

CASE SUMMARY

Case #2011/1244

Complainant: Amy Medcalf
4623 Del Mar
Greenwood, IN 46142
317-523-9984

Applicator: David Ray
Cragen Lawn Care, LLC
2595 Endress Place
Greenwood, IN 46143
317-509-1364

Licensed Applicator
Licensed Business

1. On July 28, 2011, I, Agent Jay Kelley of the Office of Indiana State Chemist (OISC) performed an investigation at the complainant's property 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 Amy Medcalf. I observed the following during my on-site investigation:
 - a) Top of Spruce is distorted and brown (see figure #1).
 - b) Browning on tips (See figure #3).
 - c) Willow has twisting and distortion of leaves (See figure #4).
 - d) Burning bush has twisted and curled leaves (See figure #5).
 - e) Tomato has cupped and curled leaves (See figure #6).
2. I took the following photos depicting injured/damaged vegetation:



Figure #1 - Spruce



Figure #2



Figure #3



Figure #4 - Willow

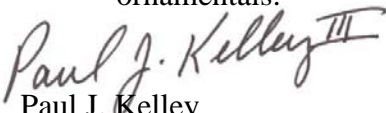


Figure #5 - Burning Bush



Figure #6 -Tomato

3. I collected the following vegetation samples from visibly impacted non-target vegetation as described in paragraph #1 for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL).
- a) *Spruce*
 - b) *Willow*
4. At the site I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
- a) Vegetation sample from Evergreen (Spruce)
 - b) Vegetation sample from ornamental (Willow)
5. According to a report from the PPDL, "*Willow: Twisting and distortion of leaves, tip dieback present. Spruce: Dieback and twisting of new growth. There was no evidence of significant mite or insect injury or disease on the samples submitted. The samples (and pictures spruce, willow, burning bush and tomato) 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 and 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. 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.*"
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) Vegetation sample from evergreen (spruce) | 11.0 PPB |
| b) Vegetation sample from ornamental (willow) | 0.65PPB |
| c) Redbud | BDL |
- PPB=Parts Per Billion BDL = Below Detectable Limits
7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 29, 2011, at the rate of 4.5 oz/acre using hand held ground spray equipment; no application was made to the soil within the drip line of any of the trees or ornamentals; no application was made directly to any exposed roots of any trees or ornamentals.



Paul J. Kelley
Pesticide Investigator

Date: August 24, 2011

Disposition: No violation of the Indiana Pesticide Use and Application Law was documented against the pesticide applicator. On August 12, 2011, a letter was sent to E.I. duPont de Nemours and Company, Inc. proposing cancellation of the registration for Imprelis Herbicide, EPA registration number 352-793, for distributing a pesticide product with label directions that are inadequate to prevent unreasonable adverse effects to non-target vegetation.



George N. Saxton
Compliance Officer

Final Date: September 14, 2011