

CASE SUMMARY

Case #2011/1143

Complainant: Jeff Kellar
2469 E. 200 S.
Kokomo, Indiana 46902
765-432-9616

Applicator: William Thompson Certified Applicator
List Lawn Care, Inc.
2734 W 600 N.
Sharpsville, Indiana 46068
765-963-3551

1. On June 30, 2011, I, Agent George N. Saxton 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 and shrubs possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Jeff Kellar. I observed the following during my on-site investigation:
 - a) Browning and curling of the spruce needles (see figures 1, 2, 3, & 4).
2. I took the following photos depicting injured/damaged vegetation:



Figure #1



Figure #2



Figure #3



Figure #4

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. Spruce

4. According to a report from the PPDL, “No insect pest was found to be associated with the dieback and distortion observed on the blue spruce sample submitted. *Rhizosphaera needlecast* was confirmed on older, inner, discolored needles.

The primary symptoms on the spruce sample submitted were those that we typically find to be associated with injury that can be caused by 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.

The prospects for recovery from herbicide damage depend on the dose and the extent of the damage. Don't give up on herbicide damaged trees and shrubs too quickly. Here are some suggestions for managing stress to help allow the tree to recover as much as possible:

- *Make sure the tree has sufficient water this summer; the tree should get an inch of water each week from rain and/or irrigation. This will reduce stress on the tree and may help wash remaining herbicide down past the root zone.*
- *Don't prune dead wood until you know the extent of the dieback, probably about a year. Early pruning can stimulate new growth and increase stress. The exception to this is to remove dead branches that might be a hazard if they fall.*
- *Don't fertilize affected trees for a minimum of one growing season. Stimulating new top growth too soon is adding stress to the tree.”*

--G. Ruhl: Plant Disease Diagnostician

5. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied April 29, 2011, at the rate of 4.5 oz/acre. 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.

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: November 14, 2011