

# Phragmipedium Culture (frag-meh-pee-dee-um)

Phrag. Gold Tower  
(Icho Tower flava x  
besseae)



The Phragmipedium is commonly known as the South American Slipper Orchid and is frequently called Phrag. (frag) for short. These are terrestrial growing orchids native to areas of Mexico, Central and South America. These orchids are incredibly easy to culture in the home and often have a blooming period of six months or more. A distinct feature about Phrags is that they produce their blooms sequentially, one flower after another, after another. Each blossom remains in flower for approximately two weeks while another flower bud develops. When a flower has finished blooming, it falls from the stem while still looking nearly perfect. Do not despair; this is natural. Because of the sequential blooming, it is not uncommon to see mature Phrags bloom up to a year or even more.

The following are the cultural requirements for Phragmipedium as grown in the upper Midwest.

## LIGHT

In the Midwestern climate, the Phragmipedium prefers to be grown in a bright area where they will receive some direct sun. The best exposure would be a bright east or west window to obtain some direct sun on the leaves.

During the winter months, south exposure in the Midwestern latitude is very bright due to the sun being so low on the horizon. The best position for the plant in a southern window would be where it will receive no more than two to three hours of direct sun daily. More direct sunlight on a Phragmipedium can damage the leaves. During the summer months, the south exposure has the opposite effect where the sun's angle is very high, and no direct light should be received. Then you should move the plant to an east or west exposure to ensure proper light levels. Or you can supplement light with an artificial plant light.

Photos by Chuck Acker



Phrag. Acker's Berry

Moving the Phrag to a shaded outdoor location is also an option, be sure to protect the plant from any hot direct sun. Whichever exposure you choose for your Phragmipedium, try to provide as much light as possible throughout the year without causing sunburn on the leaves. If your Phragmipedium is growing fine but not producing flowers, this is a sign that you need to increase the light levels.

Phragmipedium can be grown and flowered successfully under artificial plant lights. Some of these lights produce enough heat to burn the leaves if positioned too close to the plant. When using any artificial plant light source, be sure to arrange the plants under the lights per the needs of the plants.

## TEMPERATURE

An attractive aspect of raising the Phragmipedium is that they are tolerant of a wide range of temperatures. They also do not require the cooler night temperatures to set their flowering spikes as many other orchids. They thrive in temperatures between 50 degrees at night to 80 degrees in the daytime. A good rule of thumb is if you are comfortable, so is the plant. Keep in mind that consistent cool temperatures will slow the growth rate and subsequently slow the frequency of the blooming periods.

## **WATER**

One of the most manageable elements about growing Phrags is their watering needs. Once they become established in their pot and have a good root system, they prefer to be consistently moist. An easy way to accomplish this is to place the pot in a small saucer of water. The saucer size should be only slightly larger than the diameter of the bottom of the pot and no more than one inch deep. The purpose of the saucer would be to let the plant consume that amount of water in less than a week. When the saucer is completely dry, it is time to water again. Water the plant from the top of the pot allowing the saucer to become full again. This prevents the water from becoming stagnant, which can lead to some undesirable issues.



If you do not use the saucer method for watering your Phragmipedium, then water on average two times a week or whatever it takes to keep the potting medium consistently moist. Water thoroughly until water runs freely from the bottom of the pot. These plants will tolerate dryness periodically, but if grown constantly dry, they will become less vigorous and be reluctant to produce flowering spikes. Phrags also prefer low mineral water such as rain, reverse osmosis or bottled water. Never use softened water on any of your orchids.

## **FERTILIZER**

Phragmipedium is known for its rapid and vigorous growth with an extended blooming period. Therefore, a regular fertilizing schedule is needed to maintain their health and vigor. When using low mineral water, use a fertilizer that is specifically blended for such water types. One of the best fertilizers to use in that case is the MSU 13-3-15 or similar type fertilizer applied once every 2 weeks. If you are using tap or well-water, use a balanced fertilizer such as a 20-20-20 or equivalent. A safe dilution ratio for either fertilizer type is one level teaspoon mixed in one gallon of water. Do not over-fertilize as this will cause permanent root damage.



