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Philodendrons as Interior Plants

January is a month most gardeners would rather skip. The excitement and festivities associated with the holiday season are over, and ahead lies the prospect of eight bleak, dreary weeks of winter. All is not lost, however, since it is at this time of the year that interior plants brighten our days and allow us to enjoy plants when our psyche needs it most. Few other genera of plants offer "indoor gardeners" a wider array of choices than does *Philodendron*. Let's take a closer look at this popular group of plants.

Philodendron is a large genus in the Araceae family that contains some the most attractive tropical plants known. Its name is derived from the Greek words *philo* (love), and *dendron* (tree). Literally interpreted, its name means "lover of trees" and refers to the fact that many members of this genus are vines that (in nature) use trees as a means of support. Additional to the climbers, the genus also contains self-heading (non-vining) species.

Given the fact many philodendrons can be found in nature under the canopies of heavily foliated trees, they are capable of growing at relatively low light intensities. This attribute makes them good candidates for use as interior (house) plants since most indoor settings lack appreciable levels of light even though they might appear bright to the human eye.

An excellent example of a low-light philodendron is heartleaf philodendron (*P. scandens oxycardium*) which probably is the most popular interior plant in America today. An excellent choice for beginners, it has the ability to tolerate as little as 15 foot candles of light. However, it requires at least 200 to really thrive and develop its true, mature form. It is ideal for dish gardens or trained on a support (totem) in larger containers. A look-alike often confused with heartleaf philodendron is pothos (*Epipremnum aureum*). It, too, is an excellent low-light, vining plant but normally has foliage variegated with yellow or creamy white. Spade-leaf philodendron (*P. domesticum*) is another easy-to-grow, popular member of the genus. It has glossy, arrow-shaped leaves that often achieve a length of 12 inches when grown as an interior plant. It appreciates a bit more light than heartleaf philodendron and should be located in a moderate to bright interior location. Since it is somewhat weak-stemmed, it normally is grown attached to a totem.

One of the more popular self-heading philodendrons is lacy tree philodendron (*P. selloum*). It has large, imposing leaves with finger-like projections and requires a lot of space. Lacy tree philodendron is a full-sun plant in nature but can adapt to lower levels indoors. Given medium to bright amounts of light and time to grow, it is spectacular when used as a specimen plant.

Recently, a number of hybrid philodendrons have been introduced to the gardening world. Most are considered self-heading and are prized for their colorful new foliage which, in most cases, matures to a shade of green. Their mature size depends upon parentage, but most do well in larger containers (eight inches or more) with a totem for support. Generally, hybrids require medium to bright indirect light to retain their foliage color and to thrive.

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Philodendrons as Interior Plants...

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Popular hybrid philodendron cultivars along with distinguishing characteristics include:

• 'Autumn' – coppery-red leaves that and mature to an olive green.

• 'Black Cardinal' – bright burgundy leaves that can reach 8 to 10 inches long; upon maturity the leaves appear to be almost black.

• 'Imperial Green' – one of the older hybrids, it has large, glossy leaves shaped like an elephant ear.

• 'Majesty' – dark purplish-green leaves new leaves that turn maroon as they age.

• 'Pink Princess' – new leaves emerge bright pink in color and mature to green.

• 'Prince of Orange – bright shiny orange new leaves that mature to green. Tends to maintain its foliage color better under low light than most other hybrid cultivars.

• 'Rojo Congo' – new foliage emerges brown to coppery red and later matures to green with a hint of red; its bright red petioles add it is attractiveness.

Philodendrons grow well in a porous, soilless potting medium that retains goodly amounts of moisture. When fertilizer is needed, ordinary "house plant" fertilizer used according to label directions will suffice. Philodendrons have relatively few pests and are quite fond of warm interior temperatures typical of most homes. Watering frequency depends on size of container, plant size and interior setting. Keeping the growing medium "uniformly moist" is a good rule to follow.

Like other plants native to the tropics, philodendrons thrive under conditions of high relative humidity. This presents a problem as we move plants indoors. Astoundingly, the average interior setting during winter has a relative humidity lower than that of the Sahara desert. Therefore, the use of a home humidifier should be encouraged since it will improve the environment for plants (and people) who reside there.

