



Post Harvest Treatment of flowers

THE CHALLENGE

A gerbera producer in The Netherlands requested assistance from Clean Light to improve the storability of their gerbera flowers after harvest. Specifically against Botrytis in the dark moist wintermonths.

INSTALLATION

Installation was done in January 2010. The flowers move through the sorting machine machine (Havatec) at great speed. The challenge was to deliver a dosage to the flowers high enough to kill the Botrytis, without slowing down the regular operation of the sorting machine.

A total of 10 Clean Light Units (model HO) were installed just above the conveyerline, under the cover of the machine. The on-off switch for the Clean Lights was connected to the conveyor belt. In other words, when the belt stops, the Clean Lights go off. When the green start button is pushed, the Clean Lights come on.

When all Clean Lights were hooked onto one circuit, the overload switch tripped. One circuit could not supply enough power for all Clean Light units. This was solved by hooking the Clean Lights onto two separate circuits.

RESULTS

The belt ran at full speed. The flowers were exposed for less than 5 seconds. The proper operation of the light sensors inside the Havatec machine was not affected.

The results on the storability were dependent on the weather conditions.

- Under clear sunny conditions at time of harvest, the flowers were easy to store: Untreated flowers showed Botrytis after 5.6 days. The Clean Light treatment improved the storability only slightly.
- Under cold dark conditions, the results were more easily visible: On such days untreated flowers showed Botrytis damage after 4.6 days. After Clean Light treatment, the storability improved remarkably: On the darkest most moist days, treated flowers stayed clean for 7.8 days.

Test Feb 28, 2010
gerbera, post harvest

