

CASE SUMMARY

Case #2011/1325

Complainant: Mike Beal
6626 W. CR700S - 35
La Fontaine, IN 46940

Applicator: Ben Herr
Business: Ben's Lawn Service
7861 W. CR900S - 90
Warren, IN 46792

Licensed Applicator
Licensed Business

1. On July 28, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the above listed address 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 a Norway spruce with twisted tips and brown needles, a willow with cupped and discolored leaves and a ginkgo tree with yellowed leaf edges. Many other species were showing varying degrees of decline.
2. I photographed the site, documenting the symptoms I observed:



Figure 1



Figure 2



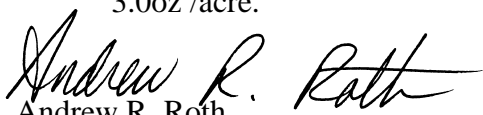
Figure 3



Figure 4

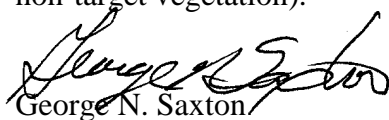
3. I collected foliage exhibiting symptoms from Norway spruce, willow, ginkgo, maple, hickory, Paw Paw, hackberry, mulberry and bald cypress trees for submission to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.

4. I collected ginko foliage and a composite soil sample from the treated turf area for chemical analysis by the OISC Residue Lab.
5. The report from the PPDL for the samples submitted states,
“Ginko, Paw Paw, Mulberry, Norway spruce, Bald Cypress: There was no evidence of significant mite or insect injury or disease on these samples. 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. When injury results in new shoot dieback in conifers there will be no regrowth this season, and with certain species, such as Norway spruce, the entire tree can die. Norway maple: leaves show marginal scorch that can be caused by drought/heat stress or other problems lower down in the tree or root system. If not watered regularly this could be transplant stress still on a tree this small. Cause undetermined. No disease found. Hackberry: Leaves showed yellowing but the cause is unclear. Powdery mildew was present and what appears to be mite injury. The sample has been sent to entomology for evaluation. Hickory: The stem had holes that suggest insect injury. The sample has also been sent to entomology for evaluation. There were no symptoms of herbicide injury and no disease. Willow: Some twisting that may indicate herbicide injury was present. No significant disease found. Entomology Report: The samples submitted contained evidence of spider mites and also of hackberry nipple galls. Neither of these arthropod infestations was considered serious or life threatening for the tree.”
6. According to the OISC Residue Lab report, the following levels of aminocyclopyrachlor (active ingredient in Imprelis Herbicide) were found in the samples submitted:
- | | |
|--|-----------|
| a) Ginko foliage | 135.0 PPB |
| b) Soil composite from treated turf area | 11.0 PPB |
- PPB=Parts Per Billion
7. According to application information collected from Bens’ Lawn Service, Ben Herr applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on June 3, 2011, at the rate of 3.0oz /acre.


Andrew R. Roth
Pesticide Investigator

Date: September 26, 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 19, 2011