

CASE SUMMARY

Case #2011/1071

Complainant: Matt Curts
Site: 15059 Geist Ridge Drive
Fortville, IN 46040

Applicator: Anthony Mader
Business: Becker Landscape Contractors
3749 N. Kitley Avenue
Indianapolis, IN 46226
317-542-5200

Registered Technician
Licensed Business

1. On June 20, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at an estate at the above listed address in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to Imprelis herbicide. Matt Curts, of Becker Landscape Contractors, explained that many of the property's evergreen trees were distorted and discolored. I observed the following during my on-site investigation:
 - a) Spruces exhibited distorted tips and discolored new growth; a few were totally brown and dropping needles (Figures 1-4).
 - b) White pines were brown with distorted new growth at the tips (Figures 5-6).
 - c) Willows exhibited cupped leaves, twisted stems and leaf drop.
 - d) Bald cypress had brown tips at the top.
2. I photographed the site documenting the symptoms I observed:



Figure 1



Figure 2

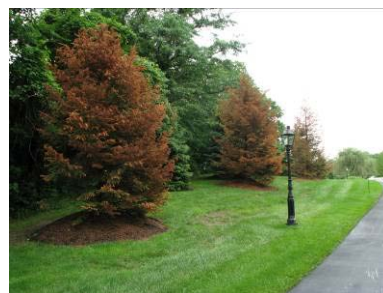


Figure 3



Figure 4



Figure 5



Figure 6

3. I collected plant samples from visibly impacted non-target vegetation, as described in Item #1, for examination by the Plant & Pest Diagnostic Lab (PPDL) at Purdue. Specifically, I collected spruce, white pine, willow and bald cypress.
4. I collected environmental samples for chemical analysis by the OISC Residue Lab. Specifically, I collected foliage from spruce and white pine as well as a composite soil sample from the treated turf area.
5. The report from the PPDL for the samples submitted indicates, *"The samples submitted (Norway spruce, white pine, willow, bald cypress) exhibit symptoms that are associated with injury caused by a synthetic auxin (growth regulator type) herbicides. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the shoot and its 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. There was no significant disease or insect/mite injury on the spruce, white pine and bald cypress. The willow branches had a few minor fungal cankers on the twigs (probably caused by a Botryosphaeria sp. which are common and widespread on willows). The fungal cankers are not responsible for the twisting and distortion of the leaves and tip dieback."*
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) Spruce foliage	124.0 PPB
b) White pine foliage	256.0 PPB
c) Soil composite from treated turf area	8.8 PPB

PPB=Parts Per Billion
7. According to application information collected from Mr. Curts, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 13, 2011, at the rate of 0.1oz /1,000 square feet using ride-on and backpack application equipment.



Andrew R. Roth
Pesticide Investigator

Date: September 13, 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 20, 2011