## **CASE SUMMARY**

Case #2011/1279

**Complainant:** Eric Smith

34 Summit Dr. Clinton, IN 47842 765-828-0433

**Applicator:** Tom Bekkering

Tommy Boys Lawn Care

631 Blackman Clinton, IN 47842 812-208-7626 Certified Applicator Licensed Business

- 1. On August 8, 2011, I, Agent Scott Farrisof 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 possibly resulting from exposure to the herbicide Imprelis.I observed the following during my on-site investigation:
  - a) Honey locus defoliated (see figure #1).
  - b) Japanese maple showing dieback and discoloring (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) Honey Locust
- 4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
  - a) Vegetation sample from the Japanese Maple

- 5. According to a report from the PPDL, "The photos show major branch dieback. The most likely causes of dieback on Japanese maples are the fungal pathogens Botryosphaeria and Phomopsis. The leaf distortion and twisting suggest a possible injury from a synthetic auxin (growth regulator type) herbicide. 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. Honey locust: The sample was defoliated and had dead buds. The cause could not be confirmed based on visual symptoms. There was no evidence of significant infectious disease, mite or insect injury. Premature yellowing of tree foliage can be caused by a number of different stresses including site, environmental, cultural and chemical factors."
- 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 Japanese maple 18 PPB
    PPB=Parts Per Billion BDL=Below Detection Limits
- 7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on June 2, 2011, at the rate of4.30oz /acre using Z ground sprayequipment; 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.

Date: October 31, 2011

Final Date: November 22, 2011

Scott M. Farris

Pesticide Investigator

**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**