

Phalaenopsis



Phalaenopsis, the Moth Orchids mainly native to tropical East-Asia, are one of the best orchids for growing in the home, as well as a favourite with glasshouse growers, due to their long lasting showy flowers.

Temperatures

To promote growth temperatures for Phalaenopsis should range between 24-29°C for most of the year. Temperature held constantly above 22°C suppresses flower initiation, so night temperatures between 16 -18°C are desirable for several weeks in autumn, in order to initiate flower spikes. Although higher temperatures produce faster growth, higher relative humidity and increased air movement must accompany the higher temperatures, the recommended maximum being 35°C. Fluctuating temperatures can cause the buds to drop on plants with buds ready to open.

Light

In a glasshouse at least 75% shade is desirable, although slightly more light can be provided in winter. In the home they grow easily near a bright window, with little or no direct sun. A north or east facing window providing bright indirect light is ideal; shaded west windows are acceptable. Artificial lighting is excellent; usually four fluorescent tubes in one fixture are placed 150 - 300mm over the leaves, 12 -16 hours a day, following natural day length.

Water

As Phalaenopsis have no significant water-storage organs other than their leaves, they should never completely dry out. Plants should be thoroughly watered, then not watered again until nearly dry through the pot. (In the home, with good ventilation, twice a week, in summer will suffice; in winter, once every five days.). In the heat of summer plants may require water every second day. Watering is best done in the morning, avoiding the crown if possible, so that the leaves and crown are dry by nightfall.

Humidity

This is important to Phalaenopsis, the recommended humidity being between 60% and 80%. In the glasshouse, keep the floor moist and use misting to maintain humidity but not water the growing medium. In the home, stand the plants over trays of gravel, partially filled with water, so that the pots sit above the water. Mist the plants often on dry days, or during dry weather. Grouping plants together helps raise the humidity. During humid days, ensure that the air is constantly moving to prevent air around the plants becoming stagnant. A small fan, blowing away from the plants may help.

Fertilizer

Apply on a regular basis, especially if the weather is warm when the plants are most often growing faster. A rate of 500ppm (approx. 1 tsp to 10 litres) once a week is adequate. Fertilizers not high in nitrogen (NPK approx. 15:2:15) and with trace elements and higher calcium and magnesium are ideal, such as Peters Excel. This can be applied with normal watering. While night temperatures are falling below 22°C fertilising can be reduced to once a fortnight.

Potting

Best done in the spring or after flowering. Phalaenopsis plants can be potted in bark, perlite, sphagnum moss, or a combination of these. If using bark it should be soaking overnight in a solution of pool algaecide before use. Potting is usually done every 1-3 years, except plants in sphagnum moss should be re-potted every year. Mature plants can grow in the same pot until the potting medium starts to decompose, usually in two years. Root rot occurs if left in a soggy medium. Small plants usually grow fast enough to need re-potting yearly, and if in bark should be in a fine grade bark while small. Mature plants in bark are potted in medium-grade. If using perlite, jumbo size is preferred. When mature, a plant may stay in the same sized pot for many years, but must have the medium changed. To re-pot, remove all the old medium from the roots, trim soft, rotted roots, and spread the remaining roots over a handful of medium in the bottom of a new pot. Fill the rest of the pot with medium, working it through the roots, so that the bottom leaf is just above the medium. Keep the plant shaded and humid. A plant hormone promoting root growth may be helpful in establishing plants.

Pests

The most common pest usually found in Phalaenopsis is mealy bug. Frequent inspection to remove them and periodic spraying with Eco-oil will control their numbers. Slugs and snails are attracted to new leaves and flower spikes. Fungi and bacteria (e.g. Erwinia) can usually be controlled by spraying regularly with a peroxide, colloidal silver mix such as Hysan.