Why Collect Palms?

Palm pests are coming soon
Palms are part of Florida landscapes
Palms are important to green industries

Why *Not* Collect Palms?

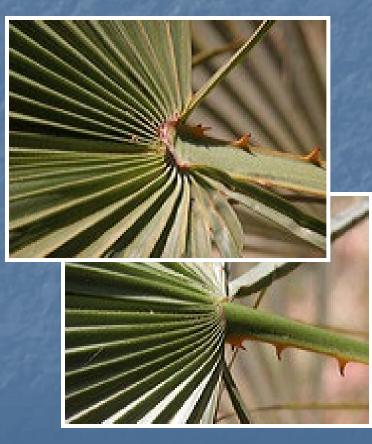
Many have spines or prickles
Stinging insects make nests in them
They can be BIG, *very* big

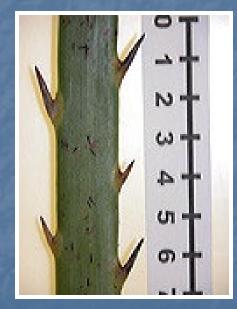
What about using photos?



So, which palms do you see here?

Photographs can be very helpful—if you focus on the right parts



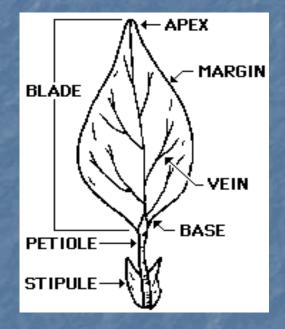


Acoelerrhaphe wrighttii

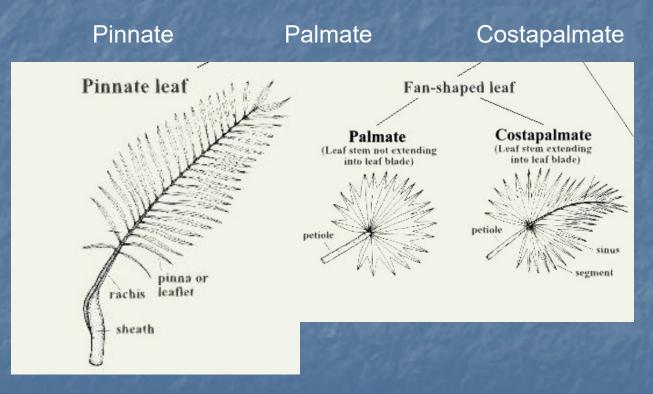
Chamaerops humilis

Just to review those parts...

Remember the "regular" plant leaf



Not All Palm Leaves Have the Same Parts



<u> http://www.plantapalm.com/vpe/palmkey/</u>

Parts of a Palm Leaf

Sheath

Hastula

- Petiole
- Rachis

Blade

- Leaflets
- Spine

Rein

-- attachment of petiole to the stem or trunk
-- attachment of petiole to palmate leaf blade
-- leaf stem or stalk
-- extension of the petiole on pinnate leaves

- -- broader section (leafy)
- -- divisions of a compound leaf
- -- protruding, thorn-like protective organ: "armature"
- -- threadlike tissue connecting the leaf tips of developing pinnate leaves

What makes a good photographic collection? Entire palm with surroundings (head to toe shot) Clear view of how leaves hang Stem showing any crown shaft, leaf scars, persistent leaf bases Any spines or thorns or swelling on the stem If you see roots, a root photo Close up of flowers, fruits, and patterns on stem Whole leaves before pieces are cut for mailing

Distinctive fibers and leaf sheath



Aphandra natalia



Hastula from above and below

Palm Stems Can Be Very Distinctive



Coccothrinax crinita

Astrocaryum mexicanum

Photographic collections need notes, too

What to include?

 Habitat type: swamp/scrub--in a nursery, any label information

Does the palm have a single stem or a cluster?

Color of stem and any fibers (photos *do* lie)
 Common or Latin name

Collecting Live Palms

Goal: Provide as much information as possible with as little material as possible

Note: It helps to measure the whole leaf when you send in parts of a leaf.



Pinnate leaf (like a feather)

Ideally--

- If small, the whole thing...otherwise,
- Fibers (if any) from leaf sheath
- Base of petiole with any spines
- Do spines or fibers change along petiole? If so, include sections with each variation.
- First set of leaflets and any reins with the uppermost section of the petiole
- A portion from the middle of the blade--You can cut the leaflets on one side of the rachis.
- Leaf tip with several leaflets



Palmate leaf (like a fan or hand)

Ideally --

If small, the **whole** thing... otherwise

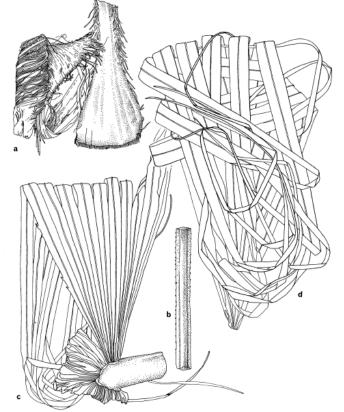
Base of petiole with any spines

Do spines or fibers change along petiole?
 If so, include sections with each variation.

 Hastula with the the petiole attached to the base of the blade

A portion from the middle of the blade

You can fold the leaf blade.



leaf prepared for pressing .- a. Sheath .- b. Petiole section. ments removed except at one side. -d. Middle portion of blad

Inflorescence / Infructescence

Send a photo of the entire structure and any protective bracts

Send the whole structure, if possible (folding is ok)--even an old one can show the branching pattern.

Note flower or fruit

- color
- aroma
- position in relation to leaves

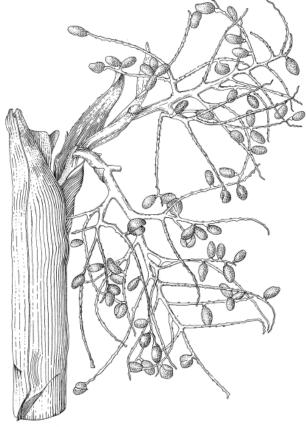
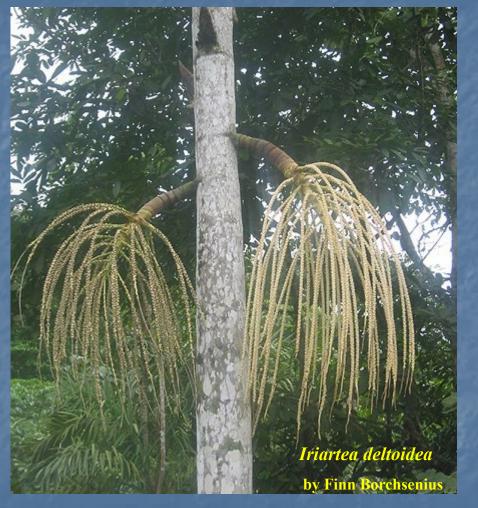


FIGURE 6. Portion of an infructescence

Drawings from John Dransfield. 1986. **A Guide to Collecting Palms.** *Annals of the Missouri Botanical Garden,* Vol. 73: 166-176.

Inflorescences below leaves or within leaves





Now for an example...

What could tell us this is a coconut palm?



These characteristics

Stem: swollen at base; no crown shaft

Leaves: up to 6m (18 ft)

Leaf sheath: fiber matting, woven (clothlike), light brown

Petiole: channeled above, convex below

Leaflets: in a single plane; midrib prominent above; brown hairs below

Fruit: coconut, sampled as piña colada



Documented by photographs & leaf segments with notes