

# CASE SUMMARY

Case #2011/1536

**Complainant:** Duane Zuver  
Farmers State Bank  
220 South Detroit Street  
Lagrange, Indiana  
260-463-7111

**Applicator:** Chad Miller  
Precision Turf Care, LLC  
7330 West 250 North  
Shipshewana, Indiana 46565  
260-499-0132

Licensed Applicator  
Licensed Business

1. On August 25, 2011, I, Agent Kevin Gibson 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 shrubs possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Duane Zuver. I observed the following during my on-site investigation:
  - a) Browning or Arborvitae and Birds Nest Spruce (see figure #1).
  - b) Browning of needles throughout Birds Nest Spruce (see figure #2).
2. I took the following photos depicting injured/damaged vegetation:



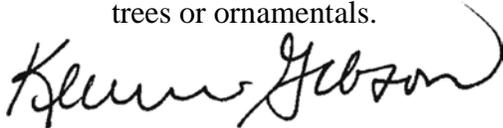
Figure #1



Figure #2

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) Birds Nest Spruce
  - b) Arborvitae

4. According to a report from the PPDL, *“There was no evidence of significant mite or insect injury or disease on the sample submitted. Birds Nest Spruce: the sample had twisted and distorted new growth and dieback likely caused by herbicide injury. Many dead interior needles may be due to shading and secondary fungi. Arborvitae: Dieback of new growing tips is likely due herbicide injury. Old spider mite injury was noted on older foliage but is not causing death of new growing points. Some stress related dieback may be present. The sample (and 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. When injury results in new shoot dieback in conifers there will be no re-growth this season, and with certain species, such as Norway spruce, the entire tree can die*
  
5. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on June 3, 2011, at the rate of 4.5 oz/acre using 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.



Kevin W. Gibson  
Pesticide Investigator

Date: September 8, 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