

## Suspected Herbicide Injury Site Visit Check List

Date of site visit and any other communication:

Initial contact: \_\_\_\_\_ (date) Name: \_\_\_\_\_

Contact information: \_\_\_\_\_

Have images or samples been sent to the plant disease and insect clinic? Y / N

If so, what is the sample number: \_\_\_\_\_

Site visit:

Date: \_\_\_\_\_

Names and contact information for representatives present at the time (and others with whom you have communicated). Obtain business cards for each if available.

Name: \_\_\_\_\_ Name: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_ Name: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Location of location of the field(s) where the suspected injury has occurred.

Address: \_\_\_\_\_ GPS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

General information:

- Name and the role of the person who is reporting the problem.
- Location of the reported problem.
- General site characteristics
- Where is the plant being grown? (Commercial field, landscape, home garden, greenhouse, etc.) • What is the soil type? Texture? Drainage? Hardpans? Describe other soil characteristics (are soil tests available?)
- Describe the irrigation practices. How much? How often? How applied? Water source Etc...
- Describe the fertilization practices. What? How often? How applied? Etc...
- Other management practices. Conventional or organic production? Specific crop/plant managements? Seed treatments? Use of other chemicals (fungicides, insecticides, etc.)?

Description of the problem:

- What are the symptoms?
- Date problem was first noticed.
- Species / varieties affected.
- Are other plants (including weeds) showing symptoms?
- Are there patterns?
- What is cropping history (what has been planted in the area in the past 3-5 years)? Varieties?
- What were dates of planting, spraying, etc.?
- What was the stage of crop at the time of application?
- What variety of crop?
- What were the past problems (diseases, insects, etc.) in the field or garden?
- Look for symptoms on non-treated adjacent fields, field edges and ditch-banks (describe how the untreated plant species look like or what is normal and what is abnormal).

Application and chemical related information:

- What pesticides have been sprayed this season and last season? Application doses / dilutions? How much herbicide was added per tank?
- Are the containers still present? If so, look at them. Photograph them if possible. Record lot numbers.
- Get copies of the pesticide application records (if available).
- When was the sprayer last calibrated? Method of calibration? GPA?
- What nozzles, speed, pressure was used?
- What was the spray boom width and height?
- Do patterns in the field match spray boom width or nozzle spacing?
- What was the dose and total volume of application? (“back check” the dose / calibration – how many acres were treated? And how much herbicide was applied?)
- What other chemicals have been sprayed with the same equipment? When? How many acres? Look for: faulty equipment, poor agitation, improper nozzles or spacing.

Environment related information:

- Environmental conditions prior to and during application and symptom development. Air and soil temperatures? Moisture? Humidity? Rainfall? Hail? Wind direction and velocity? \*\* Note: obtain weather station data for the region for the weeks of application(s) and weeks before symptoms were observed.
- Look for drift patterns (note gradient in the injury symptoms), check prevailing wind direction.
- Look for the change in symptoms in the field and whether they are related to the change in the soil type and soil organic matter.
- Look for obvious symptoms of insect, diseases, wind, and/or hail injuries

DO NOT:

- Jump to conclusions. Many things can mimic herbicide injury. Get all the facts
- Voice opinions such as “looks like herbicide injury to me” unless you are VERY sure of it.

DO:

- Take photos of site, symptoms, non-symptomatic plants (if present), patterns, weeds in and around the field, and the application equipment.
- Label those photos as soon as you return to the office. Use date and GPS referencing in your camera if available.
- Record your observations – just what you see. Not what you think you are seeing. For example: “*petioles were curved (epinasty)*” instead of “*plants exhibiting phenoxy herbicide symptoms*”.
- Send plant samples to the PDIC at NCSU.
- Send soil samples to NCDA (for nutritional analysis).

If you suspect herbicide injury contact the appropriate Department of Agriculture representative or Cooperative Extension Specialist.