

# 10 Common Palms of the Tampa Bay Area <sup>1</sup>

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## Introduction

Palms often serve as key specimens in urban landscape designs. Despite this, their identity is often unknown to Florida's new, seasonal, and even long-term residents. This article serves as a quick reference for some of the most common palms found in North and Central Florida and the Tampa Bay Area in particular. Though many species of palms are currently cultivated, data from the City of Tampa shows that these 10 species account for 98.1% of palms currently inventoried ([TampaTreeMap.org](http://TampaTreeMap.org)). As such, this guide serves as an efficient resource for master gardeners, novice tree inventory crews, 4-H forestry teams, and others interested in basic palm identification.

Beyond the basic descriptions and images featured below, this guide includes a dichotomous key that will guide the user through a step-by-step comparison of the species featured. A dichotomous key is a tool used to help identify an unknown organism. As the prefix di- in its name implies, a dichotomous key leads the user through a sequence of paired, either-or choices (e.g., Does the tree have simple or compound leaves?). Accurately navigating this series of options will lead the user to identify the correct organism, if included among the list of possible outcomes.

If you are interested in identifying trees beyond the palm species showcased in this article, the University of Florida offers a comprehensive key and tree identification field guide, *Trees: North and Central Florida* (Koeser et al. 2015).

Additionally, the Florida Department of Agriculture and Consumer Services offers an online key of palms commonly cultivated in Florida and the Caribbean (Anderson 2014).



Figure 1. *Trees included in this key: A.) Paurotis Palm (Acoelorrhaphes wrightii); B.) Mexican Fan Palm (Washingtonia robusta); C.) Date Palm (Phoenix dactylifera); D.) Chinese Fan Palm (Livistona chinensis); E.) Queen Palm (Syagrus romanzoffiana); F.) Wild Date Palm (Phoenix sylvestris); G.) Cabbage Palm (Sabal palmetto); H.) Senegal Date Palm (Phoenix reclinata); I.) Canary Island Date Palm (Phoenix canariensis); J.) Pindo Palm (Butia capitata)*

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## Key to 10 Common Palms of the Tampa Bay Area

1. Leaves are palmate or costapalmate (go to 2)
  - 1'. Leaves are pinnately compound (go to 5)
  2. Leaves are palmate (go to 3)
    - 2'. Leaves are costapalmate (go to 4)
    3. Leaves are bright green on top, silvery underneath, and attached to a 1–3' long and 1/2" wide petiole with sharp, saw-like, orange teeth. (Paurotis Palm, *Acoelorrhaphe wrightii*)
    - 3'. Leaves are bright green and attached to a 4–6' long petiole that is armed with 1–2" long, reddish spines. (Mexican Fan Palm, *Washingtonia robusta*)
    4. Leaves are bright green to glossy olive-green and split half their length into 60–100 lance-shaped segments that give a fringed appearance. Leaf blade is 6' wide and attached to a 6' long petiole that bears stout teeth near its base. (Chinese Fan Palm, *Livistona chinensis*)
    - 4'. Leaf is light green to gray-green, 3–4' wide, has marginal threads hanging from its segments, and is attached to a 3–6' long, unarmed petiole. (Cabbage Palm, *Sabal palmetto*)
    5. Leaf has V-shaped leaflets. Leaflets are modified into sharp spines towards the base of the leaf. (go to 6)
    - 5'. Leaf does not have V-shaped leaflets or sharp modified leaflets at the base of the leaf. (go to 9)
    6. Leaf crown contains 20–40 leaves. (Go to 7)
    - 6'. Leaf crown contains closer to 100 leaves. (Go to 8)
    7. Leaves are 10–20' long. Leaflets are 1–2' long, stiff, and gray-green to blue-green. Trees are usually single-stemmed, and can grow up to 90'. (Date Palm, *Phoenix dactylifera*)
    - 7'. Leaves are 12–15' long and narrowly elliptic. Leaflets are 1' long, stiff, shiny, bright to dark green, and grow from the rachis at multiple angles.. Trees are multi-stemmed and sparsely to densely clustering. (Senegal Date Palm, *Phoenix reclinata*)
    8. Leaves are 8–15' long and narrowly elliptic. Leaflets are 1–1 1/2' long, stiff, sharply pointed, and dull to deep olive green. (Canary Island Date Palm, *Phoenix canariensis*)

8'. Leaves are 10–15' long and are attached to a 3' long, spiny petiole. Leaflets are 1 1/2' long, blue-green, and often crisscross one another. (Wild Date Palm, *Phoenix sylvestris*)

9. Leaves attached to a 5' long, armed petiole, and are silvery-green to yellowish-green. (Pindo Palm, *Butia capitata*)

9'. Petiole is not armed. Leaflets are 1–1 1/2' long, dark green and shiny. (Queen Palm, *Syagrus romanzoffiana*)

## Paurotis Palm (*Acoelorrhaphe wrightii*)



Family: Arecaceae or Palmae, palm family

Florida Hardiness: 9a–11

Height: 15–25', densely multi-stemmed, and readily clumps

Width: 10–15'

Leaf: 2–3' wide, simple, palmate, with segments divided more than 1/2 their length. Leaves are bright green on top, silvery underneath, and attached to a 1–3' long petiole with sharp, saw-like, yellow-orange teeth.

