

**PRACTICAL GUIDE TO THE PALMS
FOUND ON *LES NOURAGUES* TRAIL NETWORK**

J.-J. de Granville



Infructescence de *Bactris constanciae*

(Photo Ph. Birnbaum)

Mai 2000

CHAPTER 6

PALMS

Practical guide to the palms found on *Les Nouragues* trail network

J.-J. de Granville

1. LIST OF THE PALM SPECIES

Genus *Astrocaryum*

- Astrocaryum gynacanthum* Martius
- Astrocaryum paramaca* Martius [« **Counana** »]
- Astrocaryum sciophilum* (Miquel) Pulle [« **Mourou-mourou** »]

Genus *Bactris*

- Bactris acanthocarpoides* Barbosa Rodrigues
- Bactris aubletiana* Trail
- Bactris constanciae* Barbosa Rodrigues
- Bactris floccosa* Spruce
- Bactris gastoniana* Barbosa Rodrigues
- Bactris hirta* Martius
- Bactris oligocarpa* Barbosa Rodrigues
- Bactris raphidacantha* Wessels Boer
- Bactris simplicifrons* Martius

Genus *Desmoncus*

- Desmoncus* sp.

Genus *Euterpe*

- Euterpe oleracea* Martius [« **Pinot** », « **Wassaie** »]

Genus *Geonoma* [« **Wai** »]

- Geonoma deversa* (Poiteau) Kunth
- Geonoma stricta* (Poiteau) Kunth

Genus *Jessenia*

- Jessenia bataua* (Martius) Burret subsp. *oligocarpa* (Grisebach & H. Wendland) Balick [« **Patawa** »]

Genus Maximiliana

Maximiliana maripa (Correa de Serra) Drude [« **Maripa** »]

Genus Oenocarpus

Oenocarpus bacaba Martius [« **Comou** »]

Genus Orbignya

Orbignya sp. [« **Macoupi** »]

Genus Scheelea

Scheelea sp. [« **Macoupi** »]

Genus Socratea

Socratea exorrhiza (Martius) H. Wendland [« **Awara-monpè** »]

Genus Syagrus

Syagrus stratincola Wessels Boer

2. RELATIVE ABUNDANCE OF PALM SPECIES ON THE 8 MAIN TRAILS

CAMP: surroundings of the camp

RD/RG: trails along the creek (« Rive droite » and « Rive gauche »)

C.T.1: 1st trail from camp to the southern slope of the outcrop (« Chemin des terrasses n°1 »)

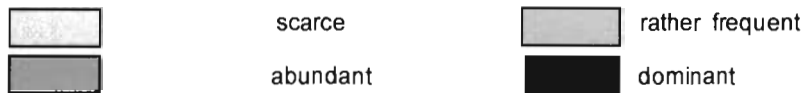
C.T.2: 2nd trail from camp to the southern slope of the outcrop (« Chemin des terrasses n°2 »)

SOMM.: trail from camp to the top of the outcrop (« Chemin du sommet »)

CASC.: trail from camp to the water falls (« Chemin des cascades »)

BOUCLE: loop from camp to camp

S.C.: trail from camp to the eastern slope of the outcrop (« Chemin de la Savane Coco »)



SPECIES	CAMP	RD/RG	C.T.1	C.T.2	SOMM.	CASC.	BOUCLE	S.C.
<i>Astrocaryum gynacanthum</i>								
<i>Astrocaryum paramaca</i>								
<i>Astrocaryum sciophilum</i>								
<i>Bactris acanthocarpoides</i>								
<i>Bactris auletiiana</i>								
<i>Bactris constanciae</i>								
<i>Bactris floccosa</i>								
<i>Bactris gastoniana</i>								
<i>Bactris hirta</i>								
<i>Bactris oligocarpa</i>								
<i>Bactris raphidancantha</i>								
<i>Bactris simplicifrons</i>								
<i>Desmoncus sp.</i>								
<i>Euterpe oleracea</i>								
<i>Geonoma deversa</i>								
<i>Geonoma stricta</i>								
<i>Hyospathe elegans</i>								
<i>Jessenia bataua</i>								
<i>Maximiliana maripa</i>								
<i>Oenocarpus bacaba</i>								
<i>Orbignya sp.</i>								
<i>Scheelea sp.</i>								
<i>Socratea exorrhiza</i>								
<i>Syagrus stratincola</i>								
Number of species per trail	2	13	9	7	9	9	6	9

