

Acacia Senegal - Sudan Gum Arabic Tree

Description

- Family:** Mimosoideae (legumes, Nitrogen fixing).
- Growth form:** Small tree, usually smaller than 10 meters high.
- Identification highlight:** Its spines, growing in "threes", the outer two curving upward, the centre one pointing downward.
- Flowers:** cream-colored spikes.
- Leaves:** Fine "acacia style" leaflets.



Ecology

- Origin:** Indigenous to sub-saharan Africa, and the Arabian & Indian peninsulas.
- Climate:** Hot & dry areas.
- Soils:** Mostly rocky hills, dry sandy soils, some varieties heavy clay soils.
- Root system:** Deep tap root and far-reaching lateral roots for obtaining soil moisture and nutrients.
- Altitude:** Sea level to 1,900 meters.
- Lifespan:** 25-30 years.

Products, yields, uses and value

- Most important product:** Gum arabic.
- Use:** Widely used in the food, printing and pharmaceutical industry, as an emulsifier (soft drinks), stabilizer (foam in beers, dairy products, carrier for encapsulation).
- Yield:** After 3-4 years.
0.2-6 kg gum per tree/year (reaching a peak between 7-12 years).
- Price (2007):** **Non-processed gum (cleaned, graded, kibbled):**
1.90-4.20 Euros/kg with premium quality from Sudan, best quoted on international markets.
- Processed gum (spray-dried):**
3.20-6.30 Euros/kg.



Melia Volkensii - Mukau Tree

Description

Family: Meliaceae (a tropical family).

Growth form: A medium-sized tree, up to 20 meters tall, with a straight trunk.

Identification highlight: Its light green foliage.

Flowers: White panicles.

Leaves: Composed of leaflets.



2 year old mukau



3 year old mukau



5 year old mukau



7 year old mukau

Ecology

Origin: Indigenous to East-Africa (Kenya, Tanzania, Somalia, Ethiopia).

Climate: Hot and dry areas.

Soils: Mostly light and medium soils.

Root system: Deep tap root and far-reaching lateral roots for obtaining soil moisture and nutrients.

Altitude: 400-1,650 meters.

Lifespan: 15-20 years commercial, 30-40 years biological.

Special treatment: Needs intensive pruning in its first years.

Products, yields, uses and value

Most important product: High-quality mahogany timber, can be used in open air.

Use: Furniture, parquet, doors, window frames, boat furnishing etc.

Yield: 130 m³/ha for timber.
10 year old tree contains about 1/2 m³ timber.
20 year old tree contains about 1 m³ timber.

Price (2007): **Kiln dried timber:**
FOB 400 USD/m³ (FOB - Free On Board).

Market prospects: Sustainably grown tropical hardwoods have excellent market prospects as timber supply from rainforests will decrease due to overexploitation, political pressure (global warming) and increasing remoteness.