

## **Package and practices of growing Cymbidium orchid (*Cymbidium sp.*)**

### **Family: Orchidaceae**

### **Temperature**

*Cymbidiums* require warm and humid in growing period and cool climate in flowering seasons i.e. mostly in winter. They are most suited to the temperature regime of 20-24 ° C during growth and cooler temperature of 10-20° C at the time of flowering. Orchids flower best when they experience a difference (at least 10°C) between daytime and night time temperature.

### **Light**

*Cymbidiums* need bright filtered light (55% -70 % shade) all day or full morning sun but cool temperatures. Plants require light shade from the midday sun. In cool areas full sun is tolerated. Leaves should be a medium to golden green in color, not dark green. If too shady, plants will bloom less or not at all.

### **Relative humidity**

Relative humidity should be between 50-80 %. If the RH drops below 40%, shading and misting can be done.

### **Air movement**

Good air movement is essential for *Cymbidium* growth. Ventilate the greenhouse whenever the weather permits. If the Orchids are grown in sheds, their sides should not be covered. It should be kept open to provide good air circulation system.

**Varieties:** New hybrids are produced every year, but most of these are sold unnamed. Levis Duke Bella Vista, Margaret Thatcher, Kennywine, Golden girl Mini Beacon Red torch, Beauty Fred 6, Ames Bury, Baltic Glacier Mint ice have been found to be suitable in Hill zone of West Bengal.

### **Repotting**

Orchids should be repotted only if the pot is overcrowded which happens on average every two or three years or when the medium has broken down, for *cymbidiums* thrive best when left undisturbed. Repotting should be carried out during spring (after flowering). During repotting dead

or withered roots should be removed. Older roots should be trimmed up to 10-15 cm from the base of the bulbs; Leave the root tissue to air dry. Use sterile utensils to carry out such work.

### **Propagation**

1. Division of plant: To divide the plant, the orchid must have reached a maturity stage where division of the plant has atleast three pseudobulbs.
2. Repotting one of the backbulbs: Remove one of the old dormant bulbs from the plant, peel off its dry sheaths and plant

Do not water for at least three weeks, moisten with a hand-spray just to keep the leaves, bulbs and compost from drying out. Start to water when the newly potted divisions start to root.

### **Media**

Substrate should be light, aerated, capable of holding moisture but draining thoroughly. The potting mix for Cymbidium cultivation comprise of cocopeat, cocochips, perlite, leafmould, brick pieces and charcoal.

The potting mix can be supplemented with N: P: K (30:10:10) during vegetative growth (March to October) and N: P: K (5:15:30) during flowering season to help form bloom spikes. Avoid fertilizers that use urea as a nitrogen source. Fertilize every week to two weeks. In winter, fertilize once a month as excess fertilization causes browning of the tips of the leaves. Cymbidiums cannot tolerate high levels of fertilizers or salts and hence should be avoided. In the winter, or when the plants are not actively growing, don't fertilize the orchids at all. To remedy this situation, flush the pots with plain water to get the fertilizer out.

### **Watering**

Cymbidium crop needs 2-3 liters water per sq mt per day for transpiration. Irrigate the plants whenever the media is dry. Only rainwater is suitable.

**Harvesting of flowers:** The optimum harvesting stage of Cymbidium is 2 bud open stage. Sharp tools should be used to cut the stem at a slant angle and the spikes should be dipped in a bucket containing water immediately after harvest.

**Yield:** 4-7 spikes/ plant/year.

**Pest:**

1. Scale insects and mealy bugs: use a toothbrush dipped in isopropyl alcohol or a pesticide like Malathion, to physically remove the pest.
2. Red spider mites: Miticide like Kelthane applied on the undersides of the leaves.
3. Aphids: Sprayed with a pesticide like Malathion as per label instructions.
4. Snail: Snail kill sticks to be placed near the plants.

**Diseases:**

1. Root rot: Apply captan or contaf SE.