Phrag. Belle Hougue Point 'Mem. Walter J. Acker' AM/AOS

To apply the fertilizer solution, slowly pour it into the top of the pot allowing the saucer to fill with the solution. If you are not using the saucer method, pour the fertilizer mixture copiously over the potting medium until it flows freely from the bottom of the pot.

## **HUMIDITY**

Like many orchids, the Phragmipedium enjoys a moderately humid climate of 50% or greater. Therefore, while growing these plants indoors, increase humidity around the plant. This can be achieved by placing your plants on a humidity tray, misting them adequately in the morning, or grouping your plants all together in one area. While growing outdoors, this is not an issue since we generally have adequate humidity in the Midwestern summer climate.

## **BLOOMS**

Phrags often have a blooming period of six months or more, producing their blooms sequentially. Each blossom remains in flower for approximately two weeks and then falls from the stem while still looking nearly perfect. Once the flowering stem has completely finished producing flowers, it will turn brown and begin to die back. It is beneficial for the plant to allow dead flower stem(s) to turn brown before removing them because it will reabsorb and use the nutrients. The stem can then be cut off at the point where it had emerged from the leaf. →  
While the plant was producing flowers, another growth was developing, where the next flowering stem would emerge.



## **REPOTTING**

Phragmipedium needs to be repotted every year, to every year and a half. If you are not experienced or comfortable doing this yourself, call upon someone you know who can help you through the process. A recently purchased Phragmipedium may be ready for repotting as soon as it has finished flowering. Inquire with the seller as to when your specific plant was last repotted.

### ***Good indicators for a Phrag to be repotted are:***

1. When the plant has grown itself up and out of the pot;
2. The roots are becoming abundant at the surface; or
3. When the pot is entirely root-bound.

It is not advised to repot Phrags between Nov. through Feb. because the days are too short unless you are growing under artificial lights and can control the day length.

**A note about orchid viruses:** most commonly, the transmission of orchid viruses is caused by using the same cutting tool on multiple plants. The most effective method to reduce virus transmission from plant to plant is to briefly flame-sterilize your cutting tools between each plant. A simple Butane torch

or a gas stove are handy items for this purpose. This practice should be implemented when repotting as well as when cutting off perished flowering stems.

**Repot your Phragmipedium:**

1. Remove it from the pot and let the existing potting mix fall away from the roots. Once you have all the mixture away from the roots, you can distinguish the healthy roots from the not-so-healthy, rotted roots. If your Phragmipedium is completely root-bound, then no potting mix will fall away, no root trimming will be needed, and your potting process will continue from there.
2. Selecting the proper size pot is a crucial aspect in repotting a Phragmipedium. Select a pot that is only large enough to accommodate the roots comfortably. If you need to force the root mass into the container, then it is not large enough. The rule of thumb is to use a pot that comfortably accommodates the roots. It should be a new pot with adequate drain holes in the bottom.
3. Set your plant into the pot and begin adding moistened fir bark orchid potting mix. Work the mixture between the roots by gently shaking or tapping the pot to allow the mix to fill in between the root crevasses naturally. Position the plant, so the junction of the plant and root is just below the surface of the mix. This will allow the new roots to enter the fresh mixture immediately. Once the pot is nearly full of bark mix, begin to pack the mix somewhat firmly to anchor the plant properly. Sometimes a blunt tool is needed to firm up the mixture properly. Wait several days and then water the plant thoroughly.
4. Do not use the saucer method for watering a Phragmipedium that has been freshly repotted. Allow the plant several months to produce new roots into the potting medium before using the saucer method again. This will avoid root rot and get your freshly repotted Phragmipedium off to a healthy start.



Phrag. Don Wimber

Phragmipedium can be divided, providing the plant has enough growths to do so safely. This is a somewhat technical process and is best done by someone who has experience dividing a Phragmipedium. If you want to divide your Phragmipedium yourself, the rule of thumb is to have at least six mature growths to start. A safe division will then be three to four growths apiece. Dividing is accomplished by cutting the rhizome and root zone in a place to make the minimum growth division.

Chuck Acker

Good luck and Happy Growing!