

2027 AGRONOMY GUIDE · NON-GMO SOYBEANS

NO TRAIT. NO PROBLEM.

A pre-emergent-first herbicide guide for Confluence Non-GMO soybeans — featuring the two newest residual tools, Convintro™ and Tendovo®.

1. **The PRE does the heavy lifting.** In every trait platform, waterhemp and Palmer control are won or lost before the beans emerge.

2. **RR1 and Non-GMO now fight waterhemp with the same tools.** Glyphosate has failed on most waterhemp populations tested — Groups 12, 14 and 15 do the work in both.

3. **One new PREs raise the floor for 2027.** Convintro brings Group 12 to soybeans; Tendovo packs Groups 2, 5 and 15 in one jug.

confluence® GENETICS

FOR GROWERS AND SEED DEALERS · NOVEMBER 2026

The trait isn't what controls your waterhemp

In fields with glyphosate-resistant waterhemp or Palmer amaranth, a Roundup Ready 1 program and a Non-GMO program run on the same effective chemistry.

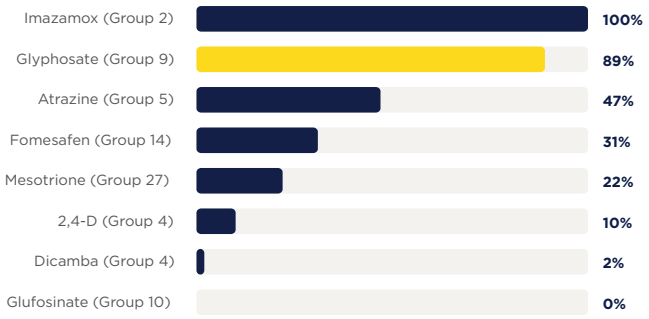
89%
of Minnesota waterhemp populations screened in 2020–21 were glyphosate-resistant.

100%
were ALS (Group 2) resistant — Group 2 POST won't rescue either system.

1 in 4
Iowa populations (75 collected, fall 2019) resisted four groups: 2, 5, 9 and 14.

What still works on waterhemp

Share of 90 Minnesota populations resistant at the labeled rate, 2020–21



Populations came from fields where plants survived a POST spray, so these figures run higher than a random field survey — but they show where the pressure is. PPO (Group 14) resistance at 31% is the warning: protect Flexstar and Cobra with a strong PRE.

The RR1 POST pass, re-examined

RR1
~~Glyphosate (9)~~ · Cobra (14) · Outlook (15) · Select Max (1)

NON-GMO
Cobra (14) · Outlook (15) · Select Max (1)

Strike the glyphosate that resistant waterhemp shrugs off and the two passes are identical: a Group 14 contact, a Group 15 residual, and Select Max for grasses and volunteer corn.

Bottom line: If your field has glyphosate-resistant waterhemp, you are already spraying a Non-GMO program — you just paid for a trait to do it.

Pass by pass: one Moderate-pressure program, RR1 vs. Non-GMO

Moderate Option 2 · Convintro + Group 15 (full card on page 5)

Pass	Roundup Ready 1			Confluence Non-GMO			Verdict
	Product	Rate / A	SOA #	Product	Rate / A	SOA #	
Burndown	Gramoxone® SL 2.0	40 oz	22	Gramoxone® SL 2.0	40 oz	22	Identical
	COC	1%		COC	1%		
Pre-Emergence	Convintro™ [c]	~4 fl oz	12	Convintro™ [c]	~4 fl oz	12	Identical
	Warrant®	48 oz	15	Warrant®	48 oz	15	
	Metribuzin (75DF) [b]	5 oz	5	Metribuzin (75DF) [b]	5 oz	5	
Early Post (V2–V3)	Roundup PowerMAX® 3 RR1 only	30 oz	9	No glyphosate needed			Equal on waterhemp
	Cobra®	12.5 oz	14	Cobra®	12.5 oz	14	
	Outlook®	16 oz	15	Outlook®	16 oz	15	
	Select Max® vol. corn	24 oz	1	Select Max® vol. corn	24 oz	1	
	COC	1%		COC	1%		
Effective sites on waterhemp	5 · 12 · 14 · 15 + glyphosate (9) adds no site on resistant waterhemp			5 · 12 · 14 · 15			Identical

