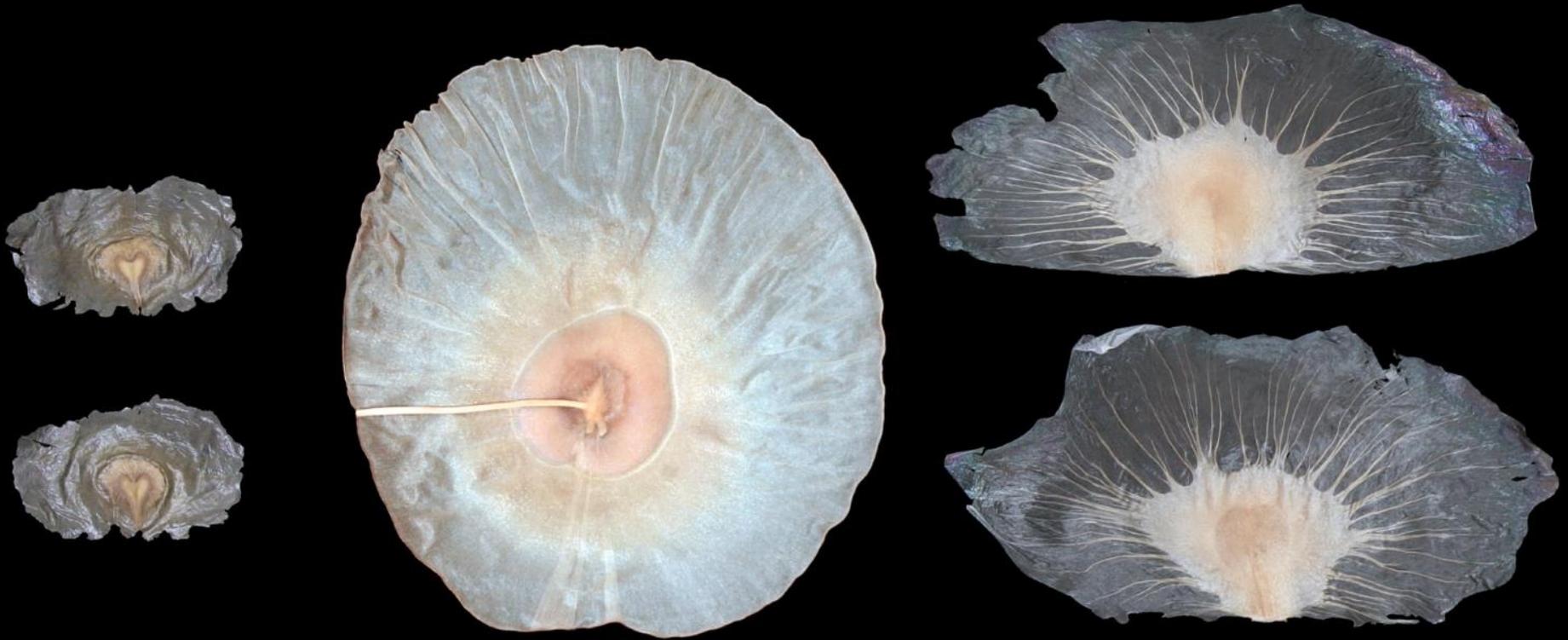




We love fruits and seeds.



There were so many wonderful seeds with wings to fly around the forest.

Whole pod



Half pod



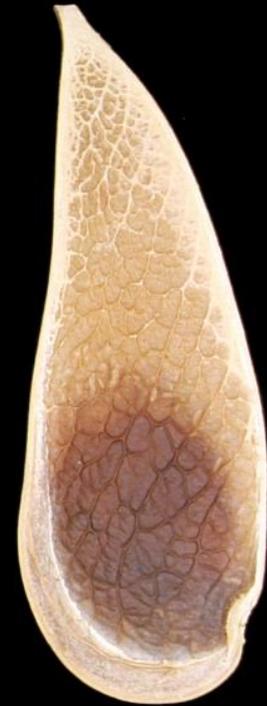
Winged covering



Seed



Half pod



Quamwood (*Schizolobium*) is a wonderful and different member of the legume family. It is unique in having a winged coating that covers the seed and floats it from its high canopy.



Here is a collection of drift seeds that can float great distances in the ocean.

Seeds and fruits that are dispersed in salt water oceans are called drift seeds.

Less than 0.1% of the living plant species produce seeds designed for water dispersal.

