Acelepryn treatment for birch leafminers 11-8-16

To treat birch leafminers on a tree with a circumference of 44" at breast height.

From the label: Table 4. You will need to apply 0.25 fl oz of Acelepryn per inch of diameter (DBH).

First calculate DBH = Circumference ÷ π = 44" ÷ 3.14 = 14"

0.25 fl oz x 14" = 3.5 fl oz of Acelepryn needed to treat this 14" diameter tree.

Step 1: Calibrate the application equipment to determine its flow rate in gallons per minute (given: your equipment delivers 0.5 gallons per minute)

Step 2: Select an injection volume per inch of tree diameter at breast height (DBH) for foot of shrub height.

We have selected an injection volume of 1 pint per site

Step 3: Refer to Table 5 below to determine the amount of time that is required to deliver the desired volume per injection site.

15 seconds to deliver 1 pint per site with a flow rate of 0.5 gallons/min.

Step 4: Determine how much solution to mix.

Based on Step 2. We will need (1 pint/site x 14" DBH) = 14 pints = 1.75 gallons

Step 5: Refer to Table 6 below to determine the amount of Acelepryn that must be mixed in the desired volume of water based on the injection volume identified above.

This step is actually not needed since we have already calculated that we would need 3.5 fl oz of Acelepryn from Table 4.

0.25 fl oz x 14" DBH = 3.5 fl oz.

Also, the EXACT amount of Acelepryn we need is NOT listed in Table 6. The amount we need is 0.25 fl oz per inch of DBH. Table 6 only lists 2 fl oz of Acelepryn for 1 gallon of water. For 1.75 gallons of water we would need 1.75 x 2 fl oz = 3.5 fl oz (again we already calculated this in the beginning).

Treatment: Put 3.5 fl oz of Acelepryn in 1.75 gallons of water and inject 14 holes with 1 pint of mix each around the base of the tree (p. 3 of label: "basal applications within one to three feet of the root flare").

It would take you 14 x 15 second / site = 210 seconds or 3.5 minutes to treat this tree.

Part II

If your injection volume per site is 1 gallon (same flow rate of 0.5 gallons/minute)

Step 1: Calibrate the application equipment to determine its flow rate in gallons per minute (given: your equipment delivers 0.5 gallons per minute)

Step 2: Select an injection volume per inch of tree diameter at breast height (DBH) for foot of shrub height.

We have selected an injection volume of 1 gallon per site

Step 3: Refer to Table 5 below to determine the amount of time that is required to deliver the desired volume per injection site.

2.0 minutes to deliver 1 gallon per site with a flow rate of 0.5 gallons/min.

Step 4: Determine how much solution to mix.

Based on Step 2. We will need (1 gallon/site x 14" DBH) = 14 gallons

Step 5: Refer to Table 6 below to determine the amount of Acelepryn that must be mixed in the desired volume of water based on the injection volume identified above.

Again, this step is not needed since we have already calculated that we would need 3.5 fl oz of Acelepryn from Table 4 (0.25 fl oz x 14" DBH = 3.5 fl oz).

Treatment: Put 3.5 fl oz of Acelepryn in 14 gallons of water and inject 14 holes with 1 gallon of mixture into each around the base of the tree.

It will take you 14 x 2 minutes/site = 28 minutes to treat this tree.