

Ferns¹

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Ferns are among the world's oldest living plants and lower on the evolutionary scale than seed plants. Some common fern types are Boston, maidenhair, staghorn, rabbit's foot, and pteris. Plants in the genus *Asparagus* such as *A. setaceus* and *A. densiflorus* are called ferns, but are not true ferns since they produce seeds and not spores. Plants discussed in this publication are called ferns and may not be true ferns. The Florida Exotic Plant Council has reported *A. densiflorus* to be an invasive plant.

Hundreds of different fern types can be grown both indoors for interior decoration and outdoors as part of the landscape in Florida. Ferns are popular because of their graceful foliage and ability to grow in areas of dense shade and low light intensity. Ferns are well adapted for use on north sides of buildings where light intensity is low, under trees and in shaded sites near water features. Inside the home ferns are useful in low light areas as a complement to interior decorating. Some common and easily obtainable ferns are listed in Table 1.

Propagation

The best method of propagating most ferns is by division or by offsets as with Boston ferns. True ferns

can be grown from spores, but this procedure takes at least a year to produce useable plants. Spores may be shaken from the undersides of fronds when ripe and placed on ground sphagnum moss in a well drained container. To maintain soil moisture the container should be covered with glass or plastic. Water as necessary to keep the medium surface moist and place in an area where light is sufficient for normal fern growth. Young plants may be potted six months after germination. Both *A. setaceus* and *A. densiflorus* are easily grown from seed.

Culture

Ferns grow best in a predominately organic potting medium similar to soils in their natural habitats. Good growth can be obtained in 100% peat moss or in combinations of 75% peat moss and 25% sand as long as drainage is rapid.

Any container with good drainage is satisfactory but the growing media should be kept moist at all times. However, do not allow water to stand in pots since roots may be damaged.

Good fern growth occurs at normal home temperatures of 70 to 80°F but most ferns outdoors will be injured by freezing temperatures. Humidity

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may be too low in the home for fine, thin-leaved ferns such as maidenhair, which frequently develops scorched leaf margins in dry atmospheres. This can partially be controlled in the home by syringing or double-potting. Boston and rabbit's foot ferns as well as other types with thick fronds tolerate low humidity better than those with thin fronds.

Ferns require small amounts of fertilizer and in fact obtain some nutrients from the decomposition of sphagnum peat moss. Packaged liquid house plant fertilizers are quite adequate for fern growth and should be applied at about one-half recommended rate. Ferns will not tolerate high fertilization and frequently show leaf scorch when fertilized too heavily.

Most ferns are grown in partial shade and will grow satisfactorily from about 100 to 3000 footcandles. In the home, plants should receive as much light as possible without being placed in direct sunlight or normal light may be supplemented with artificial light.

Ferns are relatively free from insect and disease problems, but may be attacked from time to time. Since many ferns are easily injured by fungicides and insecticides, their use should first be checked on a single plant.

In many cases where only a few indoor plants are affected, removal of diseased parts by clipping or insects by placing plants outdoors and spraying with water is the best procedure.

Table 1. Ferns for the home.

Scientific name (common name)	Ground Cover	Tub or Pot Plant	Specimen Plant	Hanging Basket or Wall Plaque	Useful in Flower Arrangements
<i>Adiantum</i> spp. (maidenhair fern)	X	X	X	---	X
Notes: Many species and varieties available. Leaf shape varies.					
<i>Alsophilia australis</i> (tree fern)	---	X	X	---	---
Notes: Other tree ferns include <i>Cyathea dealbata</i> and <i>Dicksonia fibrosa</i> .					
<i>Asparagus setaceus</i> (plumosa fern)	X	X	---	---	X
Notes: Very fine texture. Climbs.					
<i>Asparagus densiflorus</i> (asparagus fern)	X	X	---	X	---
Notes: Texture somewhat coarser than plumosa fern. Reported to be invasive.					
<i>Asplenium nidus</i> (bird's nest fern)	---	X	X	---	---
Notes: Other species available.					
<i>Davillia</i> spp. (rabbit's foot fern)	---	X	X	X	---
Notes: Rhizome looks like a rabbit's foot. Many species available.					
<i>Nephrolepis exaltata</i> (Boston fern)	X	X	---	X	---
Notes: Many excellent varieties available.					
<i>Platycerium</i> spp. (staghorn fern)	---	---	X	X	---
Notes: A spectacular plant. Many interesting species available.					
<i>Polystichum adiantiforme</i> (leatherleaf)	X	---	---	---	X
Notes: Grows well in heavy shade.					
<i>Pteris</i> spp. (pteris fern)	X	X	---	---	X
Notes: Many species available. Fine to medium texture. Variegated forms available.					