

Weed Resistance



YWTG 2018

Topics

- We will be focusing on Sprayer Cleanout
- Updated Resistance maps for Waterhemp, Kochia, Ragweed, and tough to control Lambsquarters
- Label Changes for Ethofumesate 4SC
- Weed control strategies for 2018
- Quick Refresh on Weed Identification

Sprayer Tank Cleanout

- Where do pesticides accumulate in my sprayer
- 7 Steps for Sprayer Cleanout
- Tank cleaners for different chemistry's?
- Correct Nozzles for Spraying Season
- Second Sprayer Dedicated just for Sugarbeets?

Where does pesticide accumulate

- Bottom of main tank
- End caps/dead heads on booms
- Main screens and or nozzle screens
- Not completely draining the tank



7 Steps for Sprayer Cleanout

1. Spray out Booms Every Night
2. Perform Rinse Number 1
 - Can be 5 minutes long_(ND weed control guide)
 - Or double the application rate
 - Ex. 15gpa application rate=flushing with 30 gallons
3. Remove and clean all screens



Sprayer Cleanout Continued

4. Remove and clean boom end caps
5. Perform Rinse Number 2
6. Add Tank Cleaner
 - Agitation is key to distribute cleaner
 - If possible leave in overnight
7. Perform Final Rinse and Flush

Tank Cleaners for Chemistry's

- **Water=** Extreme, Glyphosate, Lightning, SG formulation
- **Bleach=** Laudis
- **Ammonia/commercial tank cleaner + Water=** 2,4-D, Assure II, Basagran, Bromoxynil, Cadet, Callisto, Cobra, Dicamba, Extreme, FirstRate, Fusilade DX, Gramoxone, Harmony DF, Harness, Hornet, Metolachlor, Metsulfuron, Paraquat, Permit, Prowl, Pursuit, Python, Raptor, Reflex, Rimsulfuron, Resource, Select, Stinger, Surpass, Thifensulfuron, Treflan, Ultra Blazer, Valor
- **Detergent or Commercial Tank Cleaner + Water=** Aim, Atrazine, Clarity, Flexstar, Liberty 280, Metribuzin, Poast, Status

