

CASE SUMMARY

Case #2011/1158

Complainant: Stacy Chinis
16425 Carter Court
Westfield, IN 46074
317-258-5869

Applicator: Isaias Aguilera
Hittle Landscaping
17778 Sun Park Drive
Westfield, IN 46074
317-896-5697

Certified Applicator
Licensed Business

1. On July 8, 2011, Agent George Saxton, Agent Matt Pearson, and I, all of the Office of Indiana State Chemist (OISC), performed an investigation at the common area of Carey Glen subdivision. The investigation was 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 Stacy Chinis, the complainant and a resident of the neighborhood. I observed the following on the spruce trees during my on-site investigation:
 - a) Curling at the top of the tree (see figure 1).
 - b) Spiraling of the dead area (see figure 1 & 3).
 - c) Browning of needle tips and throughout the branch (see figure 2 & 4).
2. I took the following photos depicting injured/damaged vegetation:



Figure 1



Figure 2



Figure 3



Figure 4

3. I collected a sample from a visibly impacted spruce tree as described in paragraph #1 for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL).
4. I collected the following environmental sample for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample (spruce)
 - b) Soil from lawn (composite)
 - c) Soil inside drip line

NOTE: A decision was made by OISC management to not analyze the environmental samples in this case. That decision was based on: 1) the large number of similar environmental samples already analyzed that had produced representative results consistent with the presence of visible exposure symptoms; 2) the expertise developed by OISC investigators through repetition to identify Imprelis exposure symptoms without chemical confirmation; and 3) the large number of similar cases being investigated by OISC at the same time.

5. The PPDL report stated the following: *"The spruce sample had dying and discolored needles (starting on the distal end of the needle) scattered on the branch and extensive needle loss. Needle/branch twisting and distortion were absent from the sample but were seen on the upper branches and tops of the spruce in the pictures from the site. The Norway spruce in the pictures was affected while the Colorado blue spruce showed no symptoms. This suggests injury from something other than environmental stress such as drought or drowning since Norway spruce is generally more tolerant of adverse conditions than blue spruce and all the trees in the photo were of similar size and appeared to be well-established. The 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."*
6. According to the application information collected from Hittle Landscaping, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on May 23, 2011, at a rate of 4.5 fluid ounces per acre with a ride on sprayer.


Elizabeth C. Carter
Pesticide Investigator

Date: September 23, 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: October 18, 2011