THE POWER WEEDS CAN’T RESIST.

A unique formulation of three proven active ingredients. Extraordinary power against tough weeds.

Resicore™ HERBICIDE

Dow AgroSciences Solutions for the Growing World
A powerful formulation of ingredients. Together at last.

Protecting corn yield season after season means finding new ways to eliminate herbicide-resistant weeds. Resicore™ herbicide will offer a unique formulation featuring three leading active ingredients and three modes of action to deliver powerful broad-spectrum control of broadleaf weeds and annual grasses.

Early control of herbicide-resistant weeds.

Resicore will give growers a new and effective way to control the toughest weeds that may be herbicide-resistant to glyphosate, atrazine or other ALS herbicides, such as Palmer amaranth, giant ragweed, marestail, waterhemp and morningglory. And since Resicore is tank-mix-compatible with glyphosate, atrazine and other herbicides, growers will also have the flexibility and convenience they need to customize their weed control.
Control weeds deep into the season.

Keeping fields cleaner longer is a key to getting higher yield potential. Resicore will deliver the residual activity you need for long-lasting weed control with excellent crop safety.

“Resicore will provide growers peace of mind that their weeds are controlled well into the season. Trusted, long-lasting residual activity can lead to higher yield.”

— Luke Peters, corn herbicides product manager, Dow AgroSciences
With three powerful ingredients that have never been used before in a single herbicide formulation, Resicore™ herbicide can help growers combat herbicide resistance and maintain clean fields deep into the growing season.

“Resicore herbicide has unique chemistry to provide very broad spectrum weed control and target herbicide-resistant weeds in multiple ways. The new technology will provide long-lasting residual control to help corn growers minimize weed competition and maximize yield potential.”

— Scott Ditmarsen, field scientist, Dow AgroSciences
Proven active ingredients deliver powerful control.

**Acetochlor**

- **MODE OF ACTION**: Seedling shoot growth inhibitor
- **SITE OF ACTION**: Group 15 long-chain fatty acid inhibitor
- **CHEMICAL FAMILY**: Chloroacetamide
- **HOW IT WORKS**: Controls weeds by inhibiting the growth of seedling shoots. Selective herbicide absorbed mainly by shoots and roots of germinating weeds. When applied prior to weed emergence, it inhibits proper cell division. Chloroacetamides are believed to inhibit synthesis of very-long-chain fatty acids (VLCFAs) during cell division.

**Mesotrione**

- **MODE OF ACTION**: Pigment inhibitor
- **SITE OF ACTION**: Group 27 HPPD inhibitor
- **CHEMICAL FAMILY**: Triketones
- **HOW IT WORKS**: Selective herbicide absorbed by shoots and roots of weeds and translocated. Mobile in xylem and phloem. It causes bleaching due to inhibition of the enzyme 4-HPPD, (4-hydroxyphenylpyruvate dioxygenase), which is involved in the synthesis of carotenoids.

**Clopyralid**

- **MODE OF ACTION**: Growth regulator
- **SITE OF ACTION**: Group 4 synthetic auxin
- **CHEMICAL FAMILY**: Carboxylic acid
- **HOW IT WORKS**: Systemic herbicide absorbed through leaves and roots of annual and perennial weeds. Acts on plant hormones. Mobile in xylem and phloem. Synthetic auxins interfere with plant growth by disrupting hormone balance and protein synthesis. Believed to have several sites of action.

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**Active ingredients concentration in Resicore™ herbicide.**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>lb./gal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetochlor</td>
<td>2.80</td>
</tr>
<tr>
<td>Mesotrione</td>
<td>0.30</td>
</tr>
<tr>
<td>Clopyralid</td>
<td>0.19</td>
</tr>
</tbody>
</table>

TAKE OUT CORN’S TOUGHEST ENEMIES.
Control today’s most troublesome weeds.