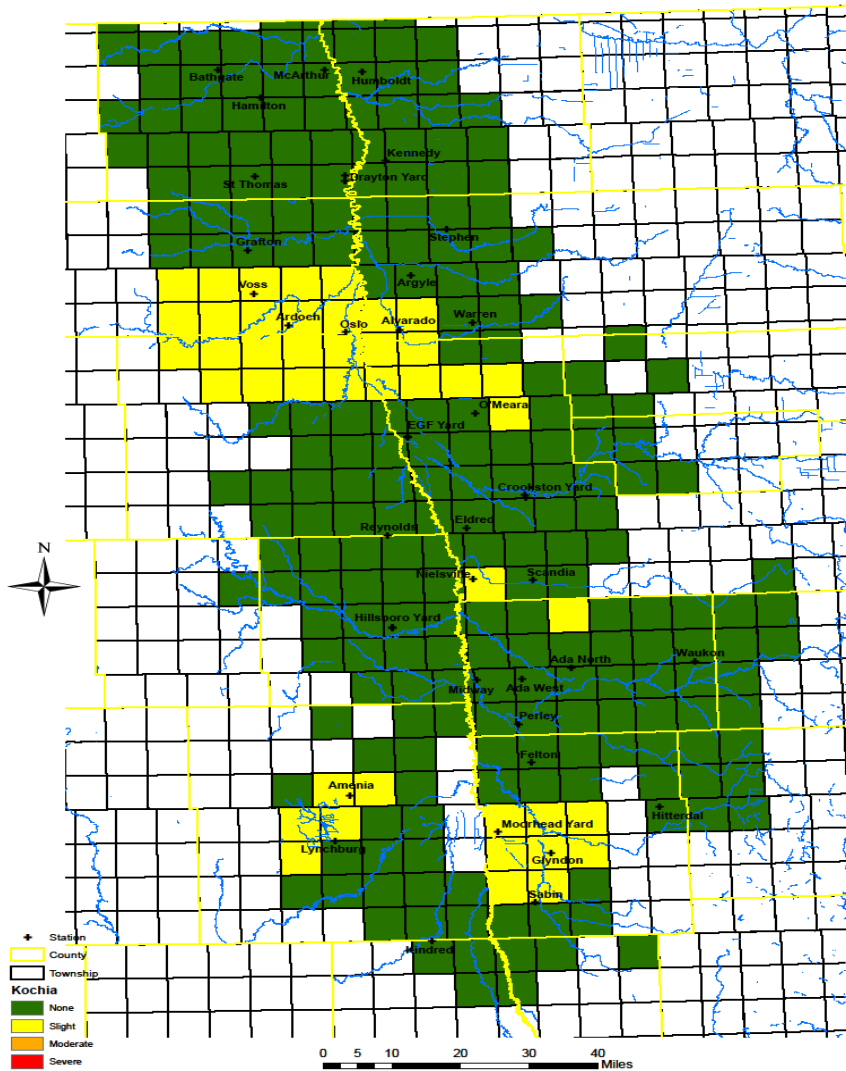
Correct Nozzles

- Spray Nozzle Selection guide-one of many

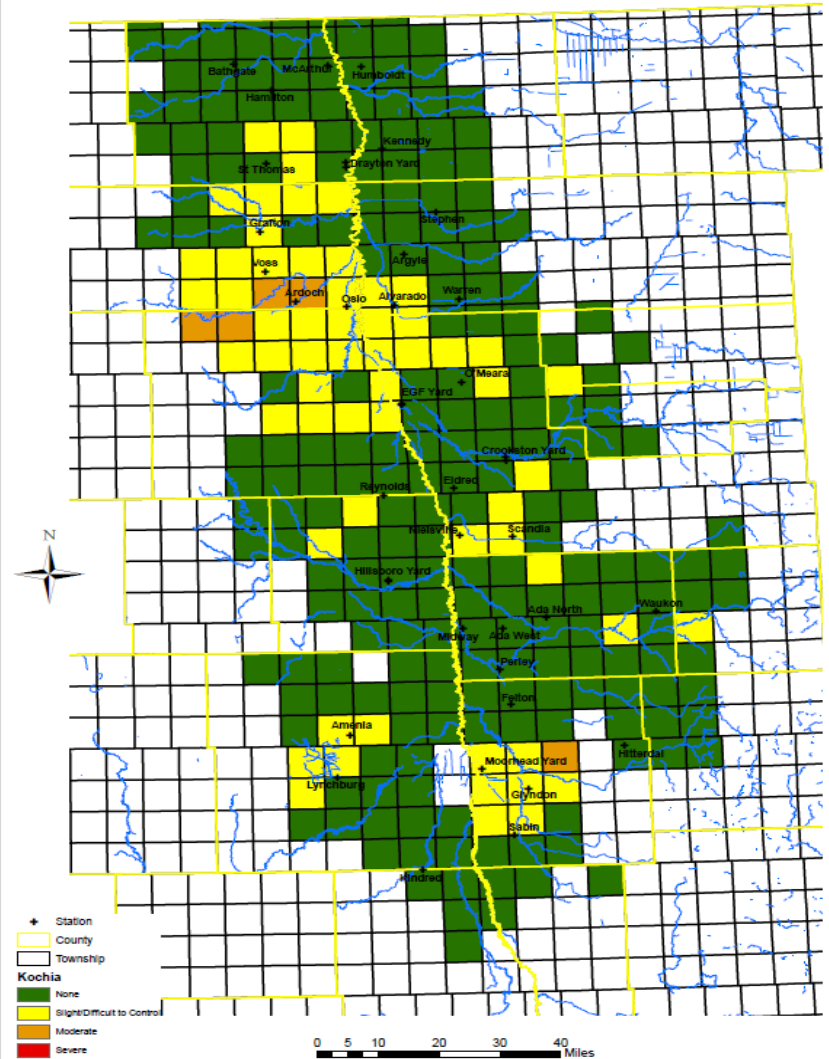
Nozzle	<i>Herbicides</i>			<i>Fungicides</i>		<i>Insecticides</i>		<i>Drift Management</i>	<i>Liquid Fertilizer</i>
	<i>Soil Applied</i>	<i>Post-emergence</i>		<i>Contact</i>	<i>Systemic</i>	<i>Contact</i>	<i>Systemic</i>		
		<i>Contact</i>	<i>Systemic</i>						
Turbo TeeJet®		Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	
Turbo TeeJet	Good	Good	Excellent	Good	Excellent	Good	Excellent	Very Good	
Turbo TeeJet® Induction	Excellent		Excellent		Excellent		Excellent	Excellent	Excellent
XR, XRC TeeJet®		Excellent	Good	Excellent	Good	Excellent	Good	Good	
AIRX TeeJet®	Very Good	Good	Excellent	Good	Excellent	Good	Excellent	Excellent	Good
AI, AIC TeeJet®	Very Good	Good	Excellent	Good	Excellent	Good	Excellent	Excellent	Very Good
TwinJet®		Excellent		Excellent		Excellent			
Turbo FloodJet®	Excellent		Very Good		Very Good		Very Good	Excellent	Excellent
TurfJet®	Excellent		Very Good		Very Good		Very Good	Excellent	Excellent