However, those adapted to this mode of dispersal are amazing in their ability to survive long periods in cold, salt water.

Drift seeds can travel great distances and there are examples of seeds from the tropics washing up on Northern European beaches.

Common drift seeds



Sea heart (*Entada gigas*)



Sea purse
(*Dioclea reflexa*)



Sea bean
(*Mucuna*)

Drift seeds and fruits float because they are buoyant.

In many cases, this is due to air cavities within the seeds.

Half seed showing air cavity
in the center of the seed.



Sea heart (*Entada gigas*)

Kapok (*Cieba*) is the Mayan
"World Tree".

It is also known as the floss
tree because the fruits open
and release seeds in a
cottony mass.



Kapok tree (*Cieba*)

Cojones de burro (*Stemmadenia*) is named for the shape of its paired fruits. The seeds inside the fruit are eaten by parrots and squirrel monkeys (*Capuchin*).





The seeds in *Stemmadenia* are covered with an orange-red aril that entices the animal to eat the seed and disperse it to a new location as it passes through its digestive system.



Madras thorn (*Pithecellobium*)
is a legume that also produces
an aril.

The white aril is attractive to
birds.





We found this fruit in the Belize botanic garden. Our coach driver kept it in the bus. The next day it violently exploded while we were hiking in the ATM cave. It is from the sandlebox tree (*Hura*) known for its exploding fruit, which disperses seeds over 100 feet at a speed of 150 MPH.



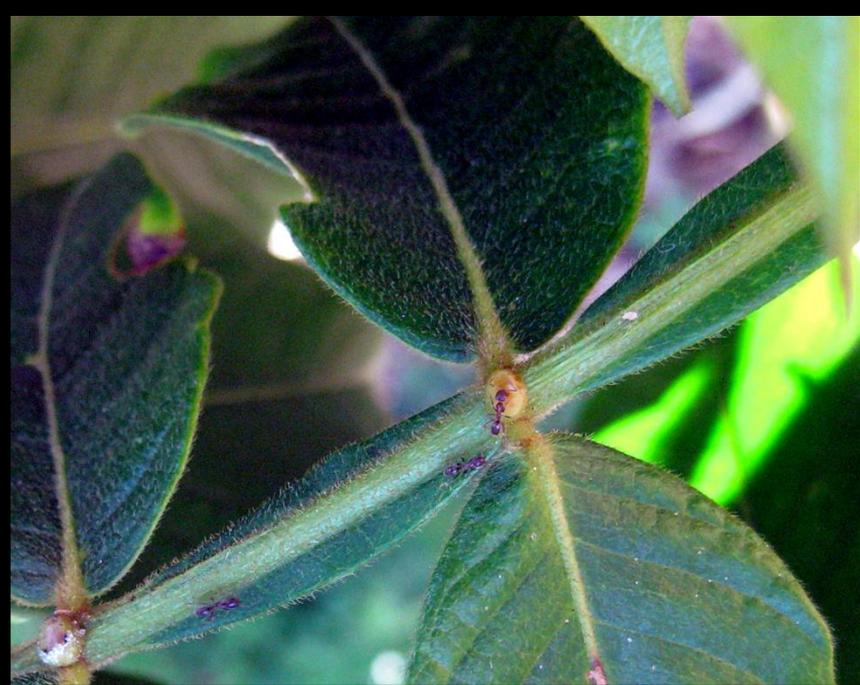
The state tree of Belize has a seed pod shaped like an ear (*Enterlobium*).



It is a large tree with lacy leaves.

Ice cream bean (*Inga*) is a legume that produces lacy white flowers and a long pod with an edible covering around the seed.

It also has a large gland on the leaf rachis between the leaflets that supplies a nectar to attract insects.



Breadnut (*Brosimum alicastrum*)
was an important part of pre-
columbium Mayan diet.



Flowers



Fruit



Noni (*Morinda citrifolia*) produces an interesting fruit that is high in vitamin C, but has an unpleasant odor. We saw it being sold at the Market in Guatemala.

Notice the weaver ants attracted by the nectar in the flowers. They protect it from insect herbivory.