**Palmer amaranth**

**CONTROL FACTORS**
- Adapts quickly: Spreads herbicide-resistant genes.
- Prolific production of small seeds: A single female plant can produce approximately 600,000 seeds, which are rapidly spread through grain, seed, feed or equipment contamination.
- Competes aggressively: Palmer amaranth is the most competitive and aggressive pigweed species; it can grow 2 or 3 inches per day.
- Extended emergence period: Observed from early May until mid-September.

**HERBICIDE RESISTANCE**
Populations have evolved with resistance to ALS inhibitors, triazines, HPPD inhibitors, dinitroanilines and glyphosate.

Sources: Purdue University Cooperative Extension Service, takeactiononweeds.com

Palmer amaranth can lead to corn yield loss of up to 91 percent when allowed to compete throughout the growing season.

**Giant ragweed**

**CONTROL FACTORS**
- Produces many seeds: A single plant can produce up to 3,500 seeds per square yard in corn production areas.
- Competes aggressively: Due to early emergence, rapid growth and large, 4- to 8-inch leaf area; giant ragweed plants are often 1 to 5 feet taller than competing crops.
- Extended emergence period: Possible from March through late July.

**HERBICIDE RESISTANCE**
ALS inhibitor resistance was first confirmed in Indiana, Illinois and Ohio in the 1990s and early 2000s. Glyphosate resistance has been confirmed in more than 11 states across the Midwest and southern United States. Plant populations with resistance to both ALS inhibitors and glyphosate have been found in Ohio, Minnesota, Missouri and Indiana.

Sources: Purdue University Cooperative Extension Service, takeactiononweeds.com

Just two giant ragweed plants per 110 square feet can reduce corn yield by 13 percent.

**Waterhemp**

**CONTROL FACTORS**
- Adapts quickly: Spreads herbicide-resistant genes; pollen can travel half a mile or farther under windy conditions.
- Extended emergence period: Emerges throughout the growing season; seeds can remain viable in the soil for several years.
- Produces many seeds: More than 1 million seeds per plant when not competing with a crop.
- Competes aggressively: Early season competition from a heavy infestation reduced corn yield by 15 percent by the time the waterhemp was 6 inches tall.¹

**HERBICIDE RESISTANCE**
Resistance to five modes of action documented: ALS inhibitors, triazines, diphenyl ethers (protoporphyrinogen oxidase (PPO) inhibitors), HPPD inhibitors and glyphosate.

Source: Purdue University Cooperative Extension Service


Waterhemp is the first U.S. weed to develop resistance to three sites of action.
Marestail

CONTROL FACTORS

Overwintering:
Marestail plants overwinter in the rosette stage through late April, followed by stem elongation (bolting). Marestail is most easily controlled when in the seedling or rosette stage. Therefore, in no-till situations, burndown herbicides should be applied prior to bolting.

Easily spread seeds:
Plants can produce up to 200,000 seeds that are transported by wind, providing for effective spread of herbicide-resistant populations.

HERBICIDE RESISTANCE

Many populations of marestail are resistant to glyphosate. Cases of multiple resistance to glyphosate and ALS-inhibiting herbicides have been confirmed. Control in corn can be accomplished through tilling.

Morningglory

CONTROL FACTORS

Growth habits:
They cause issues by climbing or vining up crops, and have the ability to grow and reproduce on the soil surface.

Late emergence:
Emerges in late spring after many herbicide residuals have dissipated.

Competes aggressively:
Vine growth and sprawling growth habit choke out desirable plants and hinder harvesting efficiency by twining around crop plants.

HERBICIDE RESISTANCE

Morningglory has always been hard to control with glyphosate.

Sources: Purdue University Department of Agriculture, Botany and Plant Pathology; University of Missouri College of Agriculture, Food and Natural Resources

Several species of annual morningglory occur in Midwest agronomic cropping systems, including tall (Ipomoea purpurea), ivyleaf (I. hederacea), and pitted (I. lacunosa) species.