Weed Control Map Kochia

2016 Weed Resistance Map - Kochia

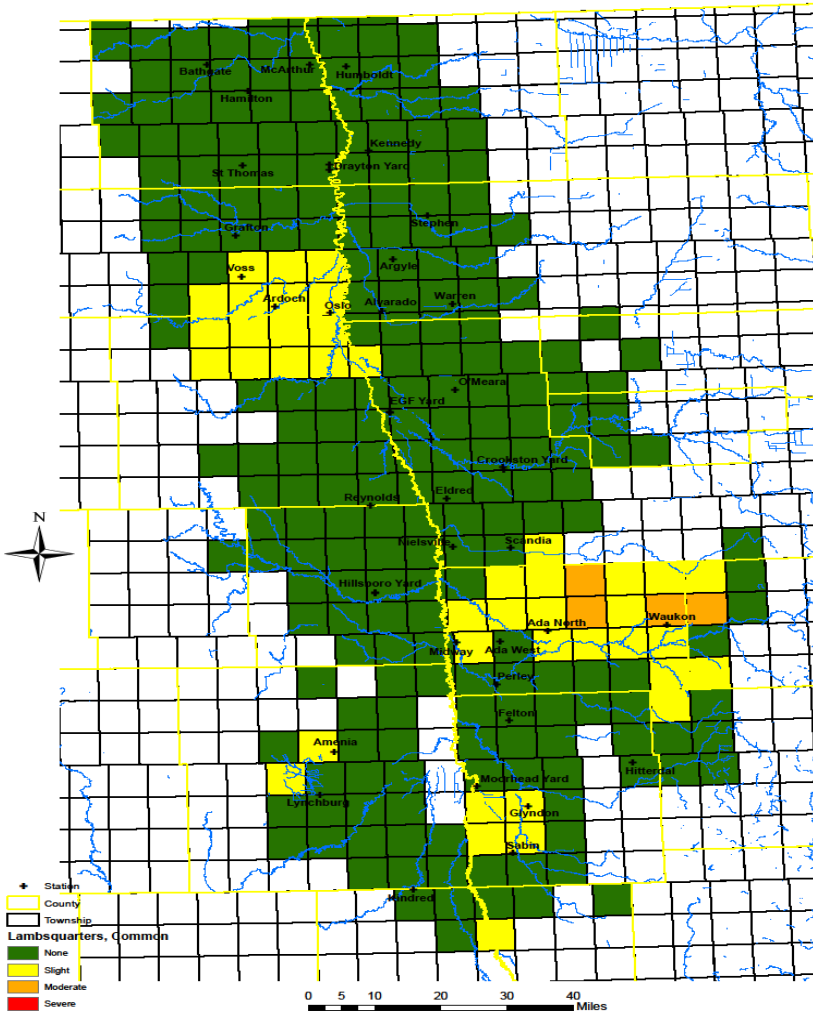


2017 Weed Control Map - Kochia

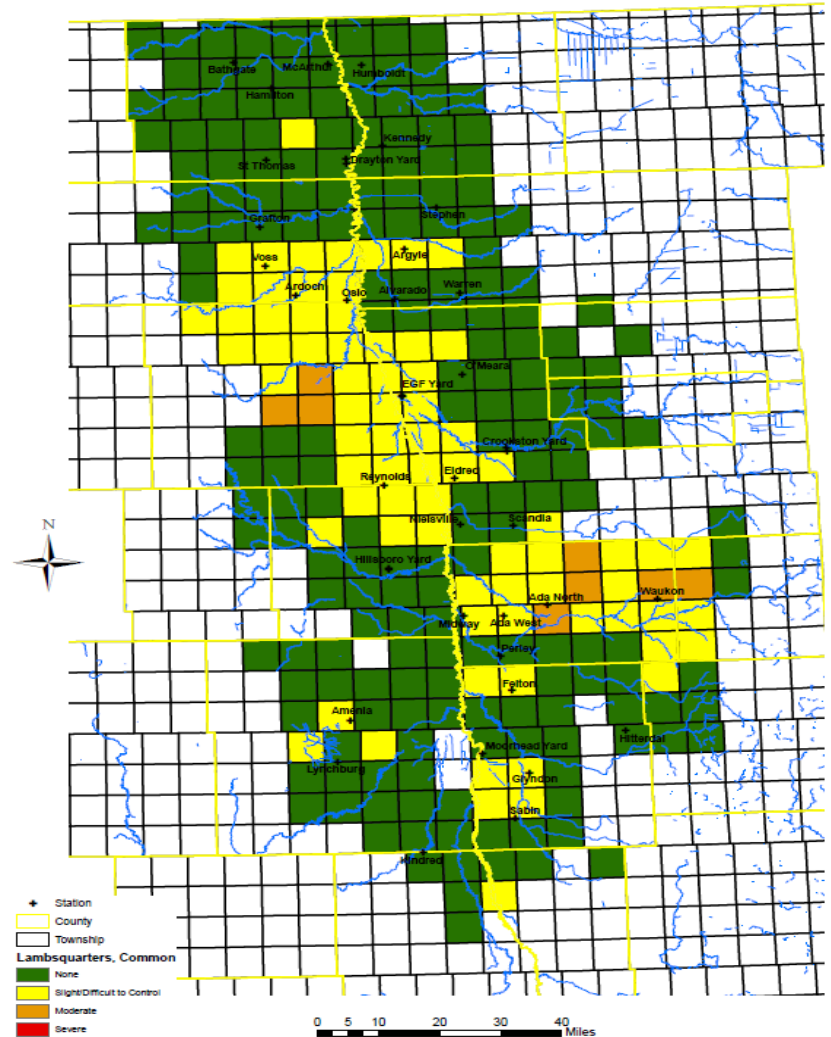


Weed Control Map Lambs.

