

Sterculia Urens (Kulu)

Common Name: Karaya Gum

Botanical Classification:

Kingdom: Plantae

Family: Malvaceae, Sterculiaceae

Genus: Sterculia



Plant Description:

Karaya gum or Kulu is a gum-yielding tree originating from India, where it occurs on dry, rocky hills and in the dry deciduous forests in the north and centre of the subcontinent.

It is a medium-sized deciduous tree, typically 9 to 15 m (30 to 50 ft) tall with a short, crooked trunk supporting a much-branched, rounded crown made up of twisted branches. The bark peels off in transparent papery flakes, exposing smooth, creamy-white underbark contrasting strongly against the usually darker surroundings.

The leaves are large, 23 to 30 cm (9 to 12) long and just as wide, with five pointed lobes resembling a maple leaf. They are clustered at the ends of the branches and, with the onset of the dry season, change colour from green to yellow, then fall to the ground, leaving the branches bare and exposed.

Medicinal Uses:

- **As Laxative:**

Gum karaya has laxative action due to its ability to absorb large amounts of water and expand up to one hundred times its initial volume.

- **Antibacterial and Antifungal**

- **Pharmaceutical Ingredient:**

Sterculia gum is utilized as an important pharmaceutical excipient material in tablets, microparticles, beads, hydrogels, buccoadhesive drug delivery systems, Sterculia gum is a mucoadhesive gum and considering the mucoadhesive property, it has been used as mucoadhesive excipient in the formulations of various biomucoadhesive drug delivery systems