

Boston Fern Culture Sheet

Production tips are to the best of our knowledge and experience. They are offered for consideration and investigation, but we do not warrant or assure any results. In any case, ARC Ferns, LLC will not be liable for crop failures, personal damages, or any other occurrences arising in relation to use of these tips or any product mentioned. Grower assumes full risks and responsibility.

- **Media:** High water-holding capacity, good aeration and drainage. Minimum 50% coarse peat, 20% - 30% perlite or PBH. Aged pine bark can be used, but it may increase fertilizer requirements. pH at 5.0 - 5.5. Low to medium rates of superphosphate and micronutrients may be added.
- **Light:** 1,500 - 3,000 FC, best at 2,000 - 2,500. Higher range preferable during short day periods, while lower ranges are advisable in summertime for temperature control. In Florida, use 50% shade in winter and 75% in summer.
- **Fertilizer:** Start with water only, until roots are established. Then, liquid feed 150 - 200 PPM nitrogen, at 2-1-2 or 2-2-2 ratio. ARC uses TotalGro 20-20-20, alternating occasionally with TotalGro 14-4-14 Cal-Mag and clear water to prevent soluble salt buildup. If feeding overhead, rinse with clear water to prevent fertilizer burn. If using slow-release, use low - medium recommended rates.
- **Temperature:** Best daytime 85 F. Best nighttime 68 F. Will tolerate 50 F - 95 F. Note that in many greenhouses, basket temperatures are as much as 10 degrees warmer than benches.

- **Water:** Even moisture is desirable. Saturation will promote root rots. A light drought will slow runner production and cause some graying, but is generally reversible. Overhead irrigation should be applied early in the day to allow sufficient time for foliage to dry.

- **Growing Time:** From 72 cell to 8" HB, 7 – 8 months, variety and condition dependent. 1-2 months longer for 10" baskets.

- **Disorders:**

Graying: increase moisture.

Long, weak, pendulous fronds: increase light.

Leaf tip, runner burn: leach to remove excess soluble salts.

- **Disease:** The best way to prevent disease is by proper water management. Make sure media is not waterlogged and that crown dries adequately between irrigations. Boston ferns are fairly drought tolerant and in case of disease pressure are best kept on the dry side. For prevention of root rots, a drench upon transplant is recommended. May recur in moist, cold conditions or if media is not properly drained. Rhizoctonia aerial blight is common in summertime, showing as brown lesions and eventual rot of inner core. Must prevent standing water and take chemical measures immediately.

- **Pest:** Caterpillars will chew foliage and leave green fecal piles. Are easily recognizable by scent.

NOTE: The Florida Fern Moth is now established all the way to Canada and measures must be taken to exclude adult moths from the greenhouse. Avoid mixing old baskets (where moths will lay eggs) with fresh plantings (where worms will feed).

Fungus gnat larvae will inhabit wet media.

Scales will show on underside of fronds.

Mealybugs, mites, and thrips are possible but rare.

- **Pesticides / insecticides:** Boston ferns are sensitive to many common formulations.

Avoid soaps, oils, spreader-stickers, or wetting agents

Avoid unproven tank-mixes.

Avoid Cleary's 3336 or any other Thiophanate - methyl product.

Avoid most liquid fungicide formulations, such as Chipco 26 GT or Daconil Weatherstick, even if these are specifically labeled for ferns.

ARC will gladly share, upon request, its pest and disease control history. We cannot, however, guarantee success and will not be liable, in any case, for damages caused.

Always read and follow labels; use pesticides at your own risk.

Some formulations that we have found safe and effective are:

- Fungicide drenches: Truban (WP only), Medallion.
- Fungicide sprays: Dithane T/O, Daconil Ultrex, Medallion, Prostar, Chipco 26019.
- Insecticide sprays: Talstar, Duraguard, Conserve, Dipel, Decathlon, Safari

- **Selections (by popularity):**

1. **Nevada:** Our best-selling Boston fern, mostly in South Florida. Clean, full, and uniform, this variety is grower-friendly and often sold to large retailers. Used mostly in 8" and some 10".
2. **True Boston:** The classic and traditional Boston. Full on top with medium hang and some shedding, is still popular for greenhouse applications with plenty of overhead space. Suitable for 8"-12".
3. **Compacta:** Medium green with denser fronds and a rounder overall shape; very popular in 8" baskets. Some reversion is always possible.
4. **Montana:** Our most popular grocery chain Boston fern. Dark green, clean, and semi-upright, this selection has good shelf life and is grown in 6" and 8" baskets.
5. **Super Boston:** formerly known as Massaii, this variety is our largest Boston fern, with long hanging fronds and a sparse top. Is often grown in 10"-12" baskets for Garden Centers and wholesale warehouses.
6. **Bluebell / Green Moment (improved Bluebell):** These are the most common European selections, also popular in glasshouses in Canada. Medium green, full, and clean.

For growers looking to add novelty to their basket mix, we suggest Boston Gold, Tiger, Pom Pom, Fluffy, and Cotton Candy. These are all *Nephrolepis* selections with similar growing conditions and overall timing.