

# *Jatropha panduraefolia* Andr.

## Systematic Position

Kingdom: Plantae

Phylum: Tracheophyta

Class: Equisetopsida C. Agardh

Order: Malpighiales

Family: Euphorbiaceae

Genus: *Jatropha*

Species: *Jatropha panduraefolia*



**Popular names:** Biodiesel plant, Bottle plant shrub, Physic Nut.

**Nature:** Shrub

**Flowering time:** August to January

**Fruiting time:** March to March

**Plant distribution:** It is native of Cuba, cultivated in most tropical countries and naturalized in India.

## Gardening notes:

- 1. Light:** It can grow in partial shade.
- 2. Moisture:** It can tolerate drought conditions to some extent.
- 3. Propagation:** By cuttings, air layering and seeds.

**Economic importance:**

1. The oil of seed is a strong purgative.
2. The juice is sometimes used to stop bleeding and cure gums.
3. Oil of seeds is used in a standard diesel engine.
4. The residue left after oil extraction can be converted to biomass to power electricity plants.

**Plant description:** It is an evergreen shrub.

**Root-** Tap root, branched; **Stem-** Aerial, erect, woody, cylindrical, solid, greenish when young, branched; bark brownish, hard, rounded lenticels present.

**Leaf-** Simple, green, ovate, spiral, entire, acuminate, spiny base, 5-15 cm long, 2.5-7 cm wide, uncostate reticulate venation, adaxial surface green, abaxial surface reddish brown, prominent midrib and veins, petiolate, petiole 3-4 cm long, greenish red, stipulate, stipules small, black.

**Inflorescence-** Terminal paniced cyme.

**Flower-** Small, incomplete, unisexual, male flowers numerous and female flowers few, actinomorphic, bracteate, bracteolate, bracts green, thin, pedicellate, pedicel greenish red, small, 1-2 cm long ; **Sepals-** 5, reddish, polysepalous, persistent, inferior, valvate aestivation; **Petals-** 5, polypetalous, attractive, reddish pink, white small hairs in center, inferior, twisted aestivation; **Stamens-** 10, in two whorls, 5 longer and 5 shorter, inner 5 connate into a central column and outer 5 free, monadelphous, inferior, filaments small, reddish, weak, anthers reddish with yellow margins, bilobed, basifixed, longitudinal dehiscence, 1-1.5 cm long; **Carpels-** 3, syncarpous, ovary superior, 3-celled, 1 ovule in each cell, axile placentation, style simple, short, stigma hexafid, 1 cm long, green.

**Fruit-** Green, capsule, ovoid, bulb shaped, 1 cm long, 3-celled, tripartite, 3-valved with white seeds having red spots when immature and brownish when mature, persistent sepals present.

**Seed-** 3 in each fruit, brownish, patchy.

### Some close-up pictures of plant parts

