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## Comments on Effect of Proposed Mancozeb Mitigation Measures in Hawaii

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Response to: Mancozeb - Mitigation Measures from the University of Hawaii on July 20, 2005

Proposed REIs: Greenhouse cut flowers: 3 or 4 days (when do workers perform high contact activities?)

Because it is affordable and has not presented resistance problems, mancozeb is the most widely used fungicide in Hawaii's floriculture industry.

The floriculture industry has become a demand-driven industry. For **greenhouse cut flower** growers in Hawaii, it would be very difficult to accommodate a 3-4 day REI. Many growers harvest twice a week: at the beginning and the end of the week. When needed, workers apply mancozeb after harvesting, allowing a day or the weekend before re-entry, usually to harvest. These growers schedule cultural activities the weekdays between application and harvest.

Some cut flower growers harvest every day. Obviously, it would be most difficult for these growers to work with a 3-day or greater REI.

For growers who harvest twice a week, worker activity scheduling and coordination under a 4 or even 3-day REI would probably have to involve scheduling more workers, most likely more part-time workers and fewer full-time workers. This will negatively impact workers. It will also increase production costs in an industry coping with tough international competition.

Most of the cut flower production in Hawaii does not occur in greenhouses.

Generally, high contact activities include harvesting, trimming, sorting and packing.

**Banana:** 2 days This will really hurt the banana industry; maybe even kill large-scale banana production where mancozeb is used a lot. Because plants of all stages of development exist within fields, it will affect activities such as pruning, deflowering, bagging and harvesting, bunch spraying. These activities are now performed daily. It will really impact the scheduling and efficacy of these activities and, probably, cost a lot of people their jobs. If a farm used mancozeb up to 20 times per year, it means the loss of 40 work days. This will really hurt the industry.

**Cucurbits:** What is the maximum feasible REI? This fungicide is usually sprayed relatively early in the crop cycle because the Pre Harvest Interval can be several days. Because of the early use

of mancozeb products there is no need to get back into the field immediately after application. The suggestion for a maximum REI is 48 hours.

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