



Present

# Do Not Cultivate

# PHYSIC NUT *Jatropha curcas*



C. Henning



BIISC



BIISC



BIISC

**Description:** Soft-wooded shrub to small tree, to 20' tall, with round, green fruit

**Flowers:** Small, pale green flowers held upright in clusters

**Don't confuse with these look alike:**



Forest and Kim Starr

Milo



Forest and Kim Starr

Kukui

**Leaves:** Light to medium green, 3 to 5 lobed, leathery, with marked vein pattern

**Seeds:** Brown, oblong nut-like seeds, 1" long, encased in woody brown capsules



Forest and Kim Starr

SHRUB

# PHYSIC NUT

*Jatropha curcas*

Family: Euphorbiaceae



USE CAUTION: TOXIC PARTS!

Origin: Mexico and Central America

HWRA Score: 17

Big Island Habitat: Lowland forests

**Description:** A fast growing, soft-wooded shrub to 20 feet tall which produces clusters of round, green fruit and brown pods containing large brown, oblong seeds to 1 inch long.

**Impacts:** Physic nut is highly tolerant of poor soils and aridity and grows rapidly to form dense stands, displacing native plants. All parts of the plant, especially the seeds, are toxic.

**Dispersal Mechanism:** Physic nut is dispersed by long lived seeds.

**Cultivation:** This plant has been cultivated in many countries for use as biodiesel. The oil rich seeds and ease of cultivation, even on marginal croplands have led to experimental plantings in the developing world. However, yields have been far below expected levels, casting doubt upon its usefulness as a biofuel source. It was planted in the Puna district for use as biofuel. Due to its highly invasive nature, physic nut should not be cultivated in Hawai'i.

## **Don't confuse with:**

- **Milo** (*Thespesia populnea*) The fruit of this small tree looks similar when green, but milo's leaves are heart shaped, rather than lobed.
- **Kukui** (*Aleurites moluccana*) The lobed leaves of kukui are similar to physic nut, however they are lighter, silvery-green and the mature kukui is a much larger tree.

SHRUB