Aqua-Hort ApS Aksel de Lasson Engdalsvej 28 8220 Brabrand

Odense the 16.^{of} February, 2010

Concerning small labtest of different concentrations of Copper from Aqua-Hort against the fungi Chalara elegans:

From Petridishes from The University of Copenhagen with the fungi Chalara elegans on PDA, isolated from Kalanchoë, we took agarslices, 1x1 cm and placed them on 9 cm Petridishes and placed them in a growing chamber for a week at 24°C. The agarslices contained mycelium, conidiespores and resting spores from the fungi.

From the AquaHort system, watersampels of 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5 and 4.0 ppm free copper ions were tested against mycelium, conidiespores and resting spores. As control, pure demineralised water was used, with 0 ppm Cu.

4 ml of the different samples was added to the Petridishes and reacted for 1 hour, 2 hours and 4 hours. After the reacting time, 1 ml of the water were placed in Petridishes with PDA and placed in a growing chamber for 1 week. The length of the growth was measured.

Results

	0ppm	0.5ppm	1.0ppm	1.5ppm	2.0ppm	2.5ppm	3.0ppm	3.5ppm	4.0.ppm
1hour	9cm	9cm	9cm	9cm	9cm	7cm	5cm	lcm	0cm
2 hrs	9cm	9cm	9cm	8cm	9cm	7cm	3cm	0cm	0cm
4 hrs	9cm	9 cm	9cm	8cm	8cm	6cm	3cm	0cm	0cm

Conclusion:

The fungi has to be treated with 3.5 ppm or more ppm Cu for 2 hours to have a good effect. The effect will be best on mycelium and conidiespores and lesser on the chlamydospores and that's way you have to use so high dose of copper.

Best regards Plant Pathologist Mrs Lene Christensen Plant health-Clinic Lavsenvænget 1 DK-5200 Odense V Phone directly: +45 33685062 Mobile phone: +45 51558055 Mail: lec@garta.dk