## **CASE SUMMARY**

Case #2011/1256

**Complainant:** Chad Tuttle

1 Lilly Corporate Center Indianapolis, IN 46285

574-273-4765

**Applicator:** Jerry White

Brickman Group 10720 Andrade Drive Zionsville, IN 46077 317-433-1866 Certified Applicator Licensed Business

- 1. On July 20, 2011, I, Agent Joe Becovitz of the Office of Indiana State Chemist (OISC), performed an investigation at the Lilly Corporate Center in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. I observed the following during my on-site investigation:
  - a) Spruce trees had new growth that was twisted and browned. Some of the spruce trees had partially defoliated beyond the new growth (see Figures 1 and 2).
  - b) Cypress trees had new growth that was twisted and browned (see Figures 3 and 4).
  - c) Ginkgo trees had foliage that was browned and yellowed along the leaf edges (see Figures 5 and 6).
- 2. I photographed the site documenting the symptoms I observed:

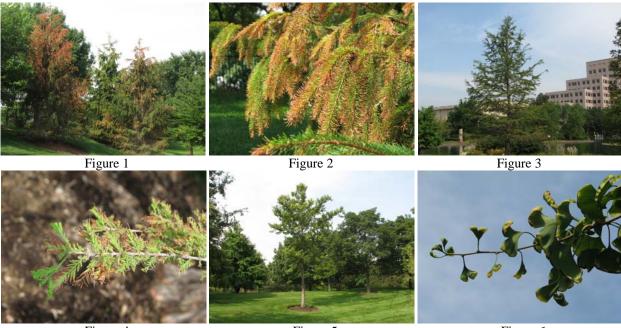


Figure 4 Figure 5 Figure 6

- 3. I collected the following vegetation samples from visibly impacted non-target vegetation, as described in paragraph #1, for examination by the Plant & Pest Diagnostic Lab (PPDL) at Purdue:
  - a) Spruce
  - b) Cypress
  - c) Ginkgo
- 4. I collected the following environmental samples for chemical analysis by the OISC Residue Lab:
  - a) Injured cypress foliage
  - b) Soil composite from Lilly turf
- 5. The report from the PPDL for the samples submitted indicates, "There was no evidence of significant mite or insect injury or disease on the spruce, cypress and gingko samples submitted. The samples submitted exhibited symptoms that are typically found to be associated with injury that can be caused by a synthetic auxinic (growth regulator type) herbicide. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; dieback of distorted shoot tips; 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. If injury results in new shoot dieback in conifers there will be no regrowth this season."
- 6. According to the report from the OISC Residue Lab, the following levels of aminocyclopyrachlor (active ingredient in Imprelis Herbicide) were found in the samples referenced in item #4:

a) Injured cypress foliage

25.0 PPB\*

b) Soil composite from Lilly turf

2.8 PPB

PPB=Parts Per Billion

\*=Minimum active ingredient detected

7. According to the application information collected from the applicator, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 5, 2011, at the rate of 3.5 oz /acre using a ride-on type sprayer.

Joseph D. Becovitz

Date: October 13, 2011

Final Date: October 31, 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