PROBLEM PERENNIAL WEEDS IN ROW CROPS

Jerry Doll

UW-Agronomy

Weeds in Proceedings

- **Wirestem muhly**
- **Hemp Dogbane**
- **White cockle**
- **Pokeweed**
- **Wild Four O’clock**
- **Comfrey**
- **Dandelion**

Wild 4 O'clock

- **Native tap-rooted, pretty perennial**
- **Found in no-till and reduced till systems**
- **Usually in shallow soils, including roadsides and railroad beds**

Wild Four O'clock
you'll know if you have some

Wild Four O’clock ID

Wild Four O’clock ID

Wild Four O’clock Biology

Wild Four O'Clock Management

- **Glyphosate is the most effective**
- **In conventional corn, dicamba achieves suppression**
- **In conventional soybean, consider Classic**

2000 Soybean Site in 2001

A Three-Step System to Control Perennial Broadleaf Weeds in Glyphosate Resistant Soybeans and Corn

1. Use a **no-tillage** production system.
2. Apply a **reduced rate** (perhaps 50%) of the recommended rate of a soil-active herbicide before or at planting.
3. Apply glyphosate when the **first flowers appear** or when the weed is 24 to 30 inches tall.

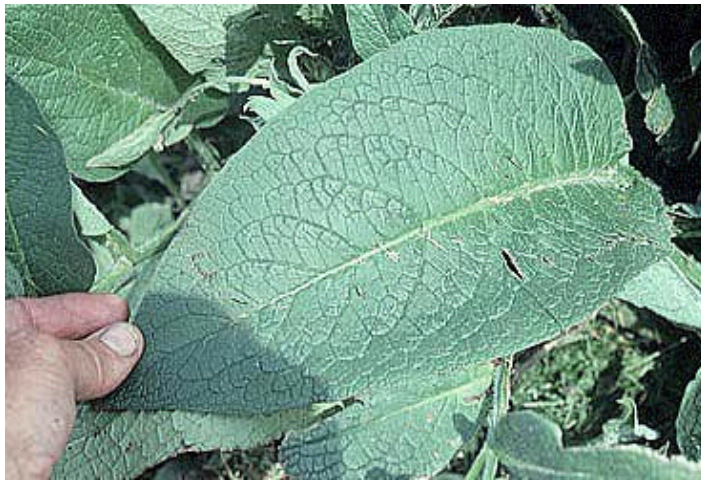
Does This Work for Comfrey?

- **Russian native introduced for medicinal and forage uses**
- **Field infestations usually come from former garden**
- **Easy to ID**
- **Tough to control**

Comfrey ID

Branched tap roots; dark brown; deep

Stems: many and fuzzy



Leaves large, fuzzy

Comfrey ID

Flowers purplish; on curved stalk; rarely set seed

2001 Comfrey Trial

- **Sauk Co. dairy farm**
- **Plowed/planted a glyphosate resistant corn hybrid May 26-28**
- **“Vegetative” treatments on July 6**
- **“Early flower” treatments on July 11**
- **All MOAs of post herbicides tested**

Typical Situation: Garden Now Part of a Field

May 26

2001 Observations

- **Moldboard plowing in late May =**
  - **Major setback to comfrey**
  - **Big help to corn**
  - **Major disaster for effectiveness of post applications**

Sauk Co. Site - 2001

June 21

July 6

Sauk Co. Site - 2001

July 6

Comfrey 2001 Results

Herbicide	Rate Pt/a	Date applied	% Cont* 8/7	% Press 9/6
Rdup Ultra	2	7/6	61	39
Rdup Ultra	2	7/11	73	45
Rdup Ultra	1.5&1.5	7/6 & 11	78	50
Rdup Ultra	2 & 2	7/6 & 11	68	30
Touchdown	2	7/6	67	50

* Control of treated plants

Comfrey 2001 Results

Herbicide	Rate Prod/a	Date applied	% Cont* 8/7	% Press 9/6
Clarity	1 pt	7/6	84	16
Distinct	6 oz	7/6	86	15
Permit	1.33 oz	7/6	77	22
Lightning	1.28 oz	7/6	73	35
NorthStar	5 oz	7/6	69	29

* Control of treated plants

Comfrey 2001 Results

Herbicide	Rate Prod/a	Date applied	% Cont* 8/7	% Press 9/6
Distinct + Rdup Ultra/Rd	4 oz + 2pt/2pt	7/6 7/11	92	14
Distinct + Rdup Ultra/ Distinct	4 oz + 2pt/ 3 oz	7/6 7/11	95	13

* Control of treated plants

Comfrey 2001 Results

Herbicide	Rate Prod/a	Date applied	% Cont* 8/7	% Press 9/6
Callisto	3 oz	7/6	41	53
Callisto + Distinct	3 oz + 4 oz	7/6	78	21
Stinger	8 oz	7/6	3	48

* Control of treated plants

Comfrey 2001 Summary

- **Dicamba + glyphosate >**
  dicamba = Distinct >
  glyphosate = Permit = Lightning = NorthStar
- **Callisto has a temporary effect**
- **Stinger has no effect**
- **Does dicamba have soil activity on comfrey?**
- **Do you have a research site for 2002?**

White Cockle

- **Behaving as winter annual in corn/beans**
- **Dicamba & atrazine effective**
  - **Few concerns in corn**
- **No labels claim control in soybeans**
- **2,4-D + glyphosate as burndown not adequate**
- **Glyphosate as post treatment in soybean can be effective**

Dandelion Suppression

- **See 1999 Proceedings (223-227) for summary of dandelion trials**
- **Not much has changed for in-crop treatments**
- **Renewed interest in fall applications**

Results From 3 Years of Testing Show That:

- **Dandelion growth stage and air temp best indicators:**

  Treat when temperatures
  > 60F and dandelions
  in early to mid bloom

- **Not necessary to monitor soil temperature**

Dandelion Take Home Message

- **Fall treatments best by far**
  - **Even glyphosate looks reasonable then**
  - **IS this the way to tackle white cockle?**
- **Numerous options in corn**
- **In soybeans, start clean if possible**
  - **glyphosate + 2,4-D followed by more glyphosate**
  - **Synchrony lists dandelions as suppressed**

Fall/Spring Preplant Dandelion Trial

- **Testing glyphosate, 2,4-D, dicamba and several SUs as fall and spring treatments**
- **Applied to dandelions among corn stalks**
- **Will no-till plant soybeans in May**

Thanks for Your Attention

Questions?

Comments?

UW Extension
Agriculture & Natural Resources