Orchids on Your Windowsills
Adele Fein
And elsewhere in the home
You don’t need a greenhouse or Nero Wolf’s gardener, Fritz.

• Orchids thrive in the right environment, just as other houseplants do.
• You can grow orchids and bloom them year after year, if you can provide their needs for light, warmth, fresh air, water, and humidity.
• If you’re comfortable in a room in your pajamas, they will be, too.
Light is a major factor in growing any plant.
Light changes during the year.

Sunlight may reach plants more directly in winter, when the sun is lower in the sky.

Indoor light intensity for plant growth depends on the distance from the window and the direction of exposure.

Image: Ortho’s Complete Guide to Orchids, 2004
Cattleya

Carmela Orchids Nursery, Hawaii
Paphiopetalum
Phalaenopsis, aka the Moth Plant
Levels of Orchid Growing
(From the National Capital Orchid Society’s Guide to Growing Orchids)

• One- “I didn’t kill it.”
• Two- “I got it to bloom again.”
• Three- “I got more flowers than last time.”
• Four- “People keep asking me how I can grow these so well.”
Level One - I Didn’t Kill It.

Hint: More orchids die from overwatering than from underwatering.
Water when they NEED water. Needs will change throughout the year, due to changes in temperature and humidity, and to changes in the planting medium as it retains more water.

Use the pencil test above, or stick your finger into the medium – about a knuckle deep will do. If it’s cool or damp, do not water.
Never let it sit in water!

• If it’s in sphagnum, it should not be waterlogged or soggy. The plant needs air spaces around its roots.

• If it’s sitting in a decorative container, and you can’t take it to the sink, be sure to pour off the excess water after 15 minutes.

• Phals are monopodial; they grow straight up rather than grow across the medium. Keep water out of the crown. If rot sets in, the plant dies.
Watering your Phal

• When you do water, take the plant to the sink and let the water (room temperature) drench the medium thoroughly. This prevents fertilizer salt buildup.

• If your plant is in bark, there should be air spaces between pieces; it should not feel like soil.

• Fertilize once a month with ½ the amount of fertilizer recommended on the label. You can use any houseplant fertilizer.
Leaves

- Leaves are light collectors, energy converters, breathing devices and cooling devices.
- Very large leaves mean that the plant needs a lot of leaf surface because it grows in relatively low light.
Leaves should be bright, grassy green; not dark green or yellowish.
Where to Grow Them

• Give them 6 hours of filtered sunlight/day in E, W, or shaded S window.

• In other words, grow them where you grow your African Violets, in natural or fluorescent light.
Temperature and Humidity

• Phals in nature grow at 50% humidity. The air in our homes tends to be dry in winter, and both we and the plants could use the moisture provided by a furnace humidifier or a room vaporizer. Do not spray mist on leaves.

• Temperatures: 60 degree nights and 70-75 degree days will suit them fine.

• If we are comfortable in a room in PJs they will be too.
Level Two - I Got it to Bloom Again.

- It survived. It bloomed. How do I get it to bloom again?
- If the spike is still a healthy green, and the youngest leaf is the same size or larger than the one that came before it, you can try to re-bloom it by cutting the spike back to above the 3rd or 4th node. If the plant doesn’t send out a new branch from the spike after 6 months of waiting, cut off the entire spike.
Bloom Time

• Phals usually send up spikes in winter or spring, but some can bloom at other times of the year.
• They’ll bloom when they’ve rested after their last flowering, and when their needs for light, water, nutrition, temperature, humidity are satisfied.
• Instead of an all-purpose houseplant fertilizer, use one specifically for orchids, at $\frac{1}{4}$ strength. Again, once a month, use water only, and heavily, to leach out excess fertilizer.
What if the last leaf is smaller than the one before it?

- It may be adjusting to a new environment.
- It may be having problems, so if the plant is blooming, cut off the flower stem to relieve stress.
Take it out of its pot.

- Has the medium begun to break down?
- Is the bark in chunks? Is it mushy? Does it look like peat moss? How do the roots look?

Photos: Growing Orchids by Brian and Wilma Rittershausen
Check out the roots.

- How do they look? Firm, white with green growing tips? Dark and mushy? Either the potting mix has broken down or you are watering too often. Repot.

- Roots dry and withered? You need to water more often or change the medium to one which holds more water.

Photo: Rittershausen
Check out the leaves.

Bacterial Rot

Fungus

Excess Fertilizer
Check for pests.
It may be time to repot.

- Repot if the mix has broken down, the pot is too big for its root mass, or the plant has been in its pot for more than 2 years.
- Remove all the old mix. Cut off dead roots.
- Use an orchid mix (bark, charcoal, perlite). It will hold some water, allow air to circulate around the roots, and maintain high humidity around the roots.
- Some growers use sphagnum moss.
- Don’t over pot. Use a pot about 1” wider than the existing root mass and about half as wide as the leaf span.
- Most windowsill orchid growers use plastic pots. They don’t dry out as fast as clay, thus keeping more humidity around the roots.
It still wont bloom. Now what?

• The newest leaf is at least as big as the previous one, the plant doesn’t need to be repotted. It still won’t bloom.
• Orchid plants have their own internal clocks; it may not be ready to start another bloom cycle. The cause may be not enough light.
• Phals need about a 15 degree drop in temperature at night to initiate flowering.
To Summarize

- Eastern exposure or comparable light level
- 50% humidity
- Open potting mix, bark or sphagnum
- Temperatures 60-75 degrees
- Fertilize weakly, weekly
- Repot every 2 years
- Water when they need it
Recommended Reading

*The Best Orchids for Indoors*, Brooklyn Botanic Gardens  
*The Complete Houseplant Survival Manual*, Barbara Pleasant  
*Growing Orchids*, Brian and Wilma Rittershausen  
*Complete Guide to Orchids*, Ortho Books  
*Bloom-Again Orchids*, Judy White