Cashew (*Anacardium*)

Flowers



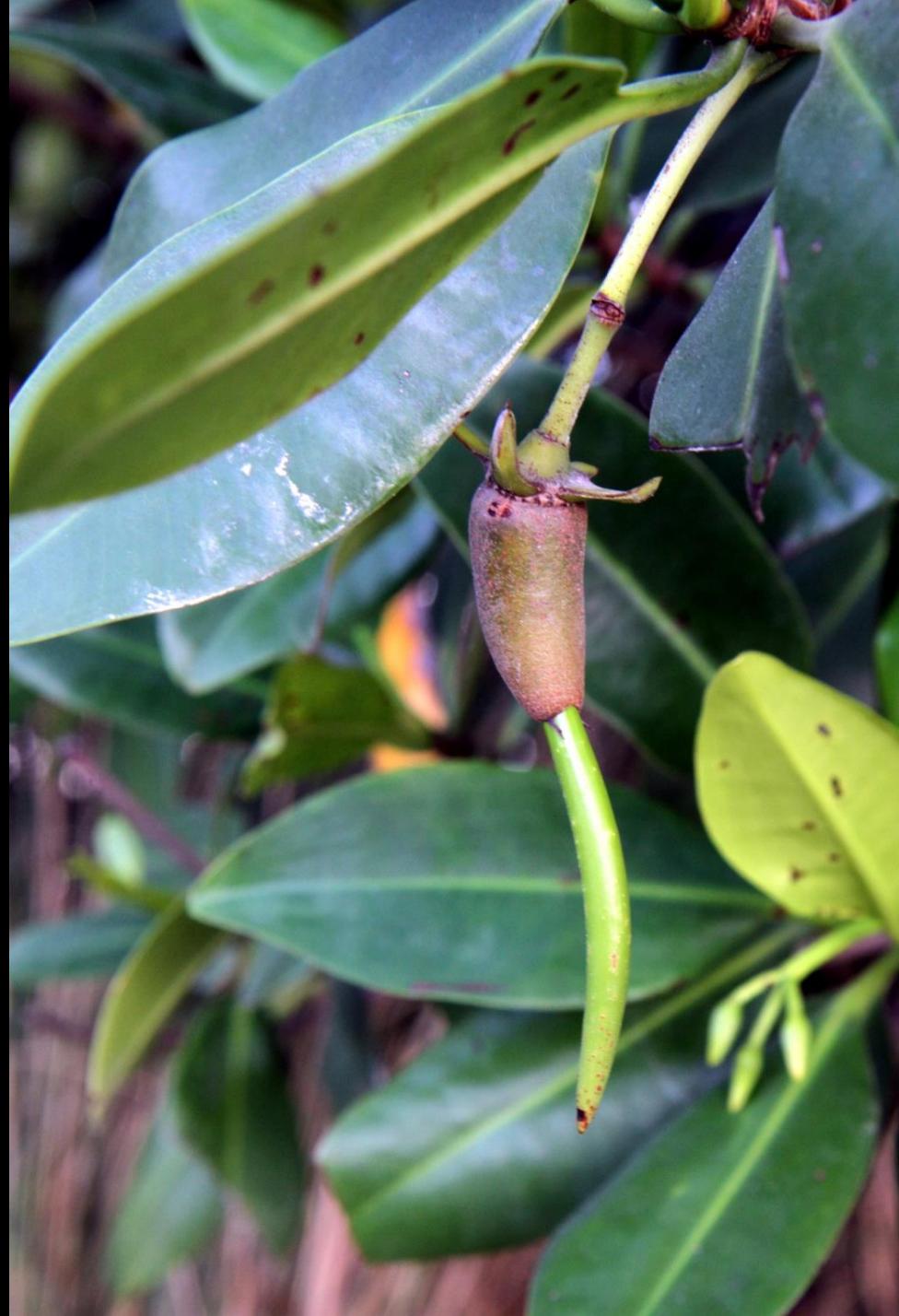
Fruit



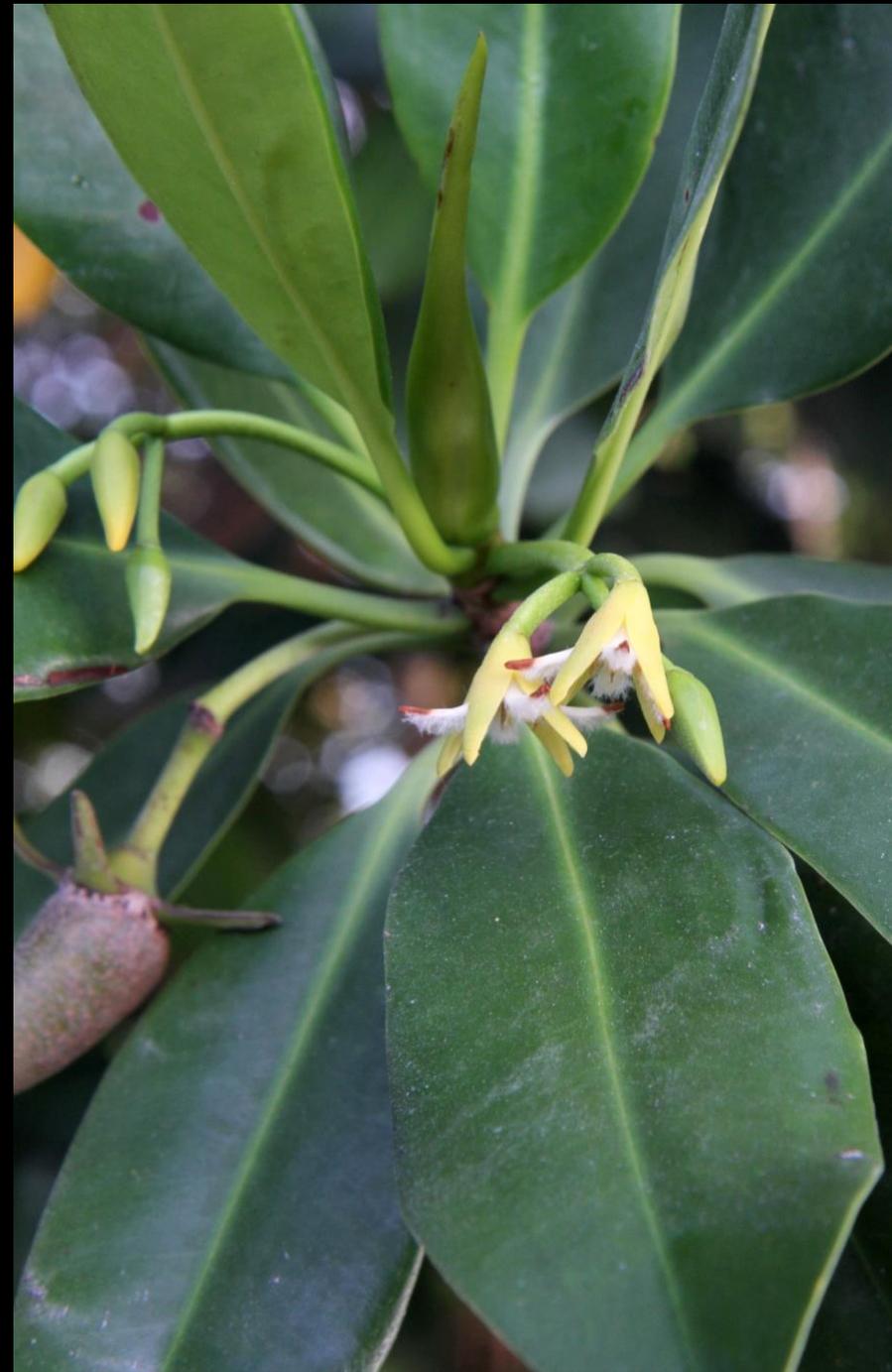


Mangroves (*Rhizophora*) were common along the coast in Belize and Mexico.

Red mangrove (*Rhizophora*) seeds germinate while still on the plant. The radicle emerges from the fruit and becomes quite long before the fruit falls and is driven into the sand.



The mangrove flower is small but attractive on close inspection.



The cannonball tree (*Couroupita*)
is always fun to see.

It flowers and fruits along the
main trunk of the tree.



Couroupita earns its common name of cannonball tree.



Shari with
cannonball
tree in
Costa Rica

The usual cannonball tree I see is *Couroupita guianensis* with orange-red petals.

However, I believe the tree we saw in the Belize botanic garden was the less common *Couroupita nicaraguensis* with white petals.



Couroupita guianensis



Couroupita nicaraguensis



Couroupita nicaraguensis

We came upon this orchid
on the forest walk in Tikal.

It turns out to be the
cockleshell orchid
(*Encyclia cochleatum*) the
official flower of Belize.



David's favorite tree
flower is *Cordia*.

We saw two types, both
native to the Yucatan.



