CASE SUMMARY

Case #2011/1198

Complainant: Jim Smith
7 Woodspoint Circle
North Manchester, IN 46962
260-578-6938

Applicator: Kristian Gaerte — Certified Applicator
Scott's Landscape Services — Licensed Business
11335 N. CR 175E
North Manchester, IN 46962
260-982-6139

1. On July 12, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at Woodspoint Condominiums in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. Condominium association president Jim Smith explained that most of the property's honey locust trees were turning yellow and dropping leaves. I observed the following during my on-site investigation:
    a) A majority of the roughly seventy mature honey locusts exhibited yellowing leaves and premature leaf drop (Figures 1-3).
    b) Needles on white pine were brown on the tips and new needles at the tips were distorted (Figure 4).

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


Figure 1


Figure 2


Figure 3

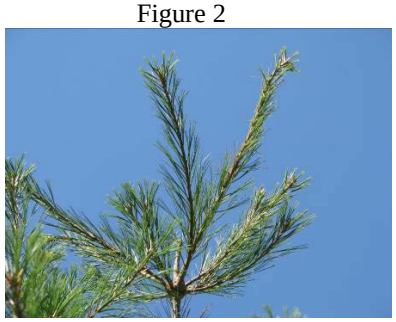
Figure 4

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) Honey locust
   b) White pine

4. I collected the following environmental samples for chemical analysis by the OISC Residue Lab:
   a) Honey locust foliage
   b) Soil composite from treated turf area
   c) Soil composite from beneath honey locust canopy

5. The report from the PPDL for the samples submitted indicates, "*No infectious disease was found to be associated with the yellow leaves on the locust branch sample submitted. The honey locust leaves do have mite eggs and mites however they were only observed on the green leaves and are not abundant enough to cause the type of yellowing observed. Premature yellowing of tree foliage can be caused by a number of different stresses including site, environmental, cultural and chemical factors. No infectious disease or insect pest was found to be associated with the white pine sample submitted. Distortion/twisting of needles was observed. This type of symptom is typical of injury caused by syntheticauxin (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.*"

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)	Honey locust foliage	26.0 PPB
b)	Soil composite from treated turf area	57.0 PPB
c)	Soil composite from beneath honey locust canopy	159.0 PPB

PPB=Parts Per Billion BDL=Below Detection Limits

7. According to the application information collected from the applicator, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on June 4, 2011, at the rate of 4.5 oz /acre using ride-on, ground application equipment.

Andrew R. Roth
Pesticide Investigator

Date: September 7, 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 15, 2011