Weeds controlled (C) or partially controlled (PC) by preplant or preemergence applications of Resicore™ herbicide.

GRASSES AND SEDGES

- Barnyardgrass
- Crabgrass species
- Crowfootgrass
- Cupgrass, prairie
- Cupgrass, Southwestern
- Cupgrass, woolly
- Foxtail, bristly
- Foxtail, giant
- Foxtail, green
- Foxtail, robust (purple, white)
- Foxtail, yellow
- Goosegrass
- Johnsongrass, seedling
- Millet, foxtail
- Millet, wild proso
- Nutseed, yellow
- Oats, wild
- Panicum, brawntop
- Panicum, Texas
- Rice, red
- Sorghum, field
- Shattercane
- Signalgrass, broadleaf
- Signalgrass, narrowleaf
- Strangletop, red
- Starbush, bristly
- Wheat, volunteer
- Witchgrass

BROADLEAF

- Amaranth, Palmer
- Amaranth, Powel
- Amaranth, spiny
- Bedstraw, catchweed
- Beggarweed, Florida
- Buckwheat, wild
- Buffalobur
- Carpetweed
- Chickweed, common
- Clover, red
- Cocklebur, common
- Deadnettle, purple
- Devil’s claw
- Galinsoga
- Groundcherry, annual
- Groundcherry, cutleaf
- Horsetail
- Horseweed (marestail)
- Jimsonweed
- Kochia
- Lamb’s quarters, common
- Mallow, Venice
- Morningglory, entololob
- Morningglory, ivyleaf
- Morningglory, tall
- Mustard, wild
- Nightshade, black
- Nightshade, eastern black
- Nightshade, hairy
- Pigweed, redroot
- Pigweed, smooth
- Pigweed, tumble
- Purslane
- Purslane
- Purslane
- Purslane, Florida
- Radish, wild
- Ragweed, common
- Ragweed, giant
- Sesbania, hemp
- Shepherdspurse
- Sicklepod
- Sida, prickly
- Smartweed, ladysthumb
- Smartweed, Pennsylvania
- Sunflower, common
- Velvetleaf
- Waterhemp, common
- Waterhemp, tall
- Waterhemp, biennial

C = CONTROL  PC = PARTIAL CONTROL

*The addition of atrazine at recommended label rates may improve control. Thoroughly till soil or make an application of a burndown herbicide to control emerging weeds. Plant crop immediately after tillage. If a significant rainfall does not occur within seven days after application, weed control may be reduced. If irrigation is available, apply 0.25 to 0.75 inch of water. If irrigation is not available, a uniform shallow cultivation is recommended as soon as weeds emerge.
RESICORE™ AT A GLANCE.

Proposed labeled crops.
For use on field corn, field seed corn, field silage corn, sweet corn and yellow popcorn.

Proposed application timing.

TIMING TO WEEDS:
Make soil applications prior to weed emergence.
Make postemergence applications before broadleaf weeds reach 3 inches tall.

TIMING TO CROP:
Make soil applications prior to crop emergence.
Make postemergence applications before corn reaches 11 inches tall.

For sweet corn and yellow popcorn, Resicore must be applied prior to crop emergence.

Proposed use rate.
Anticipated use rates of Resicore are based on soil texture and organic matter content as outlined in the table below. Do not apply Resicore more than 28 days prior to planting or to field corn taller than 11 inches. Resicore™ herbicide should not be used on soils with greater than 10 percent organic matter.

Use rates of Resicore™ herbicide by soil texture and organic matter content.

<table>
<thead>
<tr>
<th>RATE PER ACRE (QUARTS)*</th>
<th>SOIL ORGANIC MATTER CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil texture</td>
<td>Less than 3%</td>
</tr>
<tr>
<td>Coarse</td>
<td>2.25</td>
</tr>
<tr>
<td>Medium</td>
<td>2.5</td>
</tr>
<tr>
<td>Fine</td>
<td>2.75</td>
</tr>
</tbody>
</table>

*An additional 0.25 quart per acre may be used in areas of heavy weed infestation. Do not exceed 3.25 quarts per acre of Resicore™ herbicide per season.
Tank-mixing and tillage system flexibility.

