# SEED LEAFLET



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# Anacardium excelsum (Bertero & Balb. ex Kunth) Skeels

#### Taxonomi and nomenclature

Family: Anacardiaceae

Synonyms: Anacardium rhinocarpus DC, Rhino-

carpus exelsa Berth & Balb.

Vernacular/common names: wild cashew; espavel,

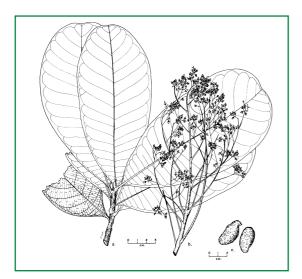
espavé acajou.

#### **Distribution and habitat**

Native to the northern part of South America from Ecuador to the Guyanas and through Central America to Honduras. In the zone of dry tropical forest it is found near rivers, in the montane tropical and humid subtropical zones on alluvial soils and on slopes and in the very humid tropical zone also on alluvial soils. The altitudinal range is 0-1300 masl, temperature and rainfall regimes are 21-27°C and 500-4500 mm/year. Grows in waterlogged areas near streams, on light clay or sandy soils with pH ranging from acidic to neutral.

#### Uses

The wood is used for construction, tools, furniture and boxes. It is soft and light, brown in colour, very lustrous and of medium texture; it is durable and easy to work; density is 0.30-0.40 g/cm<sup>3</sup> and the calorific value 3600 kcal/kg.



Foliage, inflorescence and seeds of *Anacardium excelsum*. From: Flora Arborescente de Costa Rica.

# **Botanical description**

This is one of the giant species of tropical America, reaching 50 m in height and 3 m in diameter. The outer bark is thick, rose coloured and somewhat resinous, and has the turpentine smell that is characteristic for the family.

The leaves are simple, leathery, alternate, broader near the apex, 14-30 cm long, 5-12 cm wide, clustered at the end of branches; petioles 0.7-2.1 cm long. Flowers small, white or cream coloured, in 15-35 cm long terminal panicles.

# Fruit and seed description

**Fruit:** a kidney shaped nut similar to that of *A. occidentale* (cashew), 2-3.5 cm long, 1-2 cm wide. The enlarged and fleshy receptacle in which the fruit is embedded, is smaller than that the cashew apple; it is S-shaped, 0.5-2 cm long and edible.

**Seed:** 2-2.5 cm long. The raw seeds are caustic and highly toxic.

# Flowering and fruiting habit

In Costa Rica flowering occurs in February-April and the optimal time for harvest is the first two weeks of April.

#### Harvest

The fruits are collected from the tree or from the ground.

#### **Processing and handling**

After collection the fruits should be processed quickly and care must be taken to protect the fruits from the sun to prevent loss of viability.

#### Storage and viability

It is recommended to keep the seed in cold store, preferably below 0°C. Preliminary results from CATIE (1995) show that seed kept at 6°C in plastic bags can retain viability for two months, after which viability drops quickly.

# **Dormancy and pretreatment**

The seeds can be pretreated with boiling water. The water should be taken away from the stove before the seeds are added, and the seeds left in the water for only 10 min. Another possibility is to soak the seeds in cold water for 12 hours.

# Sowing and germination

Sowing can be done directly or in polytubes. For direct sowing, 1-2 seeds are sown in each hole.

# Phytosanitary problems

The larvae of a not identified species of butterfly devours the seed leaving only the dry shell. Attacked seeds have small cracks on the surface.



Young fruits. Parque Natural Metropolitano, Panama. Photo: Dorthe Jøker, DFSC.

# **Selected readings**

**Janzen, D. (ed.) 1991**. *Historia natural de Costa Rica. Organización de Estudios Tropicales*. San José, C.R. Editorial de la Universidad de Costa Rica. 822 p.

Parent, G. 1989. *Guía de reforestación*. Corporación de Defensa de la Meseta de Bucaramanga. Colombia. 214 p. Trujillo, E. 1995. *Manejo de semillas forestales: Guía técnica para el extensionista forestal*. CATIE, Turrialba, Costa Rica. Serie Técnica. Manual Técnico No. 17. 48 p.

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