

# Weeds

By Susan Jones

You've probably heard the maxim, "A weed is just a plant where it's not wanted." Not only do weeds compete with orchids for living space in the wild, but the same habitat invaders may take hold in your orchidgrowing area as well. The root systems of weeds can spread rapidly throughout the orchid medium, siphoning off water, nutrients, light and air needed by the orchid plant for its own growth and optimum health.

The dictionary defines a weed as "any undesired, uncultivated plant, especially one growing in profusion so as to crowd out a desired crop." Weeds tend to grow especially rapidly and can be invasive in an orchid collection and often do not slow their growth during the cooler seasons as some orchids do, allowing them to get a leg up on a dormant host plant.

While weeds are a challenge for any grower, the larger the collection and more hospitable the growing environment, the better the opportunity to cultivate a crop of weeds inadvertently along with the orchids. New plants can be a source of intruders, and should be isolated for at least a couple of weeks to check for any sort of weed, pest or disease before being mingled with the rest of your orchids.



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Weeds, if left unchecked, can totally overrun an orchid pot depriving the orchid of water and nutrients.

## Weeds

While any undesired plant in an orchid pot can be considered a weed, some of the most common interlopers are *Oxalis*, *Acanthus* and ferns.

**Oxalis** -- One of the most widespread weeds in orchids is oxalis (*Oxalis corniculata*). It may also be the most aggressive weed orchid growers encounter. A green plant with cloverlike leaves, it seems to spring up overnight,

spreads rapidly, roots deeply and seeds prodigiously. Its seed capsules explode, firing seeds in all directions that adhere and germinate wherever they land, including one's orchid pots.

**Acanthus** -- Other common weeds found in orchids are members of the genus *Acanthus*, commonly called bear's breeches. There are a number of species that make their homes in orchid pots, all of which are small plants with rounded, silvery leaves, with a growth habit similar to that of a rosette. The roots take hold quickly and deeply, and need to be removed completely before they are allowed to establish or spread.

**Ferns** -- The term "fern weed" encompasses any undesired fern that has found its way into an orchid. Ferns have spores that land in orchid pots, and once established will compete with your orchid for growing space and resources. Their rhizomes choke out orchids and rapidly take over the growing container. They are also a problem in hanging baskets, as well as on tree-fern mounts and totems. Many of the ferns growing as weeds in orchid pots can also be potted and raised as houseplants (ideally somewhere other than in your orchid-growing area).

**Moss** -- Moss growing in orchid pots is not usually a problem, and for moisture-loving species, such as many members of the Pleurothallid Alliance, it provides the added benefit of moisture retention for the orchid it shares space with. In their natural habitat, some epiphytic orchids grow in among mosses on their host trees, benefiting from the humid microclimate created around their roots by the moss.



A large pair of tweezers can eliminate weeds at the stage when they are easiest to control.

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## Prevention and Control

The best time for weed control, according to orchid grower and photographer Greg Allikas, of West Palm Beach, Florida, is when they are seedlings. Keep a pair of large tweezers in the growing area to remove them before they have a chance to become established. Remember that physical control of these weeds includes removing not just the foliage, but also the roots or bulbs below the surface of the media as well. If a weed has become well established, it may be necessary to decant the orchid and remove all parts of the weed from the medium.

Once an infestation of weeds has taken hold, the safest, if most labor intensive, control involves repotting all affected plants, using only fresh medium that has been washed, sterilized and treated for weeds, sterilized tools, pots and medium. Gently remove the old medium, taking care to separate out and dislodge any weed roots from around the base and roots of the orchid. The bare-root orchid may be sprayed down gently with the sprayer hose in the kitchen

sink to wash the roots down after cleaning off the old medium — just put a screen in the sink drain so as not to clog the pipes with any material that may fall into the sink.

Dispose of the old medium; do not leave it in the growing area in case it contains weed materials or seeds that could reinfest your collection, and never reuse old orchid medium. If the weed should reappear, pull it immediately, being sure to get the roots out as well as the top of the weed. If only the top comes off when the weed is pulled, that root can regenerate if enough of it is left in the orchid pot.

Chemical controls that eradicate weeds may also harm or kill the orchid host, especially as orchids are often more sensitive to such chemicals than the weeds themselves. The herbicides Monuron (Monurex, Telvar) wettable powder, Diuron (Di-on, Crisuron, Diater, Karmex, Unidron) Simazine (Princep) have been tried with some success against weeds invasive in an orchid collection, but are not proven safe for use on all orchids. Some plants may not tolerate the chemicals and may be lost as a result of treatment.

Chemical controls may be more effective against weeds in a greenhouse or outdoor growing area, as long as they are not used directly on the orchids. Other less toxic options include mulching to suppress weed growth and pulling weeds by hand. If your orchids spend their summers outdoors, always check for the presence of hitchhiking weeds before returning them to their winter accommodations.

## References

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