive under low oxygen conditions.

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Temperatures: Rhizophora mangle prefers temperatures high throughout the year, between 20°C and 30°C.

Humidity: High humidity promotes growth and development of Rhizophora mangle and R. racemosa.

3. Ecological Role

Rhizophora mangle – or red mangrove – plays a crucial role in mangrove ecosystems, including:

Coastal protection: Rhizophora roots help stabilize the soils and to prevent coastal erosion.

Storm protection: mangroves – the Rhizophora y included – serve as a natural barrier against storms and floods.

Habitat and biodiversity: Mangroves provide a habitat essential for many commercially farmed fish species interesting.

Water quality: The roots of the Sanar help filter pollutants and the sediments in the water, thus improving the quality.

Nutrient regulation: Mangroves help regulate the nutrients in the water, thus preventing eutrophication.

Support for fisheries : Mangroves support fisheries local by providing habitat for fish and crustaceans.

Socio-ecological resilience of coastal communities: they protect mangrove communities from the impacts of Climate change such as rising sea levels and storms.

Carbon storage: Mangroves – including Rhizophora Mangroves – are important carbon sinks, storing carbon in their biomass and in the soils.

4 The functions of Sanar (Rhizophora mangle and Rhizophora racemosa)

Traditional Medicine:

- Bark decoction used against sore throats, boils and infections fungal;
- Decoction of leaves and bark as a topical antiseptic and against diarrhea and dysentery for internal use.

Craftsmanship: Its wood is used for the traditional construction of houses, for the manufacture of canoes, fences and spears peach. The bark is used to make a red-brown to black dye.

It contains tannins used for tanning leather. The fibers of The bark is crushed to make ropes.

Conservation: replanting is necessary, as mangrove habitats are declining for various reasons: agriculture, urban development, pollution of land and water, expansion of tourist facilities. This forest coastal protection safeguards coastlines from erosion and devastation from the sea (tsunamis and others). Mangroves are important for the establishment of land value and salinization of tropical coastal soils.

Other: Used as fuel and firewood.

5 Traditional Instructions

Dried bark infusion: one or two handfuls per liter of water 10 minutes; to be used as a mouthwash and gargle for ailments oral (cavities, gingivitis etc.) and wounds.

6 Cultivation of Sanar (Rhizophora mangle)

The seeds germinate easily when they are still attached to the mother plant, producing plantlets 20 to 25cm long. As soon as the The seedlings are ready; they detach and fall to the ground. Their preferred substrate must be kept constantly moist. Mangroves need plenty of light and direct exposure to the sun. Cultivation conditions: Rhizophora mangle requires specific conditions, including brackish water, muddy soils, a A humid tropical climate is necessary for proper development, in addition to a Regular exposure to tides. Cultivation practices include planting of propagules and protection of mangroves.