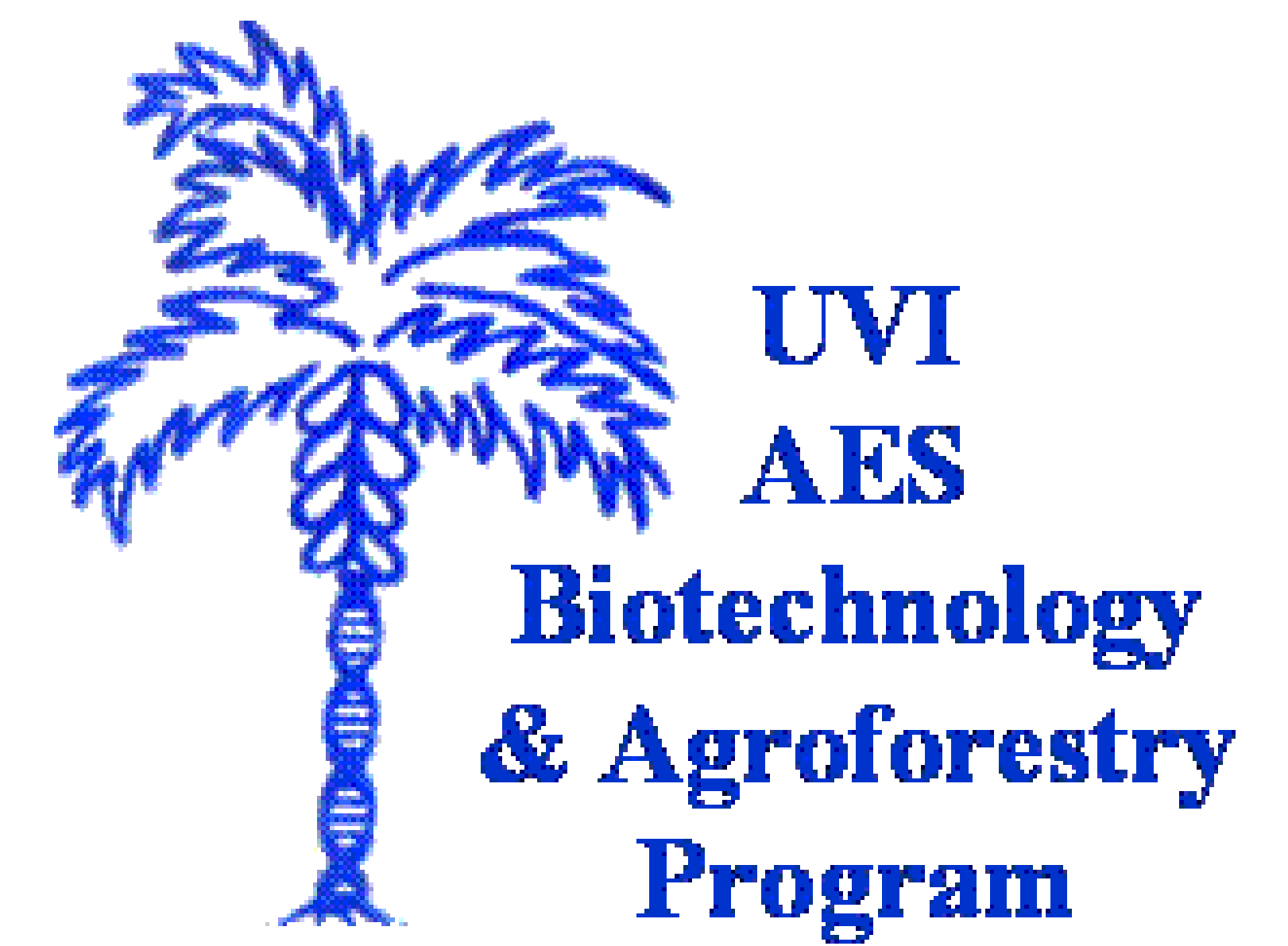




# DOG ALMOND, (*Andira inermis*, (W. Wright) D.C.)

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## INTRODUCTION

New buildings and homes require landscape plantings. The demand for ornamental plants is rising as the Virgin Islands become urbanized. The planting of native species instead of imported exotic plants around buildings and public spaces conserves water and preserves local plant biodiversity. Dog Almond is an example of a native plant that is both attractive and drought resistant. Other common names for the species are Angelin, Bastard Mahogany, Pig Turd, and Moca.