In closing, it must be noted that all philodendrons are considered to be toxic since they contain varying concentrations of needle-shaped calcium oxalate crystals known as <u>raphides</u>. In nature, these crystals serve as a defense mechanism against herbivores. Calcium oxalate crystals have an irritant action on skin and (especially) on soft tissue internal tissue. Accidental ingestion results in a severe burning sensation in the mouth and throat and warrants immediate medical attention. Therefore, care should be taken to keep philodendrons out of the reach of children and pets.

> David Trinklein, Associate Professor Division of Plant Sciences TrinkleinD@missouri.edu

Low Temperatures Injure Peach Floral Buds

After several years of relatively warm winters, peach floral buds were injured by the low temperature episode on January 6 in some areas of Missouri. At the Horticulture and Agroforestry Research Center (HARC) near New Franklin, -11°F was recorded on this date. On January 20, peach floral buds on the middle portions of terminal of shoots from five year-old trees were collected to assess bud survival. 'Redhaven' peach bud injury ranged from 29 to 74%, depending on the rootstock. 'Redhaven' buds from trees with Lovell rootstock had a low percentage of bud injury, whereas those on trees with almond hybrid rootstocks had poor survival. While bud loss was significant on trees with some rootstocks, there are still enough floral buds left on all of our trees at this time to produce a full crop of peaches, assuming minimal additional damage occurs later this winter or spring. To look at temperatures recorded in your area, Missouri weather records can be obtained at: http://agebb.missouri.edu/weather/history/index.asp?station_prefix=sfm. When using this information, remember that it is site specific. If your trees are located in a sheltered area or a higher location than the local weather station, the temperatures may be warmer than those recorded at this website.

To assess low temperature injury on your peach trees, cuttings from trees can be collected at any time after injury is suspected. Once cuttings are collected, they should be brought indoors and sealed in plastic bags or basal ends of the shoots can be submerged in water in a container to prevent them from drying. After a few days at room temperature, floral buds (plump outer buds at a node) can be sliced longitudinally with a razor blade. Near the center of the bud, injured floral tissues (pistil and stamens) will be water-soaked and brown (Figure 1). Live buds will have bright green floral tissues.

For our evaluation, buds were purposely sampled so that the basal buds of last season's growth were retained. These buds are typically hardier than those located nearer the tip of the shoot. Also, large diameter floral buds are generally hardier than smaller buds.



Figure 1. (A) Dead and (B) live pistil and stamen tissues in peach buds.

Although peach floral buds have been damaged, the shoots are not. Prune trees before bud growth in the spring. Traditionally, most Missouri peach crops are lost during bloom due to spring frosts. For this reason, delay thinning until fruit is set, leaving small-diameter peaches spaced at least six inches apart on shoots to obtain large fruit at harvest. The earlier thinning is accomplished, the larger fruit will be at harvest. Because it is often hard to see developing fruit in the spring, additional thinning is usually required. If the entire peach crop is lost this winter, do not fertilize trees. When low temperatures eliminate the crop, vegetative growth is abundant during the following growing season. Thus, fertilizing trees without a crop results in excessive shoot growth with more pruning required later.

> Michelle Warmund, Professor Division of Plant Sciences WarmundM@missouri.edu

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February Gardening Calendar

Ornamentals

- Weeks 1-4: Winter aconite (Eranthis sp.) and snowdrops (Galanthus sp.) are hardy bulbs for shady gardens that frequently push up through snow to bloom now.
- Weeks 1-4: Water evergreens if the soil is dry and unfrozen.
- Weeks 1-4: Inspect summer bulbs in storage to be sure none are drying out. Discard any that show signs of rot.
- Weeks 1-4: Enjoy the fragrant blooms of the Ozark Witch Hazel flowering in shrub borders or wooded areas on warm sunny days.
- Weeks 1-4: Take geranium cuttings now. Keep the foliage dry to avoid leaf and stem diseases.
- Weeks 2-4: Sow seeds of larkspur, sweet peas, Shirley poppies and snapdragons where they are to grow outdoors now. To bloom best, these plants must sprout and begin growth well before warm weather arrives.
- Weeks 2-3: Seeds of slow-growing annuals like ageratum, verbena, petunias, geraniums, coleus, impatiens and salvia may be started indoors now.
- Weeks 4: Dormant sprays can be applied to ornamental trees and shrubs now. Do this on a mild day while temperatures are above freezing.
- Weeks 4: Start tuberous begonias indoors now. "Non-stop" varieties perform well in this climate.