Select Max stays in the RR1 program: volunteer corn from glyphosate-tolerant hybrids survives glyphosate. **RR1's one small edge:** glyphosate on susceptible ragweeds, cocklebur and lambsquarters; Non-GMO covers most with the metribuzin PRE and Cobra. [c] Pre-launch Convintro rate — follow the final label. [b] Caution on high-pH soils.

Build the program on the pre-emergent

Waterhemp grows up to 1 1/4 inches a day and keeps emerging into August. The PRE buys the time; the layered residual closes the window.

Burndown
Plant into a clean seedbed. Control marestail here — nothing in-crop will.

PRE · at planting
Full label rate, two or more effective sites, within 3 days of planting.

Early POST · V2–V3
Group 14 on waterhemp under 4" plus a Group 15 to layer residual.

Canopy
Narrow rows close the canopy sooner and shade out late flushes.

1. **Two effective sites per pass.** Count only groups that still work on your waterhemp — Group 2 and 9 usually don't.
2. **Activate the PRE.** Most residuals need about 1/2–1 inch of rain within 7–10 days of application.
3. **One Group 14 POST, done right.** Spray waterhemp under 4" with COC and medium droplets. There is rarely a second chance.
4. **Overlap residuals.** Apply the Group 15 layer before the first PRE runs out — roughly 3–5 weeks after planting.
5. **Match rate to soil.** Coarse, low-OM and high-pH soils change rates for metribuzin and several premixes.
6. **Scout 7–14 days after each pass.** Escapes that set seed load the bank for years.

Two pre-emergent tools for 2027

Convintro™ Bayer — Group 12 · NEW SOA

Active	Diflufenican (PDS inhibitor) — first effective Group 12 for pigweeds in U.S. corn and soybeans
Timing	Preplant or pre-emergence; ground application only
Rate	~4 fl oz/A (max 0.16 lb a.i./A, once per season)
Targets	Waterhemp, Palmer amaranth, pigweed species
Status	EPA-registered summer 2026; first commercial season 2027, state by state

Tendovo® Syngenta — Groups 2 + 5 + 15

Actives	S-metolachlor + metribuzin + cloransulam-methyl
Timing	Preplant (surface or incorporated) or pre-emergence — never after crop emergence
Rate	1.6–2.1 qt/A by soil type, including coarse soils
Targets	70+ weeds incl. waterhemp, Palmer, kochia, ragweeds, marestail, grasses
Residual	Up to 5 weeks, depending on soil, rainfall and weed pressure

Partner it. Light on ragweeds and grasses — pair with a Group 15, 14 or 5. Expect brief, cosmetic bleaching on first leaves.

Labeled for conventional soybeans. Contains metribuzin — confirm variety tolerance before you book it.

Low & moderate pressure programs

Pick your pressure, then your program. Every option starts with a full-rate PRE.

LOW PRESSURE Option 1 Tendovo Foundation

Tendovo

TIMING	PRODUCT	RATE / A	SOA #
Burndown	Roundup PowerMAX® 3	30 oz	9
	2,4-D LV6 [d]	16 oz	4
Pre-Emergence	Tendovo® [ae]	1.6–2.1 qt	2 5 15
Post-Emergence	Select Max®	20–24 oz	1
	Flexstar® (if escapes) [a]	12–25.6 oz	14
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Grasses · Morningglory · Small-seeded broadleaves

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Tendovo carries metribuzin — confirm your variety's metribuzin tolerance and rate on high-pH or coarse soils.