3. KEY TO THE SPECIES

1. Trunk supported by cone of prickly stilt roots. Pinnae prearmose at tip *Socratea exorrhiza*
1. Trunk without stilt roots. Pinnae not praemorse at tip 2
2. Palms unarmed. Margins of blades without bristles 3
3. Small understory palms. Trunk < 2 cm in diameter. Leaves < 1 m long. Blade simple and bifid at apex or irregularly divided into 2-6 pairs of broad segments 4
4. Blade < 10 cm in width, always simple and bifid at apex *Geonoma stricta*
4. Blade > 10 cm in width, pinnatisect, usually with 3-4 pairs of segments 5
5. Stem 4-10 mm in diameter. Blade < 30 cm in width. Leaf sheath split opposite to petiole in old leaves. Inflorescence bearing 3-6 rachillae *Geonoma deversa*
5. Stem 8-20 mm in diameter. Blade > 30 cm in width. Leaf sheath tubular in young as well as in old leaves, never split opposite to petiole. Inflorescence bearing 8-17 rachillae *Hyospathe elegans*
3. Palms medium-sized to tall, either « stemless » or with trunk > 4 cm in diameter. Blade pinnate with more than 10 pinnae per side 6
6. Palms always « stemless ».(even when « adult ») 7
7. Leaf blade divided into narrow pinnae to tip. Staminate flowers with coiled anthers *Orbignya* sp.
7. Leaf blade with apical pairs of pinnae usually united. Staminate flowers with straight anthers *Scheelea* sp.
6. Palms with well-developed stems (at least when « adult ») 8
8. Single-stemmed (« solitary ») palms, never suckering at base 9
9. Blade whitish-waxy beneath. Pinnae inserted at regular intervals along entire rachis *Jessenia bataua*
9. Blade green and shiny beneath. Pinnae more or less in clusters, at least toward base of rachis 10
10. Stem usually > 25 cm in diameter. Leaf blades with more than 120 pairs of pinnae, in clusters along entire rachis *Maximiliana maripa*
10. Stem usually < 25 cm in diameter. Leaf blades with less than 120 pairs of pinnae, in clusters toward base of rachis *Oenocarpus bacaba*
8. Multi-stemmed (« clustered ») palms suckering at base 11
11. Palms growing in swamp forest. Pinnae inserted at regular intervals *Euterpe oleracea*
11. Palms growing in low, transition forest. Pinnae conspicuously arranged in clusters *Syagrus stratincola*
2. Palms usually more or less spiny. Margins of blade with minute, hardly visible, bristles at apex (presence detected by moving finger from tip to base of pinnae) 12
12. Palms always armed with black, strongly flattened, sometimes winged spines. Blade dull white or whitish pruinose beneath 13
13. « Stemless » palms, armed with winged spines. Leaf blade divided into narrow pinnae to tip, the apical segments narrower than others *Astrocaryum paramaca*
13. Palms with obvious stem, armed with long, flattened (but not winged) spines. Leaf blade with apical pairs of pinnae usually united, the apical segments wider than others 14

14. Multi-stemmed palms, with umbrella-shaped crown.
Stems < 10 cm in diameter, armed with rings of black
spines. Leaf sheaths not persistent *Astrocaryum gynacanthum*
14. Single-stemmed palms, with funnel-shaped crown.
Stem ≥ 10 cm in diameter, unarmed. Leaf sheaths
persistent *Astrocaryum sciophilum*
12. Palms generally armed with round or slightly flattened
spines, sometimes with recurved hooks (in climbing palms).
Blade green and shiny beneath 15
15. Climbing palms. Leaf rachis extended into a cirrus
bearing retrorse hooks *Desmoncus* sp.
15. Stemless or erect palms, never climbing. Leaf rachis
not extended into a cirrus 16
16. Leaf blade pubescent on both sides *Bactris floccosa*
16. Leaf blade glabrous on both sides 17
17. Very small palms. Leaves < 1 m long, the blade either
entire and bifid or with 2-6 segments per side 18
18. Leaf blade simple, bifid at apex, the rachis
25-40 cm long. Sheaths and petiole densely
armed with spines. Fruit setose *Bactris hirta*
18. Leaf blade simple or with up to 6 pinnae per side,
when simple, the rachis 2-15 cm long. Sheath
and petiole unarmed or with few spines 19
19. Blade always simple and deeply bifid, the
segments more or less elliptic and convex
above. Peduncular bract setose *Bactris aubletiana*
19. Blade either simple and bifid or with 2-6
pinnae per side, when simple, the segments
slightly sigmoid and flat. Peduncular bract
glabrous 20
20. Stem slender, > 50 cm tall, at least in fertile
individuals. Leaves more or less spirally
distributed along upper part of stem.
Inflorescence recurved, infrafoliar. Fruit
globose, orange to red at maturity *Bactris simplicifrons*
20. Stem inconspicuous or very short, usually
< 30 cm tall. Leaves forming a crown.
Inflorescence erect, interfoliar. Fruit
ovoid, purplish black at maturity *Bactris oligocarpa*
17. Small to medium-sized palms. Leaves > 1 m long,
the blade pinnate, with more than 6 pinnae per side 21
21. Stem < 3 cm in diameter or inconspicuous.
Pinnae sigmoid, long acuminate at apex,
less than 20 per side 22
22. Stem inconspicuous or very short.
Leaf rachis generally < 60 cm long,
with 5-12 pinnae per side. Fruits
ovoid, glabrous *Bactris gastoniana*