Vegetables

- Week 1-4: Season extending devices such as cold frames, hot beds, cloches and floating row covers will allow for an early start to the growing season.
- Week 1-4: Start onion seeds indoors now.
- Week 1-4: Run a germination test on seeds stored from previous years to see if they will still sprout.
- Week 1-4: Don't work garden soils if they are wet. Squeeze a handful of soil. It should form a ball that will crumble easily. If it is sticky, allow the soil to dry further before tilling or spading.
- Week 2-4: Sow celery and and celeriac seeds indoors now.
- Week 3-4: Sow seeds of broccoli, cauliflower, Brussels sprouts and cabbage indoors now for transplanting into the garden later this spring.
- Week 3-4: If soil conditions allow, take a chance sowing peas, lettuce, spinach and radish. If the weather obliges, you will be rewarded with extra early harvests.

Fruits

- Week 1-4: Inspect fruit trees for tent caterpillar egg masses. Eggs appear as dark brown or gray collars that encircle small twigs. Destroy by pruning or scratching off with your thumbnail.
- Week 1-2: Collect scion wood now for grafting of fruit trees later in spring. Wrap bundled scions with plastic and store them in the refrigerator.
- Week 3-4: Grapes and bramble fruits may be pruned now.
- Week 3-4: Begin pruning fruit trees. Start with apples and pears first. Peaches and nectarines should be pruned just before they bloom.
- Week 3-4: When pruning diseased branches, sterilize tools with a one part bleach, nine parts water solution in between cuts. Dry your tools at day's end and rub them lightly with oil to prevent rusting.
- Week 4: Established fruit trees can be fertilized once frost leaves the ground. Use about one-half pound of 12-12-12 per tree, per year of age, up to a maximum of 10 pounds fertilizer per tree. Broadcast fertilizers over the root zone staying at least one foot from the tree trunk.

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Miscellaneous

- Weeks 1-4: To avoid injury to lawns, keep foot traffic to a minimum when soils are wet or frozen.
- Weeks 1-4: When sowing seeds indoors, be sure to use sterile soil mediums to prevent diseases. As soon as seeds sprout, provide ample light to encourage stocky growth.
- Weeks 1-4: Repot any root-bound house plants now before vigorous growth occurs. Choose a new container that is only 1 or 2 inches larger in diameter than the old pot.
- Weeks 1-4: To extend the vase life of cut flowers you should: 1. Recut stems underwater with a sharp knife. 2. Remove any stem foliage that would be underwater. 3. Use a commercial flower preservative. 4. Display flowers in a cool spot, away from direct sunlight.
- Weeks 1-2: Now is a good time to learn to identify trees by their winter twigs and buds.
- Weeks 1-2: Branches of pussy willow, quince, crabapple, forsythia, pear and flowering cherry may be forced indoors. Place cut stems in a vase of water and change the water every 4 days.
- Weeks 2-4: Watch for squirrels feeding on the tender, swollen buds of Elms, Hickories, Oaks and other trees as spring approaches.
- Weeks 2-4: Maple sugaring time is here! Freezing nights and mild days make the sap flow.
- Weeks 2-4: Begin to fertilize house plants as they show signs of new growth. Plants that are still resting should receive no fertilizers yet.
- Weeks 3-4: Now is a good time to apply appropriate sprays for the control of lawn weeds such as chickweed and dandelion.
- Weeks 3-4: Tall and leggy house plants such as dracaena, dieffenbachia and rubber plants may be air layered now.
- Weeks 3-4: Save grape vine prunings for making into attractive wreaths and other craft objects.
- Weeks 4: Late winter storms often bury birds' natural food supplies and a well stocked feeding station will provide a life-giving haven for our feathered friends.
- Weeks 4: Encourage birds to nest in your yard by providing water and by putting up bird houses. Planting suitable shrubs, trees, vines and evergreens will provide wild food sources and nesting habitat.

Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. (www.GardeningHelp.org)