Geiger Tree (*Cordia sebestena*)



Ziricote (*Cordia dodecandra*)



The real show off in the tropics is Royal poinciana (*Delonix regia*)



Royal poinciana (*Delonix regia*)



Royal poinciana
(*Delonix regia*)

Another showy
tree legume is
mountain rose
(*Brownea
macrophylla*)

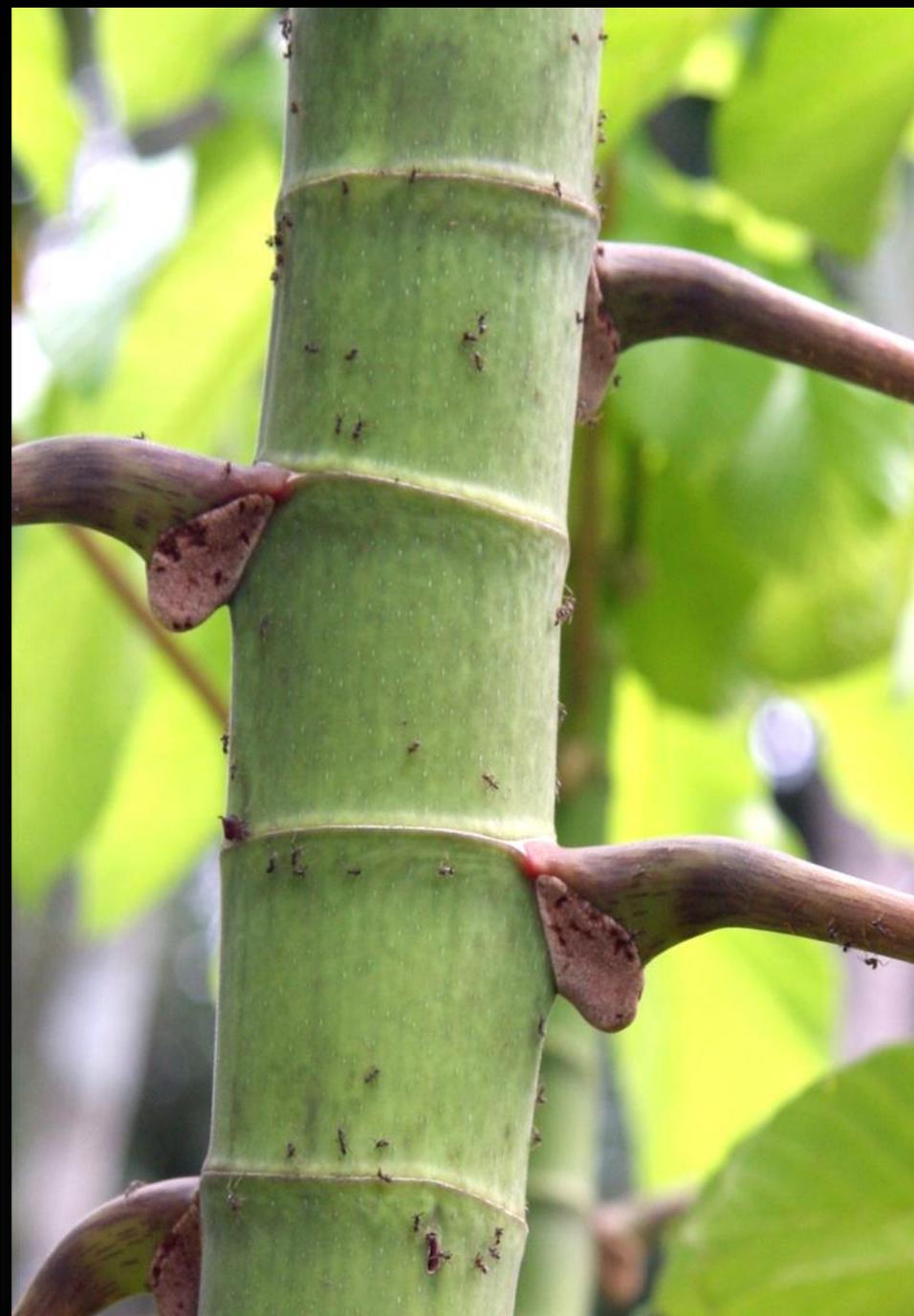


We saw a lot of *Cecropia* trees especially on our walk to the permaculture farm.



Cecropia is a tropical plant that produces a swelling at the base of the leaf petiole that provides food for ants. In return, the ants provide protection from leaf eating insects.

