Applying Imidacloprid 4F (42.3% Flowable) by Foliar Spray

In general, SGH does not recommend applying hemlock treatment by foliar spray because:

- the concentration is very dilute and the level of protection is low,
- the residual protection period is very short and treatment must be repeated frequently,
- the cost on a per-inch-per-year basis is high, and
- much of the spray may miss its target and drift onto beneficial insects or the plants they visit.

However, there are two cases in which foliar spray may be useful:

- spraying a short hedge or a "nursery" of saplings where you can reach the whole plants, or
- spraying the lower branches of a moderately to heavily infested tree that is being treated by soil application to give those limbs relief sooner than later.

The best seasons for foliar spray are spring through fall. Choose a calm day to avoid wind drift, and do the spraying in early morning or late evening to avoid sun-scorch of the needles or harm to beneficial insects during their active time of the day.

Step 1. To make a master batch of treatment mixture, follow the proportions of water and amount of product shown in the Mixing chart below. Put the water in the sprayer tank or mixing container first. Then add the corresponding amount of product and mix thoroughly.

MIXING THE MASTER BATCH

The mixing ratio for foliar spray is 0.85 fluid ounce (1 tblsp + 2 tsp) of product with 100 gallons of water. This yields a concentration of about .12 gram of active ingredient per gallon of solution.

For smaller tanks, mix as follows:

Water	Imidacloprid by fluid ounces	Imidacloprid by liquid volume
50 gal.	.425 fl. ounce	2 1/2 teaspoons
25 gal	.2 fl. ounce	1 1/4 teaspoon
10 gal	.1 fl. ounce	1/2 teaspoon
5 gal	.05 fl. ounce	1/4 teaspoon

For a sprayer that holds less than 5 gallons, use 1/4 teaspoon of product with whatever amount of water the tank holds.

- **Step 2.** Spray thoroughly on all parts of tree stems and undersides of branches as well as top sides. Wear long sleeved shirt, long pants, shoes and socks, goggles and a mask while spraying.
- **Step 3.** When you're finished treating each tree, mark it to indicate it's been treated. Give the treatment time to dry before children or pets are allowed in the area.
- **Step 4.** Keep an eye on your trees for signs of reinfestation and repeat treatment as soon as the first egg sac is spotted.

CALL THE HEMLOCK HELP LINE 706-429-8010 WITH ANY QUESTIONS.

