CASE SUMMARY

Case #2011/1255

Complainant: James Botkin
1402 Lakeshore Dr.
Marion, IN 46952
765-664-5660

Applicator: Donnie Bratch — Registered Technician
Grant County Lawn, Inc. — Licensed Business
P.O. Box 1595
Marion, IN 46952
765-384-5219

1. On July 25, 2011, I, Agent Beth Carter 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 possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to James and Ruth Botkin. Mrs. Botkin stated that Trugreen, her lawn care service, had not applied Imprelis to her property, but rather her neighbor, Ben Fischer, had an application of Imprelis done by his lawn care service, Grant County Lawn Inc, on his property.

2. There were approximately two spruce trees along the western edge of the Botkin property that bordered the Fischer property. (See figure 1.) I observed the following symptoms on the adjacent spruce trees during my on-site investigation:
   a) One of the spruce trees was dead (see figure 2)
   b) The other spruce tree had browning of the needle tips and the entire branch (see figure 4) along with spiraling of the dead area (see figure 3).

3. I took the following photos of the property and injured/damaged vegetation:

Fig 1


Fig 2


Fig 3


Fig 4

I collected a vegetation sample from a visibly impacted spruce tree for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL).

4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
    a) Vegetation sample (Spruce)
    b) Soil sample from complainant's yard (Botkin)
    c) Soil sample from neighbor's yard (Fischer)

5. The PPDL report stated the following: "*There was no evidence of significant mite or insect injury or disease on the sample submitted.*

    The sample of the live branch submitted and the accompanying images of the live tree show symptoms that are typically found to be associated with injury that can be caused by a synthetic auxinic (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; dieback of distorted shoot tips; 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. If injury results in new shoot dieback in conifers there will be no regrowth this season.

    The dead branch did not exhibit any distortion."

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 #5:
    a) Vegetation sample (Spruce) 12.0 PPB
    b) Soil sample from complainant's yard (Botkin) BDL
    c) Soil sample from neighbor's yard (Fischer) 5.5 PPB

    PPB=Parts Per Billion BDL=Below Detection Limits

7. According to the information collected from the applicator, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 12 and June 14, 2011, at a rate of 4.5 fluid ounces per acre using a tank and reel sprayer.

Elizabeth C. Carter

Elizabeth C. Carter Date: September 21, 2011
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 Final Date: October 11, 2011
Compliance Officer