2016 Weed Resistance Map - Lambsquarters



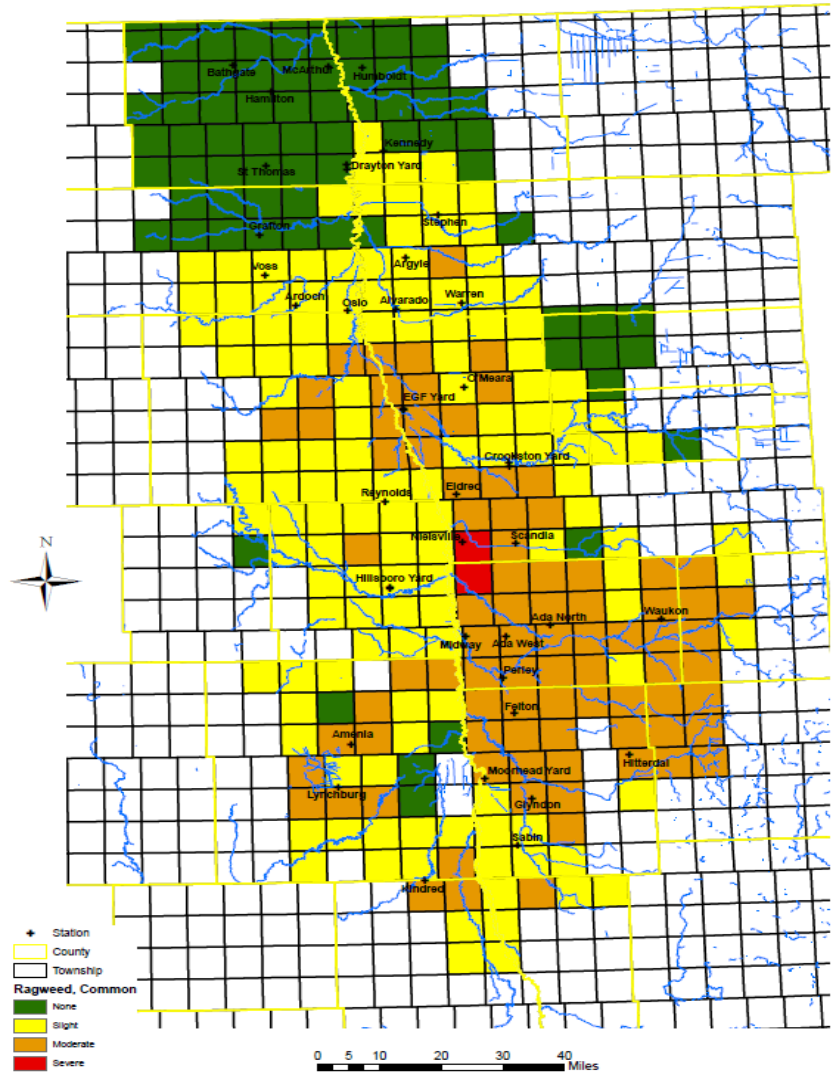
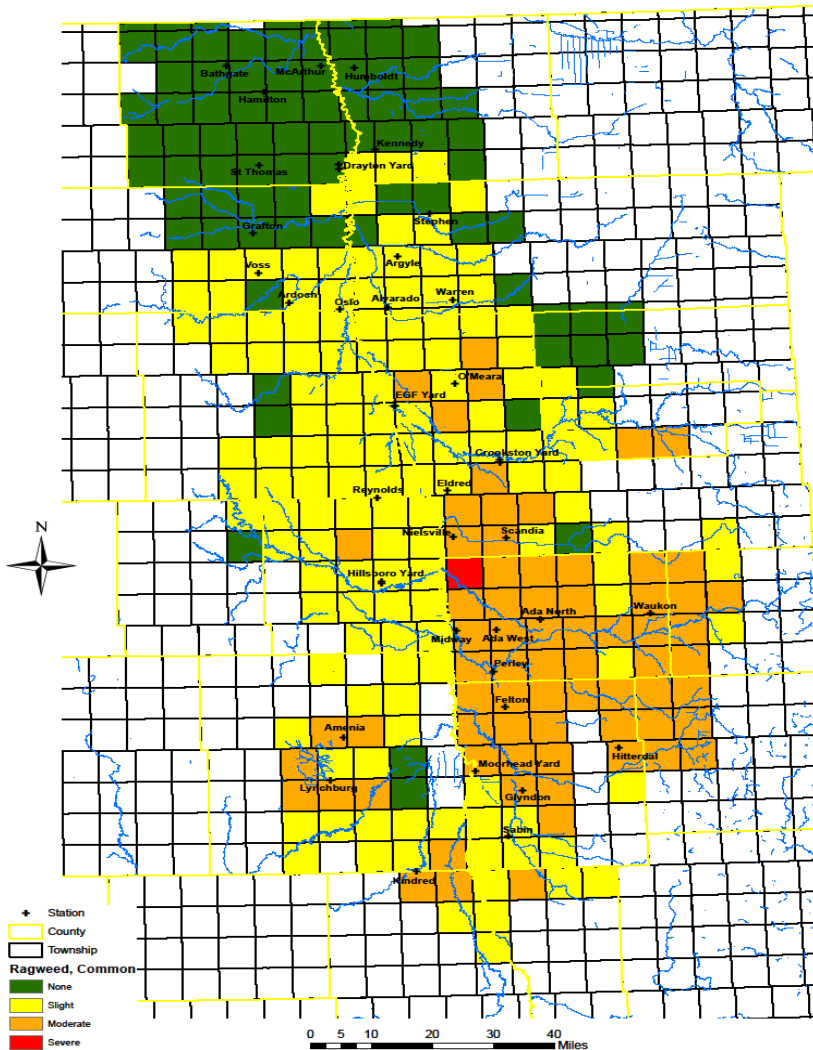
2017 Weed Control Map - Lambsquarters



