# CULTURAL TIPS FOR PERENNIAL FERN PRODUCTION

***Recommendations from Jose Aguirre … Head Grower @ Casa Flora***

**FERTILIZER:** Fertilize . . . very little. 50 to 100 ppm Nitrogen on a balanced liquid feed program or a low rate of slow release [such as *Osmocote* 15-9-12] feeds incorporated into the soil. You don't need both! Ferns are very susceptible to fertilizer burn. Do not feed when going dormant or when they are dormant in the pot.

**LIGHT:** 1200/2000 ftc of light is required during active growth periods so some shade may be required, especially in the southern climates.

**SOIL:** Casa Flora recommends that you use a perennial bark mix or peat based mix that is well drained.

**WATER:** Allow soil to dry moderately between watering. If conditions are hot, more frequent watering may be necessary to prevent desiccation.

**GROWING TIMES:** Growing times varies from fern to fern. For quarts (4 1/2" pots) your average will be 10 weeks for a full pot. For gallons (6 1/2" pots) your average growing time will be 18 to 20 weeks. Faster growing ferns will take approximately 2 weeks less and slower growing ferns will take approximately 2 weeks more.

**TEMPERATURE:** For the first 6 to 8 weeks, a soil temperature of no lower than $65^0$F/$18^0$C is best; ideal would be 68° to 75°. This will help establish the transplant.

**pH:** 5.5 to 6.5 is acceptable for most fern varieties.

**DISEASE AND PESTS:** Do not spray oil-based products on ferns. We occasionally encounter aphids or caterpillars for which we recommend Orthene or other approved insecticides at half label recommended rates. Foliage fungus problems tend to occur when the foliage is overgrown, constantly wet, and cool night temperatures prevail. We recommend spacing, good air circulation, drying them out, and treatment with Medallion or other approved fungicides. You must follow all label directions.

Buying and planting liners in the winter or early spring (November thru March) will require extra attention. If you purchase actively growing liners during this period, they will need to be kept at about $65^0$F/$18^0$C soil temperature and lit for 6 hours during the night (long days) to keep them actively growing. They should stay vegetative after April 1 without additional lights. Heat is not enough to produce vigorous top growth; they will need additional lights.

IF YOU SEND A GROWING FERN BACK INTO DORMANCY BY COOL TEMPERATURES AND SHORT DAYS, YOU MUST COOL IT FOR 6 WEEKS AT $40^0$F/$4.5^0$C BEFORE IT WILL START TO GROW AGAIN. Symptoms of dormancy include yellowing of the foliage, no new frond growth and decreased water requirements. If you continue to keep a dormant fern in warm temperatures and regular watering, you will kill it.

If you are not concerned about frond growth until April, then $40^0$F/$4.5^0$C is the maximum soil temperature you should maintain. Cold frames, beds with thermal blankets and unheated greenhouses are good places to overwinter ferns but you need to water carefully and provide rodent control.

Marketing ferns goes hand in hand with shade garden promotions. With the limited selection of material available for shade gardens, ferns can add height, texture, and color accents. There are many ferns suitable for small places, rock gardens, or even for vast sweeps of shady areas. Versatility with ferns is as good as your imagination will allow. Casa Flora highly recommends getting the paperback edition of Ferns For American Gardens (ISBN 0-02-584491-1) by Dr. John Mickel. You will get a fantastic feel of the vastness of fern varieties and their characteristics to improve your gardens and your gardening sales. "…A book that should be on every fern lover's shelf."

Casa Flora™ ***'Your Fern Source'***