

Tree Seed Information Leaflet



Juniperus procera

Species: *Juniperus procera* Endl.

Family: Cupressaceae

Common name: East African Pencil Cedar

Local names: Mutarakwa (Kikuyu)

Ndalakwa, Mukuu (Kamba)

Murana ((Meru)

Tarakwet (Nandi)

Torokio (Sibei)

Description: *Juniperus procera* is an evergreen tree up to 40m high usually with a straight bole. Bark is grey/brown, cracking and peeling in long narrow strips. Leaves are prickly, scale-like and closely overlapping on the branchlets. Mature seed bearing cones are purple blue and fleshy, round and about 8mm across containing 2-3 triangular seeds. Male cones are smaller and yellow with pollen.

Distribution: The species occurs in drier highland forests usually associated with podo and olea species between 1,800 and 2,950 m above sea level, on rocky hills or mountains on shallow rocky soils or ridge crests. It is common on the slopes of mount Kenya, Mt. Elgon, Abardares, Cherangani hill, Chyulu hills, Elgeyo Marakwet escapment, the Mau and the Tugen hills as well as isolated mountains of the northern Kenya e.g. Maralal, Mathews range and Mt. Kulal.

Flowering and fruit development: *Juniperus procera* flowers and seeds only periodically every several years. It is wind pollinated and the cones take more than a year to mature.

Method of collection: The mature purple-black fruits (cones) are collected from the ground following natural seed fall. Fruits can also be collected from the crown by climbing and shaking the branches containing ripe fruits to release them.

Seed extraction, cleaning and drying: The ripe fresh cones are depulped using mortar and pestle. The mixture of seed and pulp is sun dried on wooden trays and then cleaned using sieves or by winnowing to separate the pulp and other impurities from the seeds. The clean seeds are then dried under shade to the required moisture content (<10%). .

Seed weight: There are 37,000-47,000 seeds per kilogram depending on the provenance and the weather condition of the seeding season.

Seed storage: Seeds can be stored in airtight containers in cool dry place for up to 2 years with no

significant loss of viability.

Seed Sowing and Germination: Seeds germinate within 9–40 days. The expected germination rate of healthy and mature seed lots is between 40 and 70%. For good germination results pour boiling water into a container with seeds and leave to cool overnight.

To sow, broadcast the seeds thinly and evenly on a well-prepared seedbed (containing sand or a mixture of sand and soil). They are then covered with a thin layer of sand/soil and light mulch spread over the seedbed to keep it moist. Watering is done regularly (morning and evening) until they germinate. Mulch is removed immediately germination starts. The young seedlings are transplanted when they are large enough to handle. They are transplanted in pots containing soil mixed with NPK fertilizer at the rate of 30–40grams per 20liters of soil. Seedlings are planted out when they are 30cm tall (4–6months).

End uses: The wood of this species is extremely resistant to termites and very durable in the ground. It is mainly used as timber for construction, production of shingles, flooring, pencil making, furniture, poles and posts. Other uses include shade and ornamental.

For more information contact

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