Weed Resistant Map Ragweed

2016 Weed Resistance Map - Ragweed, Common

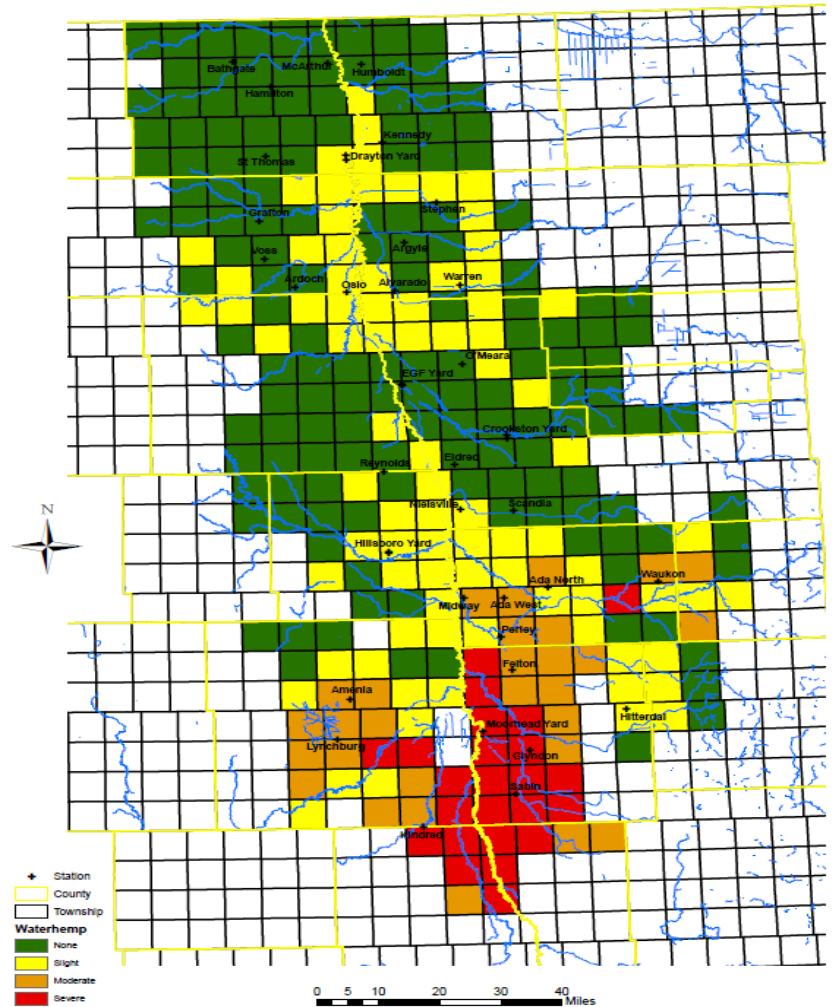
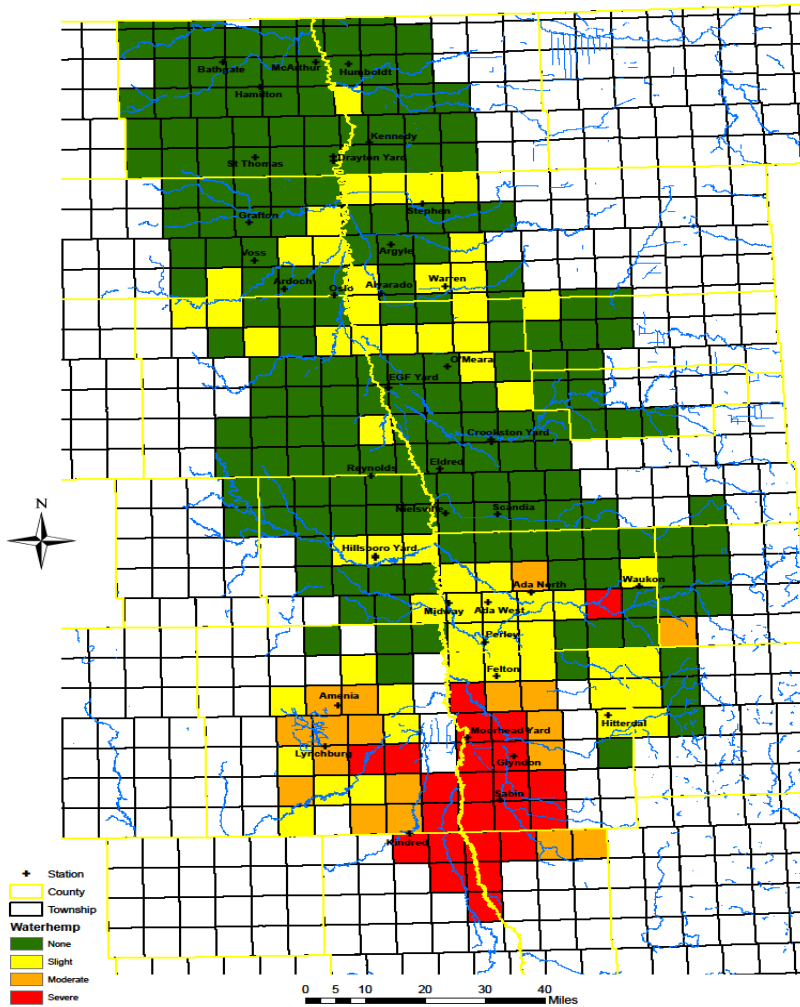
2017 Weed Resistance Map - Ragweed, Common



