Herbicide Crop Injury, Herbicide Residual Injury

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Outline

- 1. Causes of Crop Injury
- 2. Diagnosing Herbicide Injury
- 3. Pictures of Drift Injury
- 4. Pictures of Residual Injury
- 5. Field Pictures



1. Causes of Crop Injury

- A. Long residual herbicides carryover.
- B. Incorrect use of Roundup drift.
- C. Incorrect use of very active herbicides.
- D. Use of inappropriate or unregistered herbicides.
- E. Big farms constraints.



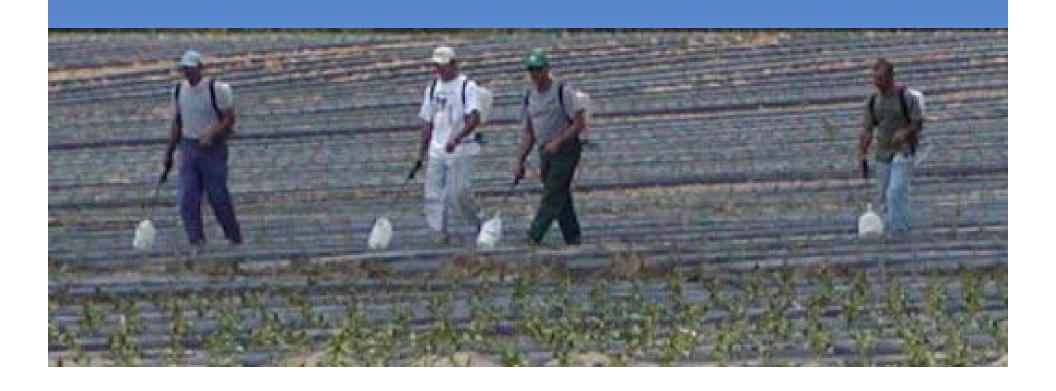
A. Long Residual Herbicides

- Sulfonylureas: Accent, Beacon, Permit, Matrix
- Imidazolinones: Scepter, Pursuit, Raptor
- Sulfonamides: Broadstrike, Firstrate
- Clomazone: Command



B. Incorrect use of Roundup

Spraying in windy weather



C. Incorrect Use of Active Herbicides

- Rate too high
- Overlapping passes
- Inattention to plant back restrictions.

Always read the label in full



D. Use of Inappropriate or Unregistered Herbicides

• Similar names, e.g. <u>Lorox Plus</u> - mix of Lorox + Classic (SU).

 Herbicides that are registered on related field crops - e.g.
 Balance (field corn, not sweet corn)



E. Big Farms Constraints

- Pressure to cover many acres in limited time - spray in bad weather.
- Poor cleaning of large equipment.
- Lack of understanding of potential problems.



2. Diagnosing Herbicide Injury

- Document everything
- Observe the site ASAP
- Take photos of crops, weeds, drift patterns
- Collect injured and non-injured plant samples
- Collect spray mix, containers, water from source.



2. Diagnosing Herbicide Injury

- Obtain weather data from nearest weather station
- Obtain herbicide history of field for current and previous years
- Observe lay of land, elevation, source of irrigation, prevailing wind, condition of farm
- Observe crop and weed symptoms
- Observe weed control by species.

3. Pictures of Drift Injury





Dicamba drift injury in Tomato

2,4-D drift injury in Watermelon





2,4-D drift injury in Cucumber

4. Pictures of Residual Injury



Pumpkin - Clubbed Root





Maverick Residue Injury on Pumpkin



5. Field Pictures

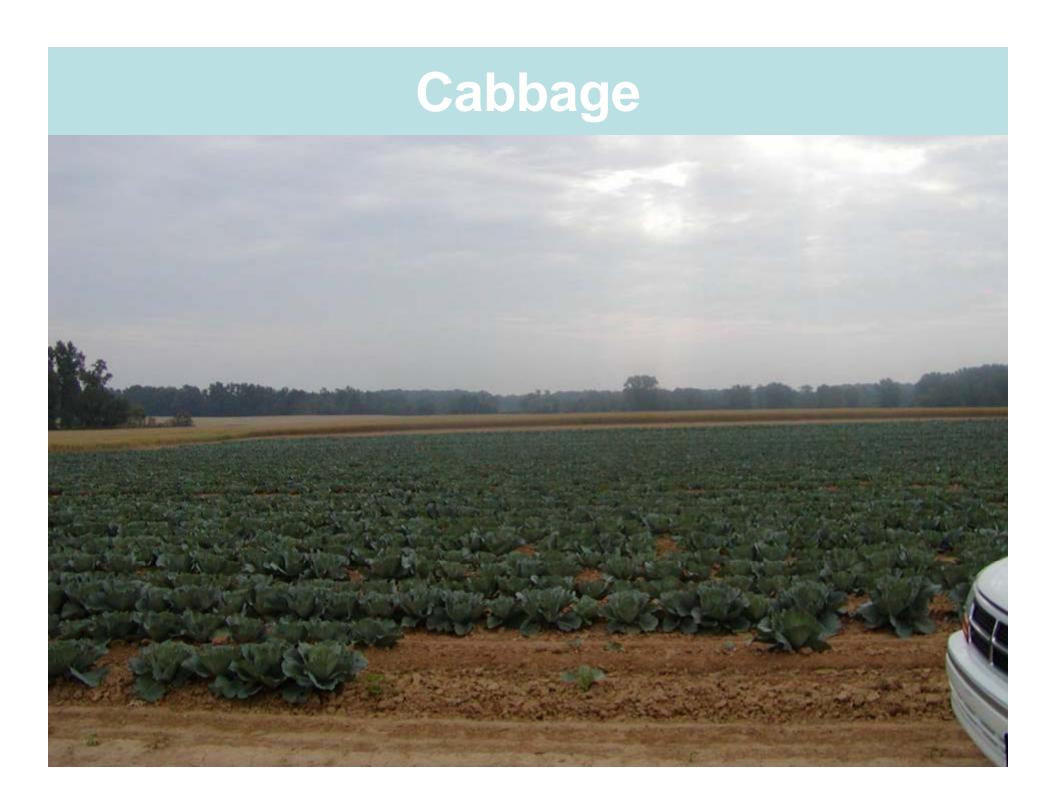






Irrigation Switch – no bending





Cantaloupe/Rye



Pepper



Automated Irrigation in Pepper



Tomato - Early Season



Tomato - Mid-Season

