Magic from the Manual: Foliage Plant Basics

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The transition time between growing seasons is a great time to start reviewing for the MNLA Certification Exam. MNLA Certified Professionals are expected to have basic knowledge of the breadth of plant materials used in all aspects of the green industry, including foliage plants. Here is a quick Indoor Foliage Plants 101 lesson to launch your review process.

Winter provides an opportunity to remind ourselves and our clients of the benefits and joys of incorporating tropical foliage plants into our interior environments. NASA research has shown that tropical foliage plants filter volatile organic compounds (VOCs) including benzene and formaldehyde from the air. Just one potted plant per 100 square feet of indoor space in an average home or office was shown to be sufficient to cleanse the air of pollutants. Australian researcher, Dr. Margaret Burchett, found that the presence of just one plant can increase a person's energy level by 28%, reduce anxiety and tension by 37%, reduce fatigue by 38%, reduce depression and rejection by 58% and reduce anger by 58%. How many plants are near your customer service desk? Plants are calming and yet enhance human productivity.

Selecting the right foliage plant for the right location starts with matching the plant's light requirements to the setting. Frequently foliage plants are categorized according to high, medium or indirect, and low light requirements (see Table 1). Typically plants with variegated leaves prefer higher light intensities.

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Medium or indirect</th>
<th>Low</th>
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<tbody>
<tr>
<td>Croton</td>
<td>Dracaena</td>
<td>Sanseveria</td>
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<tr>
<td>Palms</td>
<td>Maranta</td>
<td>Aglaonema</td>
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<tr>
<td>Aralia</td>
<td>Pleomele</td>
<td>Spathiphyllum</td>
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<tr>
<td>Schefflera</td>
<td>Pepperomina</td>
<td>Some Philodendrons</td>
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<tr>
<td>Jade Plant</td>
<td>Ficus</td>
<td>Cast Iron Plant</td>
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<td>Pothenos</td>
<td>Dieffenbachia</td>
<td></td>
<td></td>
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<tr>
<td>Tradescantia</td>
<td>Some Philodendrons</td>
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Symptoms of plants receiving excessive light may include hard growth, pale leaves, and bleached dry spots on the leaves. Plants in insufficient light may show weak growth, off color, leaf drop, poor flowering, small new leaves, and/or thin stems. Short days of winter may accentuate low light symptoms.

Most foliage will perform well in a medium containing at least 50% peat and then other components including perlite, composted bark, rice hulls or coir. The medium should be well drained but hold ample water.
Encourage consumers to use the standard "finger test" to determine when a potted plant needs water. Insert the pointer finger into the medium and if it is dry down to the middle knuckle then re-water. It is better to run the plants on the dry side and avoid keeping them too wet to prevent potential root disease issues. Water thoroughly by allowing a little water to drain from the bottom of the pot. A subtle dulling in luster and/or gray-green leaf color can also suggest it is time to re-water.

In general, foliage plants only need fertilizer when they have sufficient light to put on new growth. During the winter many tropicals experience a quiescence or rest period and are not actively growing. Slow release fertilizers are an easy way to manage fertility and they can be pre-mixed with the potting medium prior to planting or added as a top dressing later. Liquid feeding is also common and most effective when low concentrations are applied every 2-4 weeks during the active growth period.

Most tropical foliage prefer temperatures between 55 - 80° F. Some may even show chilling injury below 55° F. This is sometimes observed in unheated shipping in late fall or early spring and appears as limp leaves and/or watersoaked leaf spots that may turn tan and dry. Blackened tissues generally results from freezing. Sleeving the plants in marginal temperature conditions prior to shipping can help prevent injury. Holding the plants in a 5-10° warmer day temperature than night temperature will maximize growth and plant health. The warmer days promote photosynthesis while the cooler nights minimize respiration resulting in maximization of carbohydrate accumulation in the plants.

For more information on indoor foliage, other plants and a variety of plant growth and development cultural practices, refer to the MNLA Professional Certification Manual.

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Questions

1. Examples of good foliage plant choices for a low light interior location might include:
   a. Pepperomia, Croton, English Ivy
   b. Dracaena, Aralia, Pothos
   c. Sanseveria, Aglaonema, Spathiphyllum
   d. Maranta, Schefflera, Chlorophytum

2. T or F Typically plants with variegated leaves prefer higher light intensities.

3. Interior foliage plants that receive insufficient light might show what type of symptoms?
   a. off color, leaf drop, poor flowering, small new leaves
   b. water-soaked leaves, thin stems, etiolated stems, hard growth
   c. bleached spots on the leaves, poor root development, short, thin leaves.
   d. marginal leaf burn, slow growth, epinasty, chlorotic stippling

4. T or F Just one potted plant per 100 square feet of indoor space in an average home or office has been shown to be sufficient to cleanse the air of pollutants.

Answers:
1.- C, 2.- T, 3. - A, 4. - T