

# The Orchid Shadehouse

By Dr Fred

A well located shadehouse greatly increases the range of orchids you can cultivate and provides them with a more consistent garden environment. Apart from the obvious shade protection, summer temperatures are lower and humidity higher in a shadehouse. Co-location also makes plant care easier.

A shadehouse can also be used for other general garden tasks such as plant propagation. It does mean a significant amount of planning, investment and often sacrifice of otherwise productive garden space. Mine replaced an old garden tool-shed.

An ideal shadehouse should provide frost protection and the right amount of sun year-round for the type of orchids you intend to grow. Simple protection from cold southerly winter winds and drying summer westerly winds improves the microclimate enormously. However the orchids will still be exposed to rain which reduces the chance of scale and other infestations.

As with all real estate, location is the key, aiming for maximum winter sun. A north or north-east aspect would be ideal but existing structures and trees may limit your options. You should seek expert advice but even a westerly aspect can work with appropriate shading.

The local council and the neighbours should be consulted well in advance.

## Shadecloth

It comes in a range of thicknesses denoting how much shade it provides. How much shade you need depends on the aspect, natural shading from trees and the light requirements of your chosen orchids. Thirty to fifty percent (shade) is usual. Additional layers can be added in summer if required. During winter, minimal shade is needed in Sydney.

## Construction materials

They need not be expensive. Treated pine is durable, easy to work and can be painted to blend in with adjacent structures. A lean-to shadehouse can be attached to an existing wall. The wall then acts as a heat sink and provides additional hanging space.

Recycled galvanized weld-mesh fence panels make well ventilated benches which do not rust. Panels can also be mounted onto a back wall for hanging orchids. Galvanized piping attached to the roof beams provide more hanging space. Galvanized steel mesh can also be worked into an A-frame to support more plants.

Floors can be almost anything from dirt to gravel or paving as long as it can be swept clean. Gravel retains moisture from watering and contributes to humidity which is very important in summer.

If you are building or have an existing pergola think of adding some hanging space so that more tender orchids or those in flower can be given more protection under polycarbonate roofing in winter.

## Plan for the future

At some stage you will want to extend, preferably toward the east or north.

In Sydney you should be able to grow most cool and intermediate species in a shadehouse. This will include hard and soft-cane Dendrobiums, Cymbidiums, Cattleyas, Epidendrums, Laelias, Miltonias, Odontoglossums, Zygopetalums and Coelogynes.

You will find many subtle microclimates within your shadehouse. Often just moving an orchid a foot or two (vertically or laterally) will improve its chance of flowering. Don't be afraid to experiment.

Light loving species such as Cattleyas and Encyclias are hung highest with ferns and bromeliads lowest under the benches to increase humidity. In between, shelves and hanging space should be laid out to meet the light and humidity requirement of each plant without crowding.

Note that most orchids enjoy a cool root run, even if the leaves like sun.

There are some other important spaces to think about. An easily accessible potting bench with storage for pots and mix is essential and should be set up so you can repot at any time. You should also designate another space well away from the shadehouse where sick plants can be isolated, treated and observed.