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Effectiveness of EthylBloc™ Technology on Phalaenopsis Orchids

Research Background:

A major postharvest problem of orchids is their sensitivity to ethylene, a natural plant hormone that is effective at very low concentrations (parts per billion level) and causes major quality deterioration and death of many types of flowers. In orchids, ethylene can cause bud drop, petal wilting, discoloration, or flower drop (depending on the type of orchid and variety). EthylBloc™ Technology is an EPA-registered ethylene action inhibitor which protects plants from both external and internal ethylene. This technology has been shown to be very effective in protecting orchid plants from ethylene damage.

Research:

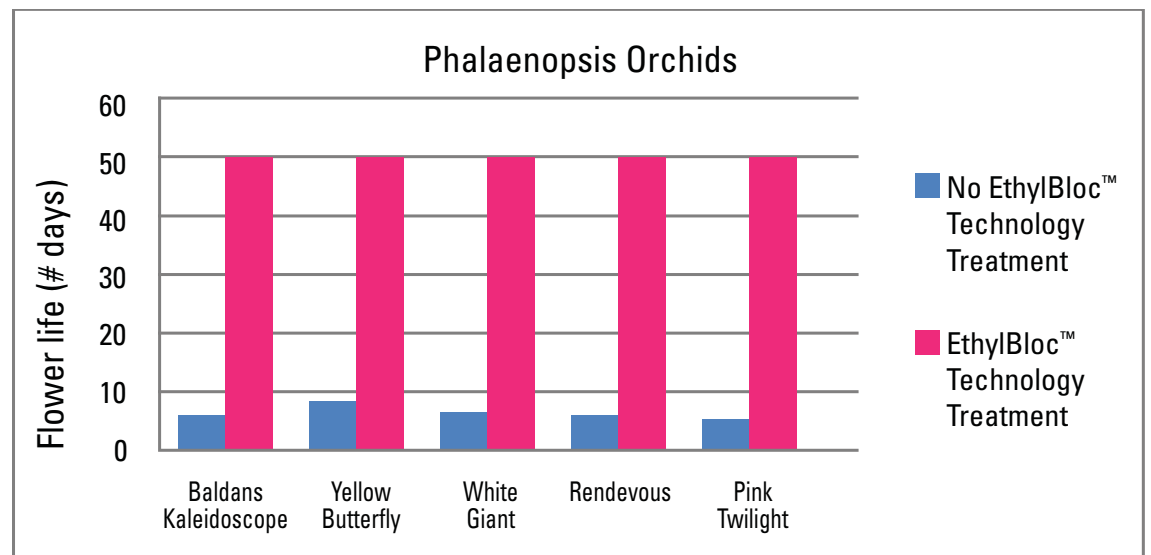
An experiment was conducted to test the effectiveness of EthylBloc™ technology on five cultivars of Phalaenopsis orchids (potted plants) at Floralife, Inc. Laboratory in Walterboro, SC. Plants were treated with EthylBloc™ technology atmosphere treatment for 4 hours at room temperature. Plants were then exposed to 2 ppm of ethylene for 16 hours.

Results:

All Phalaenopsis cultivars tested in this experiment were found to be highly sensitive to ethylene. Ethylene affected both the closed and the open flower buds and its symptoms were quite obvious within 48 - 72 hours. They included premature wilting of open and closed flower buds, flower discoloration and eventual abscission. EthylBloc™ technology was very effective in preventing damage caused by ethylene. The experiment was terminated after 50 days and the plants treated with EthylBloc™ technology were still healthy and in full bloom at that stage.

Conclusions:

The EthylBloc™ Technology treatment protected Phalaenopsis orchids tested in this experiment against ethylene damage and added significant quality and life to the flowers.



Research Update



Baldans Kaleidoscope



Rendezvous

CARE AND HANDLING
PH
FLOWER COLOR
WATER CLARITY
IMPROVE QUALITY
VASE LIFE