Resicore will be intended for use in conventional, reduced and no-till corn systems. Weed control will be greatest when applications are made as close to planting as possible. It is recommended that a burndown herbicide be tank-mixed with Resicore in reduced, minimum and no-till systems if weeds are present at application and corn has not yet emerged.

Resicore is tank-mix-compatible with atrazine, glyphosate and other corn herbicides, giving growers the flexibility they need to customize their weed control program to current conditions and weed pressure.

The following tank-mix partners may be applied by the same methods and at the same timings as Resicore™ herbicide unless otherwise specified in the tank-mix product label:

- Glyphosate, glufosinate, parquat, or 2,4-D, per product labels, to control susceptible emerged weeds.
- Atrazine at 0.5 to 2 lb. a.i. per acre, to improve control of some broadleaf weeds and grasses.

Proposed crop rotational intervals.

<table>
<thead>
<tr>
<th>ROTATIONAL CROP</th>
<th>ROTATIONAL INTERVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field corn</td>
<td>Anytime</td>
</tr>
<tr>
<td>Field seed corn</td>
<td></td>
</tr>
<tr>
<td>Field silage corn</td>
<td></td>
</tr>
<tr>
<td>Sweet corn</td>
<td></td>
</tr>
<tr>
<td>Yellow popcorn</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>4 months</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>10.5 months</td>
</tr>
<tr>
<td>Barley</td>
<td></td>
</tr>
<tr>
<td>Millet (pearl and proso)</td>
<td></td>
</tr>
<tr>
<td>Oats</td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td></td>
</tr>
<tr>
<td>Rye</td>
<td></td>
</tr>
<tr>
<td>Sorghum</td>
<td></td>
</tr>
<tr>
<td>Soybean</td>
<td></td>
</tr>
<tr>
<td>Sunflower</td>
<td></td>
</tr>
<tr>
<td>All other rotational crops</td>
<td>18 months</td>
</tr>
</tbody>
</table>

If Resicore™ herbicide is tank-mixed or used sequentially with other products, follow the most restrictive product’s crop rotation interval.

“Not only will Resicore offer control of broadleaf weeds and grasses, including Palmer amaranth, waterhemp and giant ragweed, it will provide application flexibility to be applied preemergence up to 11-inch corn.”

– Jonathan Huff, market development specialist, Dow AgroSciences
PROVEN CONTROL WHERE IT COUNTS.
Field testing shows that Resicore™ herbicide will deliver control you can trust — with extraordinary power to control weeds and protect corn yield with excellent crop safety.

**2014 Dow AgroSciences Field Trials**
PREEMERGENCE TREATMENT AT 1X RATES FOR SOIL TYPE.

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**We invited retailers to see field plots of Resicore. Here’s what they said.**

“I’m excited about what I saw in the plot today. I like being on the cutting edge of everything and bringing new products to the growers.”

— Ryan Buckler, CPS, Oakland, Illinois

“The Resicore demos here today at the Sheridan Plot are very clean. There was virtually no weed pressure at all, and the crop looked good. So no injury, no crop symptomology of herbicide damage on the corn.”

— Austin Mattern, Northcentral Co-op, Star City, Indiana

“Resicore looked really good in the plots, especially compared to some of the other products. It definitely seemed like it has held longer, and they just seem to be cleaner than most.”

— Matt Goedeke, CPS, Yates City, Illinois

“It looks like a great tool that we’ll be able to use in the coming years.”

— Dennis Gass, Crop Salesman for Heritage FS, Gifford, Illinois
For more information about Resicore™ herbicide, visit ResicoreHerbicide.com or call 800-258-3033.