

# The Herbicide Injury Key

This key is designed only as a "quick-reference" to determine herbicide injury to crops. Consider all aspects of the crop injury situation, including environmental and non-herbicide parameters, before determining the cause. Also, observe any injury symptoms on weeds.  
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## Preemergence or Carryover Herbicide Injury (crop injured at emergence)

### Plant Injured, but Roots O.K.

#### Symptoms

White, bleached leaves



#### Suspect

**Pigment Inhibitor**  
 Command, Balance

-----OR-----

Chlorotic/necrotic leaf margins, green veins



**Photosynthesis Inhibitor**  
 Atrazine, Bladex, Princep, Sencor, Lexone, Lorox, etc.

-----OR-----

Improper corn leaf unfolding, "drawstring" on soybean



**Chloroacetamide, Oxyacetamide**  
 Dual, Frontier, Micro-Tech, Harness, Surpass, Axiom



### Roots Damaged and Plants Stunted

#### Symptoms

Pruned roots, "bottle brush-like", short, slender lateral roots, possible interveinal chlorosis in corn whorl

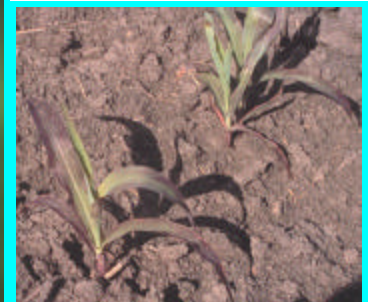
#### Suspect

**ALS Inhibitor**  
 Basis, Broadstrike (Python), Exceed, Pursuit, Scepter, etc.



-----OR-----

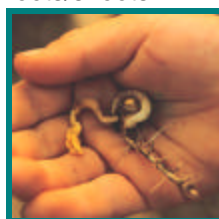
Clubby root tips, "purple corn", or swollen hypocotyl



**Dinitroaniline**  
 Prowl, Treflan

-----OR-----

Deformed seedling, bending, twisting, swollen roots/shoots



**Growth Regulator**  
 Banvel, Clarity, 2,4-D, etc.

# Postemergence, Tank Contamination, or Drift Herbicide Injury

(crop injured after emergence)

## New leaves chlorotic, plants stunted

### Symptoms

Only grasses affected, meristems (new leaves) yellow and rotting, separates easily from whorl

### Suspect

#### **ACCase Inhibitor**

Assure, Fusion, Poast, Select, etc.



-----OR-----

Reddish veins on soybeans; chlorotic, crinkled/twisted corn leaves in whorl, leaf striping, improper unfurling



#### **ALS Inhibitor**

Accent, Beacon, Exceed, Broadstrike (Python), etc.

or

**ALS Inhibitor plus OP insecticide** (or certain herbicides)

Counter, Lorsban, malathion etc. or Basagran, Laddok



-----OR-----

Variable injury, grasses and broadleaves affected, chlorosis to necrosis on most plants



#### **EPSP Inhibitor - glyphosate**

Roundup Ultra, Touchdown

## Plants bent, twisted, cupped, etc.

### Symptoms

Soybean leaves cupped, strapped, and/or twisted; corn plants leaning, leaves rolled, roots fused and/or bent

### Suspect

#### **Growth Regulator**

Banvel, Clarity, 2,4-D, etc.



## Contact activity

### Symptoms

Speckled/burned leaves

(older leaves injured, new leaves not injured)

### Suspect

•**Photosynthesis Inhibitor**- Buctril, Basagran, etc.

•**PPO Inhibitor**  
Blazer, Cobra, Resource, Action

•**Nonselective**  
Gramoxone Extra, Liberty

•(Some **adjuvants** can cause contact injury)