LOW PRESSURE Option 2 Convintro Foundation

Convintro

TIMING	PRODUCT	RATE / A	SOA #
Pre-Emergence	Convintro™ [c]	~4 fl oz	12
	Metribuzin (75DF) [b]	5 oz	5
	Gramoxone® SL 2.0	40 oz	22
	COC	1%	
Post-Emergence	Cobra®	12.5 oz	14
	Select Max®	20–24 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 12 · 14

STRONGEST ON
Waterhemp / Palmer · Pigweeds · Lambsquarters · Grasses (POST)

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Convintro is light on ragweeds — metribuzin and Cobra cover the gap. Brief bleaching on first leaves is cosmetic and grows out.

MODERATE PRESSURE Option 1 Tendovo + Layered Residual

Tendovo

TIMING	PRODUCT	RATE / A	SOA #
Burndown	Roundup PowerMAX® 3	30 oz	9
	2,4-D LV6 [d]	16 oz	4
Pre-Emergence	Tendovo® [ae]	1.6–2.1 qt	2 5 15
Early Post (V2–V3)	Flexstar® [a]	12–25.6 oz	14
	Warrant®	48 oz	15
	Select Max®	20–24 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Marestail (burndown) · Kochia · Grasses

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Warrant must reach the soil to extend the residual — spray before the canopy intercepts it, ideally by V3.

Moderate & heavy pressure programs

MODERATE PRESSURE — Option 2 Convintro + Group 15

Convintro

TIMING	PRODUCT	RATE / A	SOA #
Burndown	Gramoxone® SL 2.0	40 oz	22
	COC	1%	
Pre-Emergence	Convintro™ [c]	~4 fl oz	12
	Warrant®	48 oz	15
	Metribuzin (75DF) [b]	5 oz	5
Early Post (V2–V3)	Cobra®	12.5 oz	14
	Outlook®	16 oz	15
	Select Max®	24 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 12 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Pigweeds · Grasses · Lambsquarters

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Four effective sites on waterhemp. COC improves Cobra control, but expect leaf bronzing that the crop typically grows out of.

MODERATE PRESSURE — Option 3 Proven Standard (benchmark)

TIMING	PRODUCT	RATE / A	SOA #
Pre-Emergence	Authority® MTZ [b]	12–16 oz	5 14
	Gramoxone® SL 2.0	40 oz	22
	COC	1%	
Post-Emergence	Warrant® Ultra [a]	48–65 oz	14 15
	Select Max®	24 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Marestail · Grasses · Morningglory

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Uses Group 14 twice. Warrant Ultra contains fomesafen, which carries an extended crop-rotation interval.

HEAVY PRESSURE — Option 1 Four-Way PRE: Tendovo + Convintro

Tendovo · Convintro

TIMING	PRODUCT	RATE / A	SOA #
Burndown	Roundup PowerMAX® 3	30 oz	9
	2,4-D LV6 [d]	16–22 oz	4
Pre-Emergence	Tendovo® [ae]	1.6–2.1 qt	2 5 15
	Convintro™ [cf]	~4 fl oz	12
Early Post (V2–V3)	Flexstar® [a]	12–25.6 oz	14
	Outlook®	16 oz	15
	Select Max®	24 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 12 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Kochia · Giant & common ragweed · Grasses

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Our flagship program: four PRE sites (2, 5, 12, 15) and Group 14 saved for one POST pass. Jar-test the Tendovo + Convintro mix.

Heavy pressure programs

HEAVY PRESSURE

Option 2 Fierce MTZ + Convintro

Convintro

TIMING	PRODUCT	RATE / A	SOA #
Burndown	Gramoxone® SL 2.0	40 oz	22
	COC	1%	
Pre-Emergence	Fierce® MTZ [b]	16 oz	5 14 15
	Convintro™ [cf]	~4 fl oz	12
Early Post (V2–V3)	Cobra®	12.5 oz	14
	Warrant®	48 oz	15
	Select Max®	24 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 12 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Marestail · Pigweeds · Grasses

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
Uses Group 14 at PRE and POST. Where PPO-resistant waterhemp is confirmed, choose Heavy Option 1 instead.

