

CASE SUMMARY

Case #2011/1291

Site: Timberview
46th Street & Raceway Road
Indianapolis, IN 46234

Applicator:	Roberto Tapia	Registered Technician
Business:	Start To Finish, Inc.	Licensed Business
	3375 S. CR500E	
	Whitestown, IN 46075	
	317-710-5802	

1. On July 26, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the above listed housing addition in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. I observed Norway spruces with twisted new growth and severe browning of needles, blue spruces with twisted tips and discolored needles, and cupped, discolored leaves on willow.
2. I photographed the site documenting the symptoms I observed:



Figure 1



Figure 2



Figure 3



Figure 4

3. I collected plant samples from spruce and willow exhibiting symptoms and submitted them to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
4. The report from the PPDL for the samples submitted states, *"Norway spruce: There was no evidence of significant mite or insect injury or disease on the sample submitted. The photos show extensive injury and dieback on several specimens. Many of these symptoms are consistent with herbicide injury as described below. Blue spruce: Cytospora canker symptoms were present on the sample submitted. Rhizosphaera needlecast was found on some of the older needles. Spruce needle miner injury was also present. I suspect, based on the photos, that frost heaving has damaged one of these trees. There were no specific symptoms of herbicide injury on the physical sample but some of the photos show likely herbicide damage (twisting and dieback of new growth) Willow: There was some dieback present on the sample. This may be related to fungal disease but could not be confirmed. The photos of the tree bent at a 90 degree angle suggest some type of injury earlier. The dark areas on the bark appear to be fungal cankers but this can't be confirmed without destructive sampling. The possibility of herbicide injury on this tree is difficult to determine. Distorted leaves were present. The samples (and pictures) submitted show some symptoms that are associated with injury caused by synthetic auxin (growth regulator type) herbicides. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; leaf cupping which can be upward or downward, and in extreme cases, new leaves can be irregular in size and shape (usually smaller than normal) and have abnormal leaf margins. When injury results in new shoot dieback in conifers there will be no regrowth this season, and with certain species, such as Norway spruce, the entire tree can die."*
5. According to application information collected from Jeff Yeary of Start To Finish, Roberto Tapia applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on May 10, 2011, at the rate of 4.0 oz /acre using ride-on application equipment.



Andrew R. Roth
Pesticide Investigator

Date: October 17, 2011

Disposition: No violation of the Indiana Pesticide Use and Application Law was documented against the pesticide applicator. Effective September 15, 2011, the Indiana registration for Imprelis Herbicide, EPA Reg. #352-793, was cancelled because it was determined by OISC that the product is "misbranded" (it bears label directions that are inadequate to prevent unreasonable adverse effects to non-target vegetation).



George N. Saxton
Compliance Officer

Final Date: November 11, 2011