DuPont™ Zest™ herbicide
A new grass control option for DuPont™ Inzen™ grain sorghum

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DuPont Crop Protection

DuPont™ Zest™ herbicide is not registered for sale or use on grain sorghum containing the DuPont™ Inzen™ herbicide tolerance trait in the United States. No sale, offer for sale or use of this product on grain sorghum containing the Inzen™ herbicide tolerance trait is permitted prior to the issuance of the required EPA and state registrations.

Technical Presentation

March, 2016
General Information: DuPont™ Inzen™ grain sorghum

- Novel, non-GMO crop herbicide tolerance trait that provides the first post emergence grass control in grain sorghum

- Naturally occurring resistance trait (obtained from shattercane) developed by Kansas State University

- Seed Availability – DuPont Pioneer and Advanta are currently developing Inzen™ sorghum hybrids
  - Additional seed companies have expressed interest in adding this to their portfolios
General Information: Zest™ herbicide

• Actives approved: Nicosulfuron and Rimsulfuron
  • Zest™ herbicide pending EPA approval: Anticipated in 2nd Qtr. 2016

• Postemergence: control of key annual grass weeds

• Target Market: DuPont™ Inzen™ Grain Sorghum

• Conditional registration pending outcome of following stewardship/registration requirements
**Stewardship Requirements: DuPont™ Inzen™ grain sorghum**

- Growers must complete training on stewardship website to better understand resistance management within the Inzen™ system.
- Growers will sign a trait license agreement that includes stewardship principles at the time of seed purchase.
- Seed tags and a product use guide (PUG) will contain instructional information.
- Growers should follow best management practices listed on label.
- Canada only export market with restrictions; PNT review in next 12 to 18 months.
DuPont™ Zest™ herbicide

Restrictions: DuPont™ Inzen™ grain sorghum system

• Do not plant Inzen™ sorghum in fields known to have ALS resistant shattercane/johnsongrass

• Do not plant sorghum in consecutive years following Inzen™ sorghum in the same field

• Do not use Zest™ herbicide to control johnsongrass or any other Group 2 (ALS) herbicide labeled for control if used the previous year.

• Do not use any Group 2 (ALS) herbicide to control johnsongrass the year after using Zest™ herbicide to control johnsongrass in Inzen™ grain sorghum.
DuPont™ Zest™ herbicide

Field Trial: Application rate

• Zest™ is being tested at a rate range of 12 to 24 fl oz/A
  • No more than 24 fl oz/application
  • No more than 32 fl oz/A per growing season
  • Minimum of 7 days between applications

Field Trial: Application window

• Zest™ can be applied between 4” – 20” sorghum

• Grass weed size is critical for optimum control

Spray Adjuvants

• COC or NIS + Ammonium Nitrogen Fertilizer
Tank Mixing Zest™

- 2,4-D ester, dicamba, atrazine, fluroxypyr and metsulfuron methyl

- Huskie tank mix is not recommended due to significant grass antagonism and crop response

Proposed Label: Weed Control Timing

- Total post only applications are not recommended.
  - Sequential post applications following a soil applied broad spectrum residual programs have been shown to provide the most consistent and effective weed control
DuPont Pioneer

“Our sorghum breeding teams are committed to bringing a herbicide tolerant offering to the market place. We will not sacrifice agronomics or performance to do so. DuPont Pioneer is currently testing experimental hybrids and anticipate commercial launch in 2018 or 2019.”

FOR MORE INFORMATION – PLEASE COME TO THE DUPONT PIONEER BOOTH
DuPont™ Zest™
herbicide

Advanta US

2016

• Demos available to see this summer
  • List of trials will be made available for those interested

2017

• 3 Commercial Hybrids to be released in 2017

• Full pipeline of new Hybrids with Inzen™ trait with exceptional yield potential

FOR MORE INFORMATION – PLEASE COME TO THE ADVANTA BOOTH
DuPont™ Zest™
herbicide

A New Grass Control Option for DuPont™Inzen™ grain sorghum

• Zest™ herbicide + Inzen™ traited grain sorghum provides the first post emergence grass control system in grain sorghum

• Stewardship requirements will be met to grow Inzen™ grain sorghum and use Zest™ herbicide

• Studies have shown consistent and effective weed control is obtained with a planned program of a soil applied broad spectrum herbicide followed by post emergence Zest™ plus a broadleaf tank mix partner
DuPont™ Zest™ herbicide

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- Tennessee
- Texas A&M
- Texas Tech
- Virginia Tech

National Sorghum Producers
USCP
State Sorghum Associations
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Always read and follow all label directions and precautions for use.

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