## **CASE SUMMARY**

Case #2011/1357

**Complainant:** Tim Riley

Wabash College 301 W. Wabash Ave. Crawfordsville, IN 47933

765-361-6459

**Applicator:** Brian Vickers

Tim Riley Certified Applicator

Wabash College 301 W. Wabash Ave. Crawfordsville, IN 47933

- 1. On August 12, 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 Tim Riley. I observed the following during my on-site investigation:
  - a) Spiraling of dead trees (see figure 1)
  - b) Tops of trees were curled (see figure 2)
  - c) Needles "curled" and brown on tips of candles (see figure 3)
- 2. I took the following photos depicting injured/damaged vegetation:



Figure One



Figure Two



Figure Three

- 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
  - b) Dogwood
  - c) Weeping Mulberry

- 4. According to a report from the PPDL, "Dogwood: Severe twisting and distortion of the petioles is not caused by a disease or insect problem. Some leaf spots are likely fungal in origin but are not contributing significantly to the overall problem. Mulberry: Severe distortion of leaves was present. No disease or insect problems found. Spruce: No disease, mites or insects were found on this sample. Dieback of new growing points was present but no twisting or distortion of needles. The sample (and pictures) submitted show dieback symptoms that may be associated with injury caused by root uptake or other exposure to 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 the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on campus at various locations from May 16 through May 20, 2011, at the rate of 3oz/acre using boom sprayer.

Date: September 15, 2011

Final Date: September 21, 2011

Kevin W. Neal

Pesticide Investigator

**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