

**Copper Use on Various Crops in Hawaii and on Betel Nuts on Guam (for Copper Master Label Data File)**

---

Date: June 21, 2006

To: [Ron Landis](#); [Ted Rogers](#)  
CC: [Mike Kawate](#); [Rick Melnicoe](#)

From: [Cathy Tarutani](#)

Subject: RE: Copper, just one more version

[Attachment: Copper Refined Actual Use Rates for Crops -- Hawaii](#)

Ron and Ted,

I apologize for the delay.

However, this is probably not the last you will hear from me.

The single most important use for copper products in Hawaii is for papaya. I am still having difficulty reconciling some conflicting information that I am getting about that crop. I have been told the last (I hope) piece of the puzzle is its way (via a former specialist). So, I hope to have that last piece of information for you very shortly.

Growers here (and Guam for betel nut) have a number of concerns about the refined use rates. I did not want to hold this up any longer while awaiting the resolution to the papaya problem.

If you have any questions or concerns, please don't hesitate to contact me.

Thank you,  
Cathy

[Cathy Tarutani](#)  
Department of Plant and Environmental Protection Sciences  
3190 Maile Way  
St John Plant Science Lab., Room 017  
University of Hawaii  
Honolulu, HI 96822  
voice: 808-956-2004  
fax: 808-956-9675

## Copper Refined Actual Use Rates for Crops--Hawai'i

Crop	Maximum per Application Rate (lbs Cu <sup>2+</sup> /A) <sup>1</sup>	Maximum Seasonal Rate (lbs Cu <sup>2+</sup> /A) <sup>2</sup>	Minimum Retreatment Interval <sup>3</sup>
<b>TREE CROPS</b>			
Banana	2	2	n/a (1 application/year)
Coffee	3	9	30 days
Mango	3.2	28.8	42 days
<b>VEGETABLES</b>			
Beans, Green	1.5	6	7 days
Celery	1	4	7 days
Crucifers (Broccoli, Brussels Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip Greens)	1	4	7 days
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	1.5	6	7 days
Eggplant	1	4	7 days
Pepper	1.5	6	7 days
Tomato	2	8	7 days
<b>MISCELLANEOUS</b>			
Litchi	1.5	6	7 days
Papaya (pending)	1.6	27.2	14 days
<b>Betel Nut (Guam)</b>	<b>0.75</b>	<b>8.2</b>	<b>7 days</b>

1 – Maximum pounds of metallic copper applied to an acre for each application.

2 – Maximum amount of metallic copper applied to an acre per each growing season.

3 – Minimum number of days between each application.