HEAVY PRESSURE

Option 3 Authority Supreme + Convintro

Convintro

TIMING	PRODUCT	RATE / A	SOA #
Pre-Emergence	Authority® Supreme	8 oz	14 15
	Convintro™ [cf]	~4 fl oz	12
	Metribuzin (75DF) [b]	5 oz	5
	Gramoxone® SL 2.0	40 oz	22
	COC	1%	
Post-Emergence	Prefix® [a]	32 oz	14 15
	Select Max®	20 oz	1
	COC	1%	

EFFECTIVE SITES ON WATERHEMP
5 · 12 · 14 · 15

STRONGEST ON
Waterhemp / Palmer · Marestail · Lambsquarters · Grasses

DROPLET SIZE (POST)
MEDIUM

WATCH-OUT
To get full value from Prefix, the residual must reach the soil surface — don't wait for canopy.

Footnotes

a. Use rate depends on geography, soil texture and organic matter.

b. Caution on high-pH soils (metribuzin).

c. Convintro: approximate rate from pre-launch information; follow the final label. Registered state by state — confirm it's labeled in yours.

d. Plant-back restriction — check the 2,4-D label interval before planting.

e. Contains metribuzin — confirm your Confluence variety's tolerance.

f. Confirm both labels allow the tank mix and run a jar test.

Rates reflect common label rates; several program structures are adapted from Beck's Practical Farm Research NonGMO recommendations, with Convintro and Tendovo programs added by Confluence Genetics. **SOA #** = WSSA site-of-action group. **Effective sites on waterhemp** counts in-crop groups only and excludes Group 2 and 9, which most populations resist.

Three things to tell a grower

1

"You're already running a Non-GMO program."

If glyphosate quit on your waterhemp, your PRE, Flexstar and Group 15 are doing the work. The trait isn't.

2

"The new PRE close the gap."

Convintro adds a site of action waterhemp has never seen in soybeans. Tendovo puts three groups in one jug for any trait — including none.

3

"The premium is the difference."

Same weed control, same herbicide budget give or take a grass product, and a Non-GMO contract premium on top.[1]

Before you spray: the Non-GMO checklist

- ☐ Confirm the variety's metribuzin tolerance with your Confluence agronomist.
- ☐ Check Convintro's registration status in your state for 2027.
- ☐ Map last year's escapes and set pressure level field by field.
- ☐ Book PRE and layered-residual products together so the second pass isn't late.
- ☐ Clean the sprayer thoroughly between Non-GMO and trait fields.
- ☐ Keep application records — identity-preserved contracts may ask for them.

Ask your Confluence representative for

- Variety metribuzin tolerance ratings
- A field-by-field pressure plan
- Non-GMO premium contract options

Sources

1. Non-GMO premiums vary by contract, delivery point and year. USDA AMS weekly Non-GMO report: food-grade soybeans, East, about $2.70/bu over CBOT (Aug 28, 2026).
2. Beck's Hybrids, Practical Farm Research — Soybean Herbicide Program Recommendations (NonGMO platform), accessed Oct 2026.
3. Bayer Crop Science — Convintro product page and EPA approval release (July 2026); Minnesota Dept. of Agriculture diflufenican review (Aug 2026); UNL CropWatch, new herbicides for corn and soybeans; Farm Progress, new herbicide products.
4. Syngenta — Tendovo product information; Mississippi Soybean Promotion Board, "Tendovo: Tri-Mix Herbicide."
5. Weed Science (Cambridge) — Profile and extent of herbicide-resistant waterhemp in Minnesota (90 populations, 2020–21).
6. Iowa State University Extension — Herbicide programs for waterhemp control in soybean (2021).

Always read and follow label directions. Not all products are registered in all states. Rates shown are guides; consult the product label for rates by soil type, rotational restrictions and tank-mix partners. Product names are trademarks of their respective owners. This guide is not a substitute for the product label or local agronomic advice.