Waterhemp Resistant Map

2016 Weed Resistance Map - Waterhemp

2017 Weed Resistance Map - Waterhemp



Waterhemp Control Strategies 2018

- PPI/PRE
 - Ethofumesate or Dual Magnum
 - 10 week residual w/Ethofumesate; With Application of higher rates- follow with Beans or Potatoes only
 - Dual Magnum requires Indemnified label signature
- Post Lay-by
 - Outlook, Dual Magnum, Warrant
 - Tank mixed with Roundup
 - Split apply
 - All need rain activation and emerged weeds will not be controlled
- Cultivation as last resort near canopy closure



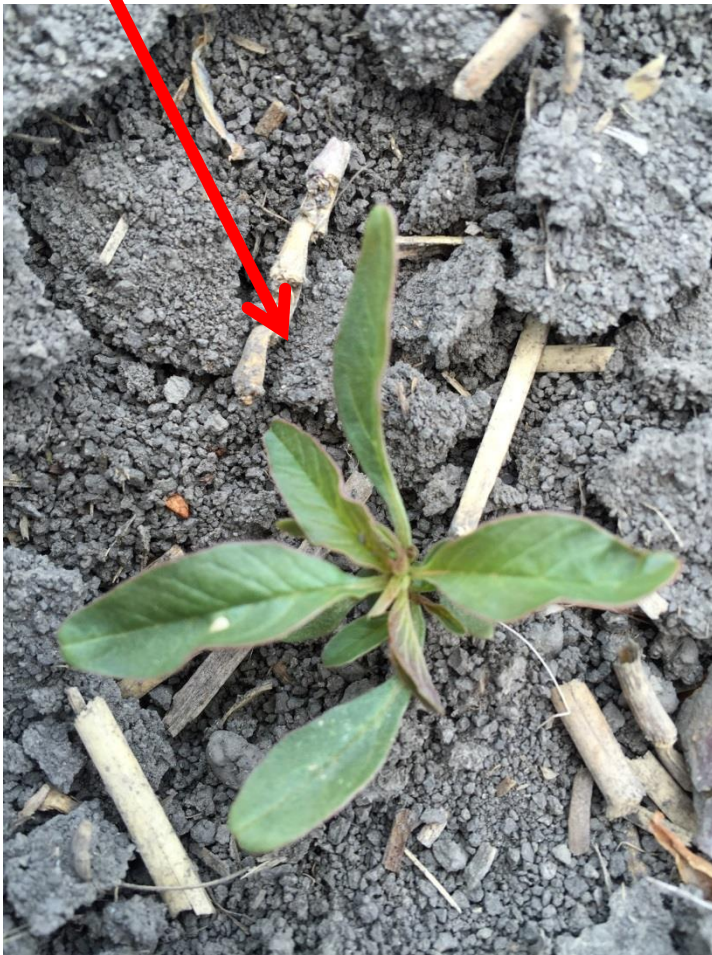
**Biennial
Wormwood**

**Common
Ragweed**



Weed ID

Waterhemp



Pigweed



Weed ID

- Kochia



- Common Lambsquarters



A wide-angle photograph of a lush green field of leafy plants, likely a vegetable or crop field. The plants are arranged in neat, parallel rows that recede into the distance. The leaves are vibrant green and appear healthy. The soil between the rows is dark and rich. In the background, a line of trees is visible against a bright blue sky with scattered white clouds. The overall scene is bright and clear, suggesting a sunny day.

Questions