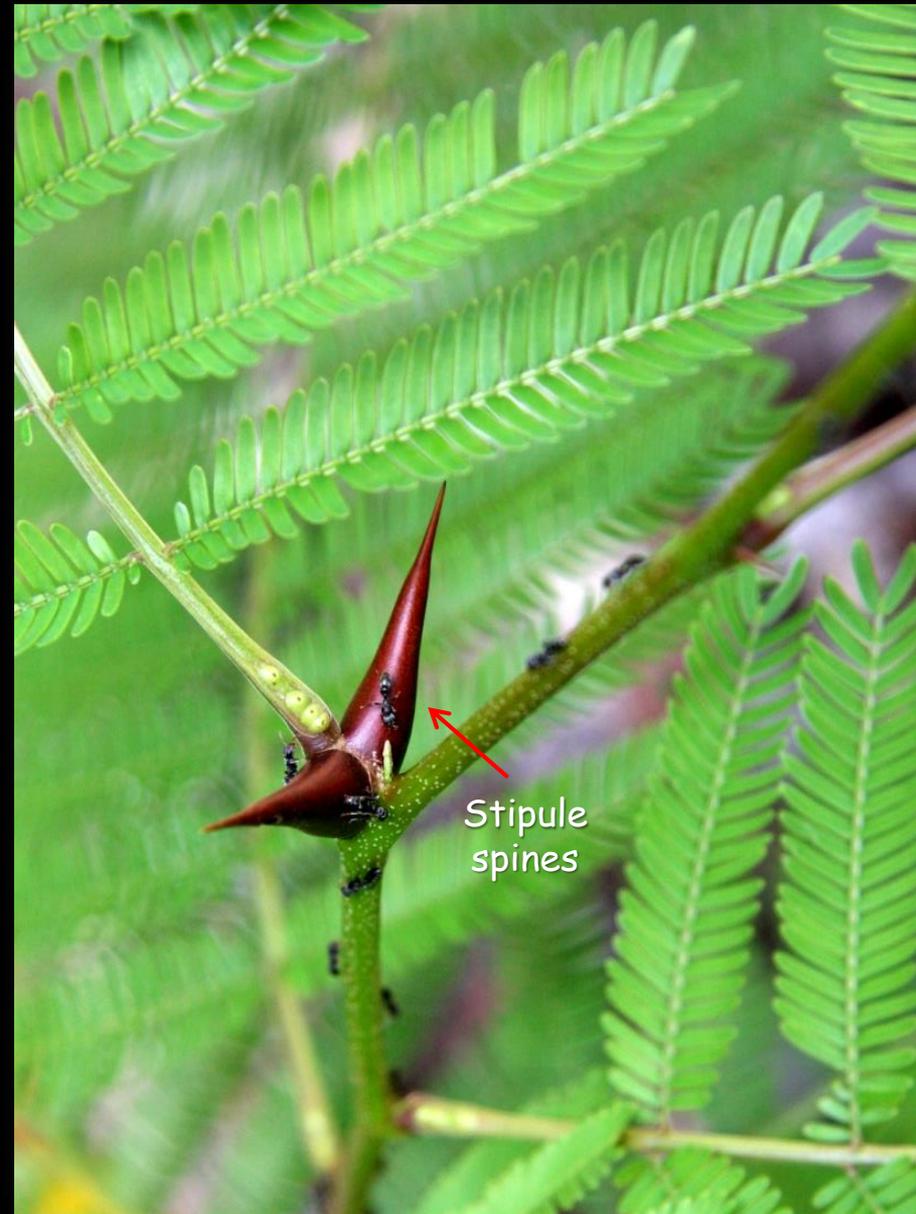
These are referred to as Müllerian bodies.



We also encountered the bull acacia (*Acacia collinsii*) that produces stipule spines that are hollow and provide shelter to of *Pseudomyrmex* ants.

The leaf tips produce food packets called Beltian bodies for the ants.

The ants then defend the *Acacia* from insect or animal pests.



Acacia collinsii

I found *lignum vitae* (*Guaiacum*)
growing in the main square in Antigua.



Yellow capsules
open to expose
red aril-covered
seeds.

The common name refers to the very hard wood of these trees. The resin was used as a 16th Century syphilis cure. It is currently the source of the cough medicine drug Guaifenesin included in products like Mucinex and Robitussin.

Copal incense
for sale at
the market.



Sampling resin or Copal from the *Bursera bipinnata* tree. The resin is used to make incense for religious ceremonies.



Queen's wreath (*Petrea*) was one of the many vines we saw on the trip, but it was the most fun because it is interactive and the flowers fly.

