## **CASE SUMMARY**

Case #2011/1581

Complainant:	John Kretzchmar 1303 Windmill Dr. Lafayette, IN 47909 765-474-3861	
Applicator:	Chris Knight Tippecanoe Lawn Care 4400 St. Rd. 25 N. Lafayette, IN 47905 765-589-8251	Certified Applicator Licensed Business

1. On August 24, 2011, I, Agent Kevin Neal of the Office of Indiana State Chemist (OISC), performed an investigation at the complainant's property in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to John Kretzchmar. I observed the following during my on-site investigation:

a) Needles "curled" and brown on tips of candles (see figures 1 and 2)

2. I took the following photos depicting injured/damaged vegetation:



Figure One



Figure Two

- 3. I collected the following vegetation samples from visibly impacted non-target vegetation as described in paragraph #1 for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL):
  - a) Spruce
- 4. According to a report from the PPDL, "There was no evidence of significant insect injury or disease on the sample submitted. The sample had extensive damage from spruce spider mite on the interior foliage and some of the new growth. Spruce spider mites are not currently active on the sample but they should be monitored for new activity and treatments for control applied this fall. The mites are not contributing to the dieback seen on previously healthy new growth.

The sample (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 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 re-growth this season, and with certain species, such as Norway spruce, the entire tree can die."

5. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on March 31 and May 17, 2011, at the rate of 4.5 oz/acre using hand held ground spray equipment.

Kevin W. Neal Pesticide Investigator

Date: September 12, 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: September 21, 2011