## **Minirhizotron Tube Preparation**

Minirhizotron Tube Vendor: Ann Arbor Plastics 727 West Ellsworth Suite #15 Ann Arbor, Michigan 48108 Phone: (734) 994-3674 Fax:(734) 994-8622

QUANTITY: (PRICE) DELIVERY 15-30 (\$45/unit) 3 weeks 31-105 (\$41/unit) 3 weeks 106-499 (\$37.75/unit) 4 weeks 500+ (\$35.50/unit) 5 weeks

\*15 unit minimum, unit price does not include shipping, packaging or handling charges. The quote is valid for 30 days. Make sure you get a tax exempt form.

\*Tubes ordered from Ann Arbor Plastics already have 1 x 1cm grid etched in when you receive them.

All you have to do is:

1)Tubes will come approximately 3 meters long. You will need to gave them cut. Purs are cut slightly over one meter. I asked someone at physical plant on campus to cut them. They usually have a good saw blade. You could cut them yourself using a hacksaw but the cut won't be as clean and that's a lot of time and effort.

2)Brush a heavy coat of bright green paint all along the grid. Let the paint stand for approximately 1 minute.

3)Wipe off paint using paint thinner NOT paint remover. It came of very easily. Remover will eat the plastic. Make sure that whatever brand you purchase can be applied to plastic. If you look on the back of the paint thinner can, it will say something like, "do not use on plastic or metal surfaces." The paint will seep into the grooves of the grid. You may need to repeat step 1 in case there are areas where the paint didn't seep into the grooves.

4)Seal off one end of the tube with a (No.11 rubber stopper, Fisher catalog – catalog# 14-130R, page 1685). Make sure you get solid rubber stoppers.

5)Apply caulking glue around the stopper and insert into tube to form seal.

6)Next, take copper insulating pipe (grey foam attached to soda can) and cut into approx. 6 inch pieces.

7)Cut aluminum cans in halves. Paint cans white and mark each with tube# and plot# using a sharpie. Remember to rinse soda from cans to avoid attracting ants!

8)Use superglue to glue the foam to the can. Apply glue around one end of the foam and press it against the inside, center of the can. This is your cap that sticks out of the ground.

9)Mark each tube with plot# and tube# using a sharpie. You may want to write this backwards. The camera will read it upside down and backwards. Here is how we have our tubes marked (J2-8). Which translates into Juniper, plot 2, tube# 8.

10)Once the tubes are inserted into the ground, you will want to cover the exposed area of the tube with foil tape. This will be the area between the cap and the part of the tube that is in the ground. This is done so that no light enters the tube.