Trunk: Reddish-brown and wrapped in the fibrous remains of old leaf bases.



Flower: Small, yellow-white, and emerges in clusters on long stalks

Flowering: Spring and summer



Fruit: 1/3", round, reddish-orange, and turns black when ripe

Native Range: South Florida, Cuba, West Indies, the Atlantic coast of Central America, and the Yucatan

Habitat: Full sun to partial shade, wet to well-drained soil, and moderate drought and salt spray tolerance.

## Pindo Palm (*Butia capitata*)



Family: Areaceae or Palmae, palm family

Florida Hardiness: 8b-11

Height: 15-25'

Width: 10-15'

Leaf: 4-7' long, pinnately compound, usually arching downward, and attached to a 5' long, armed petiole. Leaflets are 3' long, silvery-green to yellowish-green in color, and grow from the rachis at a 45° angle.



Trunk: Gray, typically with remains of old leaf bases, and very old specimens potentially lack leaf bases and bear only scars of incomplete circles

Flower: Small, white, and emerges in clusters on woody, branched stalks

Fruit: 1" wide, round, orange

Fruiting: Summer

Native Range: Brazil

Habitat: Full sun to partial shade, well-drained soil, and high drought and salt spray tolerance



## Chinese Fan Palm (*Livistona chinensis*)



Family: Arecaceae or Palmae, palm family

Florida Hardiness Zone: 9a–11

Height: 30–50'

Width: 10–12'



Leaf: 6' wide, simple, costapalmate, and attached to a 6' long petiole that bears stout teeth near its base. Leaves are bright green to glossy olive-green, and split half their length into 60–100, lance-shaped segments that give a fringed appearance.

Trunk: Dark brown to reddish-brown, becoming gray, and revealing closely set rings of leaf base scars with age

Flower: Small, greenish-white, and emerges in clusters on 6' long, branched stalks

Fruit: 1/2–1" long, oblong, and blue-green

Native Range: Japanese Islands, Taiwan, and southern China. *Caution*—may be recommended by IFAS faculty, but should be managed to prevent its escape throughout the state (UF/IFAS assessment).

Habitat: Full sun to partial shade, well-drained soil, moderate drought tolerance, and no salt spray tolerance

## Canary Island Date Palm (*Phoenix canariensis*)



Family: Arecaceae or Palmae, palm family

Florida Hardiness: 9a–11

Height: 40–50'





Width: 25–40'

Leaf: 8–15' long, pinnately compound, narrowly elliptic, with up to 200 V-shaped leaflets. Leaflets are 1–1 1/2' long, stiff, sharply pointed, dull to dark olive-green, and modified into sharp, orange spines towards the base of each leaf.

Trunk: Light or dark brown, with diamond-shaped leaf base scars around the bulbous trunks of young palms or just below the crown of taller and older specimens

Flower: Small, white, and emerges in clusters on 6' long, dark yellow to light orange, branched stalks

Flowering: Spring and winter

Fruit: 1" long, oblong, and orange

Native Range: Canary Islands

Habitat: Full sun, moist but well-drained soil, high drought tolerance, and moderate to high salt spray tolerance

## Date Palm (*Phoenix dactylifera*)



Family: Arecaceae or Palmae, palm family

Florida Hardiness: 9a–11, and marginal in 8b

Height: 70–90', and sucker sprouts with age

Width: Up to 20'





Leaf: 10–20' long and pinnately compound. Leaflets are 1–2' long, stiff, gray-green to blue-green, form a V-shape down the rachis, and become modified into sharp, orange spines near the base of each leaf.

Trunk: Brown to gray, with closely set knobby leaf bases that wear away with age

Flower: Small, white, and emerges in clusters on densely branched, orange stalks

Flowering: Year-round

Fruit: 1–3" long, oblong, and turns from green to dark reddish-orange or reddish-brown when ripe

Fruiting: Year-round

Native Range: Uncertain but thought to be North Africa and/or the Middle East

Habitat: Full sun, well-drained soil, high drought tolerance, and high salt spray and soil salt tolerance

## Senegal Date Palm (*Phoenix reclinata*)



Family: Areaceae or Palmae, palm family

Florida Hardiness: 9b–11

Height: 25–35', multi-stemmed, and sparsely to densely clustering

Width: 12–20'

Leaf: 12–15' long, pinnately compound, and narrowly elliptic. Leaflets are 1' long, grow from the rachis at multiple

angles, and are modified into long, sharp, orange spines near the petiole. Leaflets are stiff, shiny, and bright to dark green.



Trunk: Brown and fibrous underneath the crown, then gray and smooth, with closely set rings along the rest of the trunk

Flower: Small, white, and emerges in clusters on 2–3' long, orange, branched stalks

Fruit: 1/2–1" long, oval, and become reddish-brown when ripe. Though male palms flower, they do not produce fruit.