22. Stem up to 2 m tall. Leaf rachis
> 60 cm long, with 13-18 pinnae
per side. Fruits globose, covered
with fleshy bristles *Bactris constanciae*
21. Stem > 3 cm in diameter. Pinnae
straight, more than 20 per side 23
23. Stem short, with leaf scars very
closely spaced. Pinnae disposed
in a single plane, at regular
intervals along rachis *Bactris raphidacantha*
23. Stem well developed, with leaf
scars widely spaced. Pinnae
clustered and oriented
in several planes *Bactris acanthocarpoides*

ILLUSTRATIONS and TABLES:

- Table 1: list of the palm species and their relative abundance on each trail
 - Plate 1, 2 and 3: figures of the palm species growing in *Les Nouragues* and *Saut Pararé* areas
-

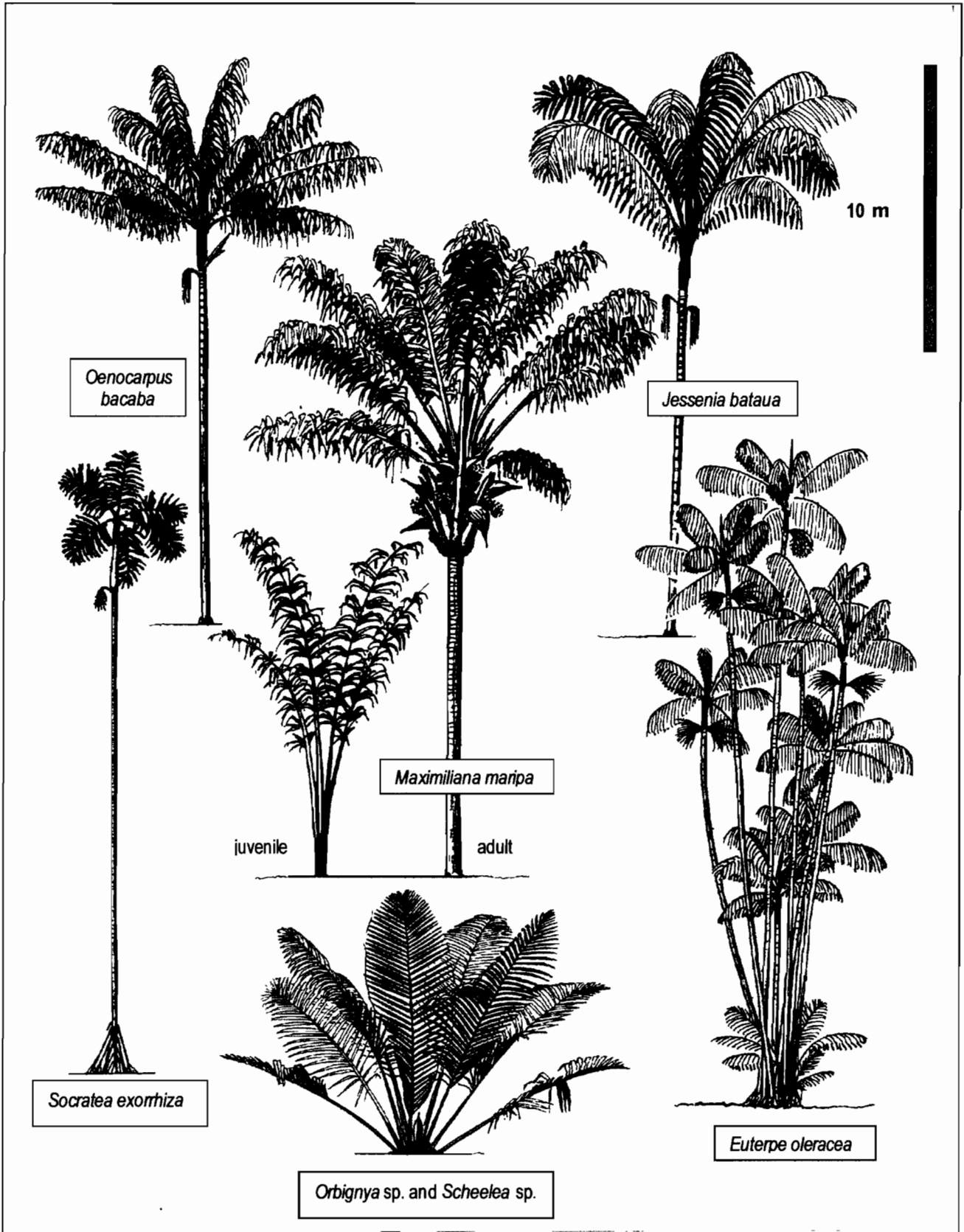


Plate 1

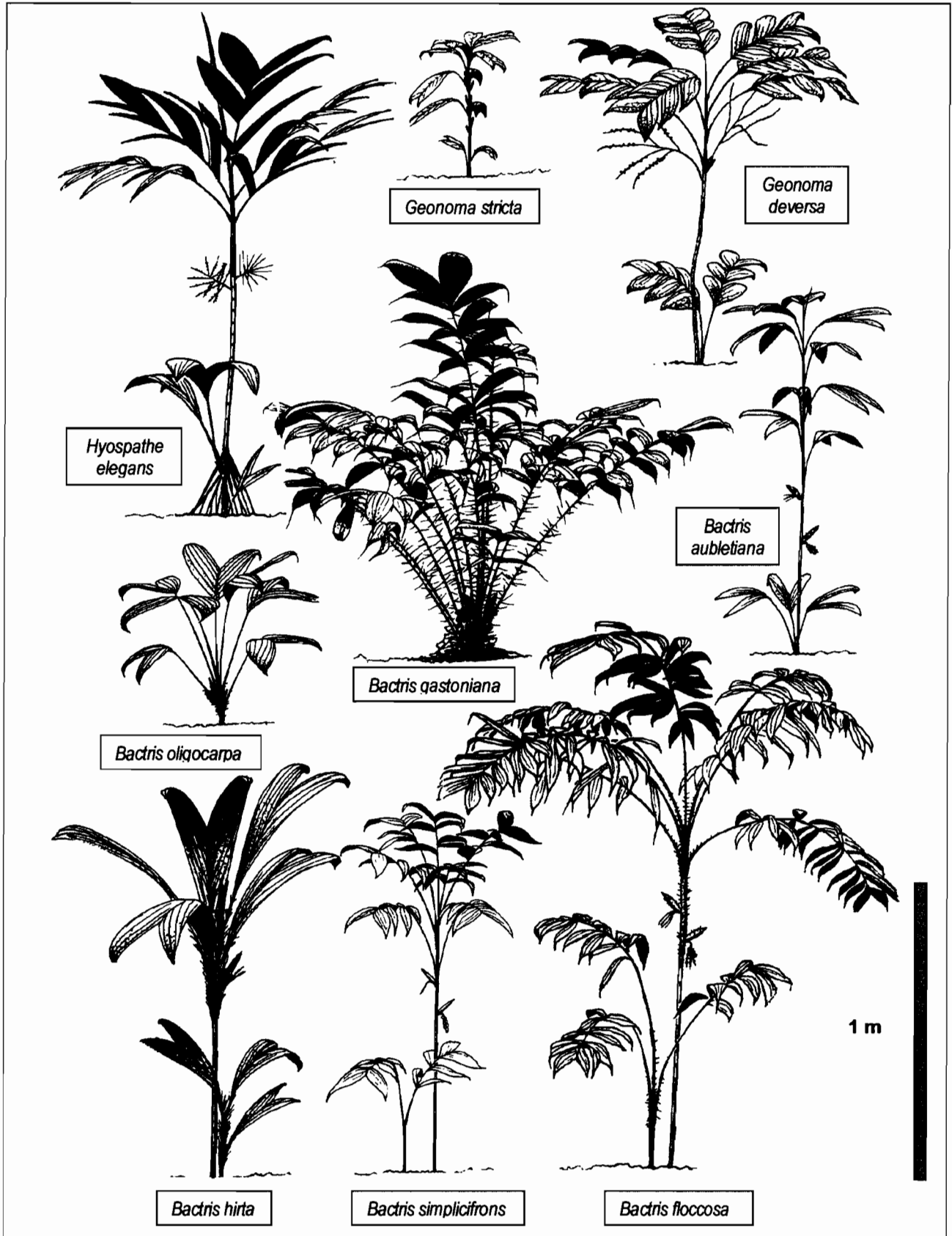


Plate 2

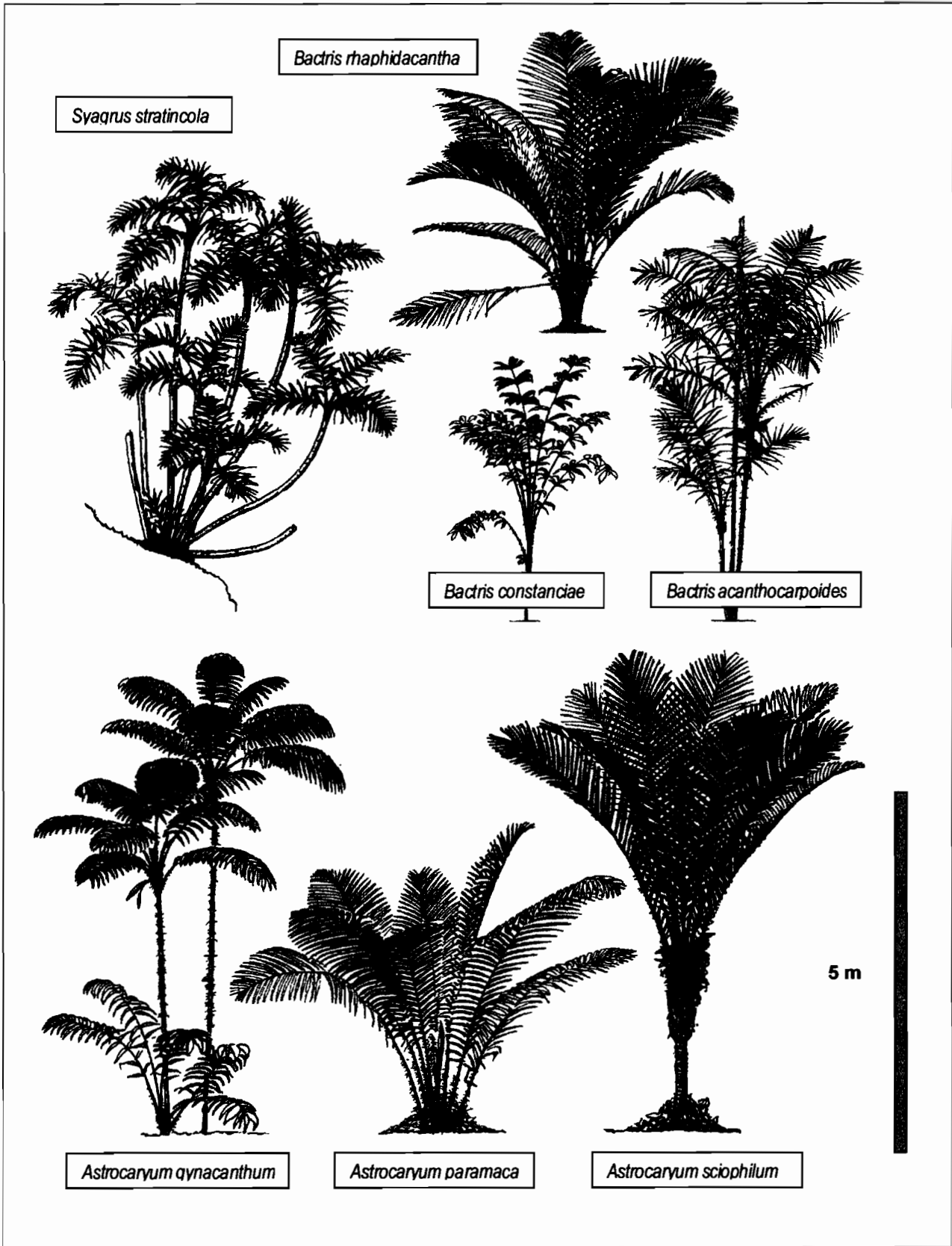


Plate 3