

Dear Retailers,

You probably are already aware that our hemlocks are being attacked and killed by an invasive insect, the hemlock woolly adelgid (HWA). These trees are vital to the beauty and property values of our neighborhoods, the environmental health of our forests and waterways, and the economic vitality of our mountain community that depends heavily on revenue from recreation and tourism.

The bad news is any hemlocks that become infested and are not treated will die within as few as 3 to 6 years. The good news is there are insecticides that have proven safe, economical, easy to use, and very effective in controlling this pest.

The **TWO PRIMARY TREATMENT MATERIALS** recommended are:

- * Imidacloprid for lightly to moderately infested trees – several generic versions of Merit 75 WSP (water soluble powder) and several generic liquid products.
- * Dinotefuran for heavily infested trees or very large infested trees (>20 inches in diameter) –Safari 20 SG (soluble granules).

SAFETY CONSIDERATIONS

- * Neither material is labeled as Restricted Use, and neither is labeled as toxic to humans or pets.
- * When either material is mixed with the correct amount of water, the percentage of active ingredient is very low.
- * Applying the treatment several inches down in the soil makes it inaccessible to anything or anyone above ground.
- * Also when applied to the soil, it's not harmful to the honeybees because bees don't collect pollen from hemlocks.
- * It binds quickly to the organic material in the soil and doesn't migrate but a few inches from each injection site and therefore can easily be kept from leaching into streams or other sensitive areas.

RETAIL CONSIDERATIONS

- * It's important for local retailers to serve their customers by making the much needed treatment products readily available.
- * Many hardware stores as well as quite a few farmers' coops and garden/landscape suppliers are already carrying the products to satisfy their customers' needs.
- * The generic forms are very reasonably priced and sell very well from early spring through late fall, and SGH can provide tear-sheet pads of mixing/dosing instructions that are consistent with the product labels but easier for customers to follow.
- * Customers who come in to buy the HWA treatment often buy other related products such as fertilizers and mulch.

But the **MOST IMPORTANT CONSIDERATIONS** are these:

- * These valuable, long-lived trees – so important for preserving the beauty, environment, and economic health of the community – are dying all around us.
- * Property owners care passionately about saving their trees, and the time window is short.

In line with our efforts to help property owners save as many of their hemlocks as possible, we urge you to carry one or more of these primary treatment products in your store. Below is a partial list of the most readily available treatment products and formulations that are labeled for combating the HWA. It is meant for information purposes only, not as a product endorsement.

Imidacloprid Products

GENERIC POWDERS (compare to Bayer's Merit 75 WSP)

Bandit 75% WSP	Hunter 75% WSP	Mallet 75% WSP	TouchStone 75% WSP
Criterion 75% WSP	Imida-E-Pro 75% WSP	QualiPro 75% WSB	XyTect 75% WSP
Enforce 75% WSP	Malice 75% WSP	Submerge 75% WSP	Zenith 75% WSP

GENERIC LIQUIDS

The liquid formulations are even more economical than the generic powders for more than just a few trees. Don't let the 21.4% or 22.6% strength mislead you. When mixed with the proper amount of water, they yield the same concentration of active ingredient per ounce of solution as the powder. Since they're liquid, they mix more readily. A gallon costs the same as a case of generic powder but contains 40% more grams of active ingredient so more trees can be treated economically.

Alias 4F (MANA) 42.3%	Dominion 2L 21.4%	Lada 2F 21.4%	Touchstone 2F 21.4%
Amtide 2F T&O 22.6%	Garant 2F T&O 21.4%	Lesco Bandit 2F 21.4%	XyTect 2F 21.4%
Criterion 2F 21.4%	Hunter 2F 21.4%	Quali-Pro 2F 21.4%	Zenith 2F 21.4%
	ImidiPro 2F 21.4%	Submerge 2F 21.4%	



Dinotefuran Products

Safari 20 SG (available in 12-oz. and 3-lb. sizes)

Transtect 70 WSP (canister of 20 packets of 0.6 oz. each) – limited availability in the southeast

There are no generic versions of these Dinotefuran products at present.

Treatment Capacity and Price Points

This chart shows how many trunk diameter inches (dbh = diameter at breast height) can be treated with the most commonly available recommended products as well as an average price point.

