

Jatropha curcas

Euphorbiaceae

Tropical America

Eng: *Physic nut, Purging nut*

Description

An erect, stiffly branched succulent shrub or small tree 3-4m. **BARK:** Thin and yellow-grey with a papery peel; an unpleasant milky sap when cut. **LEAVES:** Alternate and simple with 3-5 shallow lobes, to 15 cm long, widely rounded at the base on a stalk to 16 cm. **FLOWERS:** Small, yellow-green, shortly stalked on branched heads with a shorter stalk than the leaves. **FRUIT:** Ovoid capsules, slightly three-angled 2.5-4 cm long, yellow when ripe dark when hardening, contain 3 mottled blackish thin-shelled oblong seeds that measure 20 mm by 12mm. When crushed the seeds produce 35 – 37 % yellow oil.

Ecology

Mainly occurring in tropical America and Africa. This species was introduced to Africa centuries ago and is now naturalized in drier areas in many countries. In it naturalized in western and southwestern lowlands of Ethiopia frequently planted as a live fence around homesteads or used as a boundary marker. It can grow well in well drained soils of Dry and Moist Bereha and Dry, Moist and Wet Kolla agroclimatic zones of Ethiopia.

Uses

Oil from seeds is used for making soap and lighting lamps. Latex contains Jatrophine which has anti-microbial and anti-fungal properties; also used an ointment against skin disease, rheumatism and for sores

in livestock. Bark yields dark blue dye. Twigs are used for brushing teeth. Leaf from juice used for treating external piles. Decoction of leaves used against cough and as an antiseptic at birth. Sap is used to treat wounds and bleeding and roots are reported to be used as an antidote for snakebites. The whole plant is used as live fence, boundary marking, ornamental.



Propagation

Seedlings, cuttings.

Seed

Collect when capsules split open. About 2,400 seeds per kg; germination rate 70-100%. Dried seeds are soaked in cold water overnight and then sown directly onto seedbed. Germination takes place in 12-15 days.

Treatment: Do not dry fruits on roasting surfaces if for planting. Store them for 3 months before use to break primary dormancy; but use them before 15 months. Store seeds in low moisture.

Storage: Seeds are oily and do not store for long. Storage in dry-air condition with moisture content <5% is preferred.

Management

Fast growing; pruning, trimming as a fence.

Remarks

There are 15 species of the *Jatropha* genus in Ethiopia. The oil has purgative properties; seeds are toxic and should not be swallowed. Even the remains pressed from seeds can be fatal.

