Initial progress report to the International Cut Flower Growers Association

Development of protocols for optimization of branching and flower counts in cut-flower gerbera production

Heiner Lieth
August 31, 2006

Gerbera growers typically see a seasonal decline in flower yield (number of flowers per plant per week) in response to the decline in day length and total amount of light. This reduced winter production is problematic since growers have no known way of forcing flowers so as to time flushes for particular holidays. Our objective ot os improve our ability to increase flower production and perhaps stimulate flowering for these demanding winter holidays.

We received funding for this project less than two months ago and are currently setting up the experiment (Fig 1). We ran a preliminary study on Gerbera last year and the plants that we are using are currently being created by dividing the control plants from that study (with permission from Terra Nigra).

The plants are two varieties of Gerbera: Maya and Passion. Both are prolific producers most of the time but have different levels of susceptibility to winter decline.

Also, during our initial production trial prior to this study, we set up and operated the needed fertigation system to deliver the needed nutrient solution for Gerbera. This was not a trivial matter for us since our facilities are equipped to dispense half-strength Hoagland solution. In consultation with growers we found that this solution would not work for Gerbera since Gerbera needs a much lower pH. Thus we have the same set-up in place to initiate the experiment that is described in the proposal.

The experiment is proceeding as planned. As yet there are no results.