# CASE SUMMARY

**Case #2011/1191**

**Complainant:** Tony Lewin
10945 Stillwater Court
Fishers, IN 46038
317-585-9443

**Applicator:** Jason Gallaher — Registered Technician
Green Scene Inc. — Licensed Business
PO Box 248
Fortville, IN 46040
317-326-8888

1. On July 8, 2011, Agent George Saxton, Agent Matt Pearson, and I, all of the Office of Indiana State Chemist (OISC), performed an investigation at the complainant's property. The investigation was 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 Tony Lewin. I observed the following during my on-site investigation:
    a) **Two white pines** had curling at the top of the trees and browning of candles (see figure 1).
    b) **One spruce** had browning and yellowing at tips (see figure 2).
    c) **One corkscrew willow** had cupping and curling of leaves (see figure 3).

2. I took the following photos depicting injured/damaged vegetation:


Figure 1


Figure 2

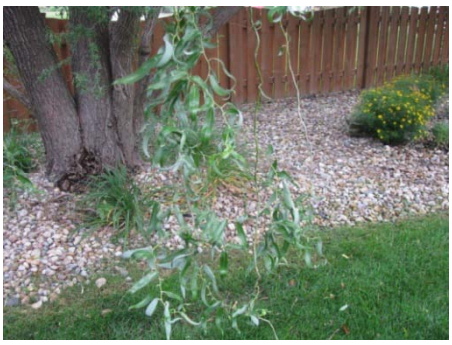
Figure 3

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) Pine
    b) Spruce
    c) Willow

4. I collected the following environmental sample for chemical analysis by the OISC Residue Laboratory:
    a) Vegetation sample
    b) Soil from lawn

    *NOTE: A decision was made by OISC management to not analyze the environmental samples in this case. That decision was based on: 1) the large number of similar environmental samples already analyzed that had produced representative results consistent with the presence of visible exposure symptoms; 2) the expertise developed by OISC investigators through repetition to identify Imprelis exposure symptoms without chemical confirmation; and 3) the large number of similar cases being investigated by OISC at the same time.*

5. The report from the PPDL stated the following:
    *"**White Pine**: There was no evidence of insects or disease on this sample.*
    *The samples (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.*
    ***Spruce**: Some old mite injury was present but no disease was found. The injury seen in the photos is mild and twisting and distortion symptoms were absent. The dieback on a few branches may be caused by environmental stress but injury from a synthetic auxin herbicide can't be ruled out.*
    ***Corkscrew willow**: The sample and pictures appear normal for this variety of willow. Willow typically has some dieback from fungal pathogens. The photo of the base of the tree show what appears to be an old injury with adventitious rooting, also a common problem on willow following stress or injury. I saw nothing on the willow I would associate with herbicide injury."*

6. According to the application information collected from Green Scene, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 12, 2011, at a rate of .10 fluid ounces per thousand square feet with a hose and reel type sprayer.

Elizabeth Carter

Elizabeth C. Carter — Date: September 27, 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

George N. Saxton — Final Date: October 19, 2011
Compliance Officer