CASE SUMMARY

Case #2011/1583

Complainant: Mark and Lisa Smith
1439 Olde Briar Lane
Carmel, IN 46032

Applicator: Jeff Yeary — Certified Applicator
Start to Finish — Licensed Business
3375 S 500 E
Whitestown, IN 46075-9795
317-710-2211

1. On September 1, 2011, I, Agent Joe Becovitz of the Office of Indiana State Chemist (OISC), performed an investigation at Smith residence 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 twisted and browned new growth (see Figures 1 and 2).
    b) Austrian pines had twisted and browned new growth and severe dieback (see Figures 3 and 4).
    c) One hemlock appeared to be dead as the result of improper planting (see figures 5 and 6).

2. I photographed the site documenting the symptoms I observed:

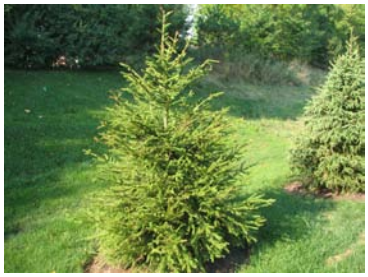
Figure 1


Figure 2


Figure 3

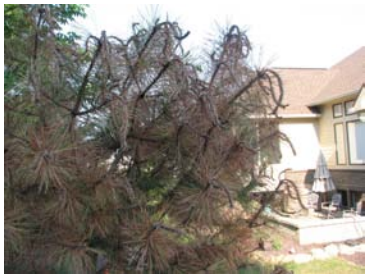
Figure 4

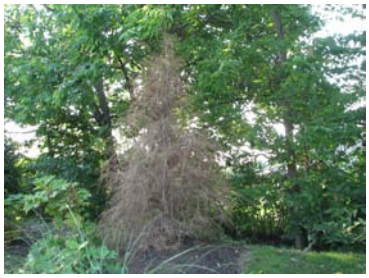
Figure 5

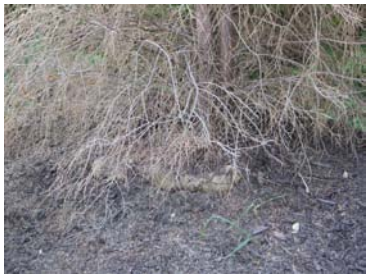
Figure 6

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) Pine

   The report from the PPDL for the samples submitted indicates, "*There was no evidence of significant mite or insect injury or disease on the samples submitted. The samples and pictures submitted show severe twisting, distortion and dieback of new growth of the pine along with dieback in the spruce. These symptoms have been associated with injury caused by root uptake of 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.ppdl.purdue.edu/PPDL/pubs/briefs/Conifer-Dieback.pdf*
   Side note: The pictures also show one recently transplanted conifer that appears to have been dead for some time (no green needles present). The exposed root ball with burlap visible indicates the tree was improperly planted and likely died from transplant stress and drought. It was planted too shallow and the exposed burlap would wick moisture from the soil and root system.

4. According to the application information collected from the applicator, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 30, 2011, at the rate of 4 oz /acre using ride-on type, ground application equipment.

Joseph D. Becovitz — Date: October 10, 2011
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 — Final Date: October 26, 2011
Compliance Officer