



ORCHIDS ON WINDOWSILLS

Marilyn H.S. Light

Adapted from material first published at www.orchidsafari.org in July, 1999

See archives at <http://www.geocities.com/brassia.geo/OSTA.html>

Windowsills come in all shapes and sizes. The windows they edge can face in any direction. They can be exposed to weak morning sun, hot unrelenting afternoon sun, and even no sun at all if the window faces a building, a wall, or is blocked by thick evergreens or hanging vines. Sometimes there are curtains, shutters, opaque or coloured glass. The glass may be thin or thick or be of an insulating or reflective type. Windowsills may be close to or below ground level or high up in a towering building. How can we successfully raise orchids on windowsills and what are some of the factors that can have a positive or negative impact on orchids in such locations?

SPACE

Sills are generally too narrow for anything but a tiny pot and those can be easily tipped by a billowing curtain, or when dusting or cleaning. Wide sills are a joy that is often the bonus of renovated older homes and apartments. Old windows not only have wider sills but are often very tall. Treasure such spaces as they can easily hold trays of pots or support vertical staging. A stand having several shelves can be stood upon the sill or attached to it. Decorative metalwork hung vertically in place of blinds can be used to hang mounted orchids. If the window is large enough, vertical supports can be arranged in two parts like doors to be swung open and closed for more or less light, warmer or cooler conditions, and to care for the plants or to display the flowers.

LIGHT

Windows present a variety of lighting conditions which can vary with the season. Leafy trees might provide adequate shade in summer but bare branches may not give enough protection from direct sun in winter. The sun's direction will change with the season and this will present additional challenges. Sun reflection from the snow may be surprisingly strong in windows near to the ground. We need to balance the quantity and quality of light being received by our orchids to what they need and can use without becoming overheated. Shading in the form of sheer or lace curtains, blinds, louvres, and similar devices can be used to adjust the quantity of light reaching the plants in any season. Supplemental artificial lighting may be required during winter months when the quantity of light is wanting and this can be installed along the top of the window or along the sides.

TEMPERATURE

Too much light for a plant can mean too much heat also. Shading will reduce light reaching the leaves and pots and thus keep plants cooler. The ideal shading diffuses light as well as reducing the quantity of light reaching the plants. Shading materials can include sun-resistant curtaining. Thermal windows composed of panes separated by dead air space can reduce chilling somewhat but may not necessarily provide adequate diffusion of light reaching your orchids. An inexpensive minimum/maximum thermometer will provide you with the information needed to make adjustments to the window sill environment. Many orchids will tolerate cool (15°C) nights if the daytime temperature is 20-25°C. A change in temperature between day and night is usually beneficial.

VENTILATION

Air movement is an essential element of successful orchid culture and is especially useful in windowsill settings. Moving air can counter overheating or chilling. A small muffin fan may be sufficient for smaller locations while more powerful fans may be needed for larger windowsill collections of plants.

HUMIDITY

It is challenging to maintain higher humidity on a window sill. When room humidity is naturally high as it often is in summer, air movement will reduce the likelihood of orchids developing injurious rots. In winter, when it is cold outdoors and warm inside, high humidity in close proximity to a chilly window surface will lead to moisture buildup

on the panes and sill, the cold glass acting like a still. Condensate will accumulate and run onto the floor, freeze or be absorbed by a wooden sill. A fan may minimize the problem but a lower humidity will result due to air mixing with that of the dry heated room. The simplest way to deal with low humidity in winter is to grow orchids that are more tolerant of such growing conditions. Orchids such as Dendrobiums, Cattleyas, Oncidiums and Catasetum are all good choices.

WATER

Since the sill is part of the home, we want to ensure that it is not soiled or badly damaged by water. Set pots in saucers or use decorative glazed pottery outer pots lacking drainage openings. Orchids can be removed to a nearby sink for watering and spraying then returned to their containers once the dripping is finished. Mist only with deionized water to limit water spotting of windows and drapery.

CHALLENGES

Windowsill orchids are subject to the same pests and diseases as are those raised elsewhere. Wind can be especially injurious to orchids perching along sills in apartment towers. Without substantial screening or similar barrier, wind gusts can easily dislodge unsecured pots. While we are snug beneath our covers on a cold winter night, plants touching glass or those whose pots are sitting on an uninsulated sill can freeze. Get to know the growing environment by measuring the minimum/maximum temperature at different locations over the winter. You may find that freezing is a risk only during periods when the outside temperature drops below -20 °C or when the wind comes from a particular direction. Outside air temperature alone is not the best guide to chilling potential during cold spells. During times of heightened risk, you may wish to increase air movement or move plants temporarily away from the hazard.

Windowsill culture means orchids are grown in your living area. All products applied to these plants including pesticides will permeate your living space and the air you breathe. Likewise, the orchids will be subject to all vapours emanating from your living space including tobacco smoke, solvent, paint and glue fumes. Some orchids are very susceptible to solvent fumes and will die. Flowers will wilt in a smoky environment. Leaves and flowers can be spotted by window cleaning products and furniture polishing sprays.

SELECTING WINDOWSILL ORCHIDS

Choose orchids which are tolerant of variable to low humidity and that respond to the existing temperature regime. Plants suited to container culture are good choices.

Paphiopedilums and Phragmipediums - Low to medium indirect light; good for brightly lit windows never receiving direct sun; warm to cool depending upon type; Phragmipedium excepting *Phrag. caudatum* and its hybrids can be set in individual saucers of water. Remember to change the water each time you water or fertilize. Mist daily.

Phalaenopsis - Medium indirect or filtered light; warm (25°C) days - cooler nights (to a minimum of 15°C) especially in autumn to induce spike production. Mist frequently.

Dendrobium - High to medium light, filtered sunlight; warm days - cooler nights. Water and fertilize only when in active growth. Mist daily.

Catasetum - High to medium light. Warm. Water and fertilize only when in active growth/flowering. Dry and warm temperatures while dormant when leaves will drop. Protect plants from chilling at all times. No misting needed.