Size of product package	Inches dbh that can be treated	Avg cost per unit
Imidacloprid – One 1.6 oz packet of 75 WSP (not sold separately)	22 – 68” (avg. 45”)	n/a
Imidacloprid – One 4-pack of 75 WSP containing four 1.6 oz packets	91 – 272” (avg. 181”)	\$37
Imidacloprid – One case of 75 WSP containing four packs – sixteen 1.6 oz packets	362 – 1,088” (avg. 726”)	\$120
Imidacloprid – One gal. of 2F/2L containing 2 lbs active ingredient	604 – 1,812” (avg. 1,208”)	\$97
Imidacloprid – One gal. of 4F containing 4 lbs of active ingredient	1,209 – 3,626” (avg. 2,417”)	\$278
Imidacloprid – One bottle of 250 Coretect tablets	83 – 250” (avg. 166”)	\$86
Safari 20 SG – 12-oz. container	28 – 113” (avg. 70”)	\$93
Safari 20 SG – 3-pound container	113 – 453” (avg. 283”)	\$370
TransTect 70 WSP – Canister containing twenty 0.6 oz packets	99 – 397” (avg. 248”)	\$370

Other Consumer Products

Other products labeled for HWA are available in various forms including liquids, wettable powders, and tablets such as those listed below. Some are systemic and provide a brief period of residual protection, while others are topical, must fall directly onto the insects to kill them, provide no residual protection, and must be repeated often. **These alternative products are generally lower in strength, have a shorter effective period, or are not as cost-effective as the primary products mentioned above.**

Advanced Tree & Shrub Protect & Feed liquid [Bayer]	Imidacloprid 0.74%	Soil treatment
Advanced Trees & Shrub Insect Control granules [Bayer]	Imidacloprid 2.9%	Soil treatment
Cortect tablets [Bayer]	Imidacloprid 20%	Soil treatment
Greenlight Tree & Shrub Insect Control with Safari 20 SG [Valent]	Dinotefuran 2%	Soil treatment
Safari 2G granules [Valent]	Dinotefuran 2%	Soil treatment
Menace Flowable Insecticide [NuFarm]	Bifenthrin 7.9%	Foliar spray
Qualipro Insecticide/Miticide [FarmSaver]	Bifenthrin 7.9%	Foliar spray
Speckoz Termiticide/Insecticide SPECKOZ [Speckoz]	Bifenthrin 7.9%	Foliar spray
Talstar liquid [FMC Corporation]	Bifenthrin 7.9%	Foliar spray

In addition to the above consumer-grade chemical products, there are also several organic **insecticidal soaps and horticultural oils** made by companies such as Arysta, Biotech Solutions, Bonide, Espoma, Drexel, Fertilome Solutions, Natural Guard, Neudorff, Ortho, Pharm Solutions, Safer, Schultz, Spectrum, Wetsel, and Woodstream. Like other topical products, insecticidal soaps and horticultural oils must fall directly on the insects to kill them, which limits their effectiveness to the months in which the adelgids are out of their egg sacs and exposed (generally April through mid-May or mid-June through September).

Insecticide Wholesalers for the Southeastern Market

To make it easier for retailers to help their customers dealing with the HWA problem, we’ve developed a partial list of wholesalers that carry the primary HWA treatment products and sell to retailers and professionals. It is meant for information purposes only, not as a company endorsement. If you know of other companies that should be added to the list, please let us know.

BWI, Greenville, SC	800-922-8961	Red River Specialties, Americus	229-924-9459
Do My Own Pest Control, Norcross	866-581-7378	Regal Chemical, Alpharetta	800-621-5208
Do Your Own Pest Control, Suwanee	770-904-3626	Southern Ag, Hendersonville, NC	800-627-1121
FIS Outdoor, Cumming	678-409-3202	TIPCO, Knoxville, TN	800-827-0532
GROSouth, Atlanta	800-282-3682	Toccoa Solutions, Atlanta	770-630-8873
Helena Chemical Co., Suwanee	770-945-0686	Tree Stuff, Indianapolis, IN	877-408-7337
John Deere Landscapes, Alpharetta	770-442-8881	White County Farmers Exchange, Cleveland	706-865-2831

Thank you for helping your customers save their hemlocks. We would be glad to schedule a free Hemlock Help Clinic for your staff and/or customers as a way of bringing special recognition to your store and supporting your efforts to provide the highest quality customer service.