

## TAKE CARE OF YOUR CYMBIDIUM ORCHIDS



Cymbidiums are the major orchids grown in North Eastern States and Hilly regions of West Bengal. The sale of mid and late season cymbidium cut flowers and pot plants has severely affected due to measures taken by the government to contain the spread of COVID 19. The cymbidium orchid growers could also not able to participate in Annual Orchid Flower Shows held during March which is not scheduled this year. The losses incurred during the current year are irrecoverable. Still, it is need of the hour to move ahead and prepare our plants for good flowering in next year. The month of April is the beginning of new season for cymbidiums marked with preparation activities on our plants for flowering. The essential activities that will determine the flowering of cymbidium orchids include timely repotting, proper feeding, watering and maintaining plants of disease and insect-free.

### **REPOTTING AND NUTRIENT MANAGEMENT**

Pots with decomposed substrate or overgrown plants need to be repotted. It is pertinent to do repotting before new root starts anchoring the potting substrate. The delay in repotting may upset flowering. The repotting of cymbidium should preferably be accomplished during April.

Feed the young plants of 1 year age with N:P:K (30:10:10) fertiliser @ 0.05% (0.5 g/litre of water) by spraying as well as drenching in the potting substrate at 15 days interval. Feed the plants at intermediate growth stage of 2 year age with N: P: K (20:20:20) fertiliser @ 0.05% by spraying as well as drenching in the potting substrate at 15 days interval. Feeding the plants with micro and trace elements will be additional beneficial. The plants can be fed with a solution containing Calcium nitrate @ 0.05%, Magnesium sulphate @ 0.1%, Iron sulphate @ 50 ppm, Boric acid @ 50ppm, Zinc sulphate @50 ppm by spraying as well as drenching at 60 days interval. The above solutions can be prepared with 5g of Calcium nitrate, 1g of Magnesium sulphate, 0.25g of Iron sulphate, 0.28g of Boric acid, and 0.22g of Zinc sulphate, in one litre of water.

Feed the flowering plants with N:P:K (20:20:20) fertiliser @ 0.1 % (1 g/litre of water) by spraying or drenching at an interval of 15 days until flower buds initiate from February to May. Switch over to feeding the plants with 20:20:20 (N:P:K) from June to August @ 0.1 % (1g/litre of water) at an interval of 15 days. After the initiation of flower buds (August to January) feed the plants with 15:25:25 (N:P:K)@ 0.1% (1g/litre of water) by spraying or drenching of the potting substrate at 15 days interval.

Poultry manure generally has N, P and K content 2-4.5%, 4.5-6% and 1.2-4% respectively, also contains almost all the micronutrients. Add poultry manure @ 10 g/pot at a depth of 10-12 cm during potting of orchids. Drench the potting media with vermiwash weekly @50 ml of vermiwash/ litre of water. Organic manure with 8kg mustard oil cake, 0.5 kg dried fish and 4 kg bone meal can be prepared and allowed to decompose for 21 days. The decomposed manure can be applied @ 5g/pot at an interval of 6 months. The manure of this kind supplies 3.5% N, 2.1% P, 2.7% K, 4.5% Ca and 1.6% Mg.

Ensure proper watering so that potting substrate remains moist not soggy. At the same time care should be taken to avoid excessive watering as excess water in the potting substrate encourages root rot and prevents aeration. Water your plants in a way that they are dry by nightfall.

## **PEST AND DISEASES MANAGEMENT**

Cymbidium orchids get infested with aphids, two-spotted spider mite, thrips, and scales that feed on foliage, flower buds and full bloom flowers. These pests are to be controlled appropriately at the right time to avoid qualitative and quantitative loss. Regular pest monitoring and cleanliness are two important practices to keep the orchid pests under check. Spray azadirachtin @ 0.3% (3ml/litre of water) or acephate 75%SP @ 0.05% (0,05g/litre of water) for managing aphids. Two-spotted spider mite can be managed through cleanliness and maintaining proper distance among the plants and with proper ventilation. Enhancing the activity of anthocorid bugs, *Blaptostethus pallescens* is good for keeping mite infestation under check. Spray the plants with Econeem 1500 ppm @3.5ml/litre and/or spiromesifen 22.9% SC @ 1ml/litre or propergite 57 EC@ 1.5 ml/litre (if required). Thrips can be controlled using aqueous Artemisia leaf extract @ 10ml/litre or neem oil 5ml/litre of water followed by acetamiprid 20 SP @ 0.3 g/litre of water. Scales insects can be managed by keeping cleanliness and regular care of plants, manual removing of infested plant parts and destroy them. Diseases like Anthracnose, Black rot, Bacterial soft rot and Bacterial brown rot are common among cymbidiums. These disease spread may be aggravated with increasing temperature and humidity. Maintain proper sanitation, proper watering, regular weeding, adequate spacing and sufficient air movement to avoid the occurrence of these diseases. As a prophylactic spray, two sprays of copper oxy chloride (COC) @ 3g/litre can be given at 15 days interval.

**Note:** Cymbidium orchid growers of Sikkim state are advised to use only organic formulations as use of inorganic chemicals is prohibited by the Govt. of Sikkim. The orchid growers should check the prevailing rules and regulations laid down by the various state governments for the use of plant protection chemical.

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