

Wallys Weekly News 3rd JANUARY 2009
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GLASSHOUSE GARDENING

Some gardeners may have been lucky enough to receive a glasshouse for Xmas. If so, congratulations, you are in for a lot of fun.

I have been asked several times in the past for basic information about growing in a glasshouse, so now is a good time to look at the subject.

If you do not have a glasshouse, but are keen on gardening, you should invest in one. It can be a plastic or glass structure and if you have to choose between the two, go for glass as you only have to replace broken panes, not all of the plastic every few years. Plastic is cheaper especially if you build your own. It takes only a little bit of building skills to construct an 'A' frame using 50 X 50 mm wood and covering it with horticulture plastic film. Alternatively cover with a clear light type nova lite.

The bigger the house the more ventilation is needed. The door is one major vent, and one or more roof vents should be included. In a glasshouse you can always remove panes of glass in summer for extra ventilation. I never paint or use shade cloth on the outside of my glasshouses. The glass is allowed to become dirty from the end of winter but washed clean once a year in autumn. With right use of the vents and water you can keep the house's temperature from getting too hot in summer.

(If you need to shade the house in a hot summer you can make up a slurry of hydrated lime and water and paint this over the outside of the glass.)

Plants that cannot stand full hot sun can be placed under benches for shade or string up some shade cloth inside the house over the sun sensitive plants.

Many gardeners have an earth floor in their glasshouses so they can grow directly into the earth. I have never liked this idea as soil can harbour diseases which will likely effect plants. Also the idea of digging out the soil every so often and replacing it with new top soil always seemed too much work. I always opt for a concrete floor and grow all plants in containers. This makes it easy to remove a plant from the house if it becomes diseased and could affect other plants. Concrete has other advantages, it is easy to clean, weeds can't grow on clean concrete, and it is also a heat trap that releases the warmth when the sun goes down. On hot sunny days you can wet the concrete and the evaporation of the water will cool the house and keep the temperature down.

If you are unable to lay a concrete floor then place weed mat over the soil and cover with pea metal, a couple of inches thick. Another choice would be weed mat with pavers, cobbles or bricks. In these cases, dirt will build up over time and you likely will need to do a bit of weeding.

Placing of the glasshouse is important and you should try and locate where it's going to get as much sun as possible, in the winter. (It will also get maximum sun in the summer too unless shaded by deciduous trees) One side of the house should face north and that will be the sunny side of your house. On this side is where you grow your tomato plants, cucumbers etc. The other side should have a small work bench or dependant on your activities a bench running the whole length of that side.

Ideal for seedling trays, cuttings, growing on lines and small container plants you fancy. Under the bench can be used for pot storage etc and plants that need a shaded situation. Having a glasshouse allows you to have a greater control over the inside environment.

The plants are sheltered from wind which is a great plus in growing. Yet the wind passing over a glasshouse will lower the inside temperature by a number of degrees.

Your plants don't get rained on and if in containers, you are the supplier of their water needs. Don't put in an overhead sprinkler system to water. It will likely cause damage and disease to plants. If you want to use an irrigation system, then install a dripper type. I prefer to water only with a soft wand late in the day. I keep a bucket of water in the glasshouse and on hot days, during the day, if any plants need some water I just use a cup of water from the bucket. (It's going to be naturally warm water and not give the plants a cold shock on a hot day) You can water in the morning if you prefer or are not able to check the plants in the middle of the day. In very hot areas likely watering in the morning and late day will be needed in the summer. Plants in containers that wilt through lack of moisture during the day can have a saucer or tray placed under them for extra water reserves. Wilting can also be caused by too higher temperatures during the day. Try and not let the temperature exceed 30 and best at about 25 degrees C. Good ventilation and water on the concrete can keep the inside temperature lower than the outside. A dripping hose can keep the supply of water for evaporation during the day when you are not present.

As temperatures start to fall in autumn you're watering should also lessen. In winter all plants should be kept on the dry side as wet growing mediums mean a very cold root system and a great chance for diseases to strike. In fact in winter you should only give small drinks when the plants start to droop through lack of moisture.

As winter approaches spray the plants with **Vaporgard** over and under foliage.

It will protect them from frost and greatly reduce their water needs. The film which lasts for about 3 months will also protect them from pests and diseases to a degree.

The product can also be used in summer to reduce the water needs of plants.

If plants wilt during the day and yet the mix is damp, it means that the roots cannot keep up with the moisture loss through the leaves. **Vaporgard** will help solve that problem.

Tomato plants must have sufficient moisture when setting fruit, if not blossom end rot is likely. For pest control use **Neem Tree Granules** around near the base of plants. If you get an outbreak of say whitefly, then spray with **Neem Tree Oil and Key Pyrethrum** at dusk but not when there is high humidity.

Diseases can be prevented by sprays of **MBL, Mycorrcin and Perkfection**. Repeat about every month with **Perkfection** and 2 weekly with the others.

Rok Solid (mineral rock dust) sprinkled around the base of plants will provide many of the extra minerals needed for healthy plants.

Germinating seeds or doing cuttings will likely require a bit of shade cloth over the trays in summer, or pop them under the bench. Use **Vaporgard** on the cuttings.

In the cooler months a heat pad will help germination and striking.

Growing in winter, extend the light hours with artificial light.

If growing tomatoes in winter chose types that set in colder conditions.

Glasshouses or tunnel houses are a lot of fun and save you lots of dollars over the years.

Problems ring me at 0800 466464 (Palmerston North 3570606)