Figure 1: Mature *A. inermis* tree in Christiansted, notice the spreading crown. To right, 3 yr old tree

**DESCRIPTION:** An attractive medium sized tree with dark green leaves and showy pink flowers. It is usually between 20 and 50 feet tall (6-15m) and 6-12 inches in diameter (15-30 cm). Sometimes larger in a forest setting up to 100 ft (30m) tall and 48" (120 cm). Branches point upwards, with leaves clumped at the ends of the branches. Where the tree grows determines its form. Within the forest, the tree has a narrow crown; the trunk is straight and cylindrical. There are no low branches. Open grown trees have a rounded dense crown with many spreading branches (Fig.1). The leaves are compound with an odd number of leaflets, that is to say there is anywhere from 4 to 19 leaflets with one leaflet at the tip. Each elliptic leaflet is 5-15 cm long. The leaf with its accompanying leaflets grows up to 40cm long. The leaf color varies from reddish when new, passing through shiny yellow, dark green when mature, and brownish green when senescing. (Fig 2). The flowers are pea-like and grouped in much branched clusters called panicles. The flowers are purple pink and fragrant. (Fig 3). The fruit is a hard oval seed covered by thin green waxy flesh. Each seed hangs from a stalk. The seed itself is poisonous but bats eat the green flesh round the seeds and disperse and disperse them, (Fig. 4 and Fig 5)). The bark is light grey, with fissures, and scaly. Unpleasant cabbage like odor when damaged.

**DISTRIBUTION:** Wide spread in central and western St Croix. Throughout the Caribbean and tropical Americas, on both Atlantic and Pacific coasts. Very adaptable species growing on large range of sites. In St Croix, grows from about sea level to the summit of Mt Eagle, (355m)



Figure 2. Leaves, back and front with pen for scale.



Figure 3. Biomass allocation for all species, 2L/wk.



Figure 4. Fruit of *A. inermis* hanging from stalks, in lab. Note seed has diameter of 2 cm..



Figure 5, Up close views of germinating seeds

**DISTRIBUTION ECOLOGY.** Found in woodlands, along streams and roadsides. Considered a long lived pioneer and very important early colonizer of open fields and other disturbed sites. Fruit bats disperse the seeds far and wide. IN fact, the genus name *Andira* refers to the word for bat in some Amerindian language. Large seed allow seedlings to persist in shade of tall grass or forest understory so seedlings can get established and wait until there is a clearing in overstory. Once in the light trees grow fast, and live a long time. Trees planted at UVI average 2 m of height growth in first two years. "The adaptability of this species to a wide variety of sites, at its capacity to produce large quantities of bat dispersed seeds make it one of the most wide spread species in Puerto Rico"

## PROPAGATION AND GREENHOUSE MANAGEMENT

Trees flower in winter and then again in summer, But fruit mainly found from June to December. Trees planted at UVI produced flowers and seed within 3 years of out planting. Trees not self pollinating, more than one tree needed in the vicinity to produce seed. There are 30 seeds per kilo. Seeds easily collected from ground. Up to 100 % germination, one could speed up the germination process by using seeds that bats have eaten the rind off or one could peel the seeds after bats have eaten the seed coat. Scarified seeds germinate within 3 weeks, and untreated seeds within 8 weeks. Because of large seeds, tree grows quickly and should be grown in large pots. Plant out when trees each 30-50cm for reforestation projects or when 1.5m tall for landscape projects.

## USES

The very heavy wood (0.63g/cm<sup>3</sup>). The heartwood is yellowish brown to dark red. It is difficult to work but used in boat building, construction, railroad ties, veneer, parquet and fine furniture. Used for carvings and turned objects like pool cues. Once upon a time it was one of the most important timber species in Puerto Rico, (and one can imagine, neighbouring islands) but due to a shortage of large trees, if it is used at all it is used for posts and poles. The wood is durable when in contact with ground.

The flowers are very attractive to bees, therefore a honey plant. The tree has been occasionally used for coffee shade.

What the tree is NOT USED FOR is charcoal or firewood because the smoke is toxic. The poisonous seeds and bark have been used as traditional or bush medicine as a vermifuge, purgative, and narcotic. They cause death in large doses.

## LANDSCAPE USES:

Makes good ornamental or shade tree, in landscape setting, but don't plant it close to pools because the trees drop lots of leaves and seeds. Also don't plant next to sandbox due to poisonous seeds that small children might eat. On the plus side average height growth 0.5m a year (20 inches), and flowers produced within 3 years.

## Acknowledgement

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