

CASE SUMMARY

Case #2011/1523

Complainant: Rusty Yoder
7550 W. CR200S
Topeka, IN 46571

Applicator: Chad Miller
Precision Turf Care
7330 W. CR250N
Shipshewana, IN 46565
260-499-0132

Certified Applicator
Licensed Business

1. On August 25, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the property listed above in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. At the site, I observed Norway spruces with distorted tips and brown needles on new growth. An ornamental pear exhibited distorted and blackened leaves and defoliation. An arborvitae near the house exhibited distorted foliage and dieback.
2. I photographed the site documenting the symptoms I observed:



Figure 1

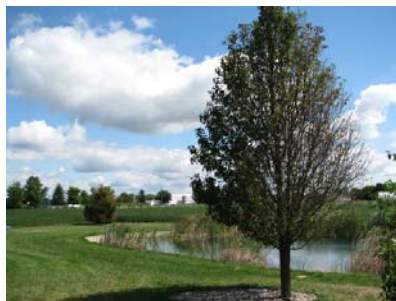


Figure 2



Figure 3



Figure 4

3. I collected plant samples from spruce, arborvitae and pear exhibiting symptoms and submitted them to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
4. The report from the PPDL for the sample submitted indicates, *"There was no evidence of significant mite or insect injury or disease on any of the samples submitted. Norway Spruce: Branch twisting and pattern of dieback suggest herbicide injury. Arborvitae: Extensive dieback present. Some twisting and distortion of foliage present. The samples and pictures submitted show 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 color, 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. Stress from environment, site, cultural and chemical factors can contribute to conifer dieback, as discussed in the following Factsheet: <http://www.ppd.purdue.edu/PPDL/pubs/briefs/Conifer-Dieback.pdf> Pear: Symptoms present include black spotting between the veins and some distortion of the leaves. Black discoloration is a general reaction of pear trees to stress or injury of any type. Cause of this injury was not determined, however herbicide injury is not ruled out."*
5. According to application information collected from Precision Turf Care, Chad Miller applied Imprelis Herbicide (EPA Reg. No. 352-793) to the lawn on June 13, 2011, at the rate of 4.5 oz /acre using ride-on application equipment.



Andrew R. Roth
Pesticide Investigator

Date: October 24, 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 14, 2011