



Realize postemergence grass control in sorghum.

DuPont™
Inzen™
herbicide tolerance trait

DuPont™
Zest™ WDG
herbicide

General information

Grass control is a top concern for all sorghum growers. In field studies, DuPont™ Inzen™ herbicide tolerance trait with accompanying DuPont™ Zest™ WDG herbicide have demonstrated effective, postemergence grass control in sorghum.

To maintain the effectiveness of this offering, sorghum growers need to follow proper stewardship guidelines to help prevent the trait from outcrossing to weedy relative grasses, such as johnsongrass and shattercane.

Inzen™ sorghum trait and Zest™ WDG herbicide

Zest™ WDG herbicide provides postemergence control of grasses in sorghum. The active ingredient in Zest™ WDG has been used in herbicides that have been registered for use on other crops for many years.

Combining Zest™ WDG with sorghum varieties containing the Inzen™ sorghum trait creates a herbicide system that controls grasses in sorghum and improves crop safety due to the built-in herbicide tolerance.

Application directions

Use rate: Apply Zest™ WDG at 0.67–1.33 oz/A per application to grain sorghum containing the Inzen™ herbicide tolerance trait. Do not apply more than 1.33 oz/A in a single application. Do not apply more than 1.74 oz/A of Zest™ WDG per season.

Application timing to crop: Apply Zest™ WDG to emerged grain sorghum containing the Inzen™ herbicide tolerance trait that is up to 20 inches tall. Applications made to 4–20-inch-tall grain sorghum (approximately V3–V7 stage) are recommended for best crop tolerance. Do not apply to grain sorghum taller than 20 inches.

Application timing to weeds: Apply Zest™ WDG at 0.67 oz/A when grasses are young and actively growing, but before they exceed the sizes listed in the Weeds Controlled table. Treat heavy infestations of weeds before they compete too much with the crop, especially where soil moisture and/or fertility are limited. Zest™ WDG provides weed control via foliar absorption. Zest™ WDG only controls those weeds

that have emerged. For later-emerging weeds, a second application or a timely cultivation is required. Applications made to weeds larger than the size indicated on this label or to weeds under stress may result in unsatisfactory control.

As weeds mature, their sensitivity to Zest™ WDG decreases. As grassy weeds become mature (more than 3 tillers), they may not reach the size listed in the Weeds Controlled table, due to drought or other environmental factors. Grassy weeds that are maturing rapidly should be treated with Zest™ WDG at 0.67 oz/A before they reach the stages listed in the Weeds Controlled table.

Sequential applications: In the event that a subsequent flush of weeds or a regrowth of previously treated weeds occurs, a second application of Zest™ WDG may be applied. Do not make more than 2 applications per season. Allow a minimum of 7 days between applications, but do not make any additional Zest™ WDG applications until all herbicide symptomology such as yellowing or reduced plant height has subsided on the grain sorghum containing the Inzen™ herbicide tolerance trait.

Weeds controlled in Inzen™ grain sorghum

Weeds controlled with Zest™ WDG at 0.67 oz/A	Maximum height or diameter (inches)
Barnyardgrass†	4
Broadleaf signalgrass	2
Crabgrass (large)*	2
Foxtails (bristly, giant,† green,† yellow)	4
Itchgrass	6
Panicum (Texas, browntop)	3
Panicum (fall)	4
Ryegrass (Italian, perennial)†	6
Sandbur (field, longspine)*	3
Wild oats†	4
Wild proso millet	4
Witchgrass	6

† Naturally occurring resistant biotypes are known to occur.
* Refer to Specific Weed Instructions section of the label.

Obtaining optimal weed control

Optimal weed control has been obtained using a preemergence herbicide, such as DuPont™ Cinch® ATZ, followed by DuPont™ Zest™ WDG herbicide applied post emergence. As always, consult a DuPont representative or the product-use label prior to applications.

Managing weed resistance in herbicide-tolerant crops

Growers need to follow a routine herbicide-resistance management program when planting sorghum with the DuPont™ Inzen™ sorghum trait:

- Apply integrated weed-management practices. Use multiple herbicide sites of action with overlapping weed spectrums in rotation, sequences or mixtures.
- Use the full recommended herbicide rate and proper application timing for the hardest-to-control weed species present in the field.
- Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
- Monitor site and clean equipment between sites.
- Plan crop rotations that allow use of herbicides with alternative modes of action in the year following sorghum with the Inzen™ sorghum trait:

Crop following sorghum	Alternative modes of action (MOA) for grass control
Corn	<ul style="list-style-type: none"> • glyphosate in glyphosate-tolerant corn • glufosinate in glufosinate-tolerant corn • tembotrione (e.g., Laudis)
Soybean	<ul style="list-style-type: none"> • glyphosate in glyphosate-tolerant soybeans • glufosinate in glufosinate-tolerant soybeans • ACCase herbicides (e.g., DuPont™ Assure® II herbicide)
Cotton	<ul style="list-style-type: none"> • glyphosate in glyphosate-tolerant cotton • glufosinate in glufosinate-tolerant cotton • ACCase herbicides (e.g., Assure® II)
Wheat	<ul style="list-style-type: none"> • preplant or post-harvest control by nonselective herbicides • tillage
Sunflower	<ul style="list-style-type: none"> • preplant tillage • nonselective herbicides • ACCase herbicides (e.g., Assure® II)
Fallow	<ul style="list-style-type: none"> • tillage • nonselective herbicides • ACCase herbicides (e.g., Assure® II)
Sorghum	<ul style="list-style-type: none"> • Use DuPont™ Inzen™ sorghum trait only one time, preferably the second year, if sorghum follows sorghum.

Managing pollen-mediated gene flow

The following best management practices help limit potential movement of the Inzen™ sorghum trait to closely related species:

- Do not plant sorghum with the Inzen™ sorghum trait and use Zest™ WDG herbicide in fields known to have ALS-resistant johnsongrass or shattercane.
- Do not plant sorghum the year following the growing of grain sorghum containing the Inzen™ herbicide tolerance trait in the same field.
- Plant into fields in which emerged weeds have been controlled by tillage or nonselective herbicides, such as glyphosate.
- Manage johnsongrass and shattercane growth in road ditches, fence rows and nearby places, so their flowering does not coincide with the Inzen™ sorghum trait flowering.
- Complete certification program and sign Stewardship Technology Agreement.

Important use restrictions

- Do not plant grain sorghum containing the Inzen™ herbicide tolerance trait in fields known to have ALS-resistant johnsongrass or shattercane.
- Do not plant sorghum the year following the growing of grain sorghum containing the Inzen™ herbicide tolerance trait in the same field.

For more information

Contact your local DuPont representative to learn more about postemergence grass control in grain sorghum with Inzen™ herbicide tolerance trait and Zest™ WDG herbicide. And visit us at zest.dupont.com.



DuPont™ Zest™ WDG herbicide may not be registered for sale or use in all states. Contact your local DuPont representative for details and availability in your state. DuPont™ Cinch® ATZ is a restricted-use pesticide.

This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use, and product warranty and liability limitations, which must be read before using the product(s). Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank-mix combinations.

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