

# CASE SUMMARY

Case #2011/1258

**Complainant:** Roger & Connie Tingley  
14580 Adios Pass  
Carmel, IN 46032

**Applicator:** Bill Greenwood  
Greenworks  
33 Thornhurst Drive  
Carmel, IN 46032  
317-663-0222

Certified Applicator  
Licensed Business

1. On July 21, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the property listed above in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. During my on-site investigation, I observed twisted tips and brown needles on mature white pines and tip dieback and brown needles on new growth of Norway spruces. Maple leaves were chlorotic between the leaf veins.
2. I photographed the site documenting the symptoms I observed:



Figure 1



Figure 2



Figure 3



Figure 4

3. I collected plant samples from spruce, white pine and maple trees exhibiting symptoms and submitted them to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
4. The report from the PPDL for the samples submitted indicates, "*Spruce: Old spruce spider mite injury was present on needles older than 1 year. Some mite eggs were present but no active mites. The mites are not causing the extensive dieback of new growth. No disease was found. White Pine: No disease nor insect injury found. All growing points were distorted and twisted. Maple: No evidence of insects or disease on the sample. The pronounced interveinal yellowing of lower leaves and general yellowing, stunting and necrosis of upper leaves are more extreme than symptoms generally seen in nutritional problems of maple such as Iron or Manganese deficiency. 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.*"
5. According to application information collected from Greenworks, Bill Greenwood applied Imprelis Herbicide (EPA Reg. No. 352-793) to the lawn on March 28, 2011, at the rate of 4.5 oz /acre using ride-on application equipment.



Andrew R. Roth  
Pesticide Investigator

Date: October 6, 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 25, 2011