Native Range: Africa and Madagascar. *Invasive*—not recommended by IFAS faculty in the southern region of the state (UF/IFAS assessment).

Habitat: Full sun to partial shade, well-drained soil, and moderate drought and salt spray tolerance

## Wild Date Palm (*Phoenix sylvestris*)



Leaf: 10–15' long, pinnately compound, and attached to a 3' long petiole. Leaflets are 1 1/2' long, blue-green, often crisscross one another, and are modified into sharp, yellow spines towards the base of each leaf.

Trunk: Reddish-brown to tan, with raised triangular to diamond-shaped leaf base scars around the trunk, and aerial roots emerging near the base with age

Flower: Small, white, and emerges in clusters on 3' long yellow-orange, branched stalks

Fruit: 1", oval, orange, and turns dark red to purple when ripe

Native Range: India and southern Pakistan

Habitat: Full sun to partial shade, well-drained soil, high drought tolerance, and moderate salt spray tolerance

Family: Arecaceae or Palmae, palm family

Florida Hardiness: 9a–11b

Height: 40–50'

Width: 30'



## Cabbage Palm (*Sabal palmetto*)



Family: Arecaceae or Palmae, palm family

Florida Hardiness: 8b–11

Height: 40–80'

Width: 10–25'

Leaf: 3–4' wide, costapalmate, shiny green on top, gray-green underneath, splits into segments about 1/2 its length,



has marginal threads hanging from the segments, and is attached to a 3–6' long, unarmed petiole.



## Queen Palm (*Syagrus romanzoffiana*)



Trunk: Brown or tan, with remnant leaf bases or “boots” encircling the trunk in a crisscross pattern, becoming smooth and turning light brown to gray with age

Flower: Tiny, creamy white, fragrant, and emerges in clusters on 3–8' long, branched spikes

Flowering: Late spring

Fruit: 1/4", round, black

Fruiting: Late summer to early winter

Native Range: North and South Carolina, Georgia, Florida, Cuba, and the West Indies

Habitat: Full sun to partial shade, wet to well-drained soil, and high drought and salt spray tolerance

Family: Arecaceae or Palmae, palm family

Florida Hardiness: 9b–11

Height: 40–60'

Width: 20–25'

Leaf: 6–15' long, pinnately compound, and arched. Leaflets are 1–1 1/2' long, lanceolate, dark green, and shiny.



Trunk: Smooth, light gray, with rings from previous years' leaf base scars encircling the trunk



Flower: Small, creamy white, and emerges in clusters on 6' long stalks

Flowering: Spring and summer

Fruit: 3/4–1" long, round to oval, fleshy, and orange

Fruiting: Shortly after flowering

Native Range: Argentina, Brazil, Paraguay, and Uruguay. *Caution*—may be recommended by UF/IFAS faculty but should be managed to prevent its escape throughout the state (UF/IFAS assessment).

Habitat: Full sun, well-drained soil, and moderate drought and salt spray tolerance

## Mexican Fan Palm (*Washingtonia robusta*)



Family: Arecaceae or Palmae, palm family

Florida Hardiness: 9b–11

Height: 70–100'

Width: 8–12'

Leaf: 3–4' wide, palmate, and segmented more than 1/2 way into the blade, and has marginal threads hanging from the

segments. Leaves are bright green and attached to a 4–6' long petiole that is armed with 1–2" long, reddish spines.



Trunk: Reddish-brown, turning gray or almost white with age, and maintains a skirt of dead leaves or leaf bases below the crown for years

Flower: Tiny, white, and emerges in clusters on elongated, yellow spikes

Flowering: Spring

Fruit: 1/4", round, shiny, black

Fruiting: Late summer

Native Range: Baja, California peninsula and Sonora, Mexico. *Caution*—may be recommended by UF/IFAS faculty but should be managed to prevent its escape in the central and southern regions of the state (UF/IFAS assessment).

Habitat: Full sun to partial shade, well-drained to occasionally wet soil, high drought tolerance, and moderate salt spray tolerance

## Conclusion

With practice, dichotomous keys can be a very effective tool when trying to identify an unknown organism. For those interested in furthering their tree identification abilities, the UF/IFAS Extension and Center for Landscape Conservation and Ecology offers a comprehensive and thoroughly-photographed field guide featuring 140 trees and palms of North and Central Florida. Available as both a mobile application and printed book, *Trees: North and Central Florida* features a full key and accompanying glossary.

## Additional Keys and References

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## Glossary

**compound**—leaf with two or more leaflets

**costapalmate**—a palmate leaf in which the petiole extends into the leaf blade

**lanceolate**—shaped like a lance head; having a narrow oval shape tapering to a point at each end

**leaflet**—an single leaf-like segment of a compound leaf

**petiole**—stalk connecting the leaf blade to that of the main stem

**pinnately compound**—type of compound leaf, with leaflets along each side of a common axis called a rachis.

**palmately compound**—type of compound leaf with veins or leaflets radiating in a fan-like pattern

**rachis**—the extension of the petiole into the leaf blade. The central “stem” to which leaflets are attached in pinnately compound leaves

**recurved**—curved backwards or downwards