Guidelines for Submitting Digital Images for Herbicide Injury Diagnosis

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Herbicide injury diagnosis from digital images is more difficult than weed identification. This is why quality images are so important. Time should be given to clues other than just the visual symptoms, since herbicide injury can be confused with nutritional, disease, or insect problems. For these reasons, it may be necessary to submit other information along with the images. Following are informational items you should consider submitting. These items may make the difference in getting the problem solved.

When collecting the digital images, it may be beneficial to have a field-image showing the extent of the affected area, but care should be taken not to skew the information sent to the diagnostician by excluding some of the clues from the image. For accurate diagnosis, submit images of unaffected versus injured plants, and close-ups of foliar and root injury symptoms. Consider the following scenarios before collecting your digital images. When in doubt, take the extra image; it may be the key to correct identification of the problem.

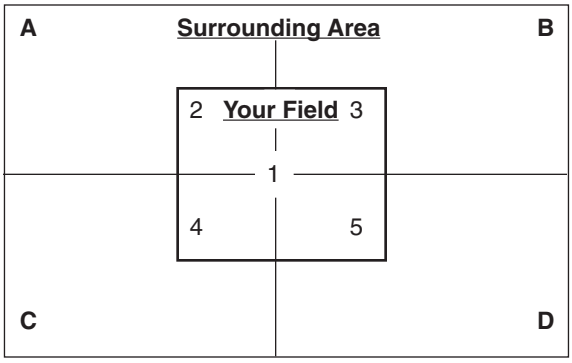
SITE INFORMATION

Current crop: _____ **Date problem was first noticed:** _____
Tillage practices: _____ **Planting date:** _____

Herbicide / Insceticide / Fungicide / Fertilizer Applied	Chemical Rate	Date Applied

Provide the following information from diagram at right.

Area	Crop or Cover Species	Condition
1		
2		
3		
4		
5		
A		
B		
C		
D		



Previous crop: _____ **Planting date:** _____ **Tillage practices:** _____

Herbicide / Insecticide / Fungicide / Fertilizer Applied	Chemical Rate	Date Applied

SOIL TEST INFORMATION
Date tested: _____ **Results:** _____**N** _____ **P**_____ **K**____**OM** ___ **pH** ____ **sand**_____ **silt** _____ **clay**

Unknown Herbicide Injury - Scenario #1

1a. From this image, the diagnosis could be drift.

1b. The diagnostician could easily rule out drift if the image captured the foreground plants.

1c. Close-up symptoms are typical of the triazine herbicide family.

Site Information

Current Crop - Soybean planted May 15
Herbicide - 0.5 oz chlorimuron + 3.2 oz metribuzin
Previous Crop - Field Corn
Herbicide - 1.26 lb metolachlor + 2 lb atrazine
- fb 0.25 lb bromoxynil + 0.5 lb atrazine
Previous year's soil test - 180 bu yield goal
Soil texture - silt loam
Soil OM - 1.6 to 2.5%
N, P, K - adequate
Soil pH - 6.1 to 7.7

1d. Atrazine can carryover in high pH soils and this is most likely the problem.

Unknown Herbicide Injury - Scenario #2

2a. Two stunted rows is a pattern typical of a boom overlap.

Site Information

Current Crop - Corn planted April 20
Herbicide - 1.26 lb metolachlor + 2 lb atrazine
- fb 0.25 lb bromoxynil + 0.5 lb atrazine

Previous year's soil test - 180 bu yield goal
Soil texture - silty clay loam
Soil OM - 1.9 to 2.2%
N, P, K - adequate
Soil pH - 6.1 to 6.5

2b. Overlapping of the PRE or POST herbicides could have resulted in significant stunting, but not likely.

2c. The close-up symptoms are not typical of any of the in-season herbicides used, but are typical of fomesafen carryover.

Additional Site Information

Past Year's Crop - Soybeans
Herbicide - 0.35 lb fomesafen applied July 1

2d. A boom overlap during the fomesafen application could have resulted in its persistence into this year's corn crop.

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