Fact Sheet - **Plants of Sudan**

Leptadenia pyrotechnica

Family name: **Apocynaceae**

Common name: **Apocynaceae**

Local name: **(المرخ) Marikh**




Wild

Role in Biodiversity

Leptadenia pyrotechnica is grazed by camels, goats and sheep, at the time when ephemerals were not available in the desert during a drought period. It is a good animal fodder for the camels because of its taste and flavor and it has higher contents of crude protein.

Leptadenia pyrotechnica is a strong soil binder: it fixes sand dunes due to its long and extensive root system. Roots are reported to improve soil calcium and phosphorus concentration.

Environment and Growing

Leptadenia pyrotechnica is adapted to grow in extremely severe climatic conditions of tropical and sub-tropical arid regions of the world. It preferes sandy or clayey well-drained soils with low organic matter.

Growth requirements:

- Annual rainfall range 100–450 mm.
- Mean annual temperature range 25- 35°C.
- Mean maximum temperature of hottest month range 28-42°C.
- pH range 7.5 – 9.0.

Reproduction and Communication

Leptadenia pyrotechnica reproduces naturally from seeds and can also regenerated from seeds sown in nurseries.The bisexual flowers are pollinated mainly by the caper white butterflies which are attracted to the flowers nectars.

Life span

Leptadenia pyrotechnica has an average of life span of 15-20 years.

Size

It can grow up to 1.5m-3m high.

Parts

Stems are glabrous, green to pale yellow and have widely spread branches that are slender,yellowish green, and spinescent.

Roots are deep, elongated and extensive. They can penetrates to a depth of 11.5 m and extenda laterally to 10 m.

Edit / Translate

Leaves, when present, are 2.5-6 x 2.5-3 mm, linear to linear-lance-shaped, nearly stalkless, hairless, pointed.

Flowers are small, numerous, 0.6 cm across, yellow, 5 triangular, velvety petals, fragrant.

Fruits are slender, spindle-shaped follicles, 7.5–12 cm × 6–7(–15) mm, apex long-acuminate, glabrous, many-seeded.

Seeds are hairy in the form of tufts, ovoid, flattened, 4–6 mm long, bearing a coma of long silky hairs at one end, 2.5–3.8 cm long.

INTRODUCTION

Shrub

Leptadenia pyrotechnica, the desert broom, is shrub or a small tree native to mediterranean regions and semi-arid deserts of Africa and Asia. It is a drought-tolerant plant characterized by ascending, dense, leafless evergreen stems. It plays an important role in arid ecosystems as a greening vegetation in the time of less and erratic rainfall. It has many traditional uses in Asia and Africa to cure various serious diseases.

In Sudan, *Leptadenia pyrotechnica* grows on dry sandy soils, dunes and sandy wadis in the arid areas of Northern and Central Sudan. As a multipurpose non-wood species that flourishs in sandy desert habitat, Leptadenia pyrotechnica plays an important role in the livelihood of nomads.

LIVELIHOODS / CULTURE

Cultivation

Leptadenia pyrotechnica grows naturally in abundance in its natural habitats. There is no cultivation practices recorded for it in Sudan. Seeds are scattered by the wind over long distances and it grows naturally whenever suitable conditions are available.

Cultural Value

Leptadenia pyrotechnica is an important plant in the dry regions of northern and central Sudan. It is used as wood fuel and building materials. Nomads use it to build the skeleton of rooms and animals pens, and house fences. Its branches are also used to make multi-purpose ropes.

In the Northern State and River Nile State, a decoction of the roots is taken to treat constipation and colic, and exposure to the smoke resulting from burning the stems is used to treat rheumatism. It is considered one of the important medicinal plants used as an anti-rheumatic and diuretic in North Kordofan and an anti-rheumatic in the Anqasana area.

Cultural Expressions

Information not available.

THREATS

Leptadenia pyrotechnica has most recently been assessed for The IUCN Red List of Threatened Species in 2020. It is listed as Least Concern. Threats may exist at a local level but on a global scale no specific threats are known. Annual rainfall and grazing pressure in addition to human overexploitation as fire and furniture wood are the main threats for *Leptadenia pyrotechnica* in Sudan.

Image(s) source :

Link(s)

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