

# FAIRCHILD TROPICAL BOTANIC GARDEN

Exploring, Explaining and Conserving the World of Tropical Plants

## Identifying Native Plants

Scientists often use *dichotomous* keys to identify species. A dichotomous key identifies organisms based on the answers to a series of questions, with each question involving alternative choices. Here at Fairchild Tropical Botanic Garden you are the scientist and will use this key to identify native South Florida plants. Good luck!

To use this key, look at the two pairs of numbers (example: 1a and 1b and so on). Decide which statement best matches your plant and continue on to the next number pair in the series. Don't get confused! If you have a question, simply ask.

- 1a. This plant is a palm.....2
- 1b. This plant is not a palm.....4
  - 2a. Each leaf of the palm is pinnate (feather like) .....**Royal Palm (*Roystonea elata*)**
  - 2b. Each leaf of the palm is palmate (palm like) .....3
    - 3a. Carefully feel the stalks that attach the leaf to the stem. Stalks are toothed .....  
.....**Saw Palmetto (*Serenoa repens*)**
    - 3b. Stalks are not toothed .....10
      - 4a. This plant is a tree (has one main stem or trunk) .....5
      - 4b. This plant is a shrub (multiple stems, not very tall) .....9
        - 5a. The tree has needle like leaves .....**Slash pine (*Pinus eliottii*)**
        - 5b. The tree does not have needle like leaves .....6
          - 6a. This tree has compound leaves .....8
          - 6b. This tree has simple leaves .....7
      - 7. Tree has deeply furrowed (cracked), grayish bark. There usually are other plants growing on the branches of these trees .....  
.....**Live Oak (*Quercus virginiana*)**
      - 8. This tree has reddish peeling bark .....  
.....**Gumbo Limbo (*Bursera simaruba*)**
    - 9a. The leaves of this plant are shiny, opposite and deeply furrowed, if present the fruits are red ..... **Wild Coffee (*Psychotria nervosa*)**
    - 9b. The leaves of this plant are whorled .....11
      - 10a. Each leaf of the palm is curved, or C-shaped, the leaves of this plant may have hanging threads .....  
..... **Sabal or Cabbage Palm (*Sabal palmetto*)**
      - 10b. The leaves of this plant have silver undersides .....  
.....**Silver Thatch Palm (*Coccothrinax argentata*)**
      - 11a. The leaves are dull and entire; the flowers are tubular, the fruits are dark purple ..... **Fire Bush (*Hamelia patens*)**
      - 11b. The leaves are toothed, flowers are small and bright purple fruit grow in clusters along stem. Leaves aromatic.  
.....**Beautyberry (*Callicarpa americana*)**



## Native Plants in the Key

Gumbo Limbo (*Bursera simaruba*)  
Fire Bush (*Hamelia patens*)  
Live Oak (*Quercus virginiana*)  
Royal Palm (*Roystonea elata*)  
Sabal or Cabbage Palm (*Sabal palmetto*)  
Saw Palmetto (*Serenoa repens*)  
Silver Thatch Palm (*Coccothrinax argentata*)  
Slash pine (*Pinus eliottii*)  
Wild Coffee (*Psychotria nervosa*)

## Glossary:

**Alternate** - One after the other along an axis; not opposite.

**Compound** - Pertaining to leaves which are divided into distinct leaflets.

**Entire** - Pertaining to margins without, serration.

**Opposite** - arranged in pairs along an axis, not alternate.

**Palmate** - Radiately lobed or divided, the axes of the individual segments originating at a common point or nearly so.

**Pinnate** - Referring to a leaf structure which is compound or deeply divided, the principal divisions arranged along each side of a common axis.

**Simple** - Not compound, a term usually applied to leaves; also, referring to a stem without branches or modifications.]

**Whorled** - An arrangement of three or